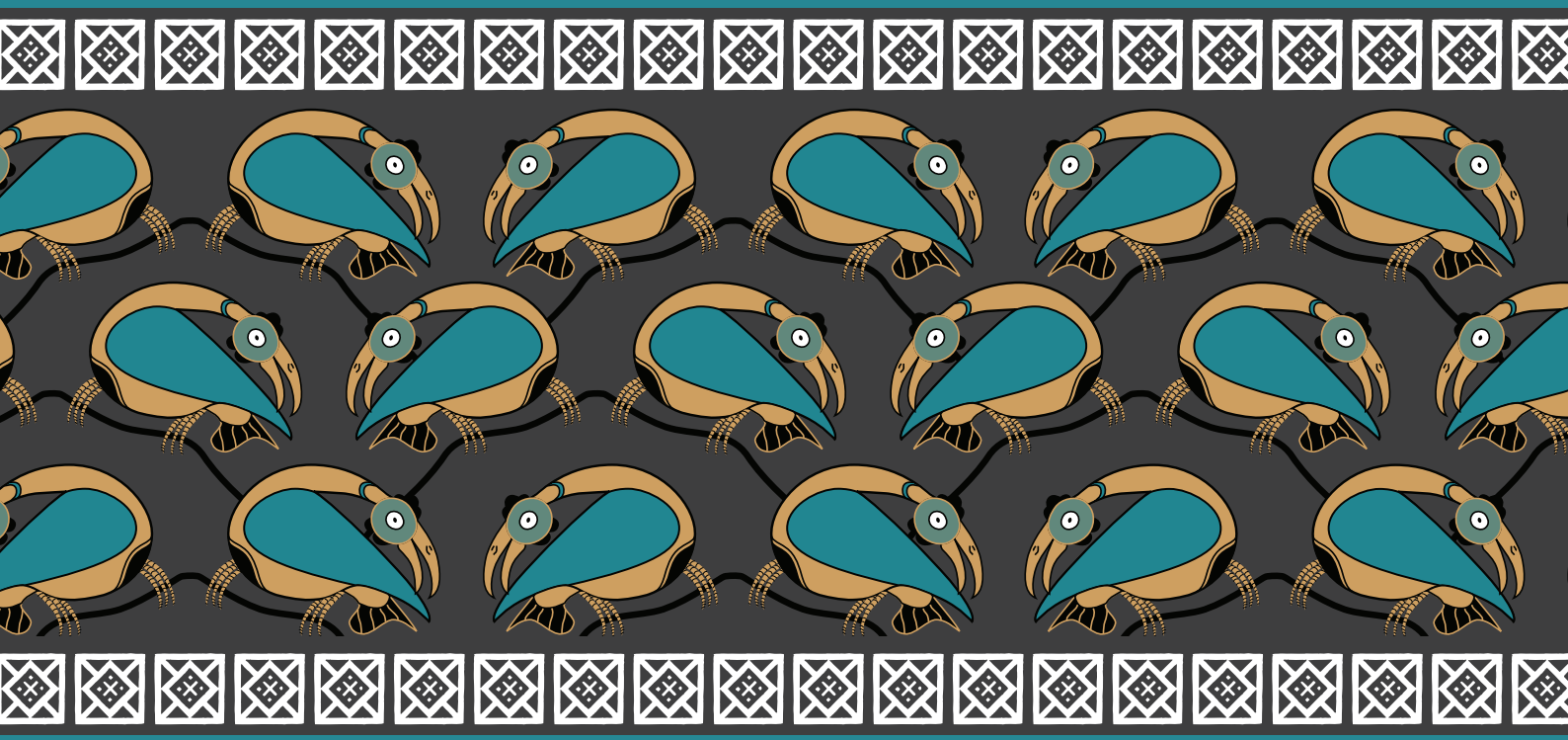
Tanzania



Demographic and Health Survey and Malaria Indicator Survey

2015-16

United Republic of Tanzania

Tanzania
Demographic and Health Survey
and
Malaria Indicator Survey
2015-2016

Final Report

Ministry of Health, Community Development, Gender, Elderly and Children
Dar es Salaam

Ministry of Health
Zanzibar

National Bureau of Statistics
Dar es Salaam

Office of Chief Government Statistician
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FOREWORD

The 2015-16 Tanzania Demographic and Health Survey and Malaria Indicator Survey (TDHS-MIS) is the sixth in a series of DHS surveys conducted in Tanzania. The National Bureau of Statistics (NBS), Tanzania Mainland, and Office of the Chief Government Statistician (OCGS), Zanzibar, conducted the survey in collaboration with the Ministry of Health, Community Development, Gender, Elderly and Children (MoHCDGEC), Tanzania Mainland, and the Ministry of Health (MoH), Zanzibar. The 2015-16 TDHS-MIS follows up the previous surveys conducted in 1991-92, 1996, 1999, 2004-05, and 2010. The availability of data and reports from these surveys provides an opportunity for trend analysis of the several population and health indicators covered in these surveys and identified in the related country's development agenda.

The main objective of the 2015-16 TDHS-MIS was to obtain the current and reliable information on demographic and health indicators with regard to family planning, fertility levels and preferences, maternal mortality, infant and child mortality, nutritional status of mothers and children, antenatal care, delivery care, and childhood immunizations and diseases. In addition, the survey was designed to provide up-to-date information on the prevalence of anaemia among women age 15-49 and the prevalence of malaria infection and anaemia among children under age 5. Unlike the previous DHS surveys, the 2015-16 TDHS-MIS included a comprehensive module on malaria, which is usually included in the Tanzania HIV and Malaria Indicators surveys. This survey did not include questions and tests on HIV/AIDS because they will certainly be included in future HIV/AIDS surveys.

The 2015-16 TDHS-MIS was implemented with financial support from various donors, including the Government of Tanzania, Global Affairs Canada, the United States Agency for International Development (USAID), Irish Aid, the United Nations Population Fund (UNFPA), and the United Nations Children's Fund (UNICEF). Technical assistance was provided by ICF International through The Demographic and Health Surveys Program (The DHS Program) and also by the Technical Committee of the 2015-16 TDHS-MIS.

This report presents the detailed findings from the 2015-16 TDHS-MIS at national, zonal (as used by the MoHCDGEC), and where possible, regional levels. The report provides useful information for assessing the country's performance on some of the health and population indicators included in the previous national and international development agendas, for example, the National Strategy for Growth and Reduction of Poverty II, NSGRP or MKUKUTA II, Health Sector Strategic Plan III (2010-2015), and the 2015 Millennium Development Goals (MDGs). At the same time, the 2015-16 TDHS-MIS will provide the baseline information for measuring progress of the health- and population-related indicators that are included in the national and international development agendas, including Health Sector Strategic Plan IV (2015-2020), the Five-Year Development Plans (2016/17-2020/21), and the 2030 Agenda for Sustainable Development.

I, therefore, take this opportunity to encourage policy makers, planners, program managers, and other stakeholders in the health sector to use these findings for making informed policy decisions based on quality planning, monitoring, and evaluating programmes related to reproductive health. Furthermore, such initiatives aim at facilitating the proper delivery of various health and social services in general. Finally, I also advise researchers and other experts to undertake further analysis of the available data sets, particularly in the areas that are not covered in this report. It is expected that the analysed data will ultimately be made available for use by the relevant stakeholders and the general public.

Dr. Mpoki M. Ulisubisya
Permanent Secretary
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The successful completion of the 2015-16 Tanzania Demographic and Health Survey and Malaria Indicator Survey (TDHS-MIS) was enabled by the collaborative efforts of various institutions and individuals whose contribution is highly appreciated.

Initially, the National Bureau of Statistics (NBS) wishes to extend its sincere gratitude to the Government of Tanzania, Global Affairs Canada, the United States Agency for International Development (USAID), Irish Aid, the United Nations Population Fund (UNFPA),and the United Nations Children's Fund (UNICEF) for providing financial assistance that led to the smooth implementation of the 2015-16 TDHS-MIS.

We would like to thank a team from ICF International for their technical assistance provided in all stages from the preparation and implementation of this survey. We gratefully acknowledge the guidance and support of the survey's Technical Committee (TC) members who came from various organizations, including the Ministry of Health, Community Development, Gender, Elderly and Children (MoHCDGEC)–Tanzania Mainland; Ministry of Health–Zanzibar; National Bureau of Standards (NBS); Office of the Chief Government Statistician (OCGS); Tanzania Food and Nutrition Centre (TFNC); National Malaria Control Program (NMCP); World Health Organization (WHO); National Institute for Medical Research (NIMR), Zanzibar Malaria Elimination Programme (ZAMEP); The World Bank (WB); UNICEF; USAID; UNFPA; Irish Aid; and Ifakara Health Institute (IHI).

We also recognize the contribution of the staff of Ifakara Health Institute Laboratories at Bagamoyo and TFNC Laboratories at Mikocheni–Dar es Salaam, who conducted laboratory microscopic analysis of malaria and urinary iodine and salt iodine tests, respectively. We also wish to express our deep appreciation for commendable work done by the authors, reviewers, and editors of this report from different institutions.

The nurses from the ministry responsible for health from both Tanzania Mainland and Tanzania Zanzibar who worked tirelessly as interviewers; staff from NBS and OCGS who worked as field supervisors; and other field staff including field editors, office editors, and teams' drivers deserve our heartfelt gratitude for their dedicated and tireless effort in making this survey a success.

Last but not least, we are even more grateful to the local leaders in the areas visited for data collection for their co-operation as well as the survey respondents for their willingness and patience in providing appropriate information that enabled the data analysts, chapter writers, and statistical consultants among others to finalize this report.

Dr. Albina Chuwa
Director General
National Bureau of Statistics

READING AND UNDERSTANDING TABLES FROM THE 2015 TDHS-MIS

The DHS final report is based on approximately 200 tables of data. Although the text and figures featured in each chapter highlight some of the most important findings from the tables, not every finding can be discussed or displayed graphically. For this reason, DHS data users should be comfortable reading and interpreting tables. The following pages provide an introduction to the organization of DHS tables, the presentation of background characteristics, and a brief summary of sampling and understanding denominators. In addition, this section provides some exercises to allow users to practice their new skills in interpreting DHS tables.

Example 1: Exposure to Mass Media

A Question Asked of All Survey Respondents

Table 3.4.1 Exposure to mass media: Women 1

Percentage of women age 15-49 who are exposed to specific media on a weekly basis, by background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic 3	2 Reads a newspaper at least once a week	Watches television at least once a week	Listens to the radio at least once a week	Accesses all three media at least once a week	Accesses none of the three media at least once a week	Number of women
Age						
15-19	16.3	31.3	43.2	8.4	43.3	2,904
20-24	15.1	30.5	48.9	8.9	41.4	2,483
25-29	13.6	29.1	47.7	8.6	44.0	2,125
30-34	11.1	26.4	44.5	6.8	47.4	1,752
35-39	11.0	23.0	42.8	5.5	49.3	1,641
40-44	10.6	20.2	40.6	6.1	52.8	1,364
45-49	11.3	16.9	40.6	4.7	54.4	997
Residence						
Urban	22.0	54.8	56.2	15.8	26.4	4,811
Rural	8.4	11.0	38.0	2.7	57.4	8,455
Tanzania Mainland/Zanzibar						
Mainland	13.4	26.3	44.4	7.5	46.5	12,862
Urban	22.2	54.5	56.2	15.9	26.6	4,675
Rural	8.4	10.2	37.7	2.7	57.9	8,187
Zanzibar	10.7	45.4	52.2	6.8	33.8	404
Unguja	12.8	57.7	66.7	8.6	17.4	293
Pemba	5.2	13.3	14.3	2.2	76.9	111
Zone						
Western	8.0	13.6	38.5	3.7	56.4	1,278
Northern	18.5	40.3	55.6	10.2	30.7	1,575
Central	9.4	11.0	32.0	3.1	62.1	1,336
Southern Highlands	9.3	22.4	39.8	6.4	54.6	807
Southern	7.1	14.6	40.1	3.0	55.0	700
South West Highlands	18.5	19.7	40.3	8.0	52.2	1,246
Lake	8.4	18.0	42.5	4.1	51.6	3,463
Eastern	22.9	52.0	54.6	16.3	28.0	2,457
Zanzibar	10.7	45.4	52.2	6.8	33.8	404
Region						
Dodoma	7.2	7.6	23.0	1.5	71.6	572
Arusha	16.0	37.3	54.7	7.8	33.1	508
Kilimanjaro	17.4	41.4	60.3	9.7	27.4	361
Tanga	21.0	41.9	53.9	12.3	30.6	706
Morogoro	21.3	28.7	52.2	11.4	38.8	636
Pwani	14.4	20.0	38.4	6.8	54.3	285
Dar Es Salaam	25.2	67.5	58.6	20.0	18.7	1,536
Lindi	6.4	14.9	30.2	2.1	62.7	288
Mtwara	7.5	14.5	46.9	3.6	49.7	412
Ruvuma	6.3	19.0	34.8	5.4	60.3	360
Iringa	19.0	29.4	40.6	11.5	52.1	245
Mbeya	18.1	18.9	39.1	7.7	53.7	828
Singida	12.5	15.4	43.7	5.0	51.1	370
Tabora	8.3	12.5	36.6	4.2	59.3	737
Rukwa	20.7	21.4	44.5	9.3	48.5	288
Kigoma	7.6	15.0	41.2	3.2	52.3	542
Shinyanga	8.0	19.0	42.6	3.5	50.0	504
Kagera	8.1	19.4	54.1	4.3	40.4	612
Mwanza	9.0	20.3	33.8	4.8	58.6	859
Mara	13.5	25.9	50.2	6.7	42.2	523
Manyara	9.8	11.8	33.9	3.5	58.7	394
Njombe	2.9	20.0	47.7	2.1	47.3	203
Katavi	16.3	21.6	38.4	6.7	51.0	130
Simiyu	2.1	8.7	32.6	1.0	64.5	479
Geita	8.6	11.6	44.1	3.2	52.6	485
Kaskazini Unguja	8.6	26.0	58.1	1.9	31.8	56
Kusini Unguja	3.2	35.1	70.3	1.6	22.8	35
Mjini Magharibi	15.7	70.5	68.4	11.7	12.4	201
Kaskazini Pemba	8.4	16.6	17.1	3.6	71.2	56
Kusini Pemba	1.9	9.8	11.5	0.7	82.8	55

(Continued….)

Table 3.4.1—*Continued* 1

Background characteristic 3	Reads a newspaper at least once a week 2	Watches television at least once a week	Listens to the radio at least once a week	Accesses all three media at least once a week	Accesses none of the three media at least once a week	Number of women
Education						
No education	0.9	5.4	26.2	0.0	71.7	1,946
Primary incomplete	4.4	11.8	36.1	1.3	58.4	1,559
Primary complete	12.5	23.7	44.4	5.8	46.9	6,652
Secondary+	27.3	54.8	61.0	18.8	22.4	3,109
Wealth quintile						
Lowest	4.8	2.1	22.5	0.6	75.1	2,239
Second	5.8	4.0	31.4	0.9	65.5	2,281
Middle	8.4	6.7	42.6	1.8	53.5	2,314
Fourth	14.3	20.8	50.3	5.7	42.2	2,826
Highest	25.9	74.5	63.6	20.9	14.3	3,606
Total 4	13.3	26.9	44.6	7.5	46.1	13,266

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Step 1: Read the title and subtitle. They tell you the topic and the specific population group being described. In this case, the table is about women age 15-49 and their access to different types of media. All eligible female respondents age 15-49 were asked these questions.

Step 2: Scan the column headings—highlighted in green in the table on the left and above. They describe how the information is categorized. In this table, the first three columns of data show different types of media that women access at least once a week. The fourth column shows women who access all three media, while the fifth column is women who do not access any of the three types of media at least once a week. The last column lists the number of women interviewed in the survey.

Step 3: Scan the row headings—the first vertical column highlighted in blue in the table above. These show the different ways the data are divided into categories based on population characteristics. In this case, the table presents women's access to media by age, urban and rural residence, Tanzania Mainland/Zanzibar, zone, region, education level, and wealth quintile. Most of the tables in the TDHS-MIS report will be divided into these same categories.

Step 4: Look at the row at the bottom of the table highlighted in red. These percentages represent the totals of all women age 15-49 and their access to different types of media. In this case, 13.3% of women age 15-49 read a newspaper at least once a week, 26.9% watch television weekly, and 44.6% listen to the radio weekly.

Step 5: To find out what percentage of women with secondary or higher education access all three media weekly, draw two imaginary lines, as shown on the table. This shows that 18.8% of women age 15-49 with secondary or higher education access all three types of media weekly.

Practice: Use the table in Example 1 to answer the following questions:

a) What percentage of women in Tanzania do not access any of the three media at least once a week?

b) What age group of women are most likely to watch television weekly?

c) Compare women in urban areas to women in rural areas—which group is more likely to listen to the radio weekly?

Answers:

a) 46.1%

b) Women age 15-19: 31.3% of women in this age group watch television weekly

c) Women in urban areas: 56.2% listen to the radio weekly, compared to 38.0% of women in rural areas

Example 2: Prevalence of Malaria in Children

Comparing and Understanding Patterns

Table 12.16 Malaria prevalence among children according to a rapid diagnostic test (RDT) and microscopy 1

Percentage of children 6-59 months tested using a RDT who are positive for malaria and percentage of children 6-59 months tested using microscopy who are positive for malaria, by background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic 3	2	Malaria prevalence using a RDT		Malaria prevalence using microscopy	
		Tested positive	Number of children tested	Tested positive	Number of children tested
Age in months					
6-8		8.4	517	4.3	483
9-11		8.4	454	1.3	424
12-17		10.3	1,104	4.1	1,036
18-23		12.9	1,036	5.7	973
24-35		15.7	1,899	5.6	1,816
36-47		16.1	1,916	6.3	1,774
48-59		17.9	1,921	6.9	1,756
Sex					
Male		15.2	4,450	5.6	4,172
Female		13.7	4,397	5.6	4,091
Mother's interview status					
Interviewed		13.9	7,672	5.3	7,164
Not interviewed but in household		21.2	189	8.2	181
Not interviewed, and not in the household[1]		17.3	986	7.3	918
Residence					
Urban		3.9	2,215	2.4	2,126
Rural		18.0	6,632	6.7	6,137
Tanzania Mainland/ Zanzibar					
Mainland		14.8	8,611	5.7	8,066
Urban		4.1	2,149	2.4	2,077
Rural		18.4	6,462	6.8	5,989
Zanzibar		0.0	236	0.7	197
Unguja		0.0	151	0.5	129
Pemba		0.0	85	1.1	68
Zone					
Western		27.7	1,100	9.3	1,024
Northern		1.4	827	1.4	782
Central		1.7	979	1.4	935
Southern Highlands		10.4	476	2.0	462
Southern		18.8	359	8.2	347
South West Highlands		3.1	847	2.8	737
Lake		23.5	2,909	8.9	2,676
Eastern		10.6	1,115	4.0	1,102
Zanzibar		0.0	236	0.7	197
Region					
Dodoma		0.0	373	0.5	349
Arusha		0.0	291	0.0	280
Kilimanjaro		0.0	166	0.5	159
Tanga		3.2	370	3.1	343
Morogoro		23.1	365	9.1	354
Pwani		15.3	183	5.8	172
Dar es Salaam		1.1	568	0.3	575
Lindi		17.4	165	9.3	162
Mtwara		20.0	194	7.3	185
Ruvuma		22.6	213	4.4	212
Iringa		0.5	151	0.0	145
Mbeya		0.7	490	2.4	404
Singida		5.5	309	3.0	306
Tabora		19.5	616	7.0	584
Rukwa		2.7	237	1.4	220
Kigoma		38.1	484	12.3	441
Shinyanga		16.5	404	4.3	372
Kagera		41.0	508	11.6	483
Mwanza		15.3	689	8.4	603
Mara		19.1	440	5.1	401
Manyara		0.0	297	0.8	281
Njombe		0.4	112	0.0	106
Katavi		13.5	120	6.5	113
Simiyu		13.4	460	6.0	436
Geita		38.4	407	17.7	382
Kaskazini Unguja		0.0	38	0.0	36
Kusini Unguja		0.3	25	1.5	24
Mjini Magharibi		0.0	88	0.4	70
Kaskazini Pemba		0.0	44	1.0	31
Kusini Pemba		0.0	40	1.2	37

(Continued…)

Table 12.16—*Continued*

Background characteristic	Malaria prevalence using a RDT: Tested positive	Malaria prevalence using a RDT: Number of children tested	Malaria prevalence using microscopy: Tested positive	Malaria prevalence using microscopy: Number of children tested
Mother's education[2]				
No education	21.0	1,726	8.8	1,610
Primary incomplete	23.3	1,030	7.3	956
Primary complete	11.6	4,028	4.5	3,761
Secondary+	3.5	1,066	1.3	1,008
Wealth quintile				
Lowest	22.3	2,158	8.2	2,006
Second	21.9	1,966	8.3	1,823
Middle	14.8	1,727	6.2	1,599
Fourth	6.0	1,599	2.0	1,496
Highest	1.0	1,398	1.0	1,339
Total	14.4	8,847	5.6	8,263

4

Step 1: Read the title and subtitle. In this case, the table presents malaria prevalence among children age 6-59 months according to both a rapid diagnostic test (RDT) and microscopy.

Step 2: Identify the information presented in the table— highlighted in green in the table on the left and above. In this table there is only one indicator—malaria prevalence, but it is divided into two categories. The first two columns show malaria prevalence according to RDT. The last two columns show malaria prevalence according to microscopy.

Step 3: Look at the row headings to identify the background characteristics. In this table, malaria prevalence is presented by age, sex, mother's interview status, urban and rural residence, Tanzania Mainland/Zanzibar, zone, region, mother's education level, and wealth quintile.

Step 4: Look at the rows at the bottom of the table to determine the total proportion of children with malaria **according to RDT**. This shows that 14.4% of children age 6-59 months in Tanzania tested positive for malaria by RDT.

Step 5: In Tanzania, 14.4% of children age 6-59 months tested positive for malaria by RDT, but a closer look at the table shows how malaria prevalence varies throughout Tanzania. To gain a better understanding of differences in the prevalence of malaria **according to RDT**, consider the following questions:

Practice:

- Is malaria prevalence more common in urban or rural areas? Malaria prevalence is more common in rural areas (18.0%) than in urban areas (3.9%).
- Now, compare malaria prevalence among girls and boys. Malaria prevalence is slightly higher among boys than girls (15.2% versus 13.7%). However, the difference between these two groups is small.
- What are the lowest and the highest percentages (range) of malaria prevalence by zone? Malaria prevalence ranges from a low of 0.0% in Zanzibar to a high of 27.7% in Western zone.
- Look for patterns: Does malaria prevalence by RDT vary by background characteristics? For example, is there a clear pattern of malaria prevalence by age in months? By mother's education? By wealth quintile?

Answers:

- Malaria prevalence is highest among children age 48-59 months (17.9%) and lowest among children age 6-8 and 9-11 months (8.4% each).
- Malaria prevalence generally decreases as mother's education increases; 21.0% of children whose mothers have no education tested positive for malaria by RDT, compared to 3.5% of children whose mothers have secondary or higher education.
- Finally, there is a pattern in malaria prevalence by household wealth quintile. Malaria prevalence decreases as household wealth increases; 22.3% of children living in households in the lowest wealth quintile tested positive for malaria by RDT, compared to just 1.0% of children living in households in the highest wealth quintile.

By looking at patterns by background characteristics, we can see which groups are more in need of interventions to address malaria. Resources are often limited; looking for patterns can help programme planners and policymakers determine how to most effectively use resources.

Example 3: Prevalence and Treatment of Symptoms of ARI

A Question Asked of a Subgroup of Survey Respondents

Table 10.5 Prevalence and treatment of symptoms of ARI 1

Among children under age 5, the percentage who had symptoms of acute respiratory infection (ARI) in the 2 weeks before the survey and among children with symptoms of ARI, the percentage for whom advice or treatment was sought from a health facility or provider, and the percentage who received antibiotics as treatment, according to background characteristics, Tanzania DHS-MIS 2015-16

	Among children under age 5:			Among children under age 5 with symptoms of ARI:		
Background characteristic	Percentage with symptoms of ARI[1]	Number of children	Percentage for whom advice or treatment was sought from a health facility or provider[2]	Percentage for whom treatment was sought same or next day	Percentage who received antibiotics	Number of children
Age in months						
<6	4.1	1,012	(63.8)	(39.0)	(19.2)	41
6-11	5.3	999	(68.4)	(42.5)	(55.3)	53
12-23	5.2	2,134	59.1	42.1	37.4	111
24-35	3.9	1,817	47.2	44.9	45.8	70
36-47	2.1	1,791	(55.2)	(24.7)	3.3)	37
48-59	2.5	1,768	(36.0)	(32.2)	9.8)	44
Sex						
Male	3.8	4,80	52.4	36.9	6.8	183
Female	3.7	4,71	58.7	42.0	2.3	174
Residence						
Urban	5.1	2,541	64.4	47.2	41.2	129
Rural	3.3	6,980	50.4	34.9	38.5	228
Tanzania Mainland/ Zanzibar						
Mainland	3.7	9,268	54.7	38.9	39.1	346
Urban	5.1	2,475	63.7	46.5	40.6	126
Rural	3.2	6,794	49.6	34.5	38.2	220
Zanzibar	4.3	252	78.6	53.0	52.7	11
Unguja	4.0	158	(79.9)	(56.6)	(43.0)	6
Pemba	4.9	94	(76.9)	(48.1)	(66.0)	5
Zone						
Western	3.2	1,170	(38.6)	(37.3)	(37.7)	37
Northern	3.6	901	(72.8)	(23.6)	(60.2)	32
Central	2.0	1,065	*	*	*	21
Southern Highlands	2.6	517	*	*	*	14
Southern	2.5	372	*	*	*	9
South West Highlands	4.3	914	(39.1)	(27.3)	(17.0)	40
Lake	4.3	3,014	50.0	39.1	32.9	130
Eastern	4.8	1,315	(75.0)	(51.7)	(50.3)	63
Zanzibar	4.3	252	78.6	53.0	52.7	11
Education						
No education	3.7	2,013	44.8	20.7	35.8	74
Primary incomplete	5.0	1,241	49.9	31.5	40.8	62
Primary complete	3.2	4,901	60.1	45.1	42.0	159
Secondary+	4.5	1,365	61.8	54.8	36.1	61
Wealth quintile						
Lowest	2.9	2,321	37.0	27.8	40.6	66
Second	3.1	2,014	48.7	34.2	29.2	63
Middle	3.4	1,838	47.7	36.8	39.9	62
Fourth	4.8	1,773	62.0	44.2	38.4	85
Highest	5.1	1,575	74.9	49.7	47.4	81
Total	3.7	9,520	55.4	39.3	39.5	357

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Symptoms of ARI (cough accompanied by short, rapid breathing which was chest-related, and/or by difficult breathing which was chest-related) is considered a proxy for pneumonia.

[2] Excludes pharmacy, shop, and traditional practitioner.

[3] Includes grass, shrubs, and crop residues.

Step 1: Read the title and subtitle. In this case, the table is about two separate groups of children: all children under 5 (a) and children under five who had symptoms of acute respiratory infection (ARI) in the two weeks before the survey (b).

Step 2: Identify the two panels. First identify the columns that refer to all children under five (a), and then isolate the columns that refer only to those children under five who had symptoms of ARI in the two weeks before the survey (b).

Step 3: Look at the first panel. What percentage of children under five had symptoms of ARI in the two weeks before the survey? It's 3.7%. Now look at the second panel. How many children under five are there who had symptoms of ARI in the two weeks before the survey? It's 357 children or 3.7% of the 9,520 children under five (with rounding). The second panel is a subset of the first panel.

Step 4: Only 3.7% of children under five had symptoms of ARI in the two weeks before the survey. Once these children are further divided into the background characteristic categories, there may be too few cases for the percentages to be reliable.

- What percentage of children under five in Western zone who had symptoms of ARI in the two weeks before the survey received antibiotics? 37.7%. This percentage is in parentheses because there are fewer than 50 children (unweighted) in this category. Readers should use this number with caution—it may not be accurate. (For more information on weighted and unweighted numbers, see Example 4.)
- What percentage of children under five in Central zone had symptoms of ARI in the two weeks before the survey received antibiotics? There is no number in this cell—only an asterisk. This is because fewer than 25 children in Central zone (unweighted) had symptoms of ARI in the two weeks before the survey. Results for this group are not reported. The subgroup is too small, and therefore the data are not reliable.

Note: When parentheses or asterisks are used in a table, the explanation will be noted under the table. If there are no parentheses or asterisks on a table, you can proceed with confidence that enough cases were included in all categories that the data are reliable.

Example 4: Understanding Sampling Weights in TDHS-MIS Tables

A sample is a group of people who have been selected for a survey. In DHS-MIS surveys, the sample is designed to represent the national population of age 15-49. Most countries also want to collect and report data on smaller geographical areas. However, doing so requires a minimum sample size per area. For the 2015-16 TDHS-MIS, the survey sample is representative of the country as a whole, residence, Tanzania Mainland and Zanzibar, nine geographic zones, and 30 regions.

Table 3.1 Background characteristics of respondents

Percent distribution of women and men age 15-49 by selected background characteristics, Tanzania DHS-MIS 2015-16

	Women		
Background characteristic	Weighted percent	Weighted number	Unweighted number
	3	2	1
Region			
Dodoma	4.3	572	343
Arusha	3.8	508	420
Kilimanjaro	2.7	361	370
Tanga	5.3	706	465
Morogoro	4.8	636	345
Pwani	2.1	285	333
Dar es Salaam	11.6	1,536	797
Lindi	2.2	288	380
Mtwara	3.1	412	348
Ruvuma	2.7	360	383
Iringa	1.8	245	340
Mbeya	6.2	828	374
Singida	2.8	370	413
Tabora	5.6	737	560
Rukwa	2.2	288	425
Kigoma	4.1	542	491
Shinyanga	3.8	504	516
Kagera	4.6	612	416
Mwanza	6.5	859	496
Mara	3.9	523	531
Manyara	3.0	394	434
Njombe	1.5	203	359
Katavi	1.0	130	466
Simiyu	3.6	479	587
Geita	3.7	485	535
Kaskazini Unguja	0.4	56	366
Kusini Unguja	0.3	35	361
Mjini Magharibi	1.5	201	708
Kaskazini Pemba	0.4	56	338
Kusini Pemba	0.4	55	366
Total 15-49	100.0	13,266	13,266

To generate statistics that are representative of Tanzania and the 30 regions, the number of women surveyed in each region should contribute to the size of the total (national) sample in proportion to size of the region. However, if some regions have small populations, then a sample allocated in proportion to each region's population may not include sufficient women from each region for analysis. To solve this problem, regions with small populations are oversampled. Let's say that you have enough money to interview 13,266 women and want to produce results that are representative of Tanzania and its regions (as in Table 3.1). However, the total population of Tanzania is not evenly distributed among the regions: some regions, such as Dar es Salaam, are heavily populated while others, such as Kusini Unguja are not. Thus, Kusini Unguja must be oversampled.

A sampling statistician determines how many women should be interviewed in each region in order to get reliable statistics. The blue column (1) in the table above shows the actual number of women interviewed in each region. Within the regions, the number of women interviewed ranges from 333 in Pwani to 797 in Dar es Salaam. The number of interviews is sufficient to get reliable results in each region. With this distribution of interviews, some regions are overrepresented and some regions are underrepresented. For example, the population in the Kusini Unguja region is less than 1% of the population in Tanzania, while Dar es Salaam is about 12% of the population in Tanzania. But as the blue column shows, the number of women interviewed in Kusini Unguja accounts for 3% of the total sample of women interviewed (361/13,266) and the number of women interviewed in Dar es Salaam accounts for 6% of the total sample of women interviewed (797/13,266). This unweighted distribution of Tanzanian women does not accurately represent the population.

In order to get statistics that are representative of Tanzania, the distribution of the women in the sample needs to be weighted (or mathematically adjusted) such that it resembles the true distribution in the country. Women from a small region, like Kusini Unguja, should contribute a small amount to the national total. Women from a large region, like Dar es Salaam should contribute much more. Therefore, DHS statisticians mathematically calculate a "weight" which is used to adjust the number of women from each region so that each region's contribution to the total is proportional to the actual population of the region. The numbers in the purple column (2) represent the "weighted" values. The weighted values can be smaller or larger than the unweighted values at the regional level. The total national sample size of 13,266 women has not changed after weighting, but the distribution of the women in the regions has changed to represent their contribution to the total population size.

How do statisticians weight each category? They take into account the probability that a woman was selected in the sample. If you were to compare the red column (3) to the actual population distribution of Tanzania, you would see that women in each region are contributing to the total sample with the same weight that they contribute to the population of Tanzania. The weighted number of women in the survey now accurately represents the proportion of women who live in Kusini Unguja and the proportion of women who live in Dar es Salaam. With sampling and weighting, it is possible to interview enough women to provide reliable statistics at national and regional levels. In general, only the weighted numbers are shown in each of the TDHS-MIS tables, so don't be surprised if these numbers seem low: they may actually represent a larger number of women interviewed.

ACRONYMS AND ABBREVIATIONS

ACT	artemisinin combination therapy
AD	age at death
ADDO	accredited drug dispensing outlet
AIDS	acquired immunodeficiency syndrome
ARI	acute respiratory infection
BCC	behavioural change communication
BCG	bacillus Calmette-Guerin
BEmONC	basic emergency obstetric and neonatal care
BMI	body mass index
BOT	Bank of Tanzania
BRN	Big Result Now
CEmONC	comprehensive emergency obstetric and neonatal care
CHMT	Council Health Management Team
CHW	Community Health Worker
DFATD	Canadian Department of Foreign Affairs, Trade and Development
DP	development partner
EA	enumeration area
FGM	female genital mutilation
FyPD	5-year development plan
GAR	gross attendance ratio
GDP	gross domestic product
GFR	general fertility rate
GPI	gender parity index
HFS	health financing strategy
HIV	human immunodeficiency virus
HRH	human resource for health
HSS	health system strengthening
HSSP	health sector strategic plan
ICD-10	International Classification of Diseases, Tenth Revision
IEC	Information, Education, and Communication
IEC/BCC	Information, Education and Communication/Behaviour Change Communication
IHI	Ifakara Health Institute
IPTp	intermittent preventive treatment for pregnant women
IT	information technology
ITN	insecticide-treated net
IYCF	infant and young child feeding
IUD	intrauterine device
KIO3	potassium iodate
LGA	local government authority

MAD	minimum acceptable diet
MDA	ministry, department and agency
MDG	millennium development goal
MDU	Ministerial Delivery Unit
MMAM	Mpango wa Maendeleo ya Afya ya Msingi
MMRate	maternal mortality rate
MMRatio	maternal mortality ratio
MoHCDGEM	Ministry of Health, Community Development, Gender, Elderly and Children
mRDT	malaria rapid diagnostic test
MSD	Medical Stores Department
NAR	net attendance ratio
NBS	National Bureau of Statistics
NCD	noncommunicable disease
NEHCIP	National Essential Health Care Intervention Package
NGO	nongovernmental organisation
NKRA	National Key Result Area
NMCP	National Malaria Control Programme
NNS	National Nutritional Strategy
OCGS	Office of Chief Government Statistician
ORS	oral rehydration solution
ORT	oral rehydration therapy
PDB	Presidential Delivery Bureau
Pf	*Plasmodium falciparum*
PHC	Population and Housing Census
PHCSDP	Primary Health Care Service Development Programme
PMO-RALG	Prime Minister's Office, Regional Administration and Local Governments
PPM	parts per million
RDT	rapid diagnostic test
RHF	recommended home fluid
RHMT	Regional Health Management Team
RMNCAH	Reproductive, Maternal, Neonatal, Child and Adolescent Health
RS	regional secretary
SD	standard deviations
SDG	sustainable development goal
SEZ	special economic zone
SMS	short message service
SNHI	single national health insurer
TDHS-MIS	Tanzania Demographic and Health Survey and Malaria Indicators Survey
TFNC	Tanzania Food and Nutrition Centre
UIC	urinary iodine concentration
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
VAD	vitamin A deficiency
WHO	World Health Organization
YSD	years since death
ZAMEP	Zanzibar Malaria Elimination Programme

TANZANIA

N
UGANDA
KENYA
RWANDA
BURUNDI
DEM. REP. OF THE CONGO
ZAMBIA
MALAWI
MOZAMBIQUE
Kagera
Lake
Mara
Mwanza
Geita
Simiyu
Shinyanga
Northern
Arusha
Kilimanjaro
Kigoma
Western
Tabora
Central
Manyara
Singida
Dodoma
Tanga
Katavi
South West Highlands
Rukwa
Mbeya
Iringa
Eastern
Pwani
Dar es Salaam
Morogoro
Lindi
Njombe
Southern Highlands
Ruvuma
Southern
Mtwara
Zanzibar
Kaskazini Pemba
Kusini Pemba
Kaskazini Unguja
Kusini Unguja
Mjini Magharibi
0 75 150 300
Kilometres

INTRODUCTION AND SURVEY METHODOLOGY 1

1.1 GEOGRAPHY, HISTORY, AND THE ECONOMY

1.1.1 Geography

The United Republic of Tanzania is the largest country in East Africa, covering 940,000 square kilometres, 60,000 of which are inland water. Tanzania lies south of the equator and shares borders with eight countries: Kenya and Uganda to the North; Rwanda, Burundi, the Democratic Republic of Congo, and Zambia to the West; and Malawi and Mozambique to the South.

Tanzania has an abundance of inland water, with several lakes and rivers. Lake Tanganyika runs along the western border and is Africa's deepest and longest freshwater lake and the world's second deepest lake. Lake Victoria, the world's second largest lake, drains into the Nile River, which flows into the Mediterranean Sea. The Rufiji River is Tanzania's largest river, and it drains into the Indian Ocean, south of Dar es Salaam. Although there are many rivers, only the Rufiji and the Kagera rivers, which empty into Lake Victoria, are navigable by anything larger than a canoe.

One of Tanzania's most distinctive geological features is the Great Rift Valley, which was caused by geological faulting throughout Eastern Africa and is associated with volcanic activity in the north-eastern regions of the country. Two branches of the Great Rift Valley run through Tanzania. The western branch holds Lakes Tanganyika, Rukwa, and Nyasa, while the Eastern branch, which ends in northern Tanzania, includes Lakes Natron, Manyara, and Eyasi.

Except for a narrow belt of 900 square kilometres along the coast, most of Tanzania lies 200 metres or more above sea level, and much of the country is above 1,000 metres. In the North, Mount Kilimanjaro rises to 5,895 metres—the highest point in Africa.

The main climatic feature for most of the country is a long dry spell from May to October, followed by a period of rainfall between November and May. The main rainy season is from March to May, along the coast and around Mount Kilimanjaro, with short periods of rain between October and December. In the western part of the country, around Lake Victoria, the rainfall is well distributed throughout the year, with the peak period falling between March and May.

1.1.2 History

Tanzania (formerly Tanganyika) became independent of British colonial rule on 9 December 1961. One year later, on 9 December 1962, it became a republic, severing all links with the British crown except for its membership in the Commonwealth. The offshore island of Zanzibar became independent on 12 January 1964, after the overthrow of the rule of the sultanate. On 26 April 1964, Tanganyika and Zanzibar joined to form the United Republic of Tanzania.

Tanzania is currently operating under a multiparty democratic system of government, with the president and the national assembly members elected every 5 years. Tanzania's president can hold office for a maximum of two 5-year terms. For administrative purposes, Tanzania Mainland is divided into 25 regions, and Zanzibar is divided into 5 regions. Each region is subdivided into several districts.

1.1.3 Economy

Tanzania has a mixed economy. Agriculture, comprising crop growth, animal husbandry, forestry, fishery, and hunting, played a key role in past years. In the current economy, activities in the service industry

account for 52% of the gross domestic product (GDP). In 2015 the agricultural sector growth declined to 2.3% compared with growth of 3.4% in 2014 (National Bureau of Statistics 2015).

During the same period, the growth rate of crops decreased from 4.0% to 3.2% and that of livestock increased from 2.2% in 2014 to 2.4% in 2015. The decrease in agricultural crop production was attributed to unreliable and untimely rainfall. The agricultural sector faces challenges, including low productivity, dependence on rainfall, backward technology, use of hand hoe, and a lack of both stable markets and agro processing industries. The increase in the growth rate of livestock production was due to improved pasture land, increased extension services for livestock development, and an increase in value of livestock and livestock products. In 2015, the GDP grew by 7.0%, as was the case in 2014.

The 2015 GDP at current prices was TZS 90,863 billion, which is equivalent to TZS 44,101 billion at 2007 constant prices. With an estimated population of 47.4 million on the Tanzania Mainland in 2015, the per capita income was TZS 1,918,928 at current prices, compared with TZS 1,730,405 in 2014, indicating an increase of 10.9% (National Bureau of Statistics 2015).

1.2 POPULATION

Tanzania has undertaken five population and housing censuses since its independence in 1961. The first census, conducted in 1967, reported a total population of 12.3 million. According to the 2012 census, the population had increased to 44.9 million (**Table 1.1**). The 2016 projected population is 50.1 million (NBS 2016). Although the population of Tanzania has increased four times its earlier size in the past four decades, the country is still sparsely populated. Despite the dispersed population, density is high in some parts of the country and has been increasing over time. In 1967, the average population density was 14 persons per square kilometre; by 2012, it had increased to 51 persons per square kilometre.

The high population growth rate in Tanzania has been brought about by high fertility and declining mortality levels. According to the 2012 census, the life expectancy at birth is 62 years. The population of Tanzania has continued to be predominantly rural despite the increase in the proportion of urban residents over time, from 6% in 1967 to 30% in 2012.

1.3 POPULATION AND HEALTH POLICIES AND PROGRAMMES

1.3.1 National Population Policy

The government of the United Republic of Tanzania adopted the National Population Policy in 1992. Since then, developments have taken place, both nationally and internationally, that have a direct bearing on population and development. The Government revised the National Population Policy in 2006 to accommodate these developments (Ministry of Planning, Economy and Empowerment 2006).

The key objectives of the revised policy are to provide a framework and guidelines for integration of population variables in the development process. Specific issues addressed in the guidelines include (1) determining priorities in population and development programmes, (2) strengthening the preparation and implementation of socioeconomic development planning, and (3) coordinating and influencing other policies, strategies, and programmes that ensure sustainable development. Guidelines for promoting gender equality and the empowerment of women are also included (Ministry of Planning, Economy, and Empowerment 2009).

Goals of the Policy

The overriding concern of the revised 2006 National Population Policy has been to improve the standard of living and quality of life of the country's population. The main goal of the policy is to direct development of other policies, strategies, and programmes that ensure sustainable development of the people.

Specific goals of this policy focus on:

- Attainment of gender equity, equality, women's empowerment, social justice, and development for all
- Sustainable development and eradication of poverty
- Harmonious interrelationships among population, resource utilisation, and the environment
- Increased and improved availability and accessibility of quality social services

1.3.2 Vision 2025

The Arusha Declaration of 1967 was the first vision document of the country after independence. The Vision 2025 (formulated in 1998) is an update of that declaration. Tanzania Vision 2025 provides direction and a philosophy for long-term development. Tanzania wants to achieve by 2025 a high quality of livelihood for its citizens; peace, stability, and unity; good governance; a well-educated society; and a competitive economy capable of producing sustainable growth and shared benefits. The document identifies health as one of the priority sectors contributing to a higher quality of livelihood for all Tanzanians. This is expected to be attained through strategies that will achieve the following health service goals:

- Access to quality primary health care for all
- Access to quality reproductive health service for all individuals of appropriate ages
- Reduction in infant and maternal mortality rates to three-quarters of 1998 levels
- Universal access to clean and safe water
- Life expectancy comparable to the level attained by typical middle-income countries
- Food self-sufficiency and food security
- Gender equality and empowerment of women in all health parameters

1.3.3 The National Strategy got Growth and Reduction of Poverty (NSGRP)

The National Strategy for Growth and Reduction of Poverty (NSGRP), known in Kiswahili as the MKUKUTA, represented Tanzania's commitment to the achievement of the Millennium Development Goals (MDGs). MKUKUTA II covered the period 2010/11–2014/15. It focused on growth, social well-being, and governance, and was a framework for all government development efforts and for mobilising resources.

The MKUKUTA aimed to foster greater collaboration among all sectors and stakeholders. It mainstreamed crosscutting issues (gender, environment, HIV/AIDS, human rights, disability, children, youth, elderly, employment, and settlements) into all sector strategies. All sectors were involved in a collaborative effort rather than segmented into separate activities.

1.3.4 The 5-Year Development Plan (FYDP I) 2011/12–2015/16

The 5-Year Development Plan (FYDP I) 2011/12–2015/16 aimed to mobilise Tanzania's resource potential in order to fast-track provision of the basic conditions for broad-based and pro-poor growth. Five crucial elements were to generate this growth momentum:

1. Large investments in energy and transport infrastructure

2. Strategic investments to expand productive sectors (growing high-value crops and producing food for self-sufficiency and export; tapping large natural gas and phosphate deposits; developing Special Economic Zones (SEZs) to foster economic growth)

3. Skills development

4. Improved business environment

5. Institutional reforms for effective implementation, monitoring, and evaluation of the plan

The FYDP I set the following goals for the health sector:

- Increase accessibility to health services, based on equity and gender balance.
- Improve quality of health services.
- Strengthen management of the health system.
- Strengthen management of policies and regulation of health services.
- Enhance human resource development for health and social welfare.

1.3.5 Big Results Now Initiative

As part of the Tanzanian Government's effort to transform the country from a low-income to a middle-income economy, Tanzania is set to adopt the Malaysian Model of Development—The Big Results Now (BRN) initiative—in its own development outlook, which was to be implemented at the beginning of the 2013/2014 financial year.

In 2014, the National Key Result Area (NKRA) in health care was introduced in the Big Results Now approach, to join other key result areas adopted by the Government of Tanzania (GOT) in 2013. The goal was to enhance the implementation of the 5-Year Development Plan 2011/12–2015/16 and Vision 2025. The health care NKRA is the eighth area under the Big Results Now programme.

The BRN approach or methodology emphasises priority setting, focused planning, and efficient resource management. The BRN approach aims to instil a sense of accountability and discipline in implementation through focused monitoring and evaluation. The Presidential Delivery Bureau manages and directs the implementation of the NKRAs and monitors the performance of the outcomes. It also supports the Ministerial Delivery Units (MDUs) at ministerial level to implement and monitor priority initiatives. The BRN has identified priority regions for actions, based on a thorough situation analysis. Most underserved or underperforming regions will be targeted first. BRN activities constitute the core of Health Sector Strategic Plan (HSSP) IV and are fully integrated. The 22 initiatives listed in the health care NKRA will continue beyond June 2018. Similar achievements planned for BRN target regions will be achieved or surpassed countrywide by the end of the HSSP IV period.

1.3.6 Health Policy

The Health Policy 2007 outlines achievements and challenges facing the health sector. The vision of this policy is to have a healthy society, with improved social wellbeing that will contribute effectively to personal and national development. The mission is to provide basic health services in accordance with geographical conditions, which are of acceptable standards, affordable, and sustainable. The policy prioritises the provision of health services to those most at risk and satisfies the needs of citizens in order to increase the lifespan of all Tanzanians.

Specifically the Government targets:

- Reducing morbidity and mortality to increase the lifespan of all Tanzanians by providing quality health care
- Ensuring that basic health services are available and accessible
- Preventing and controlling communicable and non-communicable diseases
- Sensitising the citizens to preventable diseases
- Creating awareness in individual citizens of responsibility for personal health and health of their family

- Improving partnership among the public sector, private sector, religious institutions, civil society, and community in provision of health services
- Planning, training, and increasing the number of competent health staff
- Identifying and maintaining the infrastructures and medical equipment
- Reviewing and evaluating the health policy of 2007 and guidelines, laws, and standards for provision of health services

The document looks at health policies and statements in the following areas:

- Preventive services: Control disease incidences and disability
- Epidemics: Control communicable diseases, especially diseases from outside
- Non-communicable diseases: Promote healthier lifestyles and adequate treatment
- Maternal and child health: Reduce maternal and child mortality in line with MDGs
- Reproductive health: Make services available, especially for youth and men
- Primary Health Care (PHC): Make PHC accessible for all citizens
- Health education and advocacy: Get across the message that every individual can improve his or her health status
- Environmental Health: Promote a sustainable healthy environment for the whole community
- Occupational health: Protect and improve workers' health status
- Curative care: Deliver safe health care services to the community
- Medicines and supplies: Ensure quality and availability of sufficient medicines and supplies
- Safe blood transfusions: Make safe blood available throughout the country
- Mental health: Promote mental health in the community and prevent illnesses
- Traditional medicine and traditional midwives: Increase coordination and partnerships
- Cells and genome: Develop proper use of technology of genetic engineering
- Control of food, medicines, other: Ensure foods are safe and meet defined standards
- Diagnosis of diseases: Provide accurate diagnosis and forensic investigations
- Quality improvement and standards: Attain at least minimum standards
- Coordination in health sector: Participatory, transparent, and sustainable system for all stakeholders
- Human resources development: Provide sufficient staff with required skills mix

1.3.7 Primary Health Care Service Development Programme (2007-2017)

In 2007 the Ministry of Health, Community Development, Gender, Elderly and Children (MoHCDGEC) developed the Primary Health Care Service Development Programme, better known in Kiswahili as Mpango wa Maendeleo ya Afya ya Msingi (MMAM) 2007-2017. The objective of the MMAM

programme was to accelerate the provision of primary health care services for all by 2012, while the remaining 5 years of the programme were to focus on consolidation of achievements. Major areas were strengthening health systems, rehabilitation, human resource development, strengthening the referral system, health sector financing, and provision of medicines, equipment, and supplies. This programme is being implemented by the MoHCDGEC in collaboration with other sectors in the existing government administration. These sectors include the Prime Minister's office, regional administration and local government (PMO-RALG), regional secretariats (RSs), local government authorities (LGAs), and village committees.

The first element was to increase the health workforce by increasing the throughput in the existing training institutions by 100%, upgrading four schools to enrol nurses, producing health tutors, and upgrading the skills of existing staff by provision of information technology skills and acquiring new medical technology. The rehabilitation of existing health facilities and construction of new ones, to have a dispensary in each village and a health centre in each ward, was planned, as was improving the outreach services. The referral system was to be strengthened by improving information communication systems and transport. The Programme was also designed to address the revised health policy and the health-related MDGs in the areas of maternal health, child health, and priority diseases.

1.3.8 Health Sector Strategic Plan III (2009-2015)

The Health Sector Strategic Plan III (HSSP III) was a crosscutting strategic plan for the health sector of Tanzania for the period July 2009 - June 2015. It provided an overview of the priority strategic directions across the sectors guided by Vision 2025, the National Programme for Economic Growth and Poverty Reduction (MKUKUTA in Kiswahili) and the MDGs, and the National Health Policy. It served as the guiding document for development of council and hospital strategic plans and for annual work plans. The formulation process of the HSSP III was led by the Health Sector Reform Secretariat under the Division of Policy and Planning, MoHCDGEC. The process involved key stakeholders from ministries, departments, and agencies. The private sector and development partners also participated in HSSP III preparation.

1.3.9 The National Road Map Strategic Plan to Accelerate Reduction of Maternal, Newborn, and Child Deaths in Tanzania-One Plan (2008-2015)

The main goal of this strategic plan was to reduce maternal, neonatal, and child morbidity and mortality and to attain MDG 4 (to reduce child mortality by two-thirds from the rate in 1990) and 5 (to reduce maternal mortality by three-quarters from the rate in 1990). The target date for achievement of these goals was December 2015.

Broad objectives:

- To provide skilled attendance to women during pregnancy, childbirth, postnatal and neonatal periods, and children at all levels of the health care delivery system
- To strengthen the capacity of individuals, families, communities, and organisations to improve maternal, newborn, and child health

Operational targets that were to have been achieved by the end of 2015:

- To reduce maternal mortality from 578 to 193 deaths per 100,000 live births
- To reduce neonatal mortality from 32 to 19 deaths per 1,000 live births
- To reduce under-5 mortality from 112 to 54 deaths per 1,000 live births
- To increase coverage of emergency obstetric care from 64% to 100% of hospitals and basic comprehensive emergency obstetric care services from 5% to 70% of health centres and dispensaries

- To increase modern contraceptive prevalence among women age 15-49 from 20% to 60%
- To increase provision of services that will prevent HIV transmission from mother to child in at least 80% of pregnant women, their babies, and their families
- To increase the proportion of health facilities offering essential newborn care to 75%
- To reduce the prevalence of stunting among children under age 5 from 38% to 22% and to reduce the prevalence of underweight among children under age 5 from 22% to 14%
- To increase coverage of children under age 5 sleeping under ITNs from 47% to 80%
- To increase the number of health facilities providing adolescent-friendly reproductive health services from 10% to 80%
- To increase immunization coverage of DTP-HB3 and measles vaccine to above 90% in 90% of the districts

To achieve the targets set for 2015, the following strategies were launched:

- Advocacy and resource mobilization
- Health system strengthening and capacity development
- Community mobilization
- Promotion of reproductive and child health behavioural change
- Fostering of partnership and coordination

The MoHCDGEC was to mobilise resources and advocate for the reduction of maternal, newborn, and child deaths. The MoHCDGEC was also responsible for the overall technical leadership, guidance, and coordination of the implementation and monitoring of the strategic plan. The goal was to accelerate the reduction of maternal, newborn, and child deaths and thereby achieve the relevant MDGs.

1.3.10 The Sharpened One Plan to Accelerate Progress (2014-2015)

The Sharpened One Plan 2014–2015 aimed to accelerate implementation of the interventions and strategies stipulated in "The National Road Map Strategic Plan to Accelerate Reduction of Maternal, Newborn, and Child Deaths in Tanzania 2008-2015 (One Plan)" in an integrated manner that addressed the continuum of care. The rationale for taking the integrated approach relies on a number of factors:

- Specific interventions delivered in a specific time frame have multiple benefits.
- Linking interventions in packages can reduce costs; facilitate greater efficiency in training, monitoring, and supervision; and strengthen supply systems.
- Integration of services increases uptake and promotes continuation of positive behaviours.
- Integration maximises programme achievements.

The Sharpened One Plan adopted the goal and objectives of the One Plan. The focus of the Sharpened One Plan for the remaining 600 days of the One Plan (June 2014 to December 2015) was refined based on the One Plan mid-term review findings in line with five strategic areas as defined by A Promise Renewed initiative.

Strategic Area 1: Geographic focus with increased efforts in Lake zone (Kagera, Mwanza, Geita, Mara, Simiyu, and Shinyanga regions) and Western zones (Tabora and Kigoma regions) where maternal, newborn, and child mortality is highest, with a focus on reducing rural-urban disparities

Strategic Area 2: High burden, population focusing, health systems to scale up access for underserved women, adolescents, and children; maintain gains in maternal and child health; scale-up interventions particularly in rural or marginally performing areas

Strategic Area 3: High impact interventions that target and expand coverage of selected evidence-based interventions that will have the greatest impact on lives saved, specifically in family planning, care at birth, and postpartum/ postnatal care

Strategic Area 4: Education, empowerment, equality to collaborate and coordinate with supportive policies and legal environment that influence the social determinants of health and information, education and communication/behavioural change communication

Strategic Area 5: Mutual accountability and transparency to strengthen all levels of the health systems; and invest in a Health Management Information System (HMIS) to capture data, monitor, and evaluate progress using the Reproductive and Maternal Newborn and Child Health (RMNCH) scorecard

1.3.11 National Nutrition Strategy

The Government of Tanzania developed the National Nutrition Strategy (NNS) to put forward the priorities for July 2011 to June 2016. This strategy aims to ensure that the nation and its people are properly nourished. The strategy is in-line with, and will contribute to, the National Development Vision 2025, MKUKUTA, the African Regional Nutrition Strategy (2005-2015), and the policies and strategies of the Government of Tanzania.

The goal of the strategy is that all Tanzanians attain adequate nutritional status, which is an essential requirement for a healthy and productive nation. This goal will be achieved through policies, strategies, programmes, and partnerships that deliver evidence-based and cost-effective interventions to improve nutrition.

The targets to be achieved by 2015 were as follows:

- Reduce the prevalence of underweight in children age 0-59 months (weight-for-age z-score <-2 SD) from 16% in 2010 to 11%.
- Reduce the prevalence of stunting in children age 0-59 months (height-for-age z- score <-2 SD) from 42% in 2010 to 27%.
- Increase prevalence of exclusive breastfeeding in children <6 months from 50% (2010) to 60%.
- Sustain the prevalence of wasting in children age 0-59 months (weight-for-height z- score <-2 SD) below 5% at all times[1,2].
- Sustain the prevalence of thinness (body mass index <18.5 kg/m2) among women of reproductive age below the 2005 prevalence of 10% at all times.
- Reduce the prevalence of vitamin A deficiency among children age 6-59 months (serum retinol levels <20 pg/dL) from 24% in 1997 to <15%.
- Reduce the prevalence of anaemia (haemoglobin concentration <11 g/dl) among pregnant women from 48.4% in 2004/5 to 35%.

[1] Note: Prevalence rate according to New WHO Child Growth Standards
[2] The 5% target is less that the 2% target set in the NSGRP, as it is felt that the latter target is too ambitious.

- Reduce the prevalence of anaemia among children age 6-59 months (haemoglobin concentration <11 g/dl) from 71.8% in 2004/5 to 55%.
- Maintain the prevalence of iodine deficiency among children age 6-12 (urinary iodine concentrations <100 pg/d) at <50%.

Behaviour change and service provision objectives:

- Increase the proportion of infants age less than 6 months who are exclusively breastfed from 41% to 60%.
- Increase the proportion of infants age 4-5 months who are exclusively breastfed from 13.5% to 25%.
- Maintain the proportion of infants age 6-9 months who are fed solid foods in addition to breast milk at >90%.
- Maintain the percentage of children age 6-59 months who received a vitamin A supplement in the last 6 months at >90%
- Increase the proportion of women who receive a dose of vitamin A supplement within 8 weeks of delivery from 20% to 40%
- Increase the proportion of mothers who take iron supplementation for more than 90 days during pregnancy and the post-partum period from 10% to 30%
- Increase the use of adequately iodised salt from 43% to 90%

1.4 Strategic Direction for the Period 2015 to 2020

The implementation of health sector interventions during the period July 2015 to December 2016 will continue to be guided by Tanzania Development Vision 2025, Health Sector Policy 2007, and the Primary Health Care Service Development Programme (2007-2017). The Tanzania Development Vision 2025 document will continue to provide direction and philosophy for long-term development, whereas the National Health Policy will provide the focus for improving the planning and provision of health services in Tanzania.

At the end of 2014, the MoHCDGEC started developing strategic documents to pick up from where the HSSP III (2009-2015), National Road Map Strategic Plan To Accelerate Reduction of Maternal, Newborn, and Child Deaths in Tanzania-One Plan (2008-2015), and the Sharpened One Plan (2014-2015) ended. The documents developed and launched are the Health Sector Strategic Plan IV 2015-2020 (HSSP IV 2015-2020) and the National Road Map Strategic Plan To Improve Reproductive, Maternal, Newborn, Child, and Adolescent Health-One Plan II (2016-2020). These documents provide a framework to guide the provision, monitoring, and evaluation of reproductive, maternal, newborn, child, and adolescent health interventions for the period July 2015 to December 2020.

Both the HSSP IV and One Plan II were developed in a participatory process under the leadership of the then Ministry of Health and Social Welfare (MoHSW). During this process, inputs were received from governmental, non-government, and private sector partners, with contributions from ministries, departments, and agencies, especially the Prime Minister's Office for Regional Administration and Local Government (PMO-RALG) and from development partners.

1.4.1 Health Sector Strategic Plan IV (2015-2020)

The overall objective of HSSP IV is to reach all households with essential health and social welfare services, to meet, as much as possible, the expectations of the population, adhering to objective quality

standards, and applying evidence-informed interventions through efficient channels of service delivery. This objective will be realised through five strategic objectives:

Strategic Objective 1: The health and social services sector will achieve objectively measurable **quality improvement** of primary health care services, delivering a package of essential services in communities and health facilities.

Strategic Objective 2: The health and social welfare sector will improve **equitable access** to services in the country by focusing on geographic areas with higher disease burdens and vulnerable groups in the population with higher risks**.**

Strategic Objective 3: The health and social welfare sector will achieve active **community partnership** through intensified interactions with the population for improvement of health and social wellbeing.

Strategic Objective 4: The health and social welfare sector will achieve a higher rate of return on investment by applying **modern management methods** and engaging in innovative partnerships.

Strategic Objective 5: To address the **social determinants of health**, the health and social welfare sector will collaborate with other sectors, and advocate for the inclusion of health promoting and health protecting measures in other sectors' policies and strategies.

1.4.2 One Plan II (2016-2020)

This strategy takes cognizance of the emphasis enshrined within Sustainable Development Goals (SDGs) and other international strategies. International strategies stress the importance of skilled, motivated, and enabled human resources for health, and other pillars of the health system for provision of quality reproductive health services. Furthermore, this strategy translates all national policies and strategies into an enabling environment to enhance pregnancy outcome via service provision, along the continuum of care, from pre-pregnancy to postpartum period; using antenatal and Emergency Obstetrics and Newborn Care (EmONC) interventions and services, and improved newborn and child health, through sustained gains of Millennium Development Goal (MDG) milestones.

The overall goal of One Plan II is to improve reproductive, maternal, newborn, child and adolescent health (RMNCAH) in Tanzania in line with the National Development Vision 2025. This goal is planned to be realised through three key strategies:

Key RMNCAH Strategy 1: Strengthen reproductive maternal, newborn, child, and adolescent health.

- Strengthen maternal health and newborn health services, including family planning (FP); focused antenatal care (FANC); postnatal and newborn care; and emergency obstetrics and newborn care (EmONC).
- Strengthen and improve visibility of adolescent reproductive health services including strengthening the adolescent health programme, improving its visibility, and developing and implementing a comprehensive strategy for adolescent health.
- Scale up and expand the coverage for reproductive health (RH) services, including family planning, reproductive cancers, gender-based violence and violence against children, health needs of the elderly, fistula, and male reproductive health, including male involvement in reproductive health interventions.

Key RMNCAH Strategy 2: Scale up the child health programme.

- Scale up coverage of the immunization and vaccine development programme, care for the sick child, and emergency triage assessment and treatment.

- Strengthen the implementation of the Integrated Management of Child Illnesses (IMCI) interventions.
- Scale up newborn, infant, and young child feeding services, including promotion of early breastfeeding, exclusive breastfeeding, and complementary feeding after 6 months.

Key RMNCAH Strategy 3: Strengthen response to cross-cutting issues.

- Strengthen RMNCAH interventions through the operationalization of annual One Plan II operational plans, and convening of annual RCH meetings.
- Improve the availability of RMNCAH and nutrition commodities (RMNCH lifesaving commodities, family planning commodities, vaccines, therapeutic feeds, vitamin A for U5 children, and iron-folate supplements for pregnant women).
- Strengthen community involvement in RMNCAH and nutrition services.
- Provide comprehensive health promotion and education services in all RMNCAH programmes.
- Strengthen the RMNCAH management information system and operational research activities.

1.4.3 National Key Result Area in Health Care

In 2014, the National Key Result Area in Health Care was introduced, and four broad outcomes (key result areas) were identified with 22 initiatives to be implemented for 3 years, from 2015/16 to 2017/18, in order to achieve the set targets and goals. These initiatives are to be implemented in collaboration with the MoHCDGEC, PMO-RALG, President's Office Public Service Management (PO-PSM), and Medical Stores Department (MSD). The four key results areas that were formulated in the Health and Social Welfare sector include:

1. Human Resources for Health (HRH) interventions aim to attain a 100% balanced distribution of skilled health workers at the primary level in 13 underserved regions by 2017-18. There are six distinct initiatives: prioritise allocation of employment permits to regions with a critical shortage of skilled HRH, provide skilled HRH through public-private partnerships and private sector engagement, and redistribute health workers within regions. Other goals are optimising the pool of new recruits, empowering the Local Government Authority (LGA) in human resource management, and synchronising the recruitment process at the central level.

2. Health commodities targets focus on ensuring 100% stock availability of essential medicines in all primary health facilities in the country. Six initiatives are to be implemented: (1) improving governance and accountability to the health commodity supply chain, (2) eliminating frequent stock outs and pilferages, and (3) strengthening the management of MSD's working capital and complementing MSDs in the procurement and distribution of medicines through engagement with the private sector, therefore improving accountability. Other initiatives include introducing an Information and Communication Technology (ICT) mobile application platform, expanding the short message service (SMS) reporting system, and scaling up total quality management initiatives to the primary facility level using the 5S-KAIZEN approach.

3. Health facility performance management improvement goals include achieving 80% of primary health facilities at the 3-stars and above rating by 2017-18 in twelve identified priority regions. This is to be achieved through four initiatives: (1) assess, rate, and develop specific facility performance improvement plans for health facilities below a 3-star rating at the primary level with introduction of the star rating system of certification; (2) increase social accountability at facility and community levels, (3) introduce performance targets and contracts, and (4) implement decentralization of fiscal management from the council to health facility level.

4. Reproductive Maternal, Neonatal, Adolescent, and Child Health (RMNCAH) services target the achievement of a 20% reduction in maternal and neonatal mortality rates in five identified priority regions by 2017-18. The following six initiatives will be implemented to achieve the stated goals: (1) mobilise community health workers (CHWs) to improve RMNCAH services, (2) use m-Health (SMS) and Maternal CHW App (Internet) through Public Private Partnership (PPP), (3) expand Comprehensive Emergency Obstetric and Neonatal Care (CEmONC), (4) expand Basic Emergency Obstetric and Neonatal Care (BEmONC) services, (5) construct blood bank facilities at the regional level, and (6) develop integrated mass media campaigns through PPP. The RMNCAH services will be provided through a continuum of care to include family planning, antenatal care, labour and delivery, and care during the postnatal period for both mother and the newborn.

Across the four key results areas there will be baseline assessments to get accurate starting information on data for target setting and assessment of performance. Baseline assessments will be conducted by the MoHCDGEC with collaboration from the respective LGAs. At all levels, there will be weekly reporting and monitoring of key performance indicators from facilities to the MoHCDGEC and to the President's Office. Data for quarterly monitoring of the progress of the key results areas and other initiatives will be readily available for utilization in the Health Management Information System and the District Health Information System2 (DHIS 2) electronic data base.

1.5 Objectives and Survey Organization

The 2015-16 Tanzania Demographic and Health Survey and Malaria Indicator Survey (TDHS-MIS) is the ninth in a series of national sample surveys conducted in Tanzania to measure levels, patterns, and trends in demographic and health indicators. The first TDHS, conducted in 1991-92, was followed by the 1994 Tanzania Knowledge, Attitudes, and Practices Survey (TKAPS), the 1996 TDHS, the 1999 Tanzania Reproductive and Child Health Survey (TRCHS), the 2003-04 Tanzania HIV/AIDS Indicator Survey (THIS), the 2004-05 TDHS, the 2007-08 Tanzania HIV/AIDS and Malaria Indicator Survey (THMIS), and the 2010 Tanzania Demographic and Health Survey (TDHS 2010).

The 2015-16 Tanzania Demographic and Health Survey and Malaria Indicator Survey (TDHS-MIS) was undertaken by the National Bureau of Statistics (NBS) and the Office of Chief Government Statistician (OCGS), Zanzibar, in collaboration with the Ministry of Health, Community Development, Gender, Elderly, and Children on the Tanzania Mainland and the Ministry of Health, Zanzibar.

Funding for the survey was provided by the Tanzania government through the Ministry of Health, Community Development, Gender, Elderly, and Children; Canadian Department of Foreign Affairs, Trade and Development (DFATD); United Nations Population Fund (UNFPA); Irish Aid; and United Nations Children's Fund (UNICEF). Microscopic reading of malaria infection was conducted by the Ifakara Health Institute (IHI), while the Tanzania Food and Nutrition Centre (TFNC) tested women's urine and household salt for the presence of iodine. ICF International provided technical assistance through the Demographic and Health Surveys (DHS) Program, which is funded by the United States Agency for International Development (USAID) which offers financial support and technical assistance for population and health surveys in countries worldwide.

1.5.1 Objectives

The primary objective of the 2015-16 TDHS-MIS is to provide up-to-date estimates of basic demographic and health indicators. This survey collected information on fertility levels, marriage, sexual activity, fertility preferences, awareness and use of family planning methods, breastfeeding practices, nutrition, childhood and maternal mortality, maternal and child health, malaria, and other health-related issues. In addition, the 2015-16 TDHS-MIS provided estimates of anaemia prevalence among children age 6-59 months and women age 15-49 years, estimates of malaria prevalence among children age 6-59 months, and estimates of iodine concentration in household salt and women's urine.

The information collected through the 2015-16 TDHS-MIS is intended to assist policy makers and programme managers in evaluating and designing programmes and strategies to improve the health of the country's population.

1.5.2 Survey Organization

Sample design

The sample design for the 2015-16 TDHS-MIS was done in two stages and was intended to provide estimates for the entire country, for urban and rural areas in Tanzania Mainland, and for Zanzibar. For specific indicators such as contraceptive use, the sample design allowed the estimation of indicators for each of the 30 regions (25 regions from Tanzania Mainland and 5 regions from Zanzibar). The first stage involved selecting sample points (clusters), consisting of enumeration areas (EAs) delineated for the 2012 Tanzania Population and Housing Census. A total of 608 clusters were selected.

In the second stage, a systematic selection of households was involved. A complete households listing was carried out for all 608 selected clusters prior to the fieldwork. From the list, 22 households were then systematically selected from each cluster, yielding a representative probability sample of 13,376 households for the 2015-16 TDHS-MIS. To estimate geographic differentials for certain demographic indicators, Tanzania was divided into nine geographic zones. Although these zones are not official administrative areas, this classification system is also used by the Reproductive and Child Health Section of the MoHCDGEC. Grouping the regions into zones allowed a relatively large number of people in the denominator and a reduced sampling error. Note that the zones, defined below, differ slightly from the zones used in previous DHS surveys. Therefore, comparisons across the zones and from survey to survey should be made with caution. The zones are as follows:

Western zone: Tabora, Kigoma

Northern zone: Kilimanjaro, Tanga, Arusha

Central zone: Dodoma, Singida, Manyara

Southern Highlands zone: Iringa, Njombe, Ruvuma

Southern zone: Lindi, Mtwara

South West Highlands zone: Mbeya, Rukwa, Katavi

Lake zone: Kagera, Mwanza, Geita, Mara, Simiyu, Shinyanga

Eastern zone: Dar es Salaam, Pwani, Morogoro

Zanzibar: Kaskazini Unguja, Kusini Unguja, Mjini Magharibi, Kaskazini Pemba, Kusini Pemba

All women age 15-49 who were either usual residents or visitors in the household on the night before the survey were included in the 2015-16 TDHS-MIS and were eligible to be interviewed. In a subsample of one-third of all the households selected for the survey, all men age 15-49 were eligible to be interviewed if they were either usual residents or visitors in the household on the night before the survey. In all households, with the parent's or guardian's consent, children age 6-59 months were tested for anaemia and malaria. All interviewed women were tested for anaemia. In the households selected for interviews with men, interviewed women were asked to provide a urine sample and a sample of household salt for laboratory testing to detect the presence of iodine.

Questionnaires

Four questionnaires were used for the 2015-16 TDHS-MIS: the Household Questionnaire, the Woman's Questionnaire, the Man's Questionnaire, and the Biomarker Questionnaire. These questionnaires were based on the DHS Program's standard Demographic and Health Survey (DHS) questionnaires. They were adapted to reflect the population and health issues relevant to Tanzania. Inputs were solicited from various stakeholders representing government ministries, departments, and agencies; non-governmental organizations; and development partners. After the preparation of the definitive questionnaires in English, the questionnaires were translated into Kiswahili.

The Household Questionnaire was used to list all the usual members and visitors in the selected households. Basic demographic information was collected on the characteristics of each person listed, including his or her age, sex, marital status, education, and relationship to the head of the household. For children under age 18, their parents' survival status was determined. The data on age and sex of household members obtained in the Household Questionnaire were used to identify women and men who were eligible for individual interviews. The Household Questionnaire also collected information on characteristics of the household's dwelling unit, such as source of water, type of toilet facilities, materials used for the floor, roof, and exterior walls of the dwelling unit, ownership of various durable goods and assets, and ownership and use of mosquito nets.

The Woman's Questionnaire was used to collect information from all eligible women age 15-49. These women were asked questions on the following topics:

- Background characteristics (age, education, media exposure)
- Birth history and childhood mortality
- Knowledge and use of family planning methods
- Fertility preferences
- Antenatal, delivery, and postnatal care
- Breastfeeding and infant feeding practices
- Vaccinations and childhood illnesses
- Marriage and sexual activity
- Women's work and husbands' background characteristics
- Other health issues
- Adult mortality, including maternal mortality
- Malaria
- Domestic violence

The Man's Questionnaire was administered to all men age 15-49 in the subsample of households selected for the men's survey. The Man's Questionnaire collected much of the same information found in the Woman's Questionnaire but was shorter because it did not contain a detailed reproductive history or questions on maternal and child health.

The Biomarker Questionnaire was used to record anthropometric measurements (height and weight) for children under age 5 and women age 15-49; record anaemia test results for children age 6-59 months and women age 15-49; record malaria rapid test results for children age 6-59 months; document responses to a request for blood samples among children age 6-59 months, to be tested later for malaria using microscopy at the Ifakara Health Institute lab; and document responses to request for a household salt sample and a urine sample among women age 15-49, to be tested later for iodine at the Tanzania Food and Nutrition Centre laboratory.

Anthropometric Measurements, Testing for Malaria and Anaemia, Testing for Iodine

Anthropometry: Height and weight measurements were recorded for children under age 5 and women age 15-49.

Testing for Anaemia: Blood specimens for haemoglobin measurement were collected from women age 15-49 and from all children age 6-59 months for whom consent had been obtained from their parents or guardians. Blood samples were drawn from a drop of blood taken from a finger prick (or a heel prick in the case of children age 6-11 months) and collected in a microcuvette. Haemoglobin analysis was carried out on-site using a battery-operated portable HemoCue analyzer. Results were provided verbally and in writing. Parents/guardians of children with a haemoglobin level under 7 g/dl were instructed to take the child to a health facility for follow-up care. Likewise, nonpregnant women and pregnant women were referred for follow-up care if their haemoglobin levels were below 7 g/dl and 9 g/dl, respectively.

Testing for Malaria: The 2015-16 TDHS-MIS collected finger- (or heel-) prick blood samples from children age 6-59 months to perform on-the-spot testing for malaria. Thick blood smears were also collected and taken to a laboratory to detect the presence of *Plasmodium* parasites.

Malaria testing using a rapid diagnostic test (RDT). Another major objective of the 2015-16 TDHS-MIS was to provide information about the extent of malaria infection among children age 6-59 months. Using the same finger- (or heel-) prick used for anaemia testing, a drop of blood was tested immediately using the SD Bioline Pf/Pan RDT, which is a rapid diagnostic test for malaria. It tests for two antigens—one found in many species of Plasmodium (Pan) and the other specific to *Plasmodium falciparum* (Pf), the major cause of malaria in Tanzania.

The test includes a disposable sample applicator that comes in a standard package. A tiny volume of blood is captured on an applicator and placed in the well of the testing device. All field nurses were trained to perform the RDT in the field, according to the manufacturers' instructions. As with the anaemia testing, malaria RDT results were provided to the child's parent or guardian in oral and written form and were recorded on the Biomarker Questionnaire. Children who tested positive for malaria using the RDT were offered a full course of treatment according to Tanzania national malaria treatment guidelines, provided they were not currently on treatment with Artemisinin Combination Therapy (ACT) and had not completed a full course of ACT during the 2 weeks preceding the survey. To ascertain the correct dose, nurses were provided with treatment guidance charts and were instructed to ask about signs of severe malaria and about any medications the child might already be taking. The nurses then provided the age-appropriate dose of ACT along with instructions on how to administer the medicine to the child[3].

Children who tested positive and showed symptoms of severe malaria (haemoglobin levels below 7 g/dl, extreme weakness, loss of consciousness, rapid breathing, seizures, bleeding, jaundice, and dark urine) were not offered the treatment. Because the first-line treatment for severe malaria is parenteral quinine, the parents or guardians of these children were advised to take them to a health facility immediately. The parents or guardians of all other children treated were told to take the child to a health facility immediately if they became sicker, developed a fever or difficulty breathing, or were not able to drink or breastfeed. They also received counselling on how to prevent malaria. Children who tested positive for malaria in Zanzibar were not treated due to the current procedure for malaria elimination on the island. Their parents or guardians were advised to take their children to the nearest health facility immediately.

Malaria testing using blood smears: In addition to the RDT, thick smears were prepared in the field. Each blood smear slide was given a bar code label, with a duplicate affixed to the Biomarker Questionnaire. An additional copy of the bar code label was affixed to a blood sample transmittal form to track the blood samples from the field to the laboratory. The slides were dried in a dust-free environment and stored in slide boxes. The thick smear slides were collected regularly from the field, along with the

[3] Dosage of ACT was based on recipient's age. The proper dosage for a child age 6 months to 3 years is one tablet of artemether-lumefantrine (co-formulated tablets containing 20 mg of artemether and 120 mg of lumefantrine) to be taken twice daily for 3 days, while the dosage for a child age 4-7 is two tablets of artemether-lumefantrine to be taken twice daily for 3 days.

completed questionnaires, and transported to Ifakara Health Institute laboratory in Bagamoyo for microscopic reading to determine presence of *Plasmodium* infection.

Testing for Iodine Deficiency: The 2015-16 TDHS-MIS included several tests related to iodine. First, in all households, interviewers asked for a teaspoon of salt. The salt was tested for iodine using a simple rapid test kit. Salt that turned any shade of purple after being diluted with a drop of the test solution was considered to be iodised.

Second, in every third sampled household, TDHS-MIS field teams asked for a slightly larger sample of household salt that was put into a screw-capped plastic container, appropriately labelled and transported to the Tanzania Food and Nutrition Centre (TFNC) lab, where it was then tested for iodine content.

Third, interviewing teams requested that women respondents provide a urine sample for subsequent testing for iodine levels. Women who consented were provided with a small plastic cup in which to urinate. While in the field, the urine was transferred from the plastic cup via a vacuum method into small tubes with tightly fitted caps, ready for transport to the TFNC laboratory, where samples were tested for iodine.

Pretest

A pre-test was conducted in Tanga region from May 20, 2015, through June 18, 2015. Sixteen participants (12 women and 4 men) participated in the 4-week pre-test training and fieldwork practice for the 2015-16 TDHS-MIS. The majority of participants had worked in various TDHS activities previously. Training was conducted by trainers from National Bureau of Statistics (NBS), OCGS, and MoHCDGEC, with technical assistance from ICF International. Classroom instructions were provided during the first 3 weeks, and pre-test field practice took place for 5 days in two rural and two urban EAs. Following the field practice, a debriefing session was held with the pre-test field staff, and modifications to the questionnaires were made based on lessons learned from the pre-test exercise.

Training of Field Staff

The main training of the 2015-16 TDHS-MIS enumerators, supervisors, and editors took place in Kilimanjaro region from July 20, 2015, to August 21, 2015. A total of 74 female nurses, 20 male nurses, 20 supervisors, and 20 editors from all over the country were invited to participate in the training. The training sessions were conducted by NBS, Office of the Chief Government Statistician (OCGS), and trainers from ministries responsible for health on both Tanzania Mainland and Zanzibar with support from ICF International. Training on biomarkers was provided by trainers from Ifakara Health Institute (IHI) and Tanzania Food and Nutrition Centre (TFNC), with support from ICF International.

Participants were evaluated through in-class exercises, quizzes, and observations made during field practice. By the end of the main training, 16 teams were formed, consisting of 16 individuals to serve as team leaders, 16 to serve as field editors, 16 as male interviewers, and 64 as female interviewers. All interviewers were nurses. The team leaders received additional training on how to identify the selected households, different subsamples, data quality control procedures, and fieldwork coordination. The field editors received additional training on how to edit the questionnaires, data quality control procedures, and how to enter data in tablets.

1.6 FIELDWORK

Data collection was carried out by 16 field teams: three teams in Zanzibar and 13 teams on Tanzania Mainland. Each team was provided with a four-wheel drive vehicle with a driver. The teams consisted of a team supervisor, four female interviewers, one male interviewer, and one field editor, who also entered data into a tablet. The field editor and supervisor were responsible for reviewing all questionnaires for completeness, quality, and consistency before entering data into the tablet. All questionnaires, dried blood smears, table salt, and urine specimens were transferred to the NBS head office almost every 2 weeks by a

quality control team from NBS, OCGS, TFNC, and ministries responsible for health for both Tanzania Mainland and Zanzibar. The dried blood smears, table salt and urine specimens were sent later to IHI and TFNC laboratories for testing. The NBS also coordinated and supervised all fieldwork activities. ICF International provided technical assistance during the entire 5-month data collection period, from August 22, 2015, through February 14, 2016.

1.6.1 2015-16 TDHS-MIS Field Challenges

This section summarises the reports from the 2015-16 TDHS-MIS regional field teams, quality control, and field monitoring personnel on the challenges faced during the data collection exercise, August 2015 – March 2016.

The main objective of this part is to specifically appreciate the extra efforts made by the various field teams in overcoming different field challenges while ensuring that the 2015-16 TDHS-MIS data collection undertaking was successfully implemented resulting in high quality data. Sharing this field experience with the general public is one way of honouring the data collection field teams and showing the public that the contained findings passed through delicate situations.

Data collection started when Tanzania was having campaigns for the 2015 general elections. The campaigns started in August and lasted until October 2015. The teams' schedules were planned in such a way that field work would start in areas known to have high political tensions with possible violence during political campaigns. This was one of the challenges faced by field teams; therefore they had to spend some time informing and convincing the general public that the survey was not in any way related to the forthcoming general elections.

The survey also faced the common challenges of fieldwork in Tanzania, including rough roads. Remote areas are hard to reach and therefore field teams had to walk long distances while carrying their working-gear, which included weighing scales, length boards, and backpacks with questionnaires and other field supplies, to get to the selected households. Some of the clusters had scattered pastoralist and fishery households that forced interviewers to walk long distances and climb mountainous areas within the clusters with all their field supplies. In some of these areas, there were no appropriate places for meals and accommodation. In these places, enumerators cooked for themselves and used nearby school rooms and village offices for accommodation. Sometimes due to lack of accommodation, the enumerators (mainly male) spent nights inside the field vehicles.

In addition, the survey data collection exercise extended to November/December 2015, which is the rainy season in most parts of the country. For this reason, members of the field teams sometimes had to walk long distances, as the roads were inaccessible by vehicles due to floods, broken bridges, and slippery surfaces.

It is worth noting that the field teams were very committed to the task and worked diligently to ensure that all selected households were reached and successfully interviewed regardless of where they were or whether they were accessible by vehicle, motorcycle, bicycle, or by foot.

In addition to all the challenges, interviewing sessions were long. Sometimes the interviewers stayed the whole day in the same households, especially if the households had more than three eligible women with maybe two to three children under age 5. The long questionnaires hindered interviewees from doing their daily activities, and hence sometimes they would want to leave. Interviewers had to take time to convince them of the importance of completing the session, as results would relate to the country development planning for the needs of the population.

All of these described challenges for the 2015-16 TDHS-MIS field teams indicate that data collection is neither a science nor an art, rather a team commitment, requiring dedication and patriotism. Let us praise

the field teams wherever they are for their good work and for maintaining the integrity of the data. They deserve the credit.

1.6.2 Data Processing

In the 2015-16 TDHS-MIS the first data entry was done concurrently with data collection in the field. After the paper questionnaires were completed, edited, and checked by both the field editor and the supervisor, the data was entered into a tablet equipped with a data entry programme. This was done by the editor. Completed questionnaires were then sent to NBS headquarters, where they were entered for the second time and edited by data processing personnel who were given special training for this task. ICF International provided technical assistance during the entire data processing period.

Processing the data concurrently with data collection allowed for regular monitoring of team performance and data quality. Field check tables were generated regularly during data processing to check various data quality parameters. As a result, feedback was given on a regular basis, encouraging teams to continue in areas of good performance and to correct areas in need of improvement. Feedback was individually tailored to each team. Data entry, which included 100% double entry to minimise keying errors, and data editing, were completed on March 21, 2016. Data cleaning and finalization were completed on April 22, 2016.

1.6.3 Response Rates

Table 1.2 shows response rates for the Tanzania 2015-16 DHS-MIS. A total of 13,360 households were selected for the survey, of which 12,767 were occupied. Of the occupied households, 12,563 were successfully interviewed, yielding a response rate of 98%.

In the interviewed households, 13,634 eligible women were identified for individual interviews; interviews were completed with 13,266 women, yielding a response rate of 97%. In the subsample of households selected for the male survey, 3,822 eligible men were identified and 3,514 were successfully interviewed, yielding a response rate of 92%. There is little variation in household response rates between rural and urban residences.

LIST OF TABLES

- **Table 1.1 Selected demographic indicators from various sources, Tanzania 1967-2012**
- **Table 1.2 Results of the household and individual interviews**

Table 1.1 Selected demographic indicators from various sources, Tanzania 1967-2012

Indicator	Census Year				
	1967	1978	1988	2002	2012
Population (millions)	12.3	17.5	23.1	34.4	44.9
Intercensal growth rate (%)	2.6	3.2	2.8	2.9	2.7
Sex ratio	95.2	96.2	94.2	96.0	95.0
Crude birth rate	47	49	46	43	42
Total Fertility	6.6	6.9	6.5	6.3	5.5
Crude death rate	24	19	15	14	9.3
Infant mortality	155	137	115	95	46.2
% urban	6.4	13.8	18.3	23.1	29.6
Density (population/km^2)	14	20	26	39	51
Life expectancy (years)	**42**	**44**	**50**	**51**	**61.8**
Male	6,005,339	8,586,713	11,327,511	16,829,861	21,869,990
Female	6,308,130	8,925,897	11,846,825	17,613,742	23,058,933

Source: NBS

Table 1.2 Results of the household and individual interviews

Number of households, number of interviews, and response rates, according to residence (unweighted), Tanzania 2015-16

Result	Tanzania Mainland			Zanzibar	Tanzania
	Urban	Rural	Total		
Household interviews					
Households selected	3,570	8,008	11,578	1,782	13,360
Households occupied	3,364	7,639	11,003	1,764	12,767
Households interviewed	3,265	7,543	10,808	1,755	12,563
Household response rate[1]	97.1	98.7	98.2	99.5	98.4
Interviews with women age 15-49					
Number of eligible women	3,750	7,714	11,464	2,170	13,634
Number of eligible women interviewed	3,606	7,521	11,127	2,139	13,266
Eligible women response rate[2]	96.2	97.5	97.1	98.6	97.3
Interviews with men age 15-49					
Number of eligible men	1,054	2,239	3,293	529	3,822
Number of eligible men interviewed	945	2,079	3,024	490	3,514
Eligible men response rate[2]	89.7	92.9	91.8	92.6	91.9

[1] Households interviewed/households occupied
[2] Respondents interviewed/eligible respondents

HOUSING CHARACTERISTICS AND HOUSEHOLD POPULATION

2

Key Findings

- ***Drinking water:*** Sixty-one percent of households in Tanzania have access to improved sources of drinking water: 86% of urban Mainland households, 49% of rural Mainland households, and 98% of households in Zanzibar. Access to improved sources of water in Tanzania has improved substantially since the 2010 TDHS (from 57% to 61%).
- ***Sanitation:*** Only 19% of households use improved, non-shared toilet facilities. One in 10 households has no toilet at all.
- ***Household population composition:*** The population of Tanzania is young, with 46% of the population under age 15.
- ***Birth registration:*** Registration of children under age 5 has increased substantially, from 16% in 2010 to 26% in 2016.
- ***Orphans:*** While eight percent of children under age 18 are orphans (one or both parents are dead), as many as 18% of children under age 18 do not live with either biological parent.
- ***School attendance:*** The net attendance ratio drops from 76% in primary schools to 23% in secondary schools. Girls are more likely to attend primary school than boys, whereas there are no major differences by gender in secondary school attendance.
- ***Health care expenditure:*** The total per capita annual expenditure for health services (outpatient visits and inpatient admissions combined) is higher for females than males (TZS 11,442 per woman and TZS 8,235 per man).

Information on the socioeconomic characteristics of the household population in the 2015-16 TDHS-MIS provides context to interpret demographic and health indicators and can furnish an approximate indication of the representativeness of the survey. In addition, this information sheds light on the living conditions of the population.

This chapter presents information on source of drinking water, sanitation, exposure to smoke inside the home, housing characteristics, household wealth, hand washing, household population and composition, children's living arrangements, birth registration, educational attainment, school attendance, food security, and health care expenditures.

2.1 DRINKING WATER SOURCES AND TREATMENT

Improved sources of drinking water
Include piped water, public taps, standpipes, tubewells, boreholes, protected dug wells and springs, rainwater, and bottled water
Sample: Households

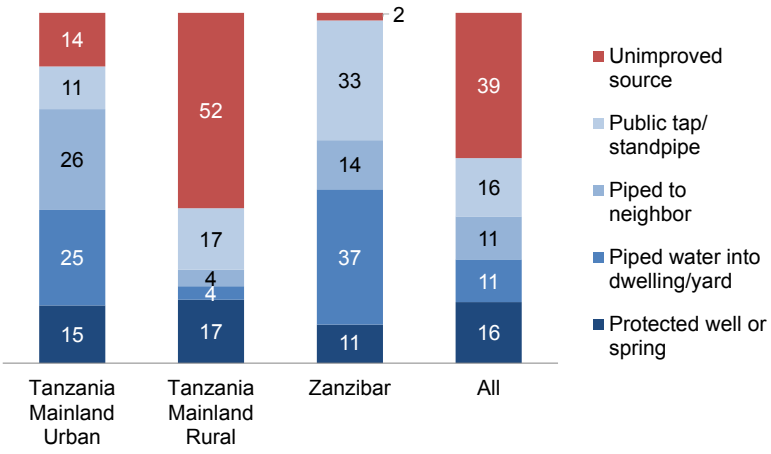
Improved drinking water sources are essential to prevent water contamination, and likely make water safe to drink. In Tanzania, about 6 in 10 households (61%) get their drinking water from improved sources **(Table 2.1)**.

Nearly 9 in 10 Tanzania Mainland urban households (86%) obtain their drinking water from improved sources. In Zanzibar, nearly all households (98%) obtain their drinking water from improved sources, a substantial increase from 80% in 2010. The two most common sources of drinking water among Tanzania Mainland's urban households are water piped directly into the household's dwelling, yard, or plot (25%), and water piped to a neighbour (26%). Protected dug wells and public tap/standpipes are the next two most common sources (13% and 11%, respectively) **(Figure 2.1)**. By contrast, more than half (52%) of Tanzania Mainland rural households obtain their drinking water from unimproved sources. The two most common sources of drinking water among Tanzania Mainland rural households are unprotected dug wells (24%) and surface water (18%). The next two most common sources are improved sources such as public taps/standpipes (17%) and protected dug wells (14%).

Fetching drinking water is an additional chore that could be of great cost to household members, depending on the time spent to obtain it. Four in 10 households (40%) spend 30 minutes or longer (round trip) to fetch drinking water; the figure is 52% in rural Tanzania Mainland, compared with 19% in urban Tanzania Mainland and 14% in Zanzibar.

Figure 2.1 **Household drinking water by residence**

Percent distribution of households by source of drinking water



About 6 in 10 households (62%) do not treat their water prior to drinking, but more than one-third (36%) use an appropriate treatment method (i.e., boiling, bleaching, filtering, and solar disinfecting). While Tanzania Mainland rural households are less likely to treat their water than Tanzania Mainland urban households boiling is the main method of treating water in all areas (43% in Tanzania Mainland urban areas compared with 23% in Tanzania Mainland rural areas and 22% in Zanzibar).

Water is a necessity of life. Fifty-four percent of households using piped water or water from a tube well or bore hole did not have water for at least 1 day in the 2 weeks preceding the survey **(Table 2.2)**. This percentage is higher in Tanzania Mainland urban households (61%) and in Zanzibar (58%) than in Tanzania Mainland rural households (45%).

Trends: Household use of improved drinking water sources has been increasing over time, from 52% in the 2004-05 TDHS, to 54% in the 2010 TDHS, and then up to the current level of 61% in the 2015-16 TDHS-MIS.

2.2 SANITATION

Improved toilet facilities

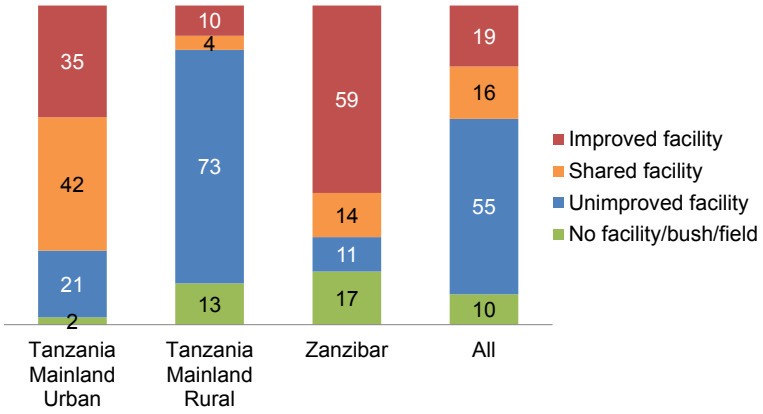
Include any non-shared toilet of the following types: flush/pour flush toilets to piped sewer systems, septic tanks, and pit latrines; ventilated improved pit (VIP) latrines; pit latrines with slabs, and composting toilets.

Sample: Households

About one in five households in Tanzania (19%) use improved toilet facilities, defined as non-shared facilities that prevent people from coming into contact with human waste and thus reduce the transmission of cholera, typhoid, and other diseases **(Table 2.3)**. Shared toilet facilities of an otherwise acceptable type are especially common in Tanzania Mainland urban areas (42%). One in ten households do not use any toilet facility **(Figure 2.2)**.

***Figure 2.2* Household toilet facilities by residence**

Percent distribution of households by type of toilet facilities



The most commonly used improved toilet facility in Tanzania Mainland urban areas is a flush toilet or pour flush to pit latrine (16%) and in Zanzibar, it is a pit latrine with slab (27%) **(Table 2.3)**. Use of improved non-shared toilet facilities is much higher among households in Zanzibar (59%) than in urban and rural Tanzania Mainland (35% and 10%, respectively). Eighty six percent of Tanzania Mainland rural households use unimproved toilet facilities or have no toilet facilities at all, which increases the risk of disease transmission. By contrast, 23% of households in Tanzania Mainland urban areas and 27% of households in Zanzibar use unimproved toilet facilities or have no toilet facilities at all **(Figure 2.2)**.

Trends: Use of improved non-shared toilet facilities has increased over time from 2% in 2004-05 TDHS to 13% in the 2010 TDHS, and further to 19% in 2015-16. While slowly declining, the percent of households using unimproved toilet facilities are still in the majority. The percent decreased from 96% in 2004-05 TDHS to 76% in 2011-12, to the current level of 65%.

2.3 EXPOSURE TO SMOKE INSIDE THE HOME

Exposure to smoke, either from cooking with solid fuels or from smoking tobacco, has potentially harmful health effects. More than 9 in 10 households in Tanzania (94%) use some type of solid fuel for cooking, mostly wood (66%), and charcoal (27%) **(Table 2.4)**. Use of wood has decreased and charcoal increased in the previous five years; the 2010 TDHS reported 74% of households using wood and 21% using charcoal. Exposure to cooking smoke is greater when cooking takes place inside the house rather than in a separate building or outdoors. In Tanzania, cooking takes place inside the house in about one-third of households (33%). Additionally, in 16% of households someone smokes inside the house daily.

2.4 HOUSING CHARACTERISTICS

The 2015-16 TDHS-MIS also collected information on other household characteristics, including access to electricity, flooring materials, and the number of rooms used for sleeping. Nationally, about one-quarter of households (23%) have electricity, ranging from a low of 5% in Tanzania Mainland rural households, up to

47% of households in Zanzibar, and 56% of Tanzania Mainland urban households. Access to electricity has increased in all three areas; the 2010 TDHS estimated that 3% of Tanzania Mainland rural households, 45% of Tanzania Mainland urban households, and 35% of Zanzibar households had electricity, respectively. Earth and sand are the most common flooring materials in Tanzania (57%), followed by cement (38%). Earth or sand flooring is most often used in three-quarters of Tanzania Mainland rural households (77%), while cement is the most common flooring material in Tanzania Mainland urban households (69%) and in Zanzibar (60%) **Table 2.4** provides information on other housing characteristics.

Household Durable Goods

The survey also collected information on household effects, means of transportation, and ownership of agricultural land and farm animals. About 8 in 10 households (78%) own a mobile phone; about half (52%) own a radio, and one in five (20%) own a television. Only 9% of households own a refrigerator, 4% own a computer, and less than 1% own a non-mobile telephone. Possession of these household effects is substantially higher among households in Tanzania Mainland urban areas and in Zanzibar than among Tanzania Mainland rural areas. In contrast, Tanzania Mainland rural households are more likely to own agricultural land (80%) or farm animals (69%) than Tanzania Mainland urban households (30% each) and Zanzibar households (29% and 48%, respectively). A bicycle is the most common means of transport, especially among households in Zanzibar (52%) and in Tanzania Mainland rural areas (43%). For information on household durable goods, see **Table 2.5**.

2.5 HOUSEHOLD WEALTH

Wealth index

Households are given scores based on the number and kinds of consumer goods they own, ranging from a television to a bicycle or car, plus housing characteristics, such as source of drinking water, toilet facilities, and flooring materials. These scores are derived using principal component analysis. National wealth quintiles are compiled by assigning the household score to each usual (de jure) household member, ranking each person in the household population by their score, and then dividing the distribution into five equal categories, each with 20% of the population.

Sample: Households

Because more than 95% of the population lives on Tanzania Mainland, the Mainland population is evenly distributed among the five wealth quintiles. The distribution is a function of how the quintiles are constructed. Generally, the urban population in Tanzania Mainland is wealthier than the rural population. Eighty-eight percent of the urban population is in the two highest wealth quintiles, while 8 in ten of the rural population is in the three lowest wealth quintiles. **(Figure 2.3)**.

In Zanzibar, almost 80 percent of the population is in the two highest wealth quintiles **(Table 2.6)**. By zone, 8 in 10 people in the Western zone are in the three lowest quintiles. Conversely, more than five in 10 people in the Northern zone (55%) and more than seven in 10 people in the Eastern zone (75%) are in the two highest wealth quintiles. Table 2.6 also shows the distribution of the population by wealth quintile within each region.

***Figure 2.3* Household wealth by residence**

Percent distribution of de jure population by wealth quintiles

2.6 HAND WASHING

To obtain hand-washing information, interviewers asked permission to see the place where members of the household most often wash their hands. A place for washing hands was observed in more than 8 in 10 households (81%), ranging from 31 percent in Kaskazini Pemba to 99% in Katavi. Soap and water—the ideal hand washing agent—was seen in 59% of the hand-washing locations that were observed; another 37% had water only **(Table 2.7)**. No water, soap, or other cleaning agents were observed in 3% of handwashing locations.

2.7 HOUSEHOLD POPULATION AND COMPOSITION

Household

A person or group of related or unrelated persons who live together in the same dwelling unit(s), who acknowledge one adult male or female as the head of the household, who share the same housekeeping arrangements, and who are considered a single unit.

De facto population

All persons who stayed in the selected households the night before the interview (whether usual residents or visitors). Tables in this report are based on de facto populations, unless otherwise stated.

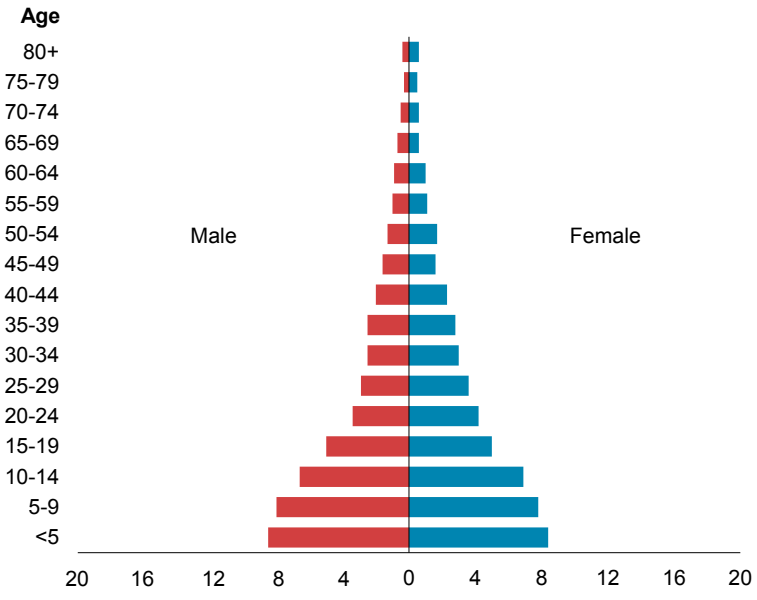
De jure population

All persons who are usual residents of the selected households, whether or not they stayed in the household the night before the interview

A total population of 59,657 individuals stayed overnight in 12,563 interviewed households in the 2015-16 TDHS-MIS. Fifty-two percent of them (30,904) were female, and 48% (28,753) were male **(Table 2.8)**. Nearly half the population is under age 15 (46%), while only 4% are age 65 and older. The population pyramid in **Figure 2.4** shows the population distribution by 5-year age groups, separately for males and females. The broad base of the pyramid illustrates that Tanzania's population is young, which is typical of countries with low life expectancy and high fertility.

***Figure 2.4* Population pyramid**

Percent distribution of the household population



The average household size in Tanzania is five people (mean size of 4.9) **(Table 2.9)**. Tanzania Mainland urban households are slightly smaller (4.3 people per household) than Tanzania Mainland rural households (5.1 people per household) and those in Zanzibar (5.4 people). Women head 25% of all households.

Trends: The age-sex structure of the Tanzanian population has remained rather constant over the past decade. The percentage of children under age 15 has remained at similar levels (47%) and that of

population age 65 and over has remained at 4% since 2004-05 TDHS. The 2004-05 TDHS also estimated the average household size to be 4.9 and found one-quarter of households to be female-headed.

2.8 CHILDREN'S LIVING ARRANGEMENTS AND PARENTAL SURVIVAL

Orphan
A child with one or both parents dead
Sample: Children under age 18

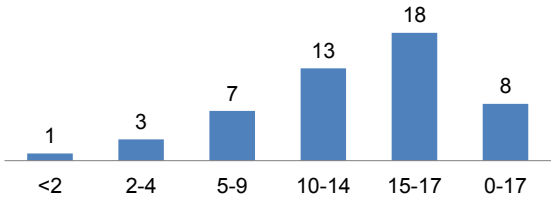
In Tanzania, 8% of children under 18 are orphans, meaning that one or both of their parents are dead **(Table 2.10)**. The percentage of orphans increases with age, ranging from 1% of children under age 2 to 18% of children age 15-17 **(Figure 2.5)**. By zone, orphanhood is highest in Southern Highlands (12%). Across regions, it is highest in Iringa (13%), Ruvuma (12%), and Mara (12%). There are no major variations in orphanhood by sex, residence, or wealth.

For information on school attendance by survivorship of parents, see **Table 2.12**.

Trends: The percentage of children under age 18 who are orphans has dropped from 10% in the 2010 TDHS to 8% in the 2015-2016 TDHS-MIS.

***Figure 2.5* Orphanhood by age**

Percentage of children under age 18 with one or both parents dead



2.9 BIRTH REGISTRATION

Registered birth
Child has a birth certificate or his/her birth has been registered with the civil authority.
Sample: De jure children under age 5

Respondents were asked whether they had birth certificates for the children in the household who were under age 5. If they did not have a birth certificate, they were asked whether the birth had been registered with the civil authority. The 2015-16 TDHS found that 14% of children had birth certificates and 12% did not have birth certificates but had been registered. In total, 26% of children under age 5 had been registered with the civil authority **(Table 2.11)**. Boys and girls under age 5 are equally likely to be registered. Boys under age 5 are slightly more likely to be registered than girls (29% versus 25%). The registration of births is more common in Tanzania Mainland urban areas (50%) than in Tanzania Mainland rural areas (16%). The registration of births in Tanzania Mainland is lower than in Zanzibar (25% versus 92%). The percentage of registered births increases with the household wealth quintile, from 8% in the lowest wealth quintile to 65% in the highest wealth quintile.

Trends: Registration of children has increased from 16% in 2010 to 26% in 2016.

2.10 EDUCATION

Education is one of the most important aspects of social and economic development. Education improves capabilities and is strongly associated with various socio-economic variables such as life-style, income, and fertility for both individuals and societies.

2.10.1 Educational Attainment

Median educational attainment
Number of years of schooling completed by half of the population
Sample: De facto household population age 6 and older

Overall, about 1 in 4 females (24%) age 6 and older have no formal education, compared with about 1 in 5 males (19%). However, once girls and boys enter school, their completion rates are similar. One in 3 females and 1 in 3 males have completed primary school (32%), 7-8% of females and males have completed secondary education, and 1-2% of females and males have completed beyond secondary education **(Table 2.13.1** and **2.13.2)**. The median number of years of schooling completed among females is 4.5 years and 5.1 years among males.

Trends: The percentage of the population with no education has been decreasing over time, from 46 % of females and 34% of males in 1991-92 TDHS to 24% of females and 19% of males in 2015-16 TDHS.

Patterns by background characteristics

- Urban residents are more likely to complete secondary school than rural residents. For example, 15% of females in urban areas have completed secondary school compared with 4% of females in rural areas. Similarly, 18% of males in urban areas have completed secondary school compared with 4% of males in rural areas. Similar patterns are observed for education beyond secondary school.
- Mainland and Zanzibar residents are similar in the percentages that have completed primary or gone on for further schooling, 48% in Mainland and 50% in Zanzibar among males, and similar percentages among females. The difference is that more students in Mainland stop after completing primary school and more students in Zanzibar go on for secondary or higher education.
- Educational attainment increases steadily with household wealth among both females and males. The median number of years of schooling increases by about one or two years of schooling for each increase in the wealth quintile, from a low or 1 or 2 years to 7 years among the highest wealth quintile for both females and males.

2.10.2 School Attendance

Net attendance ratio (NAR)
Percentage of the school-age population that attends primary or secondary school
Sample: Children age 7-13 for primary school NAR and children age 14-17 for secondary school NAR

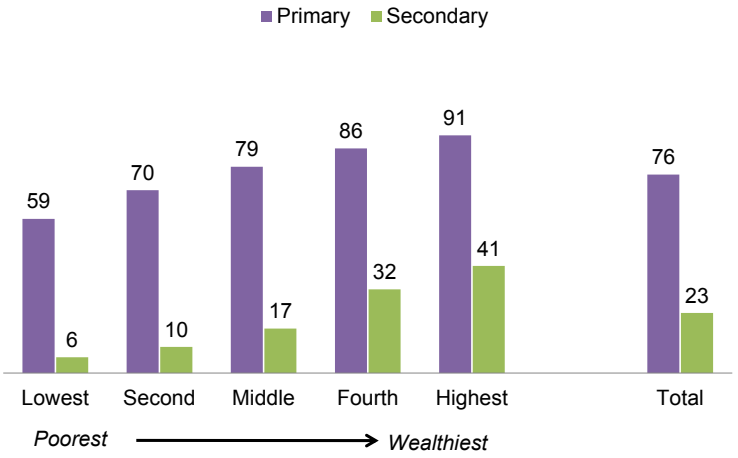
Gross attendance ratio (GAR)
The total number of primary and secondary school students expressed as a percentage of the official primary and secondary school-age population
Sample: Everyone age 5-24.

Seventy-eight percent of girls age 7 to 13 are attending primary school compared with 73% of boys **(Table 2.14)**. The net attendance ratio drops drastically in secondary school: only 24% of girls and 22% of boys are attending secondary school.

Patterns by background characteristics

- Children in urban areas are more likely to be attending primary school than children in rural areas, (86% versus 72%). Similar patterns exist for secondary school attendance: NAR is 36% in urban areas and 16% in rural areas.
- In 24 of the 30 regions, primary school attendance is higher among girls than boys.
- The net attendance ratio increases steadily and dramatically with increasing wealth quintile for both primary and secondary schooling. The net attendance ratio for primary school children increases from 59% in the lowest quintile to 91% in the highest quintile, and for secondary school children it increases from 6% to 41% **(Figure 2.6)**.

Figure 2.6 **Primary and secondary school attendance by wealth quintile**



Other Measures of School Attendance

The TDHS-MIS education data allow the calculation of two more education indicators: the gross attendance ratio (GAR), and the gender parity index (GPI).The GAR, measures participation at each level of schooling for the de facto household population, as a percentage of the official school age population for that level. The GAR is 90% at the primary school level and 29% at the secondary school level. These figures indicate that not all children who should be attending primary or secondary school are doing so. The gender parity index (GPI), which is the ratio of female to male attendance rates, is slightly higher than one for both primary and secondary school. This confirms that there is relatively little difference in overall school attendance by boys and girls at the primary and secondary level. For more information on these indicators, see **Table 2.14**.

2.11 HOUSEHOLD FOOD SECURITY

Household food security

All Tanzanians should have access to safe food of sufficient quantity and quality at all times.

Sample: Households

The survey asked about the number of meals that household members usually consume every day, number of days they consumed meat or fish during the preceding week, and the frequency of problems satisfying food needs in the past year.

Two percent of Tanzania Mainland households, both urban and rural, usually have only one meal a day **(Table 2.15)**. Urban households are much more likely than rural households to have three or more meals a day (77% and 55%, respectively). Six in 10 households in Zanzibar have at least three meals a day. Nationally, only 57% of households reported that they never had a problem satisfying their food needs in the past year.

2.12 HEALTH EXPENDITURES

Annual per capita expenditure (in TZS) on outpatient and inpatient admissions

Out-of-pocket health spending per person

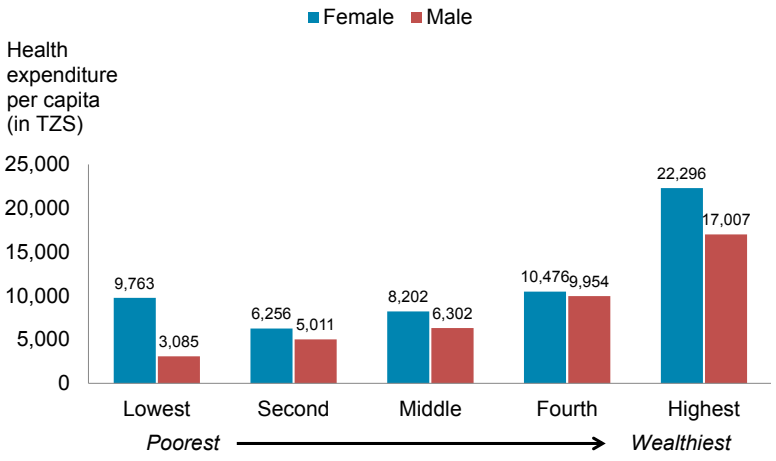
Sample: Household population

The Tanzanian Government signed the Abuja Declaration in 2001 *(Tanzania Abuja + 12 fact sheet),* which commits the government to spending 15% of the total government budget on health. Spending more on health services, and spending more effectively, has a positive impact on other segments of the economy. The TDHS-MIS asked household respondents to identify how much they spent out of their own pockets for health care.

Nationally, the per capita out-of-pocket health expenditure is TZS 8,235 among men and TZS 11,442 among women **(Table 2.17)**. The per capita expenditure among men is higher for outpatient visits (TZS 4,795) than for inpatient admissions (TZS 3,440). As is the case of men, expenditures for outpatient visits are higher than for inpatient admissions (TZS 7,695 and TZS 3,748, respectively).

With the exception of women in the lowest wealth quintile, per capita health expenditures increase with increasing wealth quintile and are significantly higher in the highest wealth quintile. Health expenditures are especially high among women in the lowest and two highest wealth quintiles **(Figure 2.7)**.

Figure 2.7 **Per capita expenditure by household wealth quintile**



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For detailed information on household population, housing characteristics, and health expenditures, see the following tables:

- **Table 2.1 Household drinking water**
- **Table 2.2 Availability of water**
- **Table 2.3 Household sanitation facilities**
- **Table 2.4 Household characteristics**
- **Table 2.5 Household possessions**
- **Table 2.6 Wealth quintiles**
- **Table 2.7 Hand washing**
- **Table 2.8 Household population by age, sex, and residence**
- **Table 2.9 Household composition**
- **Table 2.10 Children's living arrangements and orphanhood**
- **Table 2.11 Birth registration of children under age 5**
- **Table 2.12 School attendance by survivorship of parents**
- **Table 2.13.1 Educational attainment of the female household population**
- **Table 2.13.2 Educational attainment of the male household population**
- **Table 2.14 School attendance ratios**
- **Table 2.15 Household food security**
- **Table 2.16 Annual outpatient visits and inpatient admissions**
- **Table 2.17 Annual per capita expenditure (in TZS) on outpatient visits and inpatient admissions**
- **Table 2.18 Annual total health expenditure (in TZS) per household**

Table 2.1 Household drinking water

Percent distribution of households and de jure population by source of drinking water, time to obtain drinking water, and treatment of drinking water, according to residence, Tanzania DHS-MIS 2015-16

	Households					Population				
	Tanzania Mainland					Tanzania Mainland				
Characteristic	Urban	Rural	Total	Zanzibar	Tanzania	Urban	Rural	Total	Zanzibar	Tanzania
Source of drinking water										
Improved source	86.0	47.8	60.4	97.9	61.4	86.4	47.0	58.6	97.6	59.7
Piped into dwelling/yard plot	24.8	3.6	10.6	37.2	11.3	25.6	3.0	9.6	38.0	10.4
Piped to neighbour	25.6	4.2	11.3	13.5	11.4	23.7	3.5	9.4	12.4	9.5
Public tap/standpipe	11.1	17.0	15.1	32.9	15.5	11.7	16.5	15.1	32.7	15.6
Tube well or borehole	4.9	4.6	4.7	2.1	4.6	5.0	4.4	4.6	1.8	4.5
Protected dug well	12.6	13.6	13.2	10.6	13.2	14.2	15.1	14.8	11.6	14.7
Protected spring	2.3	3.4	3.1	0.0	3.0	2.8	3.3	3.1	0.0	3.0
Rain water	1.0	1.3	1.2	0.1	1.2	1.2	1.3	1.2	0.1	1.2
Bottled water, improved source for cooking/ washing[1]	3.6	0.1	1.2	1.5	1.3	2.3	0.0	0.7	0.8	0.7
Unimproved source	13.8	52.2	39.5	2.1	38.5	13.4	52.9	41.4	2.4	40.3
Unprotected dug well	4.3	23.5	17.2	1.1	16.8	4.5	24.3	18.5	1.3	18.0
Unprotected spring	1.7	9.7	7.0	0.4	6.9	1.7	9.5	7.2	0.5	7.0
Tanker truck/cart with small tank	5.6	0.6	2.3	0.3	2.2	5.1	0.5	1.9	0.3	1.8
Surface water	1.1	18.3	12.6	0.1	12.3	1.5	18.5	13.5	0.1	13.2
Bottled water, unimproved source for cooking/ washing[1]	1.0	0.1	0.4	0.2	0.4	0.5	0.0	0.2	0.2	0.2
Other	0.2	0.0	0.1	0.0	0.1	0.2	0.0	0.1	0.0	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Time to obtain drinking water (round trip)										
Water on premises	60.2	11.9	27.9	57.0	28.6	59.5	10.7	25.0	57.1	25.9
Less than 30 minutes	21.3	35.9	31.1	29.5	31.0	20.4	34.8	30.6	28.9	30.5
30 minutes or longer	18.5	52.2	41.1	13.5	40.4	20.1	54.5	44.4	13.9	43.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Water treatment prior to drinking[2]										
Boiled	42.7	22.8	29.4	21.8	29.2	43.3	21.7	28.0	21.1	27.8
Bleach/chlorine added	5.2	1.3	2.6	2.6	2.6	5.5	1.2	2.4	3.2	2.5
Strained through cloth	11.3	9.6	10.2	1.2	9.9	11.9	11.7	11.7	1.4	11.5
Ceramic, sand or other filter	1.3	0.6	0.9	0.6	0.8	1.4	0.6	0.9	0.6	0.9
Solar disinfection	0.1	0.1	0.1	0.0	0.1	0.2	0.1	0.1	0.0	0.1
Let it stand and settle	8.0	4.0	5.3	10.7	5.5	7.8	3.8	4.9	10.4	5.1
Other	1.6	0.5	0.8	0.8	0.8	1.1	0.5	0.7	0.6	0.6
No treatment	46.8	68.6	61.4	67.5	61.5	46.2	67.8	61.5	67.9	61.7
Percentage using an appropriate treatment method[3]	49.0	29.4	35.9	24.1	35.6	50.3	30.3	36.2	24.0	35.8
Number	4,053	8,195	12,247	316	12,563	17,349	41,888	59,237	1,713	60,950

[1] Because the quality of bottled water unknown, households using bottled water for drinking are classified as using an improved or unimproved source according to their water source for cooking and washing.
[2] Respondents may report multiple treatment methods so the sum of treatment may exceed 100 percent.
[3] Appropriate water treatment methods include boiling, bleaching, filtering, and solar disinfecting.

Table 2.2 Availability of water

Among households and de jure population using piped water or water from a tube well or borehole, percentage with lack of availability of water in the last 2 weeks, according to residence, Tanzania DHS-MIS 2015-16

Availability of water in last 2 weeks	Households					Population				
	Tanzania Mainland					Tanzania Mainland				
	Urban	Rural	Total	Zanzibar	Tanzania	Urban	Rural	Total	Zanzibar	Tanzania
Not available for at least 1 day	60.5	45.1	53.4	57.8	53.6	62.2	44.9	53.6	59.8	54.0
Available with no interruption of at least 1 day	37.8	53.6	45.2	41.6	45.0	36.5	54.1	45.2	39.8	44.9
Don't know/missing	1.6	1.3	1.5	0.6	1.4	1.4	1.0	1.2	0.4	1.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number using piped water or water from a tube well[2]	2,790	2,419	5,210	274	5,483	11,720	11,466	23,186	1,461	24,648

[1] Households reporting piped water or water from a tube well or borehole as their main source of drinking water. Households reporting bottled water as their main source of drinking water are also included if their main source of water for cooking and handwashing is piped water or water from a tube well or borehole.

Table 2.3 Household sanitation facilities

Percent distribution of households and de jure population by type and location of toilet/latrine facilities, according to residence, Tanzania DHS-MIS 2015-16

Type and location of toilet/latrine facility	Households					Population				
	Tanzania Mainland					Tanzania Mainland				
	Urban	Rural	Total	Zanzibar	Tanzania	Urban	Rural	Total	Zanzibar	Tanzania
Improved, not shared facility										
Flush/pour flush to piped sewer system	1.2	0.1	0.5	0.3	0.5	1.3	0.1	0.4	0.2	0.4
Flush/pour flush to septic tank	4.5	0.6	1.9	0.3	1.9	5.6	0.5	2.0	0.3	1.9
Flush/pour flush to pit latrine	16.3	2.0	6.7	25.0	7.2	19.6	1.8	7.0	26.5	7.6
Ventilated improved pit (VIP) latrine	2.1	0.5	1.1	6.3	1.2	2.5	0.6	1.2	6.7	1.3
Pit latrine with slab	10.7	6.5	7.9	26.8	8.4	12.9	6.4	8.3	27.3	8.8
Composting toilet	0.0	0.1	0.1	0.0	0.1	0.0	0.1	0.1	0.0	0.1
Tanzania	34.9	9.8	18.1	58.7	19.1	41.9	9.5	19.0	61.0	20.1
Shared facility[1]										
Flush/pour flush to piped sewer system	0.6	0.0	0.2	0.2	0.2	0.4	0.0	0.1	0.2	0.1
Flush/pour flush to septic tank	2.2	0.1	0.8	0.2	0.8	1.8	0.1	0.6	0.1	0.5
Flush/pour flush to pit latrine	16.8	1.0	6.2	5.5	6.2	13.0	0.7	4.3	3.8	4.3
Ventilated improved pit (VIP) latrine	3.9	0.4	1.5	1.7	1.6	2.9	0.3	1.1	1.4	1.1
Pit latrine with slab	18.5	2.4	7.7	6.3	7.7	14.5	1.8	5.5	5.8	5.5
Tanzania	42.0	3.9	16.5	13.8	16.4	32.5	2.8	11.5	11.2	11.5
Unimproved facility										
Flush/pour flush not to sewer/septic tank/pit latrine	0.6	0.0	0.2	5.4	0.4	0.6	0.0	0.2	5.6	0.3
Pit latrine with slab (non-washable)	15.3	52.6	40.3	4.6	39.4	16.4	52.7	42.0	4.0	41.0
Pit latrine without slab/open pit	5.2	20.2	15.2	0.7	14.9	6.1	21.1	16.7	0.8	16.2
Bucket	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
No facility/bush/field	2.0	13.0	9.4	16.6	9.5	2.5	13.5	10.3	17.3	10.5
Other	0.0	0.5	0.3	0.1	0.3	0.0	0.4	0.3	0.1	0.3
Tanzania	23.2	86.4	65.4	27.4	64.5	25.5	87.7	69.5	27.8	68.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of households/population	4,053	8,195	12,247	316	12,563	17,349	41,888	59,237	1,713	60,950
Location of toilet facility										
In own dwelling	18.1	2.0	7.8	81.7	9.5	19.5	1.7	7.4	83.5	9.4
In own yard/plot	79.8	89.5	86.0	15.3	84.4	78.4	90.7	86.8	13.9	84.9
Elsewhere	2.2	8.4	6.2	3.0	6.1	2.1	7.6	5.8	2.6	5.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Households/population with a toilet/latrine facility	3,972	7,128	11,100	263	11,364	16,922	36,213	53,136	1,417	54,553

[1] Facilities that would be considered improved if they were not shared by two or more households.

Table 2.4 Household characteristics

Percent distribution of households by housing characteristics, percentage using solid fuel for cooking, and percent distribution by frequency of smoking in the home, according to residence, Tanzania DHS-MIS 2015-16

Housing characteristic	Tanzania Mainland			Zanzibar	Tanzania
	Urban	Rural	Total		
Electricity					
Yes	55.9	5.1	21.9	47.2	22.5
No	44.1	94.9	78.1	52.8	77.5
Total	100.0	100.0	100.0	100.0	100.0
Flooring material					
Earth, sand	17.5	77.1	57.4	23.3	56.5
Dung	0.0	0.5	0.3	0.1	0.3
Wood/planks	0.0	0.0	0.0	0.0	0.0
Palm/bamboo	0.0	0.0	0.0	0.0	0.0
Parquet or polished wood	0.0	0.0	0.0	0.1	0.0
Vinyl or asphalt strips	0.3	0.0	0.1	0.0	0.1
Ceramic tiles	9.9	0.6	3.7	9.6	3.8
Cement	68.6	21.3	37.0	59.9	37.5
Carpet	3.5	0.3	1.4	7.0	1.5
Other	0.2	0.1	0.1	0.1	0.1
Total	100.0	100.0	100.0	100.0	100.0
Rooms used for sleeping					
One	40.3	29.3	32.9	21.5	32.7
Two	30.7	38.8	36.1	32.2	36.0
Three or more	29.0	31.9	31.0	46.3	31.3
Total	100.0	100.0	100.0	100.0	100.0
Place for cooking					
In the house	43.5	28.5	33.4	65.8	34.2
In a separate building	23.7	56.0	45.3	15.3	44.5
Outdoors	30.7	15.0	20.2	17.2	20.1
No food cooked in household	2.2	0.6	1.1	1.6	1.1
Total	100.0	100.0	100.0	100.0	100.0
Cooking fuel					
Electricity	1.3	0.1	0.5	1.3	0.5
LPG/natural gas/biogas	7.7	0.5	2.9	2.6	2.9
Kerosene	5.3	0.3	1.9	1.6	1.9
Charcoal	63.1	9.3	27.1	30.3	27.2
Wood	20.4	89.2	66.4	62.5	66.3
Straw/shrubs/grass	0.0	0.1	0.1	0.1	0.1
Animal dung	0.0	0.0	0.0	0.0	0.0
No food cooked in household	2.2	0.6	1.1	1.6	1.1
Total	100.0	100.0	100.0	100.0	100.0
Percentage using solid fuel for cooking[1]	83.4	98.6	93.6	92.8	93.6
Frequency of smoking in the home					
Daily	11.5	18.1	15.9	7.7	15.7
Weekly	1.4	1.8	1.7	0.9	1.6
Monthly	0.1	0.1	0.1	0.1	0.1
Less than once a month	1.4	0.9	1.1	0.3	1.1
Never	85.6	79.1	81.2	91.0	81.5
Total	100.0	100.0	100.0	100.0	100.0
Number	4,053	8,195	12,247	316	12,563

LPG = Liquefied petroleum gas

[1] Includes Kerosene, charcoal, wood, straw/shrubs/grass, , and animal dung

Table 2.5 Household possessions

Percentage of households possessing various household effects, means of transportation, agricultural land, and livestock/farm animals by residence, Tanzania DHS-MIS 2015-16

	Tanzania Mainland				
Possession	Urban	Rural	Tanzania	Zanzibar	Total
Household effects					
Radio	63.3	45.8	51.5	62.4	51.8
Television	46.6	6.4	19.7	39.6	20.2
Mobile phone	92.3	70.3	77.6	93.4	78.0
Computer	10.3	0.6	3.8	8.2	3.9
Non-mobile telephone	1.4	0.2	0.6	1.2	0.6
Refrigerator	22.1	1.3	8.2	29.5	8.7
Means of transport					
Bicycle	30.1	42.9	38.7	52.2	39.0
Animal drawn cart	1.6	3.9	3.1	2.2	3.1
Motorcycle/scooter	11.5	7.9	9.1	15.9	9.2
Car/truck	8.8	0.9	3.5	7.8	3.6
Boat with a motor	0.2	0.2	0.2	0.9	0.2
Ownership of agricultural land	29.8	80.1	63.5	28.8	62.6
Ownership of farm animals[1]	30.0	69.1	56.2	47.5	56.0
Number	4,053	8,195	12,247	316	12,563

[1] Cows, bulls, other cattle, horses, donkeys, mules, goats, sheep, chickens, or other poultry

Table 2.6 Wealth quintiles

Percent distribution of the de jure population by wealth quintiles, and the Gini Coefficient, according to residence and region, Tanzania DHS-MIS 2015-16

Residence/region	Wealth quintile					Total	Number of persons	Gini coefficient
	Lowest	Second	Middle	Fourth	Highest			
Residence								
Urban	4.9	2.1	5.2	29.6	58.3	100.0	17,856	0.19
Rural	26.3	27.4	26.2	16.0	4.1	100.0	43,094	0.40
Tanzania Mainland/Zanzibar								
Mainland	20.6	20.4	20.2	19.6	19.2	100.0	59,237	0.37
Urban	5.0	2.1	5.2	30.0	57.6	100.0	17,349	0.20
Rural	27.0	28.0	26.4	15.3	3.3	100.0	41,888	0.40
Zanzibar	0.7	6.0	14.1	32.4	46.8	100.0	1,713	0.39
Unguja	0.3	1.5	8.6	30.5	59.2	100.0	1,150	0.31
Pemba	1.6	15.4	25.3	36.3	21.5	100.0	563	0.54
Zone								
Western	35.8	27.8	18.1	10.2	8.1	100.0	6,278	0.61
Northern	13.1	13.2	18.2	26.9	28.5	100.0	6,579	0.41
Central	33.8	21.3	22.0	17.2	5.8	100.0	6,905	0.29
Southern Highlands	10.8	18.1	26.3	26.8	17.9	100.0	3,827	0.47
Southern	18.3	30.1	25.4	15.7	10.5	100.0	3,184	0.47
South West Highlands	19.4	20.7	24.2	23.9	11.9	100.0	5,769	0.39
Lake	24.0	24.6	22.8	18.1	10.5	100.0	17,264	0.40
Eastern	5.1	9.6	10.0	21.3	53.9	100.0	9,430	0.31
Zanzibar	0.7	6.0	14.1	32.4	46.8	100.0	1,713	0.39
Region								
Dodoma	30.7	19.3	24.0	22.1	4.0	100.0	2,936	0.26
Arusha	24.2	13.4	16.1	21.0	25.3	100.0	2,102	0.60
Kilimanjaro	2.8	5.8	17.1	42.4	31.9	100.0	1,652	0.32
Tanga	10.8	17.4	20.5	22.3	29.0	100.0	2,825	0.43
Morogoro	12.9	19.4	21.2	27.5	18.9	100.0	2,943	0.45
Pwani	7.3	25.4	24.2	27.3	15.8	100.0	1,332	0.47
Dar es Salaam	0.1	0.0	0.0	16.1	83.8	100.0	5,156	0.08
Lindi	17.8	30.4	26.1	16.5	9.1	100.0	1,304	0.47
Mtwara	18.7	29.9	24.8	15.0	11.5	100.0	1,880	0.54
Ruvuma	14.7	20.5	26.4	24.0	14.5	100.0	1,735	0.47
Iringa	8.2	15.8	25.7	26.2	24.2	100.0	1,210	0.56
Mbeya	13.8	21.0	24.3	26.9	14.0	100.0	3,728	0.56
Singida	34.7	25.1	18.5	12.5	9.3	100.0	1,987	0.51
Tabora	45.8	27.1	10.0	10.0	7.1	100.0	3,642	0.68
Rukwa	28.3	19.7	26.1	18.1	7.8	100.0	1,402	0.38
Kigoma	21.9	28.8	29.3	10.5	9.5	100.0	2,636	0.54
Shinyanga	37.3	21.2	16.0	12.7	12.8	100.0	2,389	0.70
Kagera	11.8	34.8	28.4	18.9	6.1	100.0	3,073	0.55
Mwanza	21.0	21.1	19.8	20.2	17.8	100.0	4,131	0.43
Mara	23.3	16.4	22.5	23.6	14.2	100.0	2,549	0.49
Manyara	37.5	20.5	22.5	14.5	4.9	100.0	1,983	0.32
Njombe	6.9	16.8	27.1	33.4	15.8	100.0	882	0.47
Katavi	32.2	21.0	19.2	19.2	8.3	100.0	638	0.66
Simiyu	36.5	30.2	19.2	10.0	4.0	100.0	2,576	0.39
Geita	19.1	23.5	31.1	21.7	4.6	100.0	2,546	0.41
Kaskazini Unguja	1.1	4.4	21.9	59.3	13.2	100.0	272	0.41
Kusini Unguja	0.2	3.2	16.8	52.0	27.7	100.0	160	0.34
Mjini Magharibi	0.0	0.0	1.7	14.7	83.6	100.0	718	0.20
Kaskazini Pemba	1.9	14.9	26.3	36.9	20.0	100.0	291	0.53
Kusini Pemba	1.2	15.9	24.3	35.6	23.0	100.0	272	0.55
Total	20.0	20.0	20.0	20.0	20.0	100.0	60,950	0.37

Table 2.7 Hand washing

Percentage of households in which the place most often used for washing hands was observed, and among households in which the place for hand washing was observed, percent distribution by availability of water, soap and other cleansing agents, Tanzania DHS-MIS 2015-16

Background characteristic	Percentage of households in which place for washing hands was observed[1]	Number of households	Among households where place for hand washing was observed, percentage with: Soap and water[2]	Water and cleansing agent[3] other than soap only	Water only	Soap but no water[4]	No water, no soap, no other cleansing agent	Total	Number of households with place for hand washing observed
Residence									
Urban	85.8	4,141	71.9	0.7	24.3	0.7	2.4	100.0	3,555
Rural	78.2	8,422	52.3	0.2	43.9	0.5	3.2	100.0	6,585
Tanzania Mainland/ Zanzibar									
Mainland	81.4	12,247	59.0	0.4	37.1	0.6	2.9	100.0	9,966
Urban	86.2	4,053	72.0	0.7	24.3	0.7	2.4	100.0	3,494
Rural	79.0	8,195	52.0	0.2	44.1	0.5	3.2	100.0	6,471
Zanzibar	55.0	316	67.2	0.1	27.4	0.4	4.9	100.0	174
Unguja	65.4	213	65.2	0.0	28.9	0.3	5.6	100.0	140
Pemba	33.4	102	75.8	0.4	21.2	0.4	2.1	100.0	34
Zone									
Western	87.4	1,010	52.2	0.2	43.9	0.1	3.7	100.0	883
Northern	81.8	1,526	65.3	0.1	30.1	1.7	2.8	100.0	1,248
Central	73.8	1,469	46.2	0.0	52.1	0.5	1.2	100.0	1,084
Southern Highlands	83.1	933	63.9	0.1	34.4	0.4	1.3	100.0	775
Southern	61.6	798	54.2	0.5	39.8	0.2	5.4	100.0	491
South West Highlands	87.9	1,306	48.0	0.6	42.0	0.3	9.2	100.0	1,148
Lake	89.2	2,935	54.2	0.1	44.1	0.4	1.2	100.0	2,617
Eastern	75.7	2,270	80.0	1.3	16.1	0.7	2.0	100.0	1,718
Zanzibar	55.0	316	67.2	0.1	27.4	0.4	4.9	100.0	174
Region									
Dodoma	83.9	683	40.5	0.0	58.1	0.0	1.4	100.0	573
Arusha	72.3	486	51.4	0.3	36.8	3.6	7.9	100.0	351
Kilimanjaro	79.0	431	75.3	0.0	20.9	2.3	1.6	100.0	340
Tanga	91.4	610	68.0	0.0	31.5	0.2	0.3	100.0	557
Morogoro	60.3	698	80.6	0.8	15.7	0.0	2.9	100.0	421
Pwani	56.1	317	78.3	0.9	16.6	0.4	3.7	100.0	178
Dar es Salaam	89.2	1,255	80.0	1.5	16.2	0.9	1.4	100.0	1,119
Lindi	70.1	313	44.1	0.0	46.9	0.4	8.6	100.0	219
Mtwara	56.1	485	62.3	1.0	34.0	0.0	2.8	100.0	272
Ruvuma	91.0	410	63.7	0.0	36.0	0.2	0.2	100.0	373
Iringa	79.5	301	60.5	0.3	37.7	0.3	1.3	100.0	239
Mbeya	83.3	902	47.6	0.8	47.9	0.1	3.6	100.0	751
Singida	64.6	392	56.3	0.0	43.2	0.3	0.2	100.0	253
Tabora	92.1	539	38.7	0.3	57.6	0.0	3.4	100.0	496
Rukwa	97.7	295	46.9	0.3	25.7	0.7	26.4	100.0	288
Kigoma	82.0	472	69.5	0.0	26.3	0.3	4.0	100.0	387
Shinyanga	85.2	400	41.5	0.0	52.3	0.5	5.7	100.0	341
Kagera	90.7	643	81.6	0.3	16.7	1.0	0.5	100.0	583
Mwanza	86.2	717	39.9	0.0	59.0	0.3	0.8	100.0	618
Mara	97.7	437	68.0	0.0	32.0	0.0	0.0	100.0	427
Manyara	65.4	395	48.9	0.0	47.4	1.9	1.8	100.0	258
Njombe	73.6	222	69.4	0.0	25.9	0.9	3.9	100.0	163
Katavi	99.1	110	53.5	0.0	44.0	0.2	2.3	100.0	109
Simiyu	83.2	348	49.2	0.0	49.4	0.0	1.4	100.0	290
Geita	92.0	390	34.2	0.2	65.3	0.0	0.2	100.0	359
Kaskazini Unguja	59.9	51	62.8	0.0	30.2	0.8	6.2	100.0	31
Kusini Unguja	50.2	32	59.3	0.0	39.3	0.0	1.4	100.0	16
Mjini Magharibi	71.3	130	67.0	0.0	26.7	0.3	6.1	100.0	93
Kaskazini Pemba	30.7	54	87.1	0.0	11.8	0.0	1.1	100.0	16
Kusini Pemba	36.3	49	65.2	0.8	30.0	0.8	3.1	100.0	18
Wealth quintile									
Lowest	75.6	2,107	38.7	0.0	55.6	0.1	5.5	100.0	1,594
Second	74.8	2,394	45.2	0.3	50.7	0.5	3.3	100.0	1,791
Middle	78.1	2,500	54.3	0.1	42.1	0.6	2.9	100.0	1,951
Fourth	83.4	2,687	66.6	0.3	30.7	0.5	1.9	100.0	2,242
Highest	89.1	2,874	78.8	0.8	17.4	0.9	2.0	100.0	2,561
Total	80.7	12,563	59.2	0.4	37.0	0.6	2.9	100.0	10,139

[1] Includes fixed and mobile place
[2] Soap includes soap or detergent in bar, liquid, powder, or paste form. This column includes households with soap and water only as well as those that had soap and water and another cleansing agent.
[3] Cleansing agents other than soap include locally available materials such as ash, mud, or sand.
[4] Includes households with soap only as well as those with soap and another cleansing agent

Table 2.8 Household population by age, sex, and residence

Percent distribution of the de facto household population by 5-year age groups, according to sex and residence, Tanzania DHS-MIS 2015-16

	Urban			Rural			Tanzania		
Age	Male	Female	Total	Male	Female	Total	Male	Female	Total
<5	16.1	13.7	14.8	18.3	17.2	17.7	17.7	16.2	16.9
5-9	13.7	12.0	12.8	17.7	16.4	17.0	16.5	15.1	15.8
10-14	11.5	11.4	11.4	14.6	14.2	14.4	13.7	13.4	13.5
15-19	10.7	12.0	11.4	10.3	8.7	9.5	10.5	9.7	10.1
20-24	9.0	10.8	9.9	6.3	7.1	6.7	7.1	8.2	7.7
25-29	7.3	9.0	8.2	5.5	6.1	5.8	6.0	7.0	6.5
30-34	7.1	7.4	7.3	4.3	5.0	4.7	5.1	5.7	5.4
35-39	6.3	6.5	6.4	4.7	4.9	4.8	5.2	5.4	5.3
40-44	5.1	4.7	4.9	3.8	4.3	4.1	4.2	4.4	4.3
45-49	3.8	3.0	3.4	3.2	3.2	3.2	3.3	3.2	3.2
50-54	2.6	2.8	2.7	2.7	3.4	3.1	2.7	3.2	2.9
55-59	2.1	1.8	1.9	2.2	2.4	2.3	2.2	2.2	2.2
60-64	1.9	1.8	1.8	2.0	1.9	1.9	1.9	1.9	1.9
65-69	1.3	1.1	1.2	1.4	1.3	1.3	1.4	1.2	1.3
70-74	0.7	0.9	0.8	1.1	1.4	1.3	1.0	1.2	1.1
75-79	0.4	0.4	0.4	0.7	1.1	0.9	0.7	0.9	0.8
80 +	0.3	0.7	0.5	1.2	1.4	1.3	0.9	1.2	1.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Dependency age groups									
0-14	41.3	37.1	39.1	50.6	47.8	49.1	47.9	44.6	46.2
15-64	56.0	59.8	58.0	45.0	47.1	46.1	48.1	50.9	49.6
65+	2.7	3.1	2.9	4.5	5.1	4.8	4.0	4.5	4.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Child and adult populations									
0-17	48.0	44.1	45.9	57.4	52.9	55.1	54.7	50.3	52.4
18+	52.0	55.9	54.1	42.6	47.1	44.9	45.3	49.7	47.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of persons	8,307	9,140	17,447	20,446	21,764	42,210	28,753	30,904	59,657

Table 2.9 Household composition

Percent distribution of households by sex of head of household and by household size; mean size of household, and percentage of households with orphans and foster children under age 18, according to residence, Tanzania DHS-MIS 2015-16

	Tanzania Mainland				
Characteristic	Urban	Rural	Total	Zanzibar	Tanzania
Household headship					
Male	74.4	76.0	75.5	77.9	75.5
Female	25.6	24.0	24.5	22.1	24.5
Total	100.0	100.0	100.0	100.0	100.0
Number of usual members					
1	13.5	7.9	9.7	5.7	9.6
2	13.0	10.3	11.2	8.3	11.1
3	16.1	13.9	14.7	13.8	14.6
4	16.4	14.7	15.3	14.0	15.2
5	14.6	14.9	14.8	12.4	14.7
6	9.4	12.3	11.3	12.5	11.4
7	6.6	8.9	8.2	11.4	8.3
8	4.7	6.6	5.9	8.2	6.0
9+	5.7	10.5	8.9	13.6	9.0
Total	100.0	100.0	100.0	100.0	100.0
Mean size of households	4.3	5.1	4.8	5.4	4.9
Percentage of households with orphans and foster children under age 18					
Double orphans	1.8	1.5	1.6	0.4	1.6
Single orphans[1]	10.5	11.7	11.3	8.9	11.2
Foster children[2]	25.9	27.2	26.8	29.5	26.8
Foster and/or orphan children	29.0	31.2	30.5	32.7	30.6
Number of households	4,053	8,195	12,247	316	12,563

Note: Table is based on de jure household members, i.e., usual residents.
[1] Includes children with one dead parent and an unknown survival status of the other parent.
[2] Foster children are those under age 18 living in households with neither their mother nor their father present, and the mother and/or the father are alive.

Table 2.10 Children's living arrangements and orphanhood

Percent distribution of de jure children under age 18 by living arrangements and survival status of parents, the percentage of children not living with a biological parent, and the percentage of children with one or both parents dead, according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Living with both parents	Living with mother but not with father		Living with father but not with mother		Not living with either parent					Total	Percentage not living with a biological parent	Percentage with one or both parents dead[1]	Number of children
		Father alive	Father dead	Mother alive	Mother dead	Both alive	Only father alive	Only mother alive	Both dead	Missing information on father/ mother				
Age														
0-4	70.6	18.3	1.4	1.6	0.1	6.8	0.5	0.4	0.1	0.3	100.0	7.7	2.5	10,090
<2	75.2	21.7	1.1	0.3	0.0	1.4	0.1	0.0	0.0	0.2	100.0	1.6	1.3	4,166
2-4	67.4	15.9	1.6	2.6	0.2	10.5	0.8	0.6	0.1	0.3	100.0	12.0	3.4	5,924
5-9	58.8	13.7	3.1	5.2	0.5	14.7	1.2	1.6	0.6	0.6	100.0	18.1	7.2	9,504
10-14	51.4	12.0	5.3	6.5	1.1	17.0	2.0	2.9	1.2	0.5	100.0	23.1	12.6	8,220
15-17	41.9	10.2	6.8	6.0	1.6	23.2	2.7	4.4	2.2	1.0	100.0	32.5	17.9	3,741
Sex														
Male	59.6	14.0	3.7	4.9	0.7	12.5	1.3	1.9	0.9	0.5	100.0	16.6	8.6	15,883
Female	57.7	14.5	3.5	4.1	0.6	15.0	1.4	1.9	0.7	0.5	100.0	19.0	8.2	15,672
Residence														
Urban	53.2	16.7	3.2	4.7	0.7	16.1	1.8	2.0	1.0	0.6	100.0	20.9	8.8	8,115
Rural	60.5	13.4	3.7	4.4	0.7	12.9	1.2	1.8	0.7	0.5	100.0	16.7	8.2	23,440
Tanzania Mainland/ Zanzibar														
Mainland	58.5	14.4	3.6	4.5	0.7	13.7	1.4	1.9	0.8	0.5	100.0	17.8	8.4	30,717
Urban	52.9	16.9	3.2	4.7	0.7	16.2	1.8	2.0	1.1	0.6	100.0	21.0	8.9	7,885
Rural	60.4	13.5	3.8	4.5	0.7	12.9	1.2	1.8	0.7	0.5	100.0	16.7	8.3	22,832
Zanzibar	65.6	10.9	2.6	2.9	0.5	14.8	1.0	1.2	0.1	0.4	100.0	17.1	5.5	838
Unguja	61.7	11.9	2.7	3.7	0.6	16.6	0.9	1.3	0.2	0.5	100.0	19.0	5.8	532
Pemba	72.5	9.2	2.4	1.6	0.3	11.6	1.2	1.0	0.0	0.2	100.0	13.8	4.9	306
Zone														
Western	68.1	9.7	3.4	4.8	0.3	10.5	1.0	1.6	0.5	0.2	100.0	13.5	6.8	3,599
Northern	57.5	15.7	3.0	3.3	0.7	15.6	1.5	1.4	0.9	0.6	100.0	19.3	7.6	3,105
Central	60.4	15.3	4.0	3.2	0.5	13.1	1.2	1.2	0.5	0.5	100.0	16.0	7.5	3,673
Southern Highlands	53.5	17.3	5.0	4.9	1.2	11.8	1.5	2.5	1.5	1.0	100.0	17.3	11.8	1,871
Southern	42.5	24.8	3.6	7.0	0.6	17.9	0.9	1.5	0.6	0.5	100.0	20.9	7.3	1,454
South West Highlands	60.6	13.3	3.5	3.1	0.6	14.1	1.0	2.1	1.3	0.4	100.0	18.5	8.5	3,089
Lake	57.3	13.6	3.6	5.3	0.9	14.1	1.5	2.3	0.9	0.5	100.0	18.7	9.3	9,782
Eastern	58.1	14.3	3.4	4.6	0.4	14.1	2.0	1.8	0.4	0.8	100.0	18.3	8.1	4,144
Zanzibar	65.6	10.9	2.6	2.9	0.5	14.8	1.0	1.2	0.1	0.4	100.0	17.1	5.5	838

(Continued…)

Table 2.10—*Continued*

Background characteristic	Living with both parents	Living with mother but not with father		Living with father but not with mother		Not living with either parent					Total	Percentage not living with a biological parent	Percentage with one or both parents dead[1]	Number of children
		Father alive	Father dead	Mother alive	Mother dead	Both alive	Only father alive	Only mother alive	Both dead	Missing information on father/ mother				
Region														
Dodoma	55.0	16.3	5.5	3.4	0.2	16.0	1.1	1.7	0.3	0.5	100.0	19.1	8.9	1,559
Arusha	65.9	12.5	2.9	3.1	0.9	11.7	0.9	0.8	1.2	0.2	100.0	14.5	6.6	1,051
Kilimanjaro	55.5	12.3	3.6	2.7	0.6	19.6	1.4	2.4	0.3	1.6	100.0	23.7	8.7	707
Tanga	51.9	19.9	2.9	3.7	0.5	16.4	2.1	1.4	0.9	0.3	100.0	20.8	7.8	1,347
Morogoro	55.8	15.5	4.7	4.2	0.6	14.6	2.2	1.1	0.2	1.1	100.0	18.1	8.9	1,438
Pwani	54.7	17.4	2.6	5.5	0.3	15.1	1.0	2.4	0.2	0.7	100.0	18.7	6.7	645
Dar es Salaam	60.8	12.6	2.8	4.7	0.3	13.5	2.1	2.1	0.6	0.6	100.0	18.3	8.0	2,061
Lindi	47.1	22.2	4.1	5.5	0.3	16.3	1.2	1.6	1.0	0.7	100.0	20.1	8.1	630
Mtwara	39.0	26.8	3.3	8.1	0.8	19.1	0.7	1.4	0.4	0.4	100.0	21.6	6.7	824
Ruvuma	53.8	16.2	4.7	6.4	1.2	10.8	2.2	2.7	0.7	1.3	100.0	16.3	11.5	860
Iringa	49.9	18.4	5.2	3.6	1.3	14.7	1.1	2.6	2.5	0.6	100.0	20.9	12.8	586
Mbeya	56.6	12.5	3.9	3.4	0.8	17.4	1.1	2.2	1.6	0.5	100.0	22.3	9.5	1,913
Singida	63.5	11.9	2.6	3.9	1.0	12.6	1.4	1.2	1.3	0.5	100.0	16.5	7.5	1,052
Tabora	64.6	9.4	3.0	6.3	0.5	12.3	1.2	1.9	0.7	0.2	100.0	16.0	7.2	2,116
Rukwa	67.7	16.5	2.8	1.6	0.3	7.5	0.6	2.1	0.6	0.3	100.0	10.7	6.3	805
Kigoma	73.0	10.1	4.0	2.6	0.1	7.9	0.6	1.2	0.3	0.1	100.0	10.0	6.2	1,483
Shinyanga	60.9	11.2	3.8	5.4	0.3	13.8	1.0	1.9	1.3	0.4	100.0	17.9	8.4	1,324
Kagera	66.1	11.2	3.5	4.3	0.8	9.1	2.1	2.0	0.3	0.6	100.0	13.5	8.8	1,703
Mwanza	46.3	19.2	2.4	6.1	1.1	18.6	1.9	2.7	1.1	0.5	100.0	24.3	9.4	2,271
Mara	56.1	13.0	6.1	3.5	0.5	15.4	1.5	2.3	1.1	0.5	100.0	20.3	11.6	1,462
Manyara	65.4	17.2	3.0	2.3	0.6	9.4	1.1	0.6	0.1	0.4	100.0	11.1	5.3	1,063
Njombe	57.7	17.9	5.0	3.5	0.9	9.7	0.9	1.9	1.7	0.8	100.0	14.1	10.7	425
Katavi	66.2	10.3	2.9	4.7	0.4	10.9	1.7	1.5	1.1	0.2	100.0	15.3	7.7	372
Simiyu	59.7	12.4	2.6	4.8	1.4	14.1	1.2	2.3	0.8	0.7	100.0	18.3	8.2	1,519
Geita	59.2	11.5	4.0	7.6	1.4	11.8	0.7	2.6	0.7	0.4	100.0	15.8	9.7	1,504
Kaskazini Unguja	72.4	5.2	2.3	4.3	0.9	12.5	0.4	1.6	0.2	0.2	100.0	14.8	5.4	138
Kusini Unguja	55.0	13.8	2.8	3.2	0.2	21.4	0.6	1.3	0.2	1.5	100.0	23.5	5.1	80
Mjini Magharibi	58.6	14.4	2.9	3.5	0.6	17.1	1.2	1.2	0.2	0.3	100.0	19.7	6.1	314
Kaskazini Pemba	74.2	7.9	2.7	1.6	0.2	10.6	1.7	1.1	0.0	0.0	100.0	13.4	5.7	159
Kusini Pemba	70.7	10.6	2.1	1.5	0.5	12.7	0.5	1.0	0.0	0.4	100.0	14.2	4.1	147
Wealth quintile														
Lowest	62.5	13.2	4.6	4.2	0.3	11.2	1.1	1.9	0.6	0.4	100.0	14.8	8.6	7,095
Second	59.7	15.5	4.0	3.7	0.7	12.4	1.2	1.5	0.9	0.4	100.0	16.0	8.4	6,763
Middle	59.7	13.1	3.4	4.3	0.9	14.0	1.3	1.9	0.6	0.7	100.0	17.9	8.2	6,481
Fourth	55.4	15.3	3.2	5.7	1.0	14.5	1.7	1.9	0.8	0.5	100.0	18.9	8.7	6,095
Highest	54.4	14.5	2.3	4.8	0.4	17.9	1.7	2.1	1.0	0.8	100.0	22.7	7.7	5,120
Total <15	60.9	14.8	3.2	4.3	0.6	12.5	1.2	1.5	0.6	0.5	100.0	15.8	7.1	27,814
Total <18	58.6	14.3	3.6	4.5	0.7	13.8	1.4	1.9	0.8	0.5	100.0	17.8	8.4	31,555

Note: Table is based on de jure members, i.e., usual residents.
[1] Includes children with father dead, mother dead, both dead and one parent dead but missing information on survival status of the other parent.

Table 2.11 Birth registration of children under age 5

Percentage of de jure children under age 5 whose births are registered with the civil authorities, according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Children whose births are registered			Number of children
	Percentage who had birth certificate	Percentage who did not have birth certificate	Percentage registered	
Age				
<2	11.0	15.1	26.0	4,166
2-4	16.2	10.4	26.7	5,924
Sex				
Male	14.6	13.2	27.8	5,061
Female	13.5	11.5	25.0	5,029
Residence				
Urban	29.5	21.4	50.9	2,642
Rural	8.6	9.1	17.7	7,449
Tanzania Mainland/Zanzibar				
Mainland	12.7	11.9	24.6	9,828
Urban	28.1	21.5	49.6	2,566
Rural	7.3	8.5	15.8	7,262
Zanzibar	63.6	28.1	91.7	262
Unguja	72.3	22.9	95.2	166
Pemba	48.6	37.0	85.6	96
Zone				
Western	5.6	7.3	12.8	1,210
Northern	18.4	22.9	41.2	957
Central	5.0	9.5	14.5	1,113
Southern Highlands	6.5	7.7	14.2	561
Southern	9.3	14.9	24.2	407
South West Highlands	21.8	4.4	26.2	976
Lake	10.6	6.0	16.6	3,260
Eastern	23.6	31.0	54.7	1,343
Zanzibar	63.6	28.1	91.7	262
Region				
Dodoma	6.1	4.9	11.0	436
Arusha	22.6	15.5	38.2	353
Kilimanjaro	24.3	43.2	67.5	185
Tanga	12.2	20.0	32.2	419
Morogoro	6.2	23.6	29.8	431
Pwani	11.2	31.4	42.5	202
Dar es Salaam	37.7	35.5	73.2	710
Lindi	7.8	9.7	17.5	192
Mtwara	10.6	19.5	30.2	216
Ruvuma	5.2	2.7	7.9	264
Iringa	8.4	13.4	21.8	174
Mbeya	35.6	6.2	41.8	563
Singida	4.5	12.1	16.6	335
Tabora	5.3	3.4	8.7	688
Rukwa	3.7	1.8	5.5	279
Kigoma	6.0	12.3	18.3	522
Shinyanga	4.0	4.1	8.1	456
Kagera	2.1	8.2	10.3	546
Mwanza	31.9	7.1	39.0	791
Mara	7.0	4.9	11.8	497
Manyara	4.2	12.8	16.9	341
Njombe	6.7	10.3	17.0	123
Katavi	1.6	2.3	3.9	134
Simiyu	1.9	2.1	4.1	502
Geita	4.4	8.7	13.1	468
Kaskazini Unguja	64.1	28.7	92.8	44
Kusini Unguja	77.4	16.2	93.6	26
Mjini Magharibi	74.7	22.0	96.7	97
Kaskazini Pemba	46.3	41.0	87.3	50
Kusini Pemba	51.0	32.8	83.8	46
Wealth quintile				
Lowest	3.1	4.6	7.7	2,462
Second	7.1	8.1	15.2	2,169
Middle	8.8	11.3	20.0	1,969
Fourth	18.4	18.8	37.2	1,865
Highest	41.3	23.8	65.1	1,626
Total	14.0	12.3	26.4	10,090

Table 2.12 School attendance by survivorship of parents

For de jure children age 10-14, the percentage attending school by parental survival and the ratio of the percentage attending, by parental survival, according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Percentage attending school by survivorship of parents				
	Both parents deceased	Number of children	Both parents alive and living with at least one parent	Number of children	Ratio[1]
Sex					
Male	70.5	65	83.4	2,857	0.85
Female	(79.0)	34	84.8	2,890	(0.93)
Residence					
Urban	(78.9)	29	93.0	1,326	(0.85)
Rural	71.1	69	81.5	4,421	0.87
Tanzania Mainland/Zanzibar					
Mainland	73.7	98	83.8	5,586	0.88
Urban	(78.9)	29	92.8	1,283	(0.85)
Rural	71.4	69	81.2	4,303	0.88
Zanzibar	*	0	93.3	161	na
Unguja	*	0	96.8	97	na
Pemba	*	0	88.1	64	na
Total	73.4	99	84.1	5,747	0.87

Notes: Table is based on children who usually live in the household, that is, de jure residents. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
na = Not applicable
[1] Ratio of the percentages attending school for children with both parents deceased to the percentages attending school with both parents alive and living with at least one parent

Table 2.13.1 Educational attainment of the female household population

Percent distribution of the de facto female household population age six and over by highest level of schooling attended or completed and median years completed, according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	No education	Some primary	Completed primary[1]	Some secondary	Completed secondary[2]	More than secondary	Total	Number	Median years completed
Age									
6-9	44.1	55.9	0.0	0.0	0.0	0.0	100.0	3,764	0.0
10-14	9.0	77.0	10.0	4.0	0.0	0.0	100.0	4,140	3.3
15-19	6.3	14.4	43.7	26.7	8.8	0.0	100.0	2,993	6.6
20-24	10.1	9.4	43.6	9.8	25.6	1.4	100.0	2,534	6.7
25-29	16.8	10.6	48.9	4.9	15.9	2.9	100.0	2,159	6.5
30-34	20.8	12.7	52.4	2.6	9.5	2.0	100.0	1,772	6.3
35-39	20.3	10.5	56.9	3.2	7.9	1.2	100.0	1,665	6.3
40-44	22.0	10.9	57.7	2.3	5.8	1.4	100.0	1,370	6.3
45-49	18.9	10.2	60.7	2.9	5.7	1.6	100.0	975	6.4
50-54	33.1	15.0	46.5	1.4	3.7	0.3	100.0	988	6.0
55-59	45.4	20.4	27.4	1.3	5.3	0.3	100.0	680	1.7
60-64	54.7	28.6	13.0	1.0	2.4	0.3	100.0	583	0.0
65+	75.9	18.6	3.9	0.1	0.9	0.6	100.0	1,391	0.0
Residence									
Urban	12.1	25.8	34.9	9.6	15.3	2.3	100.0	7,700	6.3
Rural	29.5	32.2	30.2	4.4	3.6	0.1	100.0	17,314	3.2
Tanzania Mainland/ Zanzibar									
Mainland	24.2	30.3	32.3	5.5	6.9	0.8	100.0	24,298	4.4
Urban	12.0	25.9	35.7	9.1	15.0	2.3	100.0	7,482	6.3
Rural	29.7	32.2	30.8	3.8	3.3	0.1	100.0	16,816	3.2
Zanzibar	21.4	27.9	9.2	25.2	15.1	1.1	100.0	716	6.1
Unguja	15.0	26.3	10.3	28.3	18.6	1.5	100.0	487	6.8
Pemba	35.1	31.3	6.9	18.8	7.9	0.1	100.0	229	2.5
Zone									
Western	34.8	30.0	27.9	3.4	3.8	0.2	100.0	2,495	2.3
Northern	18.7	29.3	33.6	7.0	10.7	0.7	100.0	2,874	6.1
Central	29.8	28.8	32.4	4.1	4.7	0.1	100.0	2,788	3.6
Southern Highlands	17.7	30.3	37.9	6.7	6.8	0.5	100.0	1,569	6.1
Southern	28.2	29.6	34.5	4.0	3.3	0.4	100.0	1,384	3.8
South West Highlands	23.2	32.1	33.3	5.6	4.9	0.9	100.0	2,394	4.2
Lake	26.7	34.8	28.9	4.8	4.5	0.4	100.0	6,813	3.3
Eastern	15.3	23.6	36.4	7.8	14.3	2.7	100.0	3,982	6.3
Zanzibar	21.4	27.9	9.2	25.2	15.1	1.1	100.0	716	6.1
Region									
Dodoma	30.7	30.0	32.1	2.9	4.3	0.0	100.0	1,186	3.1
Arusha	23.3	25.8	32.4	6.4	10.7	1.4	100.0	872	6.0
Kilimanjaro	7.2	36.1	34.6	10.5	10.8	0.6	100.0	766	6.2
Tanga	22.5	27.5	33.9	5.2	10.7	0.2	100.0	1,236	6.0
Morogoro	23.3	29.4	35.1	5.6	6.5	0.2	100.0	1,214	4.8
Pwani	31.8	26.5	30.6	4.7	5.4	1.0	100.0	556	3.3
Dar es Salaam	6.8	19.6	38.6	9.8	20.8	4.4	100.0	2,212	6.6
Lindi	28.2	31.0	32.8	3.6	3.7	0.6	100.0	534	3.7
Mtwara	28.2	28.7	35.5	4.3	3.0	0.3	100.0	850	3.8
Ruvuma	15.3	32.7	40.8	5.4	5.7	0.1	100.0	689	6.0
Iringa	22.1	27.4	31.3	8.7	9.3	1.1	100.0	498	6.0
Mbeya	19.1	30.1	36.9	6.9	5.7	1.2	100.0	1,592	6.0
Singida	28.4	27.0	34.9	4.3	5.4	0.1	100.0	812	4.3
Tabora	37.8	29.4	25.9	3.2	3.5	0.2	100.0	1,462	2.0
Rukwa	28.5	37.4	26.9	3.0	4.0	0.3	100.0	563	2.3
Kigoma	30.6	30.8	30.7	3.5	4.2	0.2	100.0	1,032	2.7
Shinyanga	30.6	31.5	29.4	3.1	5.2	0.3	100.0	944	3.2
Kagera	25.3	36.9	30.3	3.5	4.0	0.0	100.0	1,246	3.4
Mwanza	24.2	34.5	28.2	6.0	6.2	1.0	100.0	1,629	3.8
Mara	21.4	36.7	30.5	6.5	4.6	0.3	100.0	1,059	3.8
Manyara	29.9	28.9	30.4	5.8	4.7	0.4	100.0	790	3.8
Njombe	16.2	29.9	41.4	6.5	5.6	0.4	100.0	382	6.1
Katavi	38.0	32.3	24.2	3.4	2.0	0.1	100.0	240	1.8
Simiyu	29.9	30.6	30.2	5.8	3.4	0.0	100.0	982	3.4
Geita	31.5	37.7	24.7	3.1	2.8	0.3	100.0	953	2.2
Kaskazini Unguja	26.0	35.4	7.8	23.7	7.1	0.0	100.0	104	3.8
Kusini Unguja	15.9	31.3	10.2	31.1	11.0	0.4	100.0	67	6.3
Mjini Magharibi	11.2	22.2	11.2	29.2	23.9	2.3	100.0	316	8.0
Kaskazini Pemba	38.1	33.0	5.4	17.7	5.7	0.1	100.0	120	1.6
Kusini Pemba	31.8	29.4	8.5	19.9	10.2	0.2	100.0	110	3.5
Wealth quintile									
Lowest	42.5	30.5	24.5	1.6	0.8	0.0	100.0	4,721	0.8
Second	34.0	32.6	29.6	2.6	1.1	0.0	100.0	4,897	2.2
Middle	25.4	34.5	33.4	4.5	2.3	0.0	100.0	4,895	3.6
Fourth	15.0	32.1	35.8	9.0	7.9	0.2	100.0	5,081	6.1
Highest	6.7	22.1	34.3	11.6	21.8	3.5	100.0	5,420	6.6
Total	24.1	30.2	31.7	6.0	7.2	0.8	100.0	25,014	4.5

[1] Completed at least grade 7 at the primary level
[2] Completed grade 4 at the secondary level

Table 2.13.2 Educational attainment of the male household population

Percent distribution of the de facto male household population age six and over by highest level of schooling attended or completed and median years completed, according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	No education	Some primary	Completed primary[1]	Some secondary	Completed secondary[2]	More than secondary	Total	Number	Median years completed
Age									
6-9	53.0	46.9	0.0	0.0	0.0	0.0	100.0	3,861	0.0
10-14	10.5	79.4	7.4	2.7	0.0	0.0	100.0	3,936	2.7
15-19	8.3	24.3	37.8	23.7	5.8	0.0	100.0	3,006	6.4
20-24	6.8	11.9	39.7	12.2	27.3	2.0	100.0	2,031	6.8
25-29	10.1	13.5	43.1	7.3	21.2	4.8	100.0	1,722	6.6
30-34	10.5	12.3	53.4	6.6	12.9	4.3	100.0	1,473	6.5
35-39	12.3	13.7	57.0	3.7	9.9	3.4	100.0	1,489	6.4
40-44	10.6	11.7	62.6	2.7	9.6	2.9	100.0	1,212	6.5
45-49	10.3	8.4	66.5	1.9	9.4	3.5	100.0	962	6.5
50-54	12.0	12.3	62.8	1.9	8.1	2.9	100.0	770	6.4
55-59	13.5	19.1	50.3	1.9	10.3	4.8	100.0	622	6.4
60-64	27.1	25.2	31.7	2.1	11.6	2.3	100.0	555	3.9
65+	37.6	38.8	18.2	0.6	3.7	1.0	100.0	1,140	3.1
Residence									
Urban	8.5	27.0	31.2	10.9	17.7	4.7	100.0	6,753	6.5
Rural	23.5	35.7	31.7	4.4	4.2	0.4	100.0	16,027	3.7
Tanzania Mainland/ Zanzibar									
Mainland	19.1	33.1	32.2	5.8	8.1	1.7	100.0	22,173	5.0
Urban	8.5	27.0	31.8	10.4	17.6	4.6	100.0	6,573	6.5
Rural	23.6	35.7	32.3	3.9	4.1	0.4	100.0	15,600	3.7
Zanzibar	16.4	33.9	9.6	24.1	13.3	2.7	100.0	606	5.9
Unguja	11.1	33.1	9.8	27.0	15.6	3.5	100.0	413	6.6
Pemba	27.9	35.7	9.2	18.0	8.4	0.8	100.0	194	3.1
Zone									
Western	29.8	36.3	25.3	3.8	4.2	0.6	100.0	2,276	2.6
Northern	15.5	30.4	34.7	7.0	11.0	1.4	100.0	2,565	6.1
Central	23.9	33.3	32.7	4.2	5.2	0.6	100.0	2,636	3.7
Southern Highlands	13.5	32.8	38.9	5.5	8.3	0.9	100.0	1,512	6.1
Southern	19.6	32.0	38.1	4.0	5.6	0.8	100.0	1,194	5.3
South West Highlands	17.5	35.7	32.1	5.9	6.7	2.2	100.0	2,114	4.7
Lake	21.0	36.7	29.7	5.9	6.0	0.8	100.0	6,296	3.9
Eastern	11.5	25.5	33.9	8.2	15.8	5.1	100.0	3,581	6.4
Zanzibar	16.4	33.9	9.6	24.1	13.3	2.7	100.0	606	5.9
Region									
Dodoma	24.6	36.1	30.2	4.4	4.4	0.3	100.0	1,171	3.1
Arusha	17.6	29.0	33.4	5.5	13.0	1.5	100.0	797	6.1
Kilimanjaro	5.9	32.1	39.4	8.9	10.7	3.0	100.0	661	6.3
Tanga	19.7	30.4	32.9	6.8	9.7	0.4	100.0	1,107	5.9
Morogoro	18.7	32.2	37.2	4.6	6.2	1.1	100.0	1,118	5.5
Pwani	21.7	30.4	32.8	6.0	7.8	1.3	100.0	480	5.3
Dar es Salaam	5.0	20.5	32.3	10.8	23.2	8.2	100.0	1,983	6.8
Lindi	23.0	31.8	34.3	4.9	5.0	1.0	100.0	468	4.5
Mtwara	17.4	32.1	40.5	3.3	6.0	0.7	100.0	726	6.0
Ruvuma	12.9	35.2	41.1	4.6	5.6	0.5	100.0	685	6.0
Iringa	14.9	29.6	33.4	6.9	13.6	1.7	100.0	481	6.2
Mbeya	12.5	35.4	34.9	6.9	7.6	2.7	100.0	1,394	6.1
Singida	19.9	32.0	37.0	4.8	5.4	0.9	100.0	734	5.2
Tabora	32.7	34.7	26.2	3.1	3.2	0.1	100.0	1,354	2.4
Rukwa	25.6	35.9	27.8	3.5	5.9	1.2	100.0	483	3.1
Kigoma	25.4	38.6	24.1	4.9	5.6	1.4	100.0	922	2.9
Shinyanga	25.8	32.7	30.0	4.8	6.0	0.8	100.0	870	3.8
Kagera	19.9	38.5	32.2	4.7	4.6	0.1	100.0	1,151	4.1
Mwanza	18.5	35.6	27.3	7.9	9.5	1.2	100.0	1,495	4.3
Mara	15.5	37.7	34.1	5.7	5.2	1.6	100.0	861	4.7
Manyara	26.9	30.3	32.4	3.3	6.4	0.9	100.0	732	3.7
Njombe	12.9	32.6	42.3	5.0	6.3	0.9	100.0	346	6.1
Katavi	29.9	36.9	24.2	4.8	3.4	0.7	100.0	236	2.7
Simiyu	26.0	34.7	29.4	4.9	4.5	0.3	100.0	933	3.3
Geita	21.7	41.0	26.3	6.2	4.3	0.4	100.0	986	3.4
Kaskazini Unguja	17.9	46.3	9.4	19.4	6.7	0.4	100.0	101	4.2
Kusini Unguja	13.5	33.2	12.6	28.9	11.3	0.4	100.0	55	6.3
Mjini Magharibi	7.9	27.8	9.3	29.6	20.0	5.5	100.0	257	8.0
Kaskazini Pemba	29.0	36.4	8.5	17.2	7.9	1.0	100.0	101	2.8
Kusini Pemba	26.7	35.0	10.0	18.8	9.1	0.5	100.0	93	3.5
Wealth quintile									
Lowest	36.0	34.8	25.7	2.3	1.3	0.0	100.0	4,401	1.7
Second	27.9	37.6	29.6	3.0	1.8	0.0	100.0	4,366	2.8
Middle	17.8	37.7	36.1	4.5	3.9	0.0	100.0	4,690	4.3
Fourth	10.8	33.7	36.7	9.1	9.1	0.6	100.0	4,578	6.2
Highest	4.6	22.5	29.4	12.3	23.8	7.4	100.0	4,745	6.8
Total	19.1	33.1	31.6	6.3	8.2	1.7	100.0	22,780	5.1

[1] Completed at least grade 7 at the primary level
[2] Completed grade 4 at the secondary level

Table 2.14 School attendance ratios

Net attendance ratios (NARs) and gross attendance ratios (GARs) for the de facto household population by sex and level of schooling; and the Gender Parity Index (GPI), according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Net attendance ratio[1]				Gross attendance ratio[2]			
	Male	Female	Total	Gender Parity Index[3]	Male	Female	Total	Gender Parity Index[3]
	PRIMARY SCHOOL							
Residence								
Urban	84.8	86.6	85.7	1.02	102.5	102.6	102.5	1.00
Rural	69.1	75.7	72.4	1.09	84.8	87.7	86.3	1.04
Region								
Dodoma	73.2	82.9	77.8	1.13	85.8	93.5	89.4	1.09
Arusha	77.9	80.3	79.1	1.03	92.7	91.0	91.8	0.98
Kilimanjaro	89.9	92.9	91.5	1.03	101.0	109.6	105.6	1.08
Tanga	72.0	82.9	77.3	1.15	88.4	100.8	94.5	1.14
Morogoro	70.1	79.4	74.7	1.13	83.6	94.1	88.8	1.12
Pwani	77.7	81.3	79.6	1.05	96.9	94.2	95.5	0.97
Dar es Salaam	91.3	85.8	88.5	0.94	110.3	99.0	104.4	0.90
Lindi	67.9	79.6	74.0	1.17	80.1	90.7	85.6	1.13
Mtwara	70.7	77.1	74.0	1.09	80.8	85.8	83.3	1.06
Ruvuma	75.9	88.8	81.9	1.17	90.7	101.4	95.7	1.12
Iringa	82.8	86.5	84.6	1.05	97.6	96.3	97.0	0.99
Mbeya	78.5	84.8	81.8	1.08	92.1	97.5	94.9	1.06
Singida	72.6	71.0	71.8	0.98	83.0	82.7	82.8	1.00
Tabora	57.9	62.8	60.4	1.08	69.9	75.4	72.6	1.08
Rukwa	59.2	74.1	67.4	1.25	75.2	85.5	80.9	1.14
Kigoma	70.1	68.2	69.1	0.97	97.0	79.5	87.7	0.82
Shinyanga	62.2	67.2	64.7	1.08	73.3	74.7	74.0	1.02
Kagera	73.9	77.6	75.9	1.05	96.5	93.8	95.1	0.97
Mwanza	71.2	81.8	76.5	1.15	90.4	101.0	95.7	1.12
Mara	81.1	84.7	83.0	1.04	98.5	101.6	100.2	1.03
Manyara	70.9	80.7	75.9	1.14	84.8	88.1	86.5	1.04
Njombe	86.4	91.7	89.2	1.06	97.1	101.7	99.5	1.05
Katavi	60.3	57.7	59.1	0.96	77.7	69.6	73.7	0.90
Simiyu	69.0	74.2	71.7	1.08	86.0	85.6	85.8	1.00
Geita	63.3	68.3	65.6	1.08	86.8	81.1	84.1	0.93
Kaskazini Unguja	85.7	89.2	87.3	1.04	119.5	105.9	113.2	0.89
Kusini Unguja	90.4	92.1	91.3	1.02	114.9	110.1	112.4	0.96
Mjini Magharibi	90.0	88.8	89.4	0.99	103.8	102.9	103.4	0.99
Kaskazini Pemba	76.2	71.7	73.7	0.94	92.3	84.9	88.3	0.92
Kusini Pemba	69.6	75.7	72.6	1.09	90.0	97.5	93.7	1.08
Wealth quintile								
Lowest	56.1	61.5	58.7	1.10	66.9	72.3	69.6	1.08
Second	64.0	76.5	70.3	1.19	79.0	88.8	83.9	1.12
Middle	77.3	80.8	79.1	1.05	94.5	93.1	93.7	0.98
Fourth	84.1	87.2	85.7	1.04	102.6	102.1	102.3	1.00
Highest	91.4	89.7	90.5	0.98	112.8	105.6	109.0	0.94
Total	72.9	78.4	75.7	1.08	89.0	91.4	90.2	1.03

(Continued…)

Table 2.14—*Continued*

Background characteristic	Net attendance ratio[1]				Gross attendance ratio[2]			
	Male	Female	Total	Gender Parity Index[3]	Male	Female	Total	Gender Parity Index[3]
	SECONDARY SCHOOL							
Residence								
Urban	40.3	33.1	36.3	0.82	54.2	42.8	48.0	0.79
Rural	13.9	18.7	16.2	1.34	17.1	22.2	19.5	1.30
Region								
Dodoma	14.3	13.9	14.1	0.97	17.7	20.8	18.9	1.18
Arusha	25.3	30.1	27.8	1.19	31.6	38.2	35.0	1.21
Kilimanjaro	45.1	56.6	51.3	1.25	57.1	71.1	64.7	1.25
Tanga	22.4	27.9	25.2	1.24	28.3	32.4	30.4	1.14
Morogoro	22.4	23.9	23.1	1.07	30.5	26.7	28.6	0.88
Pwani	23.7	21.4	22.6	0.90	25.8	26.4	26.1	1.02
Dar es Salaam	42.8	30.7	35.8	0.72	62.3	45.6	52.6	0.73
Lindi	15.1	18.8	17.1	1.24	19.2	22.4	20.9	1.17
Mtwara	12.1	19.6	15.5	1.61	17.5	23.8	20.3	1.36
Ruvuma	19.7	23.8	21.7	1.21	24.7	27.3	26.0	1.11
Iringa	30.3	47.1	38.1	1.56	44.8	54.6	49.4	1.22
Mbeya	26.3	26.6	26.5	1.01	34.7	32.4	33.5	0.94
Singida	23.8	34.7	28.7	1.46	26.9	41.2	33.3	1.53
Tabora	11.5	12.7	12.1	1.10	13.9	15.5	14.7	1.12
Rukwa	10.7	10.7	10.7	1.00	13.3	12.0	12.7	0.90
Kigoma	17.9	12.4	15.2	0.69	21.4	17.8	19.6	0.83
Shinyanga	15.4	10.0	12.6	0.65	18.2	13.4	15.8	0.74
Kagera	15.3	23.8	18.9	1.56	18.8	25.6	21.7	1.36
Mwanza	21.2	20.0	20.6	0.94	28.7	22.1	25.3	0.77
Mara	19.1	22.1	20.9	1.16	23.3	22.9	23.0	0.98
Manyara	11.5	31.2	21.0	2.72	14.5	40.2	26.9	2.78
Njombe	15.9	31.2	22.1	1.96	24.0	39.8	30.4	1.66
Katavi	15.1	10.8	12.9	0.72	18.8	12.1	15.3	0.64
Simiyu	17.0	18.8	17.8	1.10	20.0	23.4	21.6	1.17
Geita	16.4	11.4	14.2	0.70	20.2	15.3	18.1	0.76
Kaskazini Unguja	21.5	36.8	28.7	1.71	26.0	40.8	33.0	1.57
Kusini Unguja	38.7	40.2	39.5	1.04	39.1	41.3	40.3	1.06
Mjini Magharibi	59.4	54.1	56.4	0.91	75.8	69.0	72.0	0.91
Kaskazini Pemba	32.9	33.8	33.4	1.03	39.4	33.8	36.4	0.86
Kusini Pemba	33.2	38.7	36.0	1.16	39.4	41.3	40.4	1.05
Wealth quintile								
Lowest	5.9	5.8	5.8	0.99	6.4	7.2	6.8	1.12
Second	8.6	10.6	9.6	1.24	10.7	12.6	11.6	1.17
Middle	15.2	19.8	17.2	1.31	18.9	22.7	20.6	1.20
Fourth	27.6	35.9	31.7	1.30	35.0	44.8	39.9	1.28
Highest	47.4	36.2	41.0	0.77	63.8	46.4	53.9	0.73
Total	21.7	23.8	22.8	1.10	28.1	29.6	28.8	1.05

[1] The NAR for primary school is the percentage of the primary-school-age (age 7-13) population that is attending primary school. The NAR for secondary school is the percentage of the secondary-school-age (age 14-17) population that is attending secondary school. By definition the NAR cannot exceed 100 percent.

[2] The GAR for primary school is the total number of primary school students, expressed as a percentage of the official primary-school-age population. The GAR for secondary school is the total number of secondary school students, expressed as a percentage of the official secondary-school-age population. If there are significant numbers of overage and underage students at a given level of schooling, the GAR can exceed 100 percent.

[3] The Gender Parity Index for primary school is the ratio of the primary school NAR(GAR) for females to the NAR(GAR) for males. The Gender Parity Index for secondary school is the ratio of the secondary school NAR(GAR) for females to the NAR(GAR) for males.

Table 2.15 Household food security

Percent distribution of household by usual number of meals per day, number of days that meat or fish was consumed during the last week, and frequency of problems satisfying food needs in the past year, according to residence, Tanzania DHS-MIS 2015-16

	Mainland				
Food security characteristic	Urban	Rural	Total	Zanzibar	Total
Usual number of meals per day					
1 meal	1.8	2.0	1.9	1.0	1.9
2 meals	21.0	43.0	35.7	38.8	35.8
3+ meals	77.1	55.0	62.4	60.2	62.3
Total	100.0	100.0	100.0	100.0	100.0
Number of days consumed meat or fish in the past week					
0	14.6	35.3	28.5	5.6	27.9
1	16.9	20.1	19.1	5.6	18.7
2	20.1	18.2	18.8	9.0	18.6
3	17.5	11.7	13.6	13.1	13.6
4	9.8	5.1	6.6	12.4	6.8
5	6.3	2.6	3.8	12.5	4.0
6	3.2	1.1	1.8	6.7	1.9
7	11.7	5.8	7.8	35.1	8.5
Don't know/missing	0.0	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0
Frequency of problems satisfying food needs in past year					
Never	65.7	52.7	57.0	64.3	57.2
Seldom	17.9	24.5	22.3	22.8	22.3
Sometimes	7.8	10.7	9.8	6.5	9.7
Often	7.8	11.1	10.1	6.0	10.0
Always	0.8	1.0	0.9	0.4	0.9
Total	100.0	100.0	100.0	100.0	100.0
Number of households	4,053	8,195	12,247	316	12,563

Table 2.16 Annual outpatient visits and inpatient admissions

Average number of annual outpatient visits and inpatient admissions to health facilities for women and men, by selected background characteristics, Tanzania DHS-MIS 2015-16

	Men			Women		
Health expenditures	Outpatient visits (per capita)	Inpatient admissions (per 1,000 population)	Total population	Outpatient visits (per capita)	Inpatient admissions (per 1,000 population)	Total population
Age						
<5	0.4	78	5,082	0.5	62	4,996
5-14	0.2	32	8,688	0.2	27	8,797
15-24	0.3	32	5,037	0.4	110	5,527
25-34	0.3	43	3,195	0.4	135	3,931
35-44	0.3	61	2,701	0.5	92	3,034
45-54	0.5	43	1,732	0.4	74	1,964
55-64	0.2	51	1,176	0.5	99	1,263
65+	0.4	114	1,140	0.9	100	1,391
Tanzania Mainland/ Zanzibar						
Mainland	0.3	49	28,003	0.4	78	30,023
Urban	0.3	57	8,087	0.6	87	8,877
Rural	0.3	46	19,916	0.3	73	21,146
Zanzibar	0.4	32	750	0.7	52	881
Unguja	0.6	32	506	0.8	55	591
Pemba	0.0	33	245	0.4	46	290
Zone						
Western	0.3	48	2,976	0.3	66	3,271
Northern	0.4	63	3,154	0.4	89	3,406
Central	0.1	26	3,300	0.4	50	3,443
Southern Highlands	0.1	61	1,834	0.2	127	1,890
Southern	0.6	57	1,442	0.4	81	1,617
South West Highlands	0.2	52	2,704	0.3	95	2,928
Lake	0.3	48	8,234	0.3	76	8,738
Eastern	0.3	51	4,359	0.8	68	4,730
Zanzibar	0.4	32	750	0.7	52	881
Region						
Dodoma	0.2	33	1,416	0.4	34	1,444
Arusha	0.3	27	1,004	0.5	60	1,061
Kilimanjaro	0.7	86	763	0.5	80	878
Tanga	0.4	75	1,386	0.2	115	1,467
Morogoro	0.1	70	1,366	0.5	75	1,484
Pwani	0.4	38	606	0.6	68	664
Dar es Salaam	0.3	43	2,387	1.0	64	2,582
Lindi	0.3	68	585	0.4	79	633
Mtwara	0.8	51	857	0.4	82	985
Ruvuma	0.1	65	832	0.2	168	830
Iringa	0.0	42	581	0.2	73	601
Mbeya	0.1	59	1,753	0.3	116	1,880
Singida	0.0	29	948	0.4	86	1,015
Tabora	0.1	49	1,724	0.2	72	1,930
Rukwa	0.6	42	639	0.3	63	728
Kigoma	0.7	47	1,253	0.3	57	1,342
Shinyanga	0.2	43	1,151	0.5	101	1,200
Kagera	0.3	42	1,462	0.3	104	1,586
Mwanza	0.0	40	1,949	0.1	54	2,089
Mara	1.1	89	1,148	0.8	103	1,366
Manyara	0.1	11	936	0.5	35	984
Njombe	0.4	77	422	0.2	125	459
Katavi	0.0	36	312	0.4	47	320
Simiyu	0.2	52	1,250	0.1	57	1,271
Geita	0.1	29	1,274	0.2	43	1,226
Kaskazini Unguja	0.7	37	124	0.6	42	133
Kusini Unguja	0.2	34	70	0.9	47	84
Mjini Magharibi	0.7	29	312	0.9	61	375
Kaskazini Pemba	0.0	32	129	0.4	59	151
Kusini Pemba	0.0	34	116	0.4	31	139
Wealth quintile						
Lowest	0.2	33	5,844	0.3	56	6,169
Second	0.3	39	5,640	0.3	64	6,213
Middle	0.2	51	5,896	0.3	76	6,067
Fourth	0.3	56	5,683	0.5	101	6,170
Highest	0.5	65	5,690	0.6	87	6,284
Total	0.3	49	28,753	0.4	77	30,904

Table 2.17 Annual per capita expenditure (in TZS) outpatient visits and inpatient admissions

Average number of annual outpatient visits and inpatient admissions to health facilities for women and men, by selected background characteristics, Tanzania DHS-MIS 2015-16

	Men				Women			
Health expenditure	Per capita expenditure for outpatient	Per capita expenditure for inpatient	Total per capita expenditure	Total population	Per capita expenditure for outpatient	Per capita expenditure for inpatient	Total per capita expenditure	Total population
Age								
<5	3,357	2,428	5,785	5,082	3,707	1,540	5,247	4,996
5-14	1,109	1,071	2,180	8,688	4,201	1,573	5,775	8,797
15-24	5,015	2,321	7,336	5,037	6,684	3,220	9,903	5,527
25-34	9,578	3,819	13,397	3,195	9,443	6,402	15,845	3,931
35-44	4,679	7,766	12,445	2,701	9,455	7,318	16,773	3,034
45-54	4,739	6,533	11,272	1,732	13,155	4,638	17,793	1,964
55-64	8,818	5,723	14,541	1,176	3,483	7,503	10,986	1,263
65+	21,130	12,602	33,733	1,140	35,474	7,579	43,052	1,391
Tanzania Mainland/ Zanzibar								
Mainland	4,671	3,418	8,089	28,003	7,603	3,741	11,344	30,023
Urban	7,417	4,756	12,172	8,087	12,492	5,031	17,523	8,877
Rural	3,555	2,875	6,431	19,916	5,550	3,200	8,750	21,146
Zanzibar	9,426	4,263	13,690	750	10,828	3,985	14,813	881
Unguja	13,780	4,883	18,662	506	13,292	5,271	18,563	591
Pemba	441	2,985	3,426	245	5,795	1,358	7,152	290
Zone								
Western	3,381	3,387	6,768	2,976	5,431	2,602	8,033	3,271
Northern	7,044	4,100	11,144	3,154	9,048	3,939	12,986	3,406
Central	640	1,367	2,007	3,300	11,394	2,892	14,285	3,443
Southern Highlands	1,579	4,899	6,478	1,834	3,569	5,603	9,172	1,890
Southern	9,902	3,399	13,301	1,442	6,812	2,672	9,484	1,617
South West Highlands	9,415	3,253	12,668	2,704	4,880	5,263	10,143	2,928
Lake	3,016	2,451	5,468	8,234	2,520	3,083	5,603	8,738
Eastern	6,639	5,811	12,450	4,359	18,263	4,899	23,162	4,730
Zanzibar	9,426	4,263	13,690	750	10,828	3,985	14,813	881
Region								
Dodoma	507	1,745	2,253	1,416	2,906	754	3,660	1,444
Arusha	2,337	891	3,228	1,004	15,828	3,949	19,777	1,061
Kilimanjaro	22,155	7,465	29,620	763	10,053	1,462	11,516	878
Tanga	2,134	4,572	6,706	1,386	3,542	5,413	8,955	1,467
Morogoro	1,055	6,009	7,064	1,366	6,615	4,197	10,812	1,484
Pwani	7,838	915	8,753	606	3,688	2,260	5,948	664
Dar es Salaam	9,531	6,941	16,471	2,387	28,708	5,982	34,690	2,582
Lindi	1,927	1,952	3,879	585	5,455	2,416	7,871	633
Mtwara	15,343	4,386	19,729	857	7,685	2,836	10,520	985
Ruvuma	1,192	2,069	3,262	832	1,563	8,147	9,710	830
Iringa	0	4,652	4,652	581	1,830	2,553	4,383	601
Mbeya	1,775	4,259	6,034	1,753	5,407	3,147	8,555	1,880
Singida	39	1,848	1,887	948	11,582	4,271	15,853	1,015
Tabora	418	4,510	4,928	1,724	7,860	3,589	11,449	1,930
Rukwa	34,171	1,564	35,735	639	2,110	12,282	14,392	728
Kigoma	7,458	1,842	9,300	1,253	1,938	1,183	3,122	1,342
Shinyanga	1,513	3,004	4,517	1,151	5,980	3,677	9,657	1,200
Kagera	4,449	1,356	5,805	1,462	2,461	3,152	5,613	1,586
Mwanza	819	3,057	3,876	1,949	303	3,540	3,843	2,089
Mara	11,492	4,131	15,623	1,148	5,766	3,365	9,131	1,366
Manyara	1,448	308	1,756	936	23,647	4,606	28,253	984
Njombe	4,517	10,823	15,340	422	9,481	4,994	14,475	459
Katavi	1,641	1,055	2,696	312	8,074	1,733	9,807	320
Simiyu	796	1,723	2,518	1,250	1,090	2,377	3,468	1,271
Geita	631	1,483	2,114	1,274	848	2,052	2,900	1,226
Kaskazini Unguja	15,575	1,356	16,931	124	2,455	1,309	3,764	133
Kusini Unguja	2,138	4,850	6,988	70	23,786	711	24,496	84
Mjini Magharibi	15,690	6,291	21,981	312	14,774	7,692	22,466	375
Kaskazini Pemba	225	3,804	4,029	129	6,241	1,346	7,587	151
Kusini Pemba	679	2,079	2,759	116	5,310	1,371	6,681	139
Wealth quintile								
Lowest	1,534	1,551	3,085	5,844	7,407	2,357	9,763	6,169
Second	3,021	1,990	5,011	5,640	4,068	2,188	6,256	6,213
Middle	3,307	2,995	6,302	5,896	4,665	3,537	8,202	6,067
Fourth	5,620	4,334	9,954	5,683	6,361	4,115	10,476	6,170
Highest	10,620	6,387	17,007	5,690	15,797	6,499	22,296	6,284
Total	4,795	3,440	8,235	28,753	7,695	3,748	11,442	30,904

Table 2.18 Annual total health expenditure (in TZS) per household

Annual total expenditures on any health-related items for members of the household, by selected background characteristics, Tanzania DHS-MIS 2015-16

Health expenditure	Total health-related expenditure	Total households
Tanzania Mainland/Zanzibar		
Mainland	47,807	12,247
Urban	62,861	4,053
Rural	40,362	8,195
Zanzibar	68,702	316
Unguja	88,181	213
Pemba	28,046	102
Zone		
Western	54,902	1,010
Northern	57,910	1,526
Central	38,534	1,469
Southern Highlands	24,627	933
Southern	40,050	798
South West Highlands	55,888	1,306
Lake	35,808	2,935
Eastern	66,972	2,270
Zanzibar	68,702	316
Region		
Dodoma	13,451	683
Arusha	62,484	486
Kilimanjaro	76,537	431
Tanga	41,108	610
Morogoro	39,330	698
Pwani	31,958	317
Dar es Salaam	91,195	1,255
Lindi	21,261	313
Mtwara	52,171	485
Ruvuma	16,572	410
Iringa	14,327	301
Mbeya	35,541	902
Singida	45,192	392
Tabora	63,953	539
Rukwa	119,519	295
Kigoma	44,570	472
Shinyanga	45,648	400
Kagera	30,312	643
Mwanza	35,417	717
Mara	66,151	437
Manyara	75,333	395
Njombe	53,537	222
Katavi	52,087	110
Simiyu	14,228	348
Geita	20,791	390
Kaskazini Unguja	51,013	51
Kusini Unguja	76,849	32
Mjini Magharibi	105,645	130
Kaskazini Pemba	25,072	54
Kusini Pemba	31,320	49
Wealth quintile		
Lowest	38,342	2,107
Second	31,630	2,394
Middle	38,181	2,500
Fourth	45,960	2,687
Highest	80,620	2,874
Total	48,332	12,563

CHARACTERISTICS OF RESPONDENTS 3

Key Findings

- ***Education:*** Among respondents age 15-49, 50% of women and 48% of men in Tanzania have completed primary school (and did not continue on to secondary school). Twenty-three percent of women and 28% of men have attended secondary school or beyond.
- ***Literacy:*** Twenty-three percent of women and 17% of men are illiterate.
- ***Exposure to mass media:*** Forty-five percent of women and 60% of men listen to the radio at least once a week. Forty-six percent of women and 32% of men do not access newspapers, television, or radio at least once a week.
- ***Internet usage:*** Eight percent of women and 19% of men used the internet in the past 12 months.
- ***Employment status:*** Seventy-two percent of women and 88% of men are currently employed.
- ***Health insurance coverage:*** Nine out of 10 women and men do not have health insurance.
- ***Tobacco smoking:*** Fourteen percent of men and 1% of women age 15-49 smoke tobacco.
- ***Male circumcision:*** Eighty percent of men age 15-49 are circumcised.

This chapter presents information on the demographic and socioeconomic characteristics of the 2015-16 TDHS-MIS respondents such as age, sex, marital status, education, literacy, place of residence, employment, and wealth status. In addition, the chapter presents information on use of mass media and the internet, health insurance coverage, tobacco smoking, and male circumcision. This information is useful for planning and implementing the Sustainable Development Goals 2030.

3.1 BASIC CHARACTERISTICS OF SURVEY RESPONDENTS

A total of 16,780 respondents age 15-49 were interviewed in the 2015-16 Tanzania Demographic and Health Survey and Malaria Indicator Survey (2015-16 TDHS-MIS); 13,266 women and 3,514 men were interviewed. Among both sexes, the percentage of the population represented by age group steadily decreases with increasing age; more than half of the population (57%) consists of the country's three youngest age groups (15-19, 20-24, and 25-29) **(Table 3.1)**.

Among the total respondents interviewed, 97% of women and 98% of men represent Mainland, and 3% represent Zanzibar. Nearly two-thirds of respondents (64%) live in rural areas. About 1 in 10 people age 15-49 live in Dar es Salaam, (12% of women and 13% of men).

A quarter of the women have never married, while 43% of the men report themselves as having never married. Among the 15-49 age group, women are much more likely than men to be either currently or previously married (age at marriage is discussed in chapter four). Forty-five percent of women are currently married compared with 36% of men. Nearly equal percentages of women (17%) and men (16%) are living together (as if married). One in 10 women is divorced or separated, compared with 1 in 20 men. Three percent of women age 15-49 are widows, while less than 1% of men are widowers.

3.2 EDUCATION AND LITERACY

Education

Respondents are classified into four categories: those who have had no education, attended some primary school, completed primary school, or attended secondary or higher education.

Sample: Women and men age 15-49

Literacy

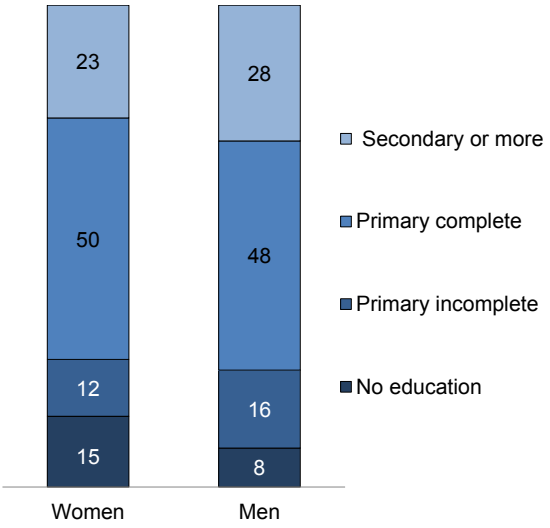
Respondents who attended secondary A level schooling or higher were assumed to be literate. All other respondents were given a pre-printed card and asked to read a sentence from the card aloud to assess literacy.

Sample: Women and men age 15-49

Half of respondents have completed primary school (50% of women and 48% of men), but never continued on to secondary school. Women are less likely than men to attend any secondary schooling (23% of women and 28% of men have attended secondary or higher level). Women are also less likely to attend any school (15% of women have no education compared with 8% of men), and less likely to attend primary school without completing it (12% of women and 16% of men) **(Tables 3.2.1 and 3.2.2)**.

***Figure 3.1* Education of survey respondents**

Percent distribution of women and men age 15-49 by highest level of schooling attended or completed



Trends: The median number of school years completed has increased from 5.1 to 6.5 years among women and from 6.1 to 6.5 among men from 1991-92 to 2015-16.

In Tanzania, about 8 in 10 respondents are literate (77% of women and 83% of men). About 9 in 10 urban dwellers are literate (89% of women and 94% of men), a higher percentage than rural dwellers (70% of women and 78% of rural men are literate) **(Tables 3.3.1 and 3.3.2)**.

Trends: Literacy among women has increased over the last decade, from 67% in 2004-05 to 72% in 2010, and to 77% in 2015-16. Literacy among men has been higher than among women throughout the decade, and increased from 80% in 2004-05 to 83% in 2015-16.

Patterns by background characteristics

- About 2 in 10 women and 1 in 10 men in rural areas have never attended school, significantly higher levels than among urban dwellers.

- The greatest disparities in access to education are seen by wealth quintile. Three in 10 women and two in 10 men in the lowest wealth quintile have never been to school. Women with no schooling steadily and abruptly decrease with rising wealth quintiles, reaching fewer than 3% among those in the highest wealth quintile. About half of women and men in the highest wealth quintile attend at least some secondary or higher school **(Table 3.2.1 and 3.2.2).**

- Among respondents of school age (15-24), the percentages who are literate are the same for women and men (83%).

- Women in Mjini Magharibi, Kilimanjaro, and Dar es Salaam regions are the most likely to be literate (90% or higher), and women in Katavi are the least likely to be literate (56%). Over 90% of men are literate in seven regions (Dar es Salaam, Pwani, Iringa, Mara, Kusini Unguja, Mjini Magharibi, and Kusini Pemba). Men are the least likely to be literate in Tabora (66%).

- Literacy rises steadily and dramatically with rising wealth quintile among both women and men. Among women, the percent literate goes up about 10% with each increase in wealth quintile **(Tables 3.3.1 and 3.3.2)**.

3.3 Exposure to Mass Media and Internet Usage

Exposure to mass media

Respondents were asked how often they read a newspaper, listened to the radio, or watched television. Those who said they did so at least once a week are considered to have been regularly exposed to that form of media.

Sample: Women and men age 15-49

Exposure to Internet

Internet is the global communication network that allows almost all computers worldwide to connect and exchange information. Respondents were asked to report the frequency of their use of the internet.

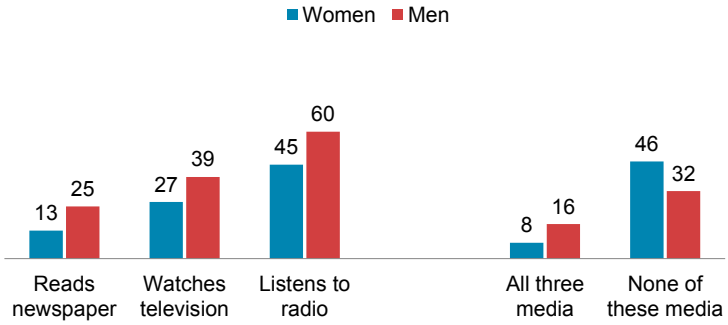
Sample: Women and men age 15-49

Between radio, television, and print, radio is the most frequently accessed form of media among both women and men; 45% of women and 60% of men listen to the radio at least once a week. However, significant percentages do not access any of the three media on a weekly basis (46% of women and 32% of men) **(Tables 3.4.1 and 3.4.2)**.

Trends: The percentages of women and men who read a newspaper or magazine at least once a week or listen to the radio at least once a week has declined since 2004-05.

***Figure 3.2* Exposure to mass media**

Percentage of women and men age 15-49 who are exposed to media on a weekly basis



Overall, only 10% of women have ever used the internet. While more men than women have ever used the internet, they are still in the minority (21%). However, respondents who have used the internet in the previous 12 months are likely to have used it either every day or at least once a week. Among those who have used the internet in the past 12 months, 51% of women and 44% of men used it almost every day, and 28% of women and 33% of men used the internet at least once a week **(Tables 3.5.1 and 3.5.2).**

Patterns by background characteristics

- Regular access to all three types of media increases steadily with increasing education, including listening to the radio. Sixty-one percent of women and 74% of men with secondary or higher schooling listen to the radio at least once a week, while only 26% of women and 35% of men with no education listen at least once a week **(Tables 3.4.1 and 3.4.2).**
- Lack of regular exposure to any of the three media is especially high in rural areas; 57% of rural women and 41% of rural men do not use any of the three media forms at least once a week.
- While reading a newspaper or magazine is the least common media accessed weekly, more men read a newspaper or magazine at least once a week than women do (25% of men and 13% of women)
- Women and men in urban areas are much more likely (18% and 36%, respectively) to have used the internet in the past 12 months than rural dwellers (2% and 9%) (**Tables 3.5.1 and 3.5.2).**
- Not surprisingly, urban dwellers are more likely than rural dwellers to have used the internet almost every day (among those who have accessed the internet at all).
- Women and men in the highest education level are far more likely than others to have used the Internet in the past 12 months (28% of women and 46% of men) than those in the lower educational levels. Use of the Internet does not exceed 3% among women in the remaining education levels.
- The patterns of Internet use by wealth quintile are similar to those by education, with minimal use among all but those in the highest wealth quintile.

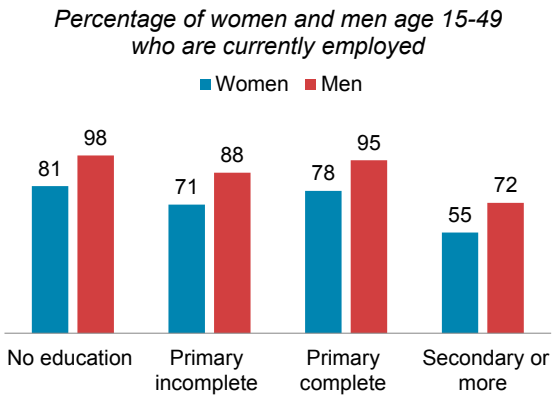
3.4 EMPLOYMENT

Currently employed
Respondents who were employed in the 7 days before the survey
Sample: Women and men age 15-49

Seventy-two percent of women are currently employed, compared with 88% of men. An additional 5% of women and 1% of men reported working in the past 12 months even though they were not currently employed. The percentage currently employed increases with age, though tends to reach a plateau at about age 30 **(Tables 3.6.1 and 3.6.2).**

Trends: There have been slight changes in employment since 2010.The percentage of women who are currently employed decreased from 79% in 2004-05 to 72% in 2015-16, while the percentage of men employed increased from 82% in 2004-05 to 88% in 2015-16.

Figure 3.3 **Employment status by education**



Patterns by background characteristics

- Women are more likely to work if they are divorced, separated or widowed (89%) than if they are married (78%).
- Seventy-eight percent of women and 95% of men who have completed primary school are currently employed. By education, those with lowest percent currently employed are those who attended secondary or higher schooling, for both women and men.
- Employment status by wealth quintile exhibits a pattern similar to education, with the percent currently employed being lower among those in the highest wealth quintile.

3.5 OCCUPATION

Occupation

Categorised as professional/technical/managerial, clerical, sales and services, skilled manual, unskilled manual, domestic service, and agriculture

Sample: Women and men age 15-49 who were currently employed or had worked in the 12 months before the survey

Women age 15-49 are most commonly employed in agriculture (56%) and unskilled manual labour (22%). Men are most commonly employed in agriculture (59%) and skilled manual labour (18%) **(Tables 3.7.1 and 3.7.2)**.

Trends: The percentage of women working in agriculture has decreased over time, from 78% in 2004-05, to 69% in 2010, and to 56% in 2015-16. Similarly, the percentage of men engaged in agriculture has decreased from 71% in 2004-5, to 62% in 2010, and to 59% in 2015-16. The percentages of women engaged in unskilled manual labour and men in skilled manual labour have increased over this same time period.

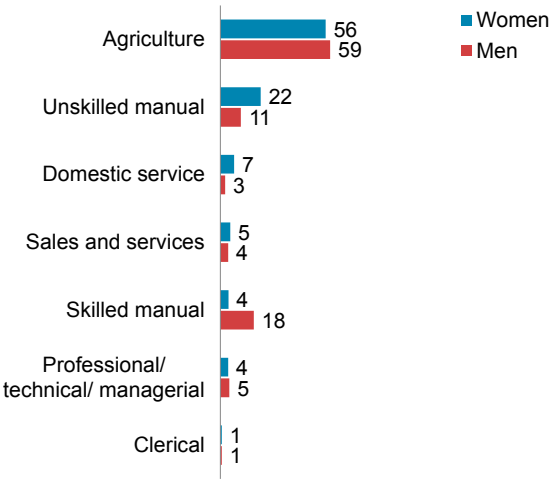
Patterns by background characteristics

- In rural areas, about eight in 10 people work in agriculture (76% of women and 79% of men).
- In urban areas, unskilled manual labor is the leading occupation among women (38%) and skilled manual labor is the leading occupation among men (34%).

- The percentage of people employed in agriculture drops steadily and dramatically with increasing education. The majority of women who have no education work in agriculture (82%), compared with 21% of those with secondary or higher schooling. The majority of men who have no education also work in agriculture (81%), compared with 29% of those with secondary or higher schooling.
- Most people in the poorest households work in agriculture (92% of women and 89% of men). Only 8% of women and 12% of men in the highest wealth quintile work in agriculture. In the highest wealth quintile, 37% of women are engaged in unskilled manual labor, and 35% of men are engaged in skilled manual labor.

***Figure 3.4* Occupation**

Percentage of women and men age 15-49 employed in the 12 months before the survey by occupation



3.6 Type of Employment: Women

Overall, 53% of women employed in the past 12 months were paid in cash (plus an additional 8% were paid in both cash and kind), 54% were self-employed, and 52% worked seasonally. How women are paid, who they work for, and how often they work varies greatly depending on whether or not they work in the agricultural sector **(Table 3.8)**.

Trends: On average, the percentage of employed women who are paid cash increased from 33% in 2010 to 53% in 2015-16. Women engaged in agriculture who received cash payment also increased over time, from 9% in 2010 to 24% in 2015-16. Similarly the percentage of women engaged in nonagricultural work for cash payment increased slightly, from 87% in 2010 to 90% in 2015-16. Women who are not paid or paid in kind decreased over the same period.

Patterns by background characteristics

- Sixty-four percent of women who work in the agricultural sector are not paid.
- Most women who work in agriculture either work for a family member (49%) or are self-employed (48%).
- The vast majority of women in agriculture work seasonally (78%), as opposed to year-round.
- The vast majority of women in the nonagricultural sector are paid cash only (90).
- Sixty-two percent of women in the nonagricultural sector were self-employed, and 73% worked all year round.

3.7 Health Insurance Coverage

Nine out of 10 women and men age 15-49 in Tanzania do not have any health insurance **(Tables 3.9.1 and 3.9.2)**.

Trends: The percentage of women who have no health insurance has decreased from 94% in 2010 to 91% in 2015-16. Similarly, the percentage of men without health insurance has decreased from 93% in 2010 to 91% in 2015-16.

Patterns by background characteristics

Women and men with secondary or higher levels of education (17% of women and 20% of men), and those from the wealthiest households (14% of women and 16% of men) are more likely to have health insurance.

3.8 TOBACCO SMOKING

Less than one percent of women (0.6%) smoke any tobacco. Fourteen percent of men age 15-49 smoke tobacco, and most of them smoke cigarettes on a daily basis **(Table 3.10)**.

Trends: The percentage of nonsmokers among women has remained the same at 99% since the 2004 TDHS. On the other hand, the percentage of men who smoke has been declining over time, from 22% in 2004 to 21% in 2010, and now to 14% in 2015-16.

Patterns by background characteristics

- Cigarette smoking rises with age among men, from a low of 1% at age 15-19 to a high of 33% among those age 45-49.
- The prevalence of smoking men declines with increasing education and increasing wealth quintile.
- Smoking among men is more popular in the Mainland (14%) than in Zanzibar (8%).
- Cigarette smoking is most common among men in the Southern zone (23%) followed by the Northen zone (18%).

3.9 DAILY SMOKING

Thirty percent, of men age 15-49 who are smokers smoke five to nine cigarettes per day, and 41% smoke fewer than five cigarettes per day **(Table 3.11)**.

3.10 MALE CIRCUMCISION

Male circumcision
Male circumcision involves the removal of part or all of the foreskin of the penis
Sample: Men age 15-49

The 2015-15 TDHS-MIS included questions on male circumcision, which involves the removal of some foreskin or the entire foreskin of the penis. Male circumcision used to be performed mostly for religious, social, or cultural reasons. Recently, the practice has been supported by scientific evidence that circumcision significantly reduces the risk of men contracting HIV or other sexually transmitted diseases.

Overall, 8 in 10 men age 15-49 have been circumcised **(Table 3.12)**. This is an increase from 72% reported in the 2010 TDHS survey.

Patterns by background characteristics

- There are no major differences in male circumcision by age; however, oldest men age 40-49 have a lower circumcision rate (74%) when compared with younger men (80- 84%).Men living in urban areas are more likely to be circumcised than men living in rural areas (91% and 74%, respectively).
- Circumcision in Zanzibar is almost universal, while in Mainland, 80% of men have been circumcised.

- By zone, virtually all men age 15-49 in Southern and Zanzibar are circumcised, compared with half of men in South West Highlands.

- Looking at regions, virtually all men (99-100%) are circumcised in several regions, including Dodoma, Kilimanjaro, Tanga, Morogoro, Lindi, Mtwara, Kaskazini Unguja, Kusini Unguja, Mjini Magharibi and Kaskazini Pemba. On the other hand, only 34% of men in Rukwa and 48% of men in Simiyu are circumcised.

List of Tables

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Table 3.1 Background characteristics of respondents

Percent distribution of women and men age 15-49 by selected background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Women			Men		
	Weighted percent	Weighted number	Unweighted number	Weighted percent	Weighted number	Unweighted number
Age						
15-19	21.9	2,904	2,932	26.5	932	930
20-24	18.7	2,483	2,467	16.4	576	626
25-29	16.0	2,125	2,110	13.7	482	492
30-34	13.2	1,752	1,746	11.7	410	408
35-39	12.4	1,641	1,629	13.3	466	437
40-44	10.3	1,364	1,347	9.5	334	325
45-49	7.5	997	1,035	8.9	314	296
Marital status						
Never married	25.3	3,353	3,478	43.0	1,510	1,580
Married	44.9	5,952	6,137	36.1	1,268	1,214
Living together	17.0	2,258	2,052	15.8	557	554
Divorced/separated	10.0	1,323	1,254	4.7	164	149
Widowed	2.9	379	345	0.4	16	17
Residence						
Urban	36.3	4,811	4,145	35.6	1,251	1,057
Rural	63.7	8,455	9,121	64.4	2,263	2,457
Tanzania Mainland/ Zanzibar						
Mainland	97.0	12,862	11,127	97.5	3,425	3,024
Urban	35.2	4,675	3,606	34.8	1,224	945
Rural	61.7	8,187	7,521	62.6	2,201	2,079
Zanzibar	3.0	404	2,139	2.5	89	490
Unguja	2.2	293	1,435	1.8	62	319
Pemba	0.8	111	704	0.8	28	171
Zone						
Western	9.6	1,278	1,051	9.2	322	270
Northern	11.9	1,575	1,255	11.8	415	339
Central	10.1	1,336	1,190	10.6	372	316
Southern Highlands	6.1	807	1,082	6.7	234	319
Southern	5.3	700	728	5.1	180	194
South West Highlands	9.4	1,246	1,265	8.8	308	331
Lake	26.1	3,463	3,081	26.6	933	863
Eastern	18.5	2,457	1,475	18.8	659	392
Zanzibar	3.0	404	2,139	2.5	89	490
Region						
Dodoma	4.3	572	343	5.0	175	101
Arusha	3.8	508	420	3.7	129	106
Kilimanjaro	2.7	361	370	3.1	110	108
Tanga	5.3	706	465	5.0	176	125
Morogoro	4.8	636	345	4.1	143	80
Pwani	2.1	285	333	1.9	68	85
Dar es Salaam	11.6	1,536	797	12.8	448	227
Lindi	2.2	288	380	1.9	66	95
Mtwara	3.1	412	348	3.3	115	99
Ruvuma	2.7	360	383	3.2	112	121
Iringa	1.8	245	340	2.0	71	107
Mbeya	6.2	828	374	5.8	202	99
Singida	2.8	370	413	3.0	106	118
Tabora	5.6	737	560	5.7	199	153
Rukwa	2.2	288	425	2.0	71	107
Kigoma	4.1	542	491	3.5	124	117
Shinyanga	3.8	504	516	4.1	142	154
Kagera	4.6	612	416	5.6	198	143
Mwanza	6.5	859	496	6.4	225	136
Mara	3.9	523	531	3.2	114	123
Manyara	3.0	394	434	2.6	91	97
Njombe	1.5	203	359	1.4	50	91
Katavi	1.0	130	466	1.0	35	125
Simiyu	3.6	479	587	3.9	136	172
Geita	3.7	485	535	3.4	118	135
Kaskazini Unguja	0.4	56	366	0.4	13	88
Kusini Unguja	0.3	35	361	0.2	9	89
Mjini Magharibi	1.5	201	708	1.1	40	142
Kaskazini Pemba	0.4	56	338	0.4	14	81
Kusini Pemba	0.4	55	366	0.4	13	90

(Continued…)

Table 3.1—*Continued*

Background characteristic	Women			Men		
	Weighted percent	Weighted number	Unweighted number	Weighted percent	Weighted number	Unweighted number
Education						
No education	14.7	1,946	1,998	8.1	283	279
Primary incomplete	11.8	1,559	1,639	16.2	568	614
Primary complete	50.1	6,652	6,001	47.6	1,673	1,561
Secondary+	23.4	3,109	3,628	28.2	990	1,060
Wealth quintile						
Lowest	16.9	2,246	2,144	17.0	598	592
Second	17.1	2,274	2,166	16.4	575	570
Middle	17.6	2,329	2,438	18.8	659	688
Fourth	21.3	2,822	3,108	21.7	764	798
Highest	27.1	3,596	3,410	26.1	918	866
Total 15-49	100.0	13,266	13,266	100.0	3,514	3,514

Note: Education categories refer to the highest level of education attended, whether or not that level was completed.

Table 3.2.1 Educational attainment: Women

Percent distribution of women age 15-49 by highest level of schooling attended or completed, and median years completed, according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Highest level of schooling				Total	Median years completed	Number of women
	No education	Some primary	Completed primary[1]	Secondary+[2]			
Age							
15-24	7.5	12.2	44.1	36.1	100.0	6.7	5,387
15-19	6.0	14.6	44.3	35.1	100.0	6.6	2,904
20-24	9.3	9.5	43.9	37.3	100.0	6.7	2,483
25-29	16.9	10.8	49.3	23.0	100.0	6.5	2,125
30-34	20.4	12.5	53.3	13.8	100.0	6.3	1,752
35-39	20.6	10.6	56.1	12.7	100.0	6.3	1,641
40-44	21.6	12.3	56.6	9.5	100.0	6.3	1,364
45-49	19.1	11.1	60.2	9.6	100.0	6.3	997
Residence							
Urban	6.2	8.1	47.1	38.6	100.0	6.8	4,811
Rural	19.5	13.9	51.9	14.8	100.0	6.3	8,455
Tanzania Mainland/ Zanzibar							
Mainland	14.8	11.8	51.3	22.1	100.0	6.5	12,862
Urban	6.3	8.1	48.2	37.4	100.0	6.7	4,675
Rural	19.7	13.8	53.2	13.3	100.0	6.3	8,187
Zanzibar	11.1	11.2	11.8	66.0	100.0	8.3	404
Unguja	6.1	9.4	12.3	72.2	100.0	8.6	293
Pemba	24.1	16.1	10.4	49.5	100.0	7.0	111
Zone							
Western	25.0	15.2	47.6	12.1	100.0	6.2	1,278
Northern	12.6	8.7	49.3	29.4	100.0	6.6	1,575
Central	18.1	10.4	55.0	16.4	100.0	6.4	1,336
Southern Highlands	7.1	7.6	61.8	23.5	100.0	6.6	807
Southern	18.9	10.8	56.8	13.5	100.0	6.4	700
South West Highlands	14.4	11.8	53.8	20.1	100.0	6.4	1,246
Lake	16.1	16.9	49.5	17.5	100.0	6.3	3,463
Eastern	8.8	7.1	49.0	35.2	100.0	6.7	2,457
Zanzibar	11.1	11.2	11.8	66.0	100.0	8.3	404
Region							
Dodoma	20.8	11.1	54.9	13.2	100.0	6.3	572
Arusha	16.9	6.1	49.0	28.0	100.0	6.6	508
Kilimanjaro	2.3	6.1	53.8	37.8	100.0	6.8	361
Tanga	14.7	12.0	47.1	26.2	100.0	6.5	706
Morogoro	14.3	10.1	54.9	20.7	100.0	6.5	636
Pwani	22.3	10.4	48.3	19.0	100.0	6.4	285
Dar es Salaam	3.9	5.3	46.6	44.1	100.0	6.9	1,536
Lindi	21.5	13.6	51.5	13.4	100.0	6.3	288
Mtwara	17.1	8.8	60.5	13.5	100.0	6.4	412
Ruvuma	6.3	8.7	65.6	19.5	100.0	6.5	360
Iringa	8.8	6.3	52.6	32.3	100.0	6.7	245
Mbeya	9.1	7.9	58.8	24.1	100.0	6.6	828
Singida	9.9	10.8	61.4	17.9	100.0	6.5	370
Tabora	28.3	14.8	45.4	11.5	100.0	6.2	737
Rukwa	22.2	18.5	46.1	13.1	100.0	6.2	288
Kigoma	20.6	15.7	50.7	12.9	100.0	6.3	542
Shinyanga	18.4	17.4	49.2	15.0	100.0	6.3	504
Kagera	18.9	16.1	50.6	14.3	100.0	6.3	612
Mwanza	13.7	16.7	46.2	23.4	100.0	6.4	859
Mara	10.2	15.6	53.2	21.0	100.0	6.4	523
Manyara	21.8	9.2	49.2	19.7	100.0	6.4	394
Njombe	6.6	7.3	66.3	19.8	100.0	6.6	203
Katavi	30.4	21.5	38.5	9.6	100.0	5.6	130
Simiyu	16.3	11.9	55.0	16.8	100.0	6.4	479
Geita	20.7	23.7	44.8	10.8	100.0	6.1	485
Kaskazini Unguja	15.3	19.9	11.3	53.5	100.0	7.1	56
Kusini Unguja	3.7	11.7	12.9	71.7	100.0	8.3	35
Mjini Magharibi	4.0	6.1	12.4	77.5	100.0	8.9	201
Kaskazini Pemba	28.4	19.6	8.8	43.2	100.0	6.2	56
Kusini Pemba	19.5	12.5	12.0	56.0	100.0	7.7	55
Wealth quintile							
Lowest	32.2	17.1	45.9	4.9	100.0	6.0	2,246
Second	23.9	14.8	54.3	6.9	100.0	6.2	2,274
Middle	15.4	13.7	57.9	13.1	100.0	6.4	2,329
Fourth	8.0	11.7	53.3	27.0	100.0	6.6	2,822
Highest	2.6	5.3	42.7	49.4	100.0	7.0	3,596
Total	14.7	11.8	50.1	23.4	100.0	6.5	13,266

[1] Completed grade 7 at the primary level
[2] Completed grade 4 at the secondary level or went on to higher education

Table 3.2.2 Educational attainment: Men

Percent distribution of men age 15-49 by highest level of schooling attended or completed, and median years completed, according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Highest level of schooling				Total	Median years completed	Number of men
	No education	Some primary	Completed primary[1]	Secondary+[2]			
Age							
15-24	5.5	20.1	38.0	36.4	100.0	6.6	1,508
15-19	5.2	23.4	37.8	33.5	100.0	6.5	932
20-24	5.9	14.7	38.3	41.1	100.0	6.8	576
25-29	9.6	14.0	43.5	32.9	100.0	6.6	482
30-34	13.9	13.1	48.5	24.5	100.0	6.5	410
35-39	8.7	14.7	57.5	19.1	100.0	6.5	466
40-44	7.6	14.3	62.3	15.7	100.0	6.5	334
45-49	10.0	8.6	68.6	12.8	100.0	6.5	314
Residence							
Urban	3.5	9.6	39.7	47.2	100.0	6.9	1,251
Rural	10.6	19.8	52.0	17.7	100.0	6.4	2,263
Tanzania Mainland/ Zanzibar							
Mainland	8.2	16.1	48.5	27.2	100.0	6.5	3,425
Urban	3.6	9.6	40.4	46.5	100.0	6.9	1,224
Rural	10.7	19.7	53.0	16.6	100.0	6.4	2,201
Zanzibar	4.3	17.5	14.0	64.2	100.0	8.1	89
Unguja	1.8	14.6	14.2	69.4	100.0	8.4	62
Pemba	9.9	24.0	13.6	52.5	100.0	7.3	28
Zone							
Western	21.0	21.7	42.4	14.9	100.0	6.2	322
Northern	9.5	8.0	46.5	36.0	100.0	6.7	415
Central	11.3	13.9	53.5	21.2	100.0	6.5	372
Southern Highlands	2.4	12.4	61.5	23.7	100.0	6.6	234
Southern	6.1	17.9	59.4	16.6	100.0	6.4	180
South West Highlands	5.5	20.4	48.0	26.1	100.0	6.5	308
Lake	7.7	23.0	47.0	22.3	100.0	6.4	933
Eastern	3.7	8.9	44.6	42.8	100.0	6.9	659
Zanzibar	4.3	17.5	14.0	64.2	100.0	8.1	89
Region							
Dodoma	10.9	14.4	51.1	23.6	100.0	6.5	175
Arusha	6.5	3.9	49.0	40.6	100.0	6.8	129
Kilimanjaro	1.9	8.6	46.2	43.3	100.0	6.8	110
Tanga	16.4	10.7	44.8	28.1	100.0	6.5	176
Morogoro	8.2	15.2	60.7	15.9	100.0	6.5	143
Pwani	4.0	13.1	56.8	26.0	100.0	6.6	68
Dar es Salaam	2.2	6.2	37.6	54.0	100.0	8.0	448
Lindi	11.0	24.1	50.2	14.7	100.0	6.3	66
Mtwara	3.2	14.4	64.7	17.7	100.0	6.5	115
Ruvuma	0.7	13.0	67.6	18.7	100.0	6.5	112
Iringa	4.4	10.7	48.4	36.4	100.0	6.7	71
Mbeya	1.9	14.7	53.0	30.4	100.0	6.6	202
Singida	8.1	18.8	53.8	19.4	100.0	6.5	106
Tabora	25.1	17.8	44.7	12.4	100.0	6.2	199
Rukwa	9.4	33.3	38.3	19.1	100.0	6.2	71
Kigoma	14.3	28.0	38.7	19.0	100.0	6.2	124
Shinyanga	5.8	20.0	53.7	20.5	100.0	6.4	142
Kagera	10.7	21.1	45.1	23.1	100.0	6.4	198
Mwanza	7.5	27.5	38.7	26.4	100.0	6.4	225
Mara	2.5	15.3	56.5	25.7	100.0	6.6	114
Manyara	16.0	7.3	57.7	19.0	100.0	6.5	91
Njombe	3.2	13.4	66.5	16.9	100.0	6.5	50
Katavi	18.6	27.1	39.2	15.2	100.0	6.1	35
Simiyu	11.0	19.7	52.3	17.1	100.0	6.4	136
Geita	6.8	32.3	42.7	18.2	100.0	6.2	118
Kaskazini Unguja	7.3	39.4	20.4	32.9	100.0	6.2	13
Kusini Unguja	1.8	6.8	15.8	75.6	100.0	8.4	9
Mjini Magharibi	0.0	7.9	11.7	80.4	100.0	8.7	40
Kaskazini Pemba	15.0	25.6	12.2	47.2	100.0	6.7	14
Kusini Pemba	4.5	22.4	15.1	58.0	100.0	7.9	13
Wealth quintile							
Lowest	19.9	25.8	47.6	6.8	100.0	6.1	598
Second	12.8	21.4	54.7	11.2	100.0	6.3	575
Middle	6.8	19.9	57.1	16.2	100.0	6.4	659
Fourth	4.5	13.3	48.7	33.4	100.0	6.7	764
Highest	1.2	6.3	35.5	57.0	100.0	8.3	918
Total 15-49	8.1	16.2	47.6	28.2	100.0	6.5	3,514

[1] Completed grade 7 at the primary level
[2] Completed grade 4 at the secondary level or went on to higher education

Table 3.3.1 Literacy: Women

Percent distribution of women age 15-49 by level of schooling attended and level of literacy, and percentage literate, according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Secondary A level or higher	No schooling, primary school, or secondary O level					
		Can read a whole sentence	Can read part of a sentence	Cannot read at all	Total	Percentage literate[1]	Number of women
Age							
15-24	1.4	78.3	3.5	16.8	100.0	83.2	5,387
15-19	0.6	79.5	3.9	16.0	100.0	84.0	2,904
20-24	2.3	76.9	3.1	17.7	100.0	82.3	2,483
25-29	3.0	68.4	4.1	24.4	100.0	75.6	2,125
30-34	1.8	65.1	4.7	28.0	100.0	71.7	1,752
35-39	1.3	66.9	3.8	27.9	100.0	72.0	1,641
40-44	1.6	61.1	6.5	30.8	100.0	69.2	1,364
45-49	1.6	63.2	7.3	27.9	100.0	72.1	997
Residence							
Urban	4.0	80.9	3.7	11.3	100.0	88.6	4,811
Rural	0.5	64.8	4.8	29.9	100.0	70.1	8,455
Tanzania Mainland/ Zanzibar							
Mainland	1.7	70.5	4.3	23.4	100.0	76.5	12,862
Urban	3.9	80.8	3.8	11.4	100.0	88.5	4,675
Rural	0.4	64.6	4.7	30.3	100.0	69.7	8,187
Zanzibar	3.4	76.8	6.6	13.2	100.0	86.7	404
Unguja	4.5	81.7	4.8	8.9	100.0	91.0	293
Pemba	0.4	63.9	11.4	24.3	100.0	75.6	111
Zone							
Western	0.7	60.7	3.7	34.9	100.0	65.1	1,278
Northern	1.5	75.2	3.4	19.8	100.0	80.1	1,575
Central	0.5	69.8	4.9	24.8	100.0	75.2	1,336
Southern Highlands	1.0	81.5	2.9	14.5	100.0	85.5	807
Southern	0.9	66.3	3.1	29.7	100.0	70.3	700
South West Highlands	1.7	69.8	3.8	24.5	100.0	75.3	1,246
Lake	0.8	65.2	6.0	28.0	100.0	72.0	3,463
Eastern	4.7	78.1	3.8	13.3	100.0	86.7	2,457
Zanzibar	3.4	76.8	6.6	13.2	100.0	86.7	404
Region							
Dodoma	0.3	68.7	2.9	28.0	100.0	72.0	572
Arusha	2.3	73.3	2.4	21.8	100.0	78.0	508
Kilimanjaro	2.7	87.1	3.1	7.2	100.0	92.8	361
Tanga	0.3	70.6	4.2	24.9	100.0	75.1	706
Morogoro	0.7	76.0	5.4	17.9	100.0	82.1	636
Pwani	2.1	64.9	5.1	27.5	100.0	72.2	285
Dar es Salaam	6.9	81.5	2.9	8.7	100.0	91.3	1,536
Lindi	1.4	63.5	3.2	31.8	100.0	68.2	288
Mtwara	0.5	68.3	2.9	28.3	100.0	71.7	412
Ruvuma	0.3	78.5	3.8	17.5	100.0	82.5	360
Iringa	2.4	83.7	1.1	12.7	100.0	87.3	245
Mbeya	2.4	77.8	1.7	17.7	100.0	82.0	828
Singida	0.3	74.5	6.2	19.0	100.0	81.0	370
Tabora	0.9	58.0	3.7	37.4	100.0	62.6	737
Rukwa	0.5	55.2	9.3	35.0	100.0	65.0	288
Kigoma	0.3	64.5	3.7	31.4	100.0	68.6	542
Shinyanga	0.8	61.8	5.6	31.9	100.0	68.1	504
Kagera	0.4	69.2	3.1	27.3	100.0	72.7	612
Mwanza	1.8	66.8	8.6	22.7	100.0	77.1	859
Mara	0.6	69.7	1.3	28.4	100.0	71.6	523
Manyara	1.0	66.9	6.4	25.5	100.0	74.3	394
Njombe	0.7	84.2	3.6	11.5	100.0	88.5	203
Katavi	0.1	50.9	4.4	44.5	100.0	55.5	130
Simiyu	0.0	65.5	5.5	29.0	100.0	71.0	479
Geita	0.4	56.0	10.7	32.7	100.0	67.1	485
Kaskazini Unguja	0.0	74.4	6.9	18.8	100.0	81.2	56
Kusini Unguja	1.4	84.7	2.9	10.9	100.0	89.1	35
Mjini Magharibi	6.3	83.2	4.5	5.8	100.0	94.0	201
Kaskazini Pemba	0.2	57.3	13.8	28.5	100.0	71.3	56
Kusini Pemba	0.6	70.6	8.9	19.9	100.0	80.1	55
Wealth quintile							
Lowest	0.0	49.3	5.1	45.5	100.0	54.4	2,246
Second	0.0	57.8	5.1	37.1	100.0	62.9	2,274
Middle	0.0	69.9	5.4	24.6	100.0	75.3	2,329
Fourth	0.6	80.2	4.8	14.3	100.0	85.6	2,822
Highest	5.9	85.2	2.6	6.3	100.0	93.7	3,596
Total	1.7	70.7	4.4	23.1	100.0	76.8	13,266

[1] Refers to women who attended secondary A level or higher and women who can read a whole sentence or part of a sentence

Table 3.3.2 Literacy: Men

Percent distribution of men age 15-49 by level of schooling attended and level of literacy, and percentage literate, according to background characteristics, Tanzania DHS-MIS 2015-16

	Secondary A level or	No schooling, primary school, or secondary O level

Background characteristic	higher	Can read a whole sentence	Can read part of a sentence	Cannot read at all	Total	Percentage literate[1]	Number of men
Age							
15-24	2.4	73.1	8.0	16.4	100.0	83.4	1,508
15-19	0.8	72.7	8.1	18.0	100.0	81.6	932
20-24	4.9	73.7	7.7	13.7	100.0	86.3	576
25-29	5.8	71.2	5.1	17.9	100.0	82.1	482
30-34	4.5	70.0	6.2	19.2	100.0	80.8	410
35-39	5.0	73.1	7.3	14.5	100.0	85.4	466
40-44	5.0	73.0	5.1	17.0	100.0	83.0	334
45-49	3.4	75.5	5.2	15.9	100.0	84.1	314
Residence							
Urban	8.2	81.0	4.2	6.5	100.0	93.5	1,251
Rural	1.3	68.1	8.2	22.3	100.0	77.5	2,263
Tanzania Mainland/ Zanzibar							
Mainland	3.7	72.5	6.8	16.9	100.0	83.0	3,425
Urban	8.2	80.9	4.2	6.6	100.0	93.3	1,224
Rural	1.3	67.8	8.2	22.6	100.0	77.3	2,201
Zanzibar	4.9	80.9	5.3	8.8	100.0	91.2	89
Unguja	6.4	84.1	3.9	5.5	100.0	94.5	62
Pemba	1.6	73.7	8.4	16.2	100.0	83.8	28
Zone							
Western	1.5	59.6	9.7	28.9	100.0	70.9	322
Northern	6.0	73.3	4.8	15.9	100.0	84.1	415
Central	1.9	69.5	11.9	16.6	100.0	83.4	372
Southern Highlands	3.2	77.3	4.6	15.0	100.0	85.0	234
Southern	2.0	77.8	0.0	19.9	100.0	79.8	180
South West Highlands	3.6	74.7	3.2	17.6	100.0	81.5	308
Lake	1.4	69.9	9.2	19.5	100.0	80.5	933
Eastern	8.6	79.2	4.7	7.5	100.0	92.5	659
Zanzibar	4.9	80.9	5.3	8.8	100.0	91.2	89
Region							
Dodoma	1.1	71.6	11.3	15.9	100.0	84.1	175
Arusha	2.4	75.9	10.6	11.1	100.0	88.9	129
Kilimanjaro	8.8	76.5	1.6	13.0	100.0	87.0	110
Tanga	6.9	69.4	2.5	21.1	100.0	78.9	176
Morogoro	3.5	68.2	9.3	19.0	100.0	81.0	143
Pwani	0.0	82.8	8.8	8.5	100.0	91.5	68
Dar es Salaam	11.5	82.2	2.6	3.7	100.0	96.3	448
Lindi	0.0	75.4	0.0	23.7	100.0	75.4	66
Mtwara	3.1	79.1	0.0	17.8	100.0	82.2	115
Ruvuma	2.3	75.8	3.9	18.0	100.0	82.0	112
Iringa	5.4	78.7	6.0	9.9	100.0	90.1	71
Mbeya	3.7	80.2	2.2	12.6	100.0	86.1	202
Singida	1.3	74.5	6.7	17.5	100.0	82.5	106
Tabora	0.8	56.3	8.9	34.0	100.0	66.0	199
Rukwa	3.7	64.2	6.2	25.9	100.0	74.1	71
Kigoma	2.8	65.0	10.9	20.6	100.0	78.7	124
Shinyanga	0.6	74.3	3.4	21.7	100.0	78.3	142
Kagera	0.0	71.7	7.5	20.8	100.0	79.2	198
Mwanza	3.5	67.8	8.6	20.1	100.0	79.9	225
Mara	0.9	75.4	16.8	6.9	100.0	93.1	114
Manyara	4.0	59.7	19.3	17.0	100.0	83.0	91
Njombe	2.0	78.6	4.1	15.3	100.0	84.7	50
Katavi	2.5	64.0	3.3	30.2	100.0	69.8	35
Simiyu	0.4	61.2	12.0	26.3	100.0	73.7	136
Geita	2.2	70.4	9.3	18.1	100.0	81.9	118
Kaskazini Unguja	1.7	77.3	5.1	15.9	100.0	84.1	13
Kusini Unguja	0.0	87.4	4.7	7.8	100.0	92.2	9
Mjini Magharibi	9.4	85.8	3.4	1.5	100.0	98.5	40
Kaskazini Pemba	1.3	65.2	9.0	24.5	100.0	75.5	14
Kusini Pemba	1.9	82.8	7.8	7.5	100.0	92.5	13
Wealth quintile							
Lowest	0.0	55.3	11.8	32.9	100.0	67.1	598
Second	0.2	63.9	8.7	26.7	100.0	72.8	575
Middle	0.8	72.5	6.6	19.9	100.0	79.9	659
Fourth	1.8	82.5	6.7	8.9	100.0	91.1	764
Highest	12.3	81.4	2.4	4.0	100.0	96.0	918
Total 15-49	3.8	72.7	6.8	16.7	100.0	83.2	3,514

[1] Refers to men who attended secondary O levels or higher and men who can read a whole sentence or part of a sentence

Table 3.4.1 Exposure to mass media: Women

Percentage of women age 15-49 who are exposed to specific media on a weekly basis, by background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Reads a newspaper or magazine at least once a week	Watches television at least once a week	Listens to the radio at least once a week	Accesses all three media at least once a week	Accesses none of the three media at least once a week	Number of women
Age						
15-19	16.3	31.3	43.2	8.4	43.3	2,904
20-24	15.1	30.5	48.9	8.9	41.4	2,483
25-29	13.6	29.1	47.7	8.6	44.0	2,125
30-34	11.1	26.4	44.5	6.8	47.4	1,752
35-39	11.0	23.0	42.8	5.5	49.3	1,641
40-44	10.6	20.2	40.6	6.1	52.8	1,364
45-49	11.3	16.9	40.6	4.7	54.4	997
Residence						
Urban	22.0	54.8	56.2	15.8	26.4	4,811
Rural	8.4	11.0	38.0	2.7	57.4	8,455
Tanzania Mainland/ Zanzibar						
Mainland	13.4	26.3	44.4	7.5	46.5	12,862
Urban	22.2	54.5	56.2	15.9	26.6	4,675
Rural	8.4	10.2	37.7	2.7	57.9	8,187
Zanzibar	10.7	45.4	52.2	6.8	33.8	404
Unguja	12.8	57.7	66.7	8.6	17.4	293
Pemba	5.2	13.3	14.3	2.2	76.9	111
Zone						
Western	8.0	13.6	38.5	3.7	56.4	1,278
Northern	18.5	40.3	55.6	10.2	30.7	1,575
Central	9.4	11.0	32.0	3.1	62.1	1,336
Southern Highlands	9.3	22.4	39.8	6.4	54.6	807
Southern	7.1	14.6	40.1	3.0	55.0	700
South West Highlands	18.5	19.7	40.3	8.0	52.2	1,246
Lake	8.4	18.0	42.5	4.1	51.6	3,463
Eastern	22.9	52.0	54.6	16.3	28.0	2,457
Zanzibar	10.7	45.4	52.2	6.8	33.8	404
Region						
Dodoma	7.2	7.6	23.0	1.5	71.6	572
Arusha	16.0	37.3	54.7	7.8	33.1	508
Kilimanjaro	17.4	41.4	60.3	9.7	27.4	361
Tanga	21.0	41.9	53.9	12.3	30.6	706
Morogoro	21.3	28.7	52.2	11.4	38.8	636
Pwani	14.4	20.0	38.4	6.8	54.3	285
Dar es Salaam	25.2	67.5	58.6	20.0	18.7	1,536
Lindi	6.4	14.9	30.2	2.1	62.7	288
Mtwara	7.5	14.5	46.9	3.6	49.7	412
Ruvuma	6.3	19.0	34.8	5.4	60.3	360
Iringa	19.0	29.4	40.6	11.5	52.1	245
Mbeya	18.1	18.9	39.1	7.7	53.7	828
Singida	12.5	15.4	43.7	5.0	51.1	370
Tabora	8.3	12.5	36.6	4.2	59.3	737
Rukwa	20.7	21.4	44.5	9.3	48.5	288
Kigoma	7.6	15.0	41.2	3.2	52.3	542
Shinyanga	8.0	19.0	42.6	3.5	50.0	504
Kagera	8.1	19.4	54.1	4.3	40.4	612
Mwanza	9.0	20.3	33.8	4.8	58.6	859
Mara	13.5	25.9	50.2	6.7	42.2	523
Manyara	9.8	11.8	33.9	3.5	58.7	394
Njombe	2.9	20.0	47.7	2.1	47.3	203
Katavi	16.3	21.6	38.4	6.7	51.0	130
Simiyu	2.1	8.7	32.6	1.0	64.5	479
Geita	8.6	11.6	44.1	3.2	52.6	485
Kaskazini Unguja	8.6	26.0	58.1	1.9	31.8	56
Kusini Unguja	3.2	35.1	70.3	1.6	22.8	35
Mjini Magharibi	15.7	70.5	68.4	11.7	12.4	201
Kaskazini Pemba	8.4	16.6	17.1	3.6	71.2	56
Kusini Pemba	1.9	9.8	11.5	0.7	82.8	55
Education						
No education	0.9	5.4	26.2	0.0	71.7	1,946
Primary incomplete	4.4	11.8	36.1	1.3	58.4	1,559
Primary complete	12.5	23.7	44.4	5.8	46.9	6,652
Secondary+	27.3	54.8	61.0	18.8	22.4	3,109
Wealth quintile						
Lowest	4.7	2.2	22.1	0.6	75.5	2,246
Second	5.9	4.1	31.1	1.1	65.9	2,274
Middle	8.0	6.8	42.6	1.7	53.6	2,329
Fourth	14.7	20.5	51.2	5.6	41.3	2,822
Highest	25.9	74.7	63.5	20.9	14.3	3,596
Total	13.3	26.9	44.6	7.5	46.1	13,266

Table 3.4.2 Exposure to mass media: Men

Percentage of men age 15-49 who are exposed to specific media on a weekly basis, by background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Reads a newspaper or magazine at least once a week	Watches television at least once a week	Listens to the radio at least once a week	Accesses all three media at least once a week	Accesses none of the three media at least once a week	Number of men
Age						
15-19	18.3	37.7	51.9	11.9	38.6	932
20-24	23.7	43.6	64.2	18.8	30.9	576
25-29	24.1	36.0	64.1	16.1	30.1	482
30-34	30.2	41.5	63.9	20.3	28.3	410
35-39	29.1	39.3	64.8	18.7	25.6	466
40-44	28.6	39.8	64.2	20.3	29.9	334
45-49	30.3	32.2	56.3	13.4	34.6	314
Residence						
Urban	44.7	64.7	71.7	33.0	15.6	1,251
Rural	13.9	24.5	54.0	7.2	41.2	2,263
Tanzania Mainland/ Zanzibar						
Mainland	24.7	38.3	59.8	16.3	32.7	3,425
Urban	44.9	64.7	71.4	33.2	15.8	1,224
Rural	13.5	23.6	53.3	6.9	42.1	2,201
Zanzibar	28.8	58.8	80.3	21.1	8.0	89
Unguja	24.8	51.3	83.8	18.0	7.9	62
Pemba	37.8	75.8	72.4	28.0	8.3	28
Zone						
Western	8.0	25.7	53.4	6.0	42.6	322
Northern	31.4	56.6	73.4	26.0	20.5	415
Central	10.3	21.8	47.9	8.0	49.8	372
Southern Highlands	39.8	42.2	73.8	20.7	16.8	234
Southern	21.6	46.9	59.8	11.5	26.6	180
South West Highlands	29.5	44.8	59.8	18.8	27.5	308
Lake	8.4	21.4	50.7	3.7	45.4	933
Eastern	53.4	59.3	68.7	36.3	17.5	659
Zanzibar	28.8	58.8	80.3	21.1	8.0	89
Region						
Dodoma	5.5	9.9	35.3	2.2	62.1	175
Arusha	33.2	47.2	65.0	28.6	28.4	129
Kilimanjaro	27.4	56.1	77.0	17.8	17.8	110
Tanga	32.5	64.0	77.3	29.1	16.4	176
Morogoro	30.4	35.5	60.7	18.6	34.3	143
Pwani	26.3	21.4	59.1	8.5	28.9	68
Dar es Salaam	64.8	72.7	72.7	46.2	10.5	448
Lindi	19.9	49.1	53.0	7.6	25.9	66
Mtwara	22.5	45.6	63.8	13.8	27.0	115
Ruvuma	34.8	39.0	64.3	18.8	23.8	112
Iringa	53.9	47.9	78.1	26.0	10.2	71
Mbeya	37.8	45.0	73.1	22.7	19.1	202
Singida	5.4	28.6	56.0	4.2	41.3	106
Tabora	6.3	22.0	36.9	4.4	57.2	199
Rukwa	15.3	44.2	35.1	13.0	45.1	71
Kigoma	10.8	31.7	79.8	8.6	19.2	124
Shinyanga	7.4	17.4	39.5	2.3	54.7	142
Kagera	10.8	40.9	80.1	4.5	17.1	198
Mwanza	10.5	14.8	44.6	5.8	52.0	225
Mara	8.4	25.5	54.9	5.4	39.1	114
Manyara	25.1	36.7	62.4	23.5	35.9	91
Njombe	30.9	41.1	88.7	17.3	10.2	50
Katavi	10.2	44.8	32.8	8.0	40.7	35
Simiyu	6.0	9.8	32.4	1.2	65.7	136
Geita	4.3	15.6	43.9	1.0	52.0	118
Kaskazini Unguja	10.3	31.4	74.9	5.2	15.0	13
Kusini Unguja	12.0	30.1	82.2	9.3	11.3	9
Mjini Magharibi	32.4	62.5	87.1	24.2	4.7	40
Kaskazini Pemba	35.9	78.8	73.3	28.8	6.8	14
Kusini Pemba	39.8	72.6	71.5	27.2	9.9	13
Education						
No education	0.7	12.3	35.4	0.5	61.4	283
Primary incomplete	6.4	22.3	45.9	2.6	48.7	568
Primary complete	21.2	34.3	61.2	11.8	31.4	1,673
Secondary+	48.4	63.5	74.1	36.7	15.2	990
Wealth quintile						
Lowest	4.9	10.4	31.3	1.5	65.3	598
Second	11.2	16.1	49.1	3.4	46.5	575
Middle	12.8	24.9	62.0	5.5	32.5	659
Fourth	27.0	41.0	68.8	15.8	23.1	764
Highest	53.3	79.7	77.8	42.6	8.5	918
Total 15-49	24.8	38.8	60.3	16.4	32.1	3,514

Table 3.5.1 Internet usage: Women

Percentage of women age 15-49 who have ever used the internet, and percentage who have used the internet in the past 12 months; and among women who have used the internet in the past 12 months, percent distribution by frequency of internet use in the past month, according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Ever used the internet	Used the internet in the past 12 months	Number	Among respondents who have used the internet in the past 12 months, percentage who, in the past month, used the internet: Almost every day	At least once a week	Less than once a week	Not at all	Total	Number
Age									
15-19	7.7	6.5	2,904	31.6	42.0	9.0	17.4	100.0	190
20-24	16.2	12.8	2,483	42.5	29.0	14.3	14.2	100.0	318
25-29	12.5	9.8	2,125	55.6	30.6	7.2	6.7	100.0	209
30-34	11.0	9.1	1,752	62.7	19.4	13.2	4.7	100.0	159
35-39	6.6	5.3	1,641	69.8	16.1	13.3	0.8	100.0	87
40-44	6.4	4.9	1,364	56.4	22.4	14.0	7.1	100.0	67
45-49	4.1	3.8	997	*	*	*	*	*	38
Residence									
Urban	21.8	18.1	4,811	53.4	28.5	9.1	9.0	100.0	871
Rural	3.2	2.3	8,455	37.5	28.2	20.6	13.7	100.0	197
Tanzania Mainland/ Zanzibar									
Mainland	9.7	7.9	12,862	50.7	28.4	10.9	10.0	100.0	1,018
Urban	21.6	18.0	4,675	53.8	28.4	8.9	9.0	100.0	839
Rural	2.9	2.2	8,187	36.3	28.2	20.4	15.0	100.0	179
Zanzibar	16.2	12.4	404	46.4	29.2	18.5	5.9	100.0	50
Unguja	20.1	15.7	293	46.5	29.6	18.2	5.7	100.0	46
Pemba	6.0	3.5	111	*	*	*	*	*	4
Education									
No education	0.2	0.1	1,946	*	*	*	*	*	2
Primary incomplete	1.1	0.5	1,559	*	*	*	*	*	8
Primary complete	4.3	2.9	6,652	41.3	31.9	15.4	11.3	100.0	190
Secondary+	32.4	27.9	3,109	52.7	27.5	10.3	9.5	100.0	868
Wealth quintile									
Lowest	0.7	0.5	2,246	*	*	*	*	*	11
Second	0.7	0.4	2,274	*	*	*	*	*	9
Middle	1.3	0.9	2,329	*	*	*	*	*	20
Fourth	6.6	4.7	2,822	34.0	30.1	23.9	12.0	100.0	132
Highest	29.7	24.9	3,596	54.1	28.4	8.5	9.0	100.0	895
Total	9.9	8.0	13,266	50.5	28.4	11.2	9.9	100.0	1,068

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 3.5.2 Internet usage: Men

Percentage of men age 15-49 who have ever used the internet ever, and percentage who have used the internet in the past 12 months; and among men who have used the internet in the past 12 months, percent distribution by frequency of internet use in the past month, according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Ever used the internet	Used the internet in the past 12 months	Number	Among respondents who have used the internet in the past 12 months, percentage who, in the past month, used internet: Almost every day	At least once a week	Less than once a week	Not at all	Total	Number
Age									
15-19	19.5	17.1	932	25.6	43.3	16.2	14.9	100.0	160
20-24	30.9	27.3	576	42.2	32.7	10.4	14.1	100.0	157
25-29	25.1	22.7	482	45.8	31.5	12.3	10.4	100.0	109
30-34	22.0	20.4	410	50.5	32.5	13.0	4.1	100.0	83
35-39	15.7	14.9	466	52.4	27.6	12.4	7.6	100.0	70
40-44	13.1	12.9	334	(72.5)	(17.3)	(3.4)	(6.7)	(100.0)	43
45-49	11.6	10.8	314	*	*	*	*	*	34
Residence									
Urban	38.9	36.3	1,251	52.0	29.8	10.8	7.1	100.0	454
Rural	10.5	9.0	2,263	25.6	41.0	15.4	18.1	100.0	203
Tanzania Mainland/ Zanzibar									
Mainland	20.2	18.3	3,425	44.3	32.9	12.5	10.3	100.0	626
Urban	38.5	36.0	1,224	52.5	29.4	10.9	7.0	100.0	440
Rural	10.0	8.5	2,201	24.9	41.0	16.0	18.0	100.0	186
Zanzibar	37.9	33.7	89	35.3	41.5	7.4	15.8	100.0	30
Unguja	43.5	38.6	62	38.3	38.5	6.8	16.3	100.0	24
Pemba	25.4	22.8	28	(23.9)	(52.9)	(9.7)	(13.5)	(100.0)	6
Education									
No education	0.9	0.9	283	*	*	*	*	*	3
Primary incomplete	3.2	2.4	568	*	*	*	*	*	14
Primary complete	12.6	11.0	1,673	21.2	41.6	18.0	19.2	100.0	184
Secondary+	49.8	46.1	990	53.4	29.4	10.3	6.7	100.0	456
Wealth quintile									
Lowest	4.3	3.6	598	*	*	*	*	*	22
Second	7.6	6.0	575	(12.8)	(29.3)	(14.2)	(43.7)	(100.0)	35
Middle	8.9	7.4	659	20.0	48.4	17.2	14.4	(100.0)	48
Fourth	18.4	16.0	764	27.2	33.7	25.7	13.4	100.0	122
Highest	49.7	46.8	918	55.4	31.8	7.2	5.4	100.0	430
Total 15-49	20.6	18.7	3,514	43.8	33.3	12.2	10.5	100.0	657

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 3.6.1 Employment status: Women

Percent distribution of women age 15-49 by employment status, according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Employed in the 12 months preceding the survey: Currently employed[1]	Employed in the 12 months preceding the survey: Not currently employed	Not employed in the 12 months preceding the survey	Total	Number of women
Age					
15-19	44.9	4.4	50.6	100.0	2,904
20-24	68.3	6.8	24.9	100.0	2,483
25-29	77.8	5.4	16.7	100.0	2,125
30-34	84.1	3.8	12.0	100.0	1,752
35-39	86.5	3.9	9.6	100.0	1,641
40-44	87.3	4.0	8.7	100.0	1,364
45-49	85.9	4.3	9.7	100.0	997
Marital status					
Never married	48.7	4.2	46.9	100.0	3,353
Married or living together	78.4	5.2	16.4	100.0	8,210
Divorced/separated/ widowed	89.3	4.5	6.2	100.0	1,703
Number of living children					
0	48.7	4.7	46.5	100.0	3,519
1-2	75.8	5.6	18.6	100.0	4,253
3-4	82.9	4.1	12.9	100.0	2,909
5+	86.8	4.5	8.7	100.0	2,585
Residence					
Urban	65.5	4.2	30.3	100.0	4,811
Rural	76.2	5.2	18.6	100.0	8,455
Tanzania Mainland/ Zanzibar					
Mainland	72.8	4.9	22.2	100.0	12,862
Urban	65.8	4.3	29.9	100.0	4,675
Rural	76.9	5.3	17.8	100.0	8,187
Zanzibar	55.4	2.3	42.3	100.0	404
Unguja	59.4	2.6	37.9	100.0	293
Pemba	44.8	1.3	53.9	100.0	111
Zone					
Western	83.8	4.4	11.8	100.0	1,278
Northern	61.2	3.2	35.6	100.0	1,575
Central	62.4	7.9	29.7	100.0	1,336
Southern Highlands	81.6	4.2	14.1	100.0	807
Southern	84.0	3.0	13.0	100.0	700
South West Highlands	81.0	1.6	17.4	100.0	1,246
Lake	74.4	7.0	18.5	100.0	3,463
Eastern	68.0	4.0	28.0	100.0	2,457
Zanzibar	55.4	2.3	42.3	100.0	404
Region					
Dodoma	60.5	12.5	26.9	100.0	572
Arusha	59.5	4.9	35.6	100.0	508
Kilimanjaro	69.3	2.0	28.8	100.0	361
Tanga	58.2	2.7	39.1	100.0	706
Morogoro	70.3	3.1	26.6	100.0	636
Pwani	71.4	1.8	26.8	100.0	285
Dar es Salaam	66.4	4.8	28.8	100.0	1,536
Lindi	85.7	2.9	11.4	100.0	288
Mtwara	82.8	3.1	14.1	100.0	412
Ruvuma	84.2	3.5	12.3	100.0	360
Iringa	80.0	0.8	19.2	100.0	245
Mbeya	77.8	1.8	20.4	100.0	828
Singida	80.1	3.3	16.6	100.0	370
Tabora	84.4	2.6	13.0	100.0	737
Rukwa	87.6	1.0	11.4	100.0	288
Kigoma	83.0	6.8	10.2	100.0	542
Shinyanga	67.1	17.6	15.2	100.0	504
Kagera	78.5	3.4	18.1	100.0	612
Mwanza	67.1	9.3	23.1	100.0	859
Mara	73.1	4.3	22.6	100.0	523
Manyara	48.6	5.6	45.9	100.0	394
Njombe	79.0	9.7	11.3	100.0	203
Katavi	86.5	1.9	11.6	100.0	130
Simiyu	83.3	2.2	14.5	100.0	479
Geita	82.1	4.5	13.5	100.0	485
Kaskazini Unguja	58.4	3.8	37.8	100.0	56
Kusini Unguja	72.0	2.6	25.4	100.0	35
Mjini Magharibi	57.5	2.3	40.2	100.0	201
Kaskazini Pemba	44.2	1.6	54.2	100.0	56
Kusini Pemba	45.4	1.1	53.5	100.0	55

(Continued…)

Table 3.6.1—*Continued*

Background characteristic	Employed in the 12 months preceding the survey: Currently employed[1]	Employed in the 12 months preceding the survey: Not currently employed	Not employed in the 12 months preceding the survey	Total	Number of women
Education					
No education	80.8	4.9	14.4	100.0	1,946
Primary incomplete	70.7	6.1	23.1	100.0	1,559
Primary complete	78.2	4.9	16.9	100.0	6,652
Secondary+	55.3	4.0	40.6	100.0	3,109
Wealth quintile					
Lowest	76.9	5.4	17.7	100.0	2,246
Second	81.8	5.1	12.9	100.0	2,274
Middle	76.9	5.2	17.9	100.0	2,329
Fourth	65.4	5.3	29.2	100.0	2,822
Highest	65.8	3.7	30.5	100.0	3,596
Total	72.3	4.8	22.8	100.0	13,266

[1] Currently employed is defined as having done work in the past 7 days. Included are persons who did not work in the past 7 days but who are regularly employed and were absent from work for leave, illness, vacation, or any other such reason.

Table 3.6.2 Employment status: Men

Percent distribution of men age 15-49 by employment status, according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Employed in the 12 months preceding the survey		Not employed in the 12 months preceding the survey	Missing/ don't know	Total	Number of men
	Currently employed[1]	Not currently employed				
Age						
15-19	64.0	1.4	33.5	1.1	100.0	932
20-24	86.9	2.5	10.6	0.0	100.0	576
25-29	97.5	0.7	1.8	0.0	100.0	482
30-34	99.5	0.5	0.0	0.0	100.0	410
35-39	98.9	0.8	0.4	0.0	100.0	466
40-44	99.1	0.9	0.1	0.0	100.0	334
45-49	98.1	0.7	1.2	0.0	100.0	314
Marital status						
Never married	72.1	2.1	25.1	0.7	100.0	1,510
Married or living together	99.3	0.2	0.5	0.0	100.0	1,825
Divorced/separated/widowed	97.0	2.4	0.6	0.0	100.0	180
Number of living children						
0	73.8	2.2	23.3	0.7	100.0	1,600
1-2	98.9	0.2	0.9	0.0	100.0	805
3-4	98.4	0.8	0.8	0.0	100.0	570
5+	99.5	0.0	0.5	0.0	100.0	539
Residence						
Urban	85.6	1.3	12.7	0.5	100.0	1,251
Rural	88.6	1.1	10.1	0.2	100.0	2,263
Tanzania Mainland/ Zanzibar						
Mainland	87.7	1.1	10.9	0.3	100.0	3,425
Urban	85.8	1.3	12.4	0.5	100.0	1,224
Rural	88.8	1.0	10.0	0.2	100.0	2,201
Zanzibar	78.4	3.9	17.8	0.0	100.0	89
Unguja	79.4	2.8	17.7	0.0	100.0	62
Pemba	76.0	6.1	17.8	0.0	100.0	28
Zone						
Western	89.4	0.4	10.2	0.0	100.0	322
Northern	78.2	2.1	19.7	0.0	100.0	415
Central	92.8	0.4	6.8	0.0	100.0	372
Southern Highlands	90.5	2.1	7.4	0.0	100.0	234
Southern	96.0	0.0	4.0	0.0	100.0	180
South West Highlands	85.6	2.5	11.9	0.0	100.0	308
Lake	87.7	0.9	10.2	1.1	100.0	933
Eastern	87.9	0.7	11.5	0.0	100.0	659
Zanzibar	78.4	3.9	17.8	0.0	100.0	89
Region						
Dodoma	95.0	0.0	5.0	0.0	100.0	175
Arusha	80.3	1.2	18.5	0.0	100.0	129
Kilimanjaro	72.5	5.3	22.2	0.0	100.0	110
Tanga	80.2	0.7	19.1	0.0	100.0	176
Morogoro	90.3	2.6	7.1	0.0	100.0	143
Pwani	88.2	1.0	10.8	0.0	100.0	68
Dar es Salaam	87.0	0.0	13.0	0.0	100.0	448
Lindi	97.8	0.0	2.2	0.0	100.0	66
Mtwara	95.0	0.0	5.0	0.0	100.0	115
Ruvuma	89.8	2.1	8.2	0.0	100.0	112
Iringa	88.5	2.6	9.0	0.0	100.0	71
Mbeya	83.5	3.3	13.2	0.0	100.0	202
Singida	96.5	0.0	3.5	0.0	100.0	106
Tabora	92.0	0.7	7.3	0.0	100.0	199
Rukwa	88.5	1.6	9.8	0.0	100.0	71
Kigoma	85.2	0.0	14.8	0.0	100.0	124
Shinyanga	91.2	1.2	7.6	0.0	100.0	142
Kagera	87.0	0.5	12.5	0.0	100.0	198
Mwanza	87.2	2.0	6.2	4.6	100.0	225
Mara	89.1	0.0	10.9	0.0	100.0	114
Manyara	84.3	1.7	14.0	0.0	100.0	91
Njombe	95.0	1.7	3.3	0.0	100.0	50
Katavi	91.3	0.0	8.7	0.0	100.0	35
Simiyu	82.7	0.4	16.9	0.0	100.0	136
Geita	90.5	0.9	8.6	0.0	100.0	118
Kaskazini Unguja	78.6	7.8	13.6	0.0	100.0	13
Kusini Unguja	88.1	0.0	11.9	0.0	100.0	9
Mjini Magharibi	77.8	1.8	20.4	0.0	100.0	40
Kaskazini Pemba	72.9	6.8	20.3	0.0	100.0	14
Kusini Pemba	79.3	5.4	15.2	0.0	100.0	13

(Continued…)

Table 3.6.2—*Continued*

Background characteristic	Employed in the 12 months preceding the survey: Currently employed[1]	Employed in the 12 months preceding the survey: Not currently employed	Not employed in the 12 months preceding the survey	Missing/ don't know	Total	Number of men
Education						
No education	97.7	1.5	0.9	0.0	100.0	283
Primary incomplete	88.2	0.7	10.1	1.0	100.0	568
Primary complete	95.0	0.9	4.0	0.1	100.0	1,673
Secondary+	71.6	1.7	26.4	0.3	100.0	990
Wealth quintile						
Lowest	95.8	0.8	2.8	0.5	100.0	598
Second	90.2	1.1	8.6	0.0	100.0	575
Middle	88.6	0.2	10.7	0.5	100.0	659
Fourth	85.3	2.0	12.1	0.5	100.0	764
Highest	81.5	1.3	17.2	0.0	100.0	918
Total 15-49	87.5	1.2	11.0	0.3	100.0	3,514

[1] *Currently employed* is defined as having done work in the past 7 days. Include are persons who did not work in the past 7 days but who are regularly employed and were absent from work for leave, illness, vacation, or any other such reason.

Table 3.7.1 Occupation: Women

Percent distribution of women age 15-49 employed in the 12 months preceding the survey by occupation, according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Professional/ technical/ managerial	Clerical	Sales and services	Skilled manual	Unskilled manual	Domestic service	Agriculture	Total	Number of women
Age									
15-19	0.9	0.2	4.6	4.8	18.0	12.1	59.4	100.0	1,430
20-24	4.5	1.0	6.8	5.7	20.5	8.2	53.2	100.0	1,864
25-29	6.1	1.5	6.0	5.3	21.9	6.6	52.6	100.0	1,769
30-34	4.5	0.9	6.4	4.4	22.4	7.3	54.0	100.0	1,541
35-39	3.8	0.5	5.6	4.9	23.6	6.1	55.4	100.0	1,484
40-44	4.3	0.1	3.4	2.8	23.6	5.3	60.5	100.0	1,246
45-49	4.6	0.6	2.6	1.1	21.3	4.7	65.0	100.0	900
Marital status									
Never married	6.5	2.4	7.4	6.3	24.3	15.6	37.4	100.0	1,775
Married or living together	4.0	0.4	4.8	4.0	19.2	4.5	63.1	100.0	6,860
Divorced/separated/widowed	2.4	0.6	5.4	4.2	28.7	10.6	48.2	100.0	1,597
Number of living children									
0	6.6	2.1	7.9	7.0	20.9	13.4	42.1	100.0	1,879
1-2	5.8	0.8	6.2	5.7	25.2	8.5	48.0	100.0	3,463
3-4	3.1	0.4	5.1	3.5	22.6	5.6	59.8	100.0	2,533
5+	1.1	0.0	2.4	1.6	15.8	2.9	76.2	100.0	2,359
Residence									
Urban	8.5	2.0	11.2	8.1	38.3	16.4	15.2	100.0	3,353
Rural	2.0	0.1	2.5	2.6	13.4	2.9	76.3	100.0	6,880
Tanzania Mainland/ Zanzibar									
Mainland	4.0	0.7	5.3	4.1	21.1	7.4	57.2	100.0	10,000
Urban	8.3	2.0	11.3	7.9	38.2	16.7	15.4	100.0	3,274
Rural	1.9	0.1	2.4	2.3	12.8	2.9	77.5	100.0	6,726
Zanzibar	10.3	2.8	5.1	17.5	40.6	5.3	18.4	100.0	233
Unguja	11.4	3.3	5.6	16.7	44.7	5.7	12.5	100.0	182
Pemba	6.3	1.1	3.4	20.0	25.9	4.2	39.1	100.0	51
Zone									
Western	1.9	0.4	3.8	2.3	9.4	2.3	80.1	100.0	1,127
Northern	7.3	1.2	5.9	5.1	28.8	14.5	36.9	100.0	1,014
Central	3.2	0.4	2.8	3.7	21.9	4.1	63.7	100.0	940
Southern Highlands	3.3	0.9	1.7	3.6	18.8	5.8	65.8	100.0	693
Southern	2.8	0.3	6.4	3.6	10.6	6.6	69.7	100.0	609
South West Highlands	3.1	0.4	4.6	4.2	29.2	4.0	54.4	100.0	1,029
Lake	2.5	0.3	5.1	3.8	13.9	4.2	70.2	100.0	2,819
Eastern	7.5	1.6	9.3	5.9	35.2	16.4	24.0	100.0	1,769
Zanzibar	10.3	2.8	5.1	17.5	40.6	5.3	18.4	100.0	233
Region									
Dodoma	3.2	0.0	4.8	4.7	29.5	6.4	51.4	100.0	418
Arusha	8.5	2.9	7.5	3.5	20.5	22.5	34.1	100.0	327
Kilimanjaro	5.4	0.3	4.0	6.8	34.0	9.7	39.8	100.0	257
Tanga	7.6	0.6	5.9	5.4	31.9	11.3	37.3	100.0	430
Morogoro	2.0	0.9	4.3	3.7	25.1	5.4	58.6	100.0	467
Pwani	3.5	0.0	5.0	3.3	27.1	11.0	50.1	100.0	209
Dar es Salaam	10.6	2.2	12.3	7.4	41.0	22.1	4.2	100.0	1,094
Lindi	3.2	0.0	8.9	1.9	5.6	7.7	72.7	100.0	255
Mtwara	2.5	0.6	4.6	4.8	14.3	5.8	67.5	100.0	354
Ruvuma	2.1	0.3	0.5	3.7	13.1	3.4	76.9	100.0	316
Iringa	5.7	2.3	4.5	4.0	29.5	9.4	44.8	100.0	198
Mbeya	3.5	0.7	6.5	5.0	34.8	5.2	44.3	100.0	659
Singida	2.6	0.8	1.0	4.4	13.0	2.1	76.1	100.0	308
Tabora	1.6	0.2	1.9	0.6	13.4	1.4	80.9	100.0	641
Rukwa	3.1	0.0	1.3	3.0	21.7	1.9	69.0	100.0	255
Kigoma	2.3	0.5	6.2	4.5	4.1	3.4	79.0	100.0	486
Shinyanga	2.8	0.2	7.3	5.4	9.3	2.8	72.1	100.0	427
Kagera	1.4	0.5	3.8	3.9	5.9	3.1	81.4	100.0	501
Mwanza	3.9	0.3	8.6	3.5	23.0	8.8	52.0	100.0	656
Mara	3.1	0.7	4.9	5.4	19.5	4.3	61.9	100.0	405
Manyara	4.3	0.8	1.6	0.7	20.1	2.6	69.9	100.0	213
Njombe	2.7	0.4	0.7	3.0	17.2	6.2	69.7	100.0	180
Katavi	0.9	0.0	1.0	2.3	14.2	1.6	80.0	100.0	115
Simiyu	2.4	0.0	0.9	2.3	4.5	2.2	87.6	100.0	410
Geita	1.1	0.2	2.9	2.3	17.7	1.5	74.3	100.0	420
Kaskazini Unguja	0.9	0.0	3.2	29.2	30.7	3.9	32.1	100.0	35
Kusini Unguja	3.4	0.8	3.3	19.1	43.2	4.8	25.4	100.0	26
Mjini Magharibi	16.3	4.9	6.8	12.6	49.1	6.4	4.0	100.0	120
Kaskazini Pemba	8.8	2.1	3.7	26.3	15.3	4.7	39.1	100.0	26
Kusini Pemba	3.9	0.0	3.0	13.7	36.6	3.6	39.2	100.0	26

(Continued…)

Table 3.7.1—*Continued*

Background characteristic	Professional/ technical/ managerial	Clerical	Sales and services	Skilled manual	Unskilled manual	Domestic service	Agriculture	Total	Number of women
Education									
No education	0.1	0.0	2.3	1.4	11.5	3.1	81.6	100.0	1,667
Primary incomplete	0.3	0.0	4.0	1.1	18.9	6.5	69.3	100.0	1,197
Primary complete	0.8	0.2	4.2	4.9	24.1	8.1	57.7	100.0	5,527
Secondary+	20.4	3.7	12.3	8.0	24.9	9.5	21.0	100.0	1,842
Wealth quintile									
Lowest	0.3	0.0	0.4	0.6	6.6	1.1	90.9	100.0	1,848
Second	0.4	0.0	2.1	1.1	9.7	2.1	84.5	100.0	1,978
Middle	0.7	0.1	2.9	3.4	15.9	3.5	73.5	100.0	1,912
Fourth	3.7	0.6	6.7	6.9	33.5	8.6	39.9	100.0	1,995
Highest	13.0	2.5	12.3	8.8	36.8	18.1	8.4	100.0	2,501
Total	4.2	0.8	5.3	4.4	21.6	7.4	56.3	100.0	10,233

Table 3.7.2 Occupation: Men

Percent distribution of men age 15-49 employed in the 12 months preceding the survey by occupation, according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Professional/ technical/ managerial	Clerical	Sales and services	Skilled manual	Unskilled manual	Domestic service	Agriculture	Total	Number of men
Age									
15-19	1.2	0.1	4.4	12.5	8.3	3.3	70.1	100.0	610
20-24	2.1	0.5	4.8	19.7	12.6	3.0	57.3	100.0	514
25-29	5.1	1.6	4.9	24.3	9.1	1.5	53.5	100.0	473
30-34	7.4	1.1	4.3	24.0	12.9	2.4	47.9	100.0	410
35-39	3.9	0.3	3.6	18.4	13.5	3.3	57.0	100.0	464
40-44	10.0	0.6	3.9	12.3	11.6	2.7	58.8	100.0	333
45-49	8.5	1.4	2.9	13.1	9.5	1.2	63.4	100.0	310
Marital status									
Never married	2.9	0.6	5.1	19.4	11.2	2.7	58.1	100.0	1,121
Married or living together	6.2	0.9	3.8	16.1	10.7	2.6	59.7	100.0	1,816
Divorced/separated/widowed	3.2	0.7	3.1	26.4	12.0	1.7	52.9	100.0	179
Number of living children									
0	3.3	0.5	5.0	16.8	10.8	2.9	60.7	100.0	1,216
1-2	8.4	1.2	4.5	25.7	10.7	2.8	46.7	100.0	798
3-4	5.4	1.3	3.1	17.6	13.6	2.4	56.7	100.0	566
5+	2.5	0.2	3.2	9.1	9.0	1.8	74.3	100.0	536
Residence									
Urban	9.8	1.6	8.8	34.2	19.7	5.7	20.3	100.0	1,086
Rural	2.2	0.3	1.7	9.2	6.3	0.9	79.3	100.0	2,030
Tanzania Mainland/ Zanzibar									
Mainland	4.8	0.7	4.1	17.7	10.7	2.5	59.4	100.0	3,042
Urban	9.7	1.6	8.8	34.2	19.6	5.6	20.4	100.0	1,066
Rural	2.1	0.3	1.6	8.8	5.9	0.9	80.4	100.0	1,977
Zanzibar	6.7	1.4	8.3	26.9	20.8	4.6	31.4	100.0	74
Unguja	8.3	1.5	8.9	30.0	19.0	5.8	26.4	100.0	51
Pemba	2.9	1.2	6.8	19.9	24.7	1.9	42.5	100.0	23
Zone									
Western	3.1	0.2	2.3	9.5	3.5	0.6	80.8	100.0	289
Northern	8.6	0.2	5.5	24.5	16.4	7.2	37.6	100.0	333
Central	4.7	0.0	0.8	8.6	8.5	0.2	77.1	100.0	347
Southern Highlands	3.8	0.3	2.3	16.5	7.0	2.3	67.9	100.0	216
Southern	2.3	0.0	6.2	20.1	7.1	0.5	63.8	100.0	173
South West Highlands	2.8	2.3	2.8	16.2	14.0	1.0	60.9	100.0	272
Lake	2.5	0.2	4.8	11.6	8.7	1.4	70.8	100.0	828
Eastern	8.9	2.1	5.8	32.4	16.1	5.2	29.4	100.0	584
Zanzibar	6.7	1.4	8.3	26.9	20.8	4.6	31.4	100.0	74
Region									
Dodoma	4.4	0.0	0.8	10.5	6.2	0.0	78.1	100.0	166
Arusha	7.4	0.0	5.2	19.4	16.6	16.2	35.1	100.0	106
Kilimanjaro	12.7	0.9	4.4	29.3	16.7	5.0	31.0	100.0	85
Tanga	7.0	0.0	6.4	25.3	16.1	1.7	43.5	100.0	142
Morogoro	1.3	0.0	3.1	13.1	10.1	0.0	72.5	100.0	133
Pwani	0.0	0.0	3.2	25.6	8.1	1.5	61.6	100.0	61
Dar es Salaam	12.8	3.1	7.1	40.1	19.4	7.6	9.8	100.0	390
Lindi	2.7	0.0	4.9	14.5	4.5	0.0	73.4	100.0	64
Mtwara	2.0	0.0	7.0	23.5	8.6	0.8	58.1	100.0	109
Ruvuma	3.9	0.7	3.4	16.8	6.7	0.0	68.4	100.0	103
Iringa	4.7	0.0	1.4	19.0	11.5	5.9	57.4	100.0	65
Mbeya	0.6	3.0	2.2	17.0	17.2	1.6	58.2	100.0	176
Singida	2.8	0.0	0.8	6.6	5.4	0.0	84.5	100.0	103
Tabora	1.6	0.0	0.0	9.4	5.0	0.0	83.9	100.0	184
Rukwa	7.3	0.8	4.0	16.3	9.4	0.0	62.1	100.0	64
Kigoma	5.6	0.5	6.3	9.6	1.0	1.7	75.3	100.0	105
Shinyanga	0.5	0.0	9.3	15.0	7.9	0.0	67.3	100.0	132
Kagera	3.3	0.0	5.9	13.4	5.6	1.3	70.4	100.0	173
Mwanza	4.7	0.0	7.0	17.2	15.7	4.7	50.8	100.0	200
Mara	1.0	1.0	2.0	10.7	10.1	0.0	75.2	100.0	101
Manyara	7.7	0.0	1.0	7.3	17.7	0.9	65.4	100.0	79
Njombe	2.1	0.0	1.2	12.5	1.3	2.3	80.6	100.0	48
Katavi	5.7	1.3	3.2	11.3	5.2	0.0	73.3	100.0	32
Simiyu	0.5	0.0	1.2	0.6	1.8	0.0	95.9	100.0	113
Geita	2.9	0.8	0.0	6.3	7.8	0.0	82.2	100.0	108
Kaskazini Unguja	1.6	0.0	3.9	28.6	15.5	3.5	46.8	100.0	12
Kusini Unguja	3.5	0.0	5.4	25.1	15.8	3.1	47.0	100.0	7
Mjini Magharibi	11.9	2.4	11.6	31.7	21.1	7.2	14.1	100.0	32
Kaskazini Pemba	3.6	0.0	9.9	19.0	16.7	1.8	49.0	100.0	11
Kusini Pemba	2.3	2.3	3.8	20.7	32.7	2.1	36.0	100.0	11

(Continued…)

Table 3.7.2—*Continued*

Background characteristic	Professional/ technical/ managerial	Clerical	Sales and services	Skilled manual	Unskilled manual	Domestic service	Agriculture	Total	Number of men
Education									
No education	0.2	0.0	1.7	8.3	7.9	1.4	80.5	100.0	281
Primary incomplete	0.6	0.0	3.0	12.3	9.9	1.4	72.8	100.0	505
Primary complete	0.8	0.0	3.4	17.9	11.1	2.9	63.8	100.0	1,605
Secondary+	18.4	3.1	7.8	25.6	12.6	3.1	29.4	100.0	726
Wealth quintile									
Lowest	0.7	0.0	1.0	3.5	5.8	0.0	88.9	100.0	578
Second	0.9	0.0	1.0	5.9	2.9	0.5	88.9	100.0	525
Middle	0.6	0.0	1.3	14.9	6.1	2.0	75.1	100.0	586
Fourth	4.6	0.7	4.5	22.7	16.3	3.0	48.1	100.0	667
Highest	14.2	2.4	10.8	35.3	19.5	6.1	11.7	100.0	760
Total 15-49	4.8	0.8	4.2	17.9	11.0	2.6	58.7	100.0	3,116

Table 3.8 Type of employment: Women

Percent distribution of women age 15-49 employed in the 12 months preceding the survey by type of earnings, type of employer, and continuity of employment, according to type of employment (agricultural or nonagricultural), Tanzania DHS-MIS 2015-16

Employment characteristic	Agricultural work	Nonagricultural work	Total
Type of earnings			
Cash only	23.9	89.7	52.6
Cash and in-kind	10.6	4.6	8.0
In-kind only	1.8	0.3	1.1
Not paid	63.7	5.5	38.3
Total	100.0	100.0	100.0
Type of employer			
Employed by family member	48.7	13.2	33.2
Employed by nonfamily member	3.1	25.0	12.7
Self-employed	48.2	61.7	54.1
Total	100.0	100.0	100.0
Continuity of employment			
All year	18.6	73.1	42.4
Seasonal	78.3	18.8	52.3
Occasional	3.1	8.1	5.3
Total	100.0	100.0	100.0
Number of women employed during the last 12 months	5,763	4,467	10,233

Note: Total includes three women with missing information on type of employment who are not shown separately.

Table 3.9.1 Health insurance coverage: Women

Percentage of women age 15-49 with specific types of health insurance coverage, according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Social security	Other employer based insurance	Mutual health organisation/ community based insurance	Privately purchased commercial insurance	None	Number of women
Age						
15-19	1.2	1.8	3.6	0.4	93.0	2,904
20-24	0.9	2.4	3.4	0.3	93.0	2,483
25-29	1.3	2.8	3.3	0.2	92.4	2,125
30-34	2.0	2.9	4.7	0.1	90.2	1,752
35-39	1.7	2.2	5.5	0.6	90.0	1,641
40-44	2.6	4.4	6.1	0.4	86.5	1,364
45-49	1.8	5.2	7.0	0.2	85.7	997
Residence						
Urban	1.3	5.7	3.0	0.4	89.7	4,811
Rural	1.7	1.2	5.2	0.3	91.7	8,455
Tanzania Mainland/ Zanzibar						
Mainland	1.6	2.8	4.5	0.3	90.8	12,862
Urban	1.3	5.7	3.0	0.4	89.6	4,675
Rural	1.7	1.2	5.4	0.3	91.5	8,187
Zanzibar	0.4	1.7	1.2	0.0	96.6	404
Unguja	0.4	2.3	1.7	0.1	95.5	293
Pemba	0.4	0.2	0.0	0.0	99.4	111
Zone						
Western	2.1	2.0	3.4	0.2	92.2	1,278
Northern	1.8	3.3	6.7	1.1	87.0	1,575
Central	2.9	3.1	8.1	0.2	85.6	1,336
Southern Highlands	1.0	2.9	4.4	0.2	91.6	807
Southern	2.2	3.0	1.8	0.2	92.8	700
South West Highlands	0.5	2.5	5.3	0.2	91.5	1,246
Lake	1.1	0.9	3.8	0.1	94.1	3,463
Eastern	1.6	5.5	3.2	0.4	89.3	2,457
Zanzibar	0.4	1.7	1.2	0.0	96.6	404
Region						
Dodoma	4.9	3.3	7.8	0.3	83.7	572
Arusha	0.6	3.7	6.0	0.8	88.9	508
Kilimanjaro	3.7	4.5	13.0	1.7	77.1	361
Tanga	1.7	2.5	4.0	1.0	90.8	706
Morogoro	1.7	4.1	6.1	0.2	87.8	636
Pwani	3.2	1.6	4.0	1.0	90.3	285
Dar es Salaam	1.3	6.9	1.8	0.4	89.7	1,536
Lindi	3.2	3.6	3.4	0.0	89.7	288
Mtwara	1.4	2.6	0.6	0.3	95.0	412
Ruvuma	0.7	3.9	2.5	0.0	92.9	360
Iringa	0.7	1.5	7.8	0.3	89.7	245
Mbeya	0.0	2.7	6.6	0.3	90.4	828
Singida	2.9	3.7	9.0	0.2	84.2	370
Tabora	1.1	1.0	2.1	0.0	95.8	737
Rukwa	1.7	2.9	2.9	0.2	92.3	288
Kigoma	3.6	3.4	5.2	0.5	87.4	542
Shinyanga	0.7	2.6	5.3	0.2	91.2	504
Kagera	1.9	0.8	3.2	0.2	93.9	612
Mwanza	0.2	0.8	2.9	0.0	96.1	859
Mara	0.3	0.9	5.5	0.0	93.4	523
Manyara	0.2	2.3	7.7	0.2	89.6	394
Njombe	2.0	2.7	3.7	0.3	91.4	203
Katavi	0.7	0.4	2.3	0.0	96.5	130
Simiyu	2.1	0.5	2.6	0.0	94.8	479
Geita	1.8	0.2	3.8	0.0	94.2	485
Kaskazini Unguja	0.0	0.6	0.4	0.0	99.0	56
Kusini Unguja	1.0	0.4	2.1	0.0	96.4	35
Mjini Magharibi	0.4	3.2	2.0	0.1	94.4	201
Kaskazini Pemba	0.2	0.4	0.0	0.0	99.4	56
Kusini Pemba	0.6	0.0	0.0	0.0	99.4	55
Education						
No education	0.8	0.0	3.7	0.1	95.4	1,946
Primary incomplete	1.0	0.0	2.6	0.3	96.0	1,559
Primary complete	1.6	1.5	4.3	0.2	92.4	6,652
Secondary+	2.0	8.7	6.0	0.6	82.6	3,109
Wealth quintile						
Lowest	0.6	0.1	3.4	0.0	95.9	2,246
Second	1.5	0.2	3.6	0.0	94.6	2,274
Middle	1.9	0.4	5.5	0.3	91.9	2,329
Fourth	1.6	2.5	5.3	0.4	90.2	2,822
Highest	1.8	7.9	4.2	0.6	85.5	3,596
Total	1.5	2.8	4.4	0.3	91.0	13,266

Table 3.9.2 Health insurance coverage: Men

Percentage of men age 15-49 with specific types of health insurance coverage, according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Social security	Other employer-based insurance	Mutual health organisation/community based insurance	Privately purchased commercial insurance	Other	None	Number of men
Age							
15-19	1.8	1.2	3.2	0.2	0.5	93.0	932
20-24	1.9	1.4	4.3	0.8	0.0	91.6	576
25-29	1.5	1.7	6.1	0.0	0.0	90.7	482
30-34	1.9	3.8	4.7	0.6	0.0	89.3	410
35-39	1.3	2.7	3.9	1.4	0.0	90.7	466
40-44	2.1	4.5	5.2	0.7	0.0	87.4	334
45-49	1.3	6.1	6.7	0.7	0.0	85.1	314
Residence							
Urban	1.8	4.3	3.5	0.8	0.2	89.3	1,251
Rural	1.7	1.6	5.1	0.5	0.1	91.1	2,263
Tanzania Mainland/ Zanzibar							
Mainland	1.8	2.6	4.6	0.6	0.1	90.3	3,425
Urban	1.8	4.3	3.5	0.8	0.2	89.3	1,224
Rural	1.7	1.7	5.2	0.5	0.1	90.9	2,201
Zanzibar	0.4	0.8	2.3	0.0	0.0	96.5	89
Unguja	0.6	1.2	3.0	0.0	0.0	95.2	62
Pemba	0.0	0.0	0.7	0.0	0.0	99.3	28
Zone							
Western	1.3	2.5	7.7	0.8	0.0	87.7	322
Northern	3.0	3.9	7.5	1.4	0.0	84.4	415
Central	0.7	5.8	8.6	0.0	0.0	84.9	372
Southern Highlands	0.0	1.6	6.7	0.0	0.7	91.0	234
Southern	3.6	1.2	3.0	0.7	0.0	91.5	180
South West Highlands	0.9	0.7	6.8	1.6	0.0	89.9	308
Lake	2.1	0.5	1.6	0.3	0.3	95.1	933
Eastern	1.9	4.7	1.9	0.4	0.0	91.2	659
Zanzibar	0.4	0.8	2.3	0.0	0.0	96.5	89
Region							
Dodoma	0.0	6.2	11.9	0.0	0.0	81.9	175
Arusha	3.2	5.1	10.0	0.0	0.0	81.7	129
Kilimanjaro	4.9	3.9	13.8	1.7	0.0	76.6	110
Tanga	1.6	3.0	1.8	2.3	0.0	91.2	176
Morogoro	0.0	2.5	5.4	0.0	0.0	92.1	143
Pwani	1.1	1.3	1.0	0.0	0.0	96.6	68
Dar es Salaam	2.6	5.9	0.9	0.6	0.0	90.1	448
Lindi	2.1	1.2	5.0	0.0	0.0	91.7	66
Mtwara	4.4	1.2	1.9	1.2	0.0	91.3	115
Ruvuma	0.0	0.6	6.8	0.0	0.0	92.6	112
Iringa	0.0	2.0	8.2	0.0	0.0	89.7	71
Mbeya	0.7	0.0	8.1	2.3	0.0	88.8	202
Singida	2.5	6.4	7.1	0.0	0.0	84.0	106
Tabora	0.0	2.3	3.2	1.3	0.0	93.2	199
Rukwa	1.3	2.0	4.7	0.0	0.0	92.0	71
Kigoma	3.3	3.0	15.0	0.0	0.0	78.7	124
Shinyanga	0.0	2.9	2.1	1.3	0.0	93.7	142
Kagera	5.8	0.0	0.7	0.0	1.4	92.0	198
Mwanza	0.0	0.0	3.8	0.0	0.0	96.2	225
Mara	0.0	0.4	0.6	1.0	0.0	98.0	114
Manyara	0.0	4.3	4.2	0.0	0.0	91.5	91
Njombe	0.0	3.3	4.2	0.0	3.3	89.1	50
Katavi	1.4	1.8	3.7	0.9	0.0	92.2	35
Simiyu	3.2	0.4	0.6	0.0	0.0	95.9	136
Geita	2.8	0.0	0.7	0.0	0.0	96.5	118
Kaskazini Unguja	0.0	0.0	0.5	0.0	0.0	99.5	13
Kusini Unguja	0.0	0.0	0.0	0.0	0.0	100.0	9
Mjini Magharibi	0.9	1.8	4.5	0.0	0.0	92.8	40
Kaskazini Pemba	0.0	0.0	0.0	0.0	0.0	100.0	14
Kusini Pemba	0.0	0.0	1.3	0.0	0.0	98.7	13
Education							
No education	2.0	0.0	3.7	0.3	0.0	94.0	283
Primary incomplete	0.7	0.3	2.9	0.3	0.2	95.5	568
Primary complete	0.9	0.6	3.8	0.3	0.0	94.4	1,673
Secondary+	3.6	7.9	7.0	1.2	0.4	79.9	990
Wealth quintile							
Lowest	0.3	0.0	3.3	0.3	0.0	96.1	598
Second	1.0	0.0	5.1	0.1	0.3	93.4	575
Middle	1.3	0.0	3.2	0.3	0.0	95.3	659
Fourth	2.0	3.5	6.6	0.5	0.0	87.5	764
Highest	3.2	7.0	4.3	1.3	0.3	83.9	918
Total 15-49	1.7	2.6	4.6	0.6	0.1	90.5	3,514

Table 3.10 Tobacco smoking

Percentage of women and men age 15-49 who smoke various tobacco products, and percent distribution of men by smoking frequency, according to background characteristics, Tanzania DHS-MIS 2015-16

	Women		Men							
	Percentage who smoke[1]		Percentage who smoke[1]			Smoking frequency				
Background characteristic	Any type of tobacco	Number of women	Cigarettes[2]	Other type of tobacco[3]	Any type of tobacco	Daily smoker	Occasional smoker[4]	Non-smoker	Total	Number of men
Age										
15-19	0.3	2,904	1.2	0.0	1.2	0.9	0.3	98.8	100.0	932
20-24	0.5	2,483	7.1	0.4	7.1	4.5	3.0	92.5	100.0	576
25-29	0.5	2,125	15.6	0.8	15.8	13.3	2.5	84.2	100.0	482
30-34	0.9	1,752	20.6	1.5	21.2	18.2	3.0	78.8	100.0	410
35-39	0.8	1,641	21.5	0.2	21.5	18.0	3.6	78.5	100.0	466
40-44	0.4	1,364	17.5	0.3	17.8	15.9	2.0	82.2	100.0	334
45-49	1.8	997	31.8	3.2	33.0	28.3	4.6	67.0	100.0	314
Residence										
Urban	0.7	4,811	13.1	0.9	13.4	10.8	2.7	86.5	100.0	1,251
Rural	0.6	8,455	13.6	0.6	13.8	11.6	2.1	86.2	100.0	2,263
Tanzania Mainland/ Zanzibar										
Mainland	0.6	12,862	13.5	0.7	13.8	11.5	2.3	86.2	100.0	3,425
Urban	0.7	4,675	13.3	0.9	13.6	11.0	2.7	86.3	100.0	1,224
Rural	0.6	8,187	13.7	0.6	13.9	11.8	2.1	86.1	100.0	2,201
Zanzibar	0.6	404	8.3	0.0	8.3	5.7	2.6	91.7	100.0	89
Unguja	0.6	293	9.3	0.0	9.3	6.1	3.2	90.7	100.0	62
Pemba	0.8	111	6.0	0.0	6.0	4.8	1.1	94.0	100.0	28
Zone	1.0	1,278								
Western	0.4	1,575	12.3	0.3	12.3	11.2	1.2	87.7	100.0	322
Northern	0.6	1,336	17.7	1.7	17.7	14.6	3.1	82.3	100.0	415
Central	0.0	807	12.5	0.0	12.5	10.0	2.5	87.5	100.0	372
Southern Highlands	0.8	700	13.4	0.6	13.4	10.2	3.1	86.6	100.0	234
Southern	0.4	1,246	22.9	0.0	22.9	21.0	1.9	77.1	100.0	180
South West Highlands	0.5	3,463	15.1	1.7	15.1	12.0	3.1	84.9	100.0	308
Lake	1.0	2,457	9.6	0.6	10.2	8.8	1.5	89.8	100.0	933
Eastern	0.6	404	14.3	0.7	14.7	12.0	3.0	85.0	100.0	659
Zanzibar			8.3	0.0	8.3	5.7	2.6	91.7	100.0	89
Region	0.6	572								
Dodoma	0.9	508	11.4	0.0	11.4	8.0	3.3	88.6	100.0	175
Arusha	0.2	361	11.4	0.0	11.4	7.5	3.8	88.6	100.0	129
Kilimanjaro	0.1	706	23.4	0.0	23.4	17.3	6.1	76.6	100.0	110
Tanga	0.7	636	18.8	4.1	18.8	18.2	0.6	81.2	100.0	176
Morogoro	0.0	285	17.6	3.0	19.5	13.3	6.2	80.5	100.0	143
Pwani	1.3	1,536	11.4	0.0	11.4	9.0	2.5	88.6	100.0	68
Dar es Salaam	0.7	288	13.6	0.0	13.6	12.0	2.1	85.9	100.0	448
Lindi	0.8	412	19.5	0.0	19.5	19.5	0.0	80.5	100.0	66
Mtwara	0.0	360	24.8	0.0	24.8	21.8	3.0	75.2	100.0	115
Ruvuma	0.0	245	23.7	1.2	23.7	18.1	5.6	76.3	100.0	112
Iringa	0.2	828	2.3	0.0	2.3	1.5	0.8	97.7	100.0	71
Mbeya	0.4	370	12.9	2.6	12.9	10.9	2.0	87.1	100.0	202
Singida	1.2	737	13.1	0.0	13.1	10.4	2.6	86.9	100.0	106
Tabora	0.2	288	10.3	0.4	10.3	8.4	1.9	89.7	100.0	199
Rukwa	0.8	542	16.6	0.0	16.6	14.2	2.4	83.4	100.0	71
Kigoma	0.9	504	15.6	0.0	15.6	15.6	0.0	84.4	100.0	124
Shinyanga	0.3	612	9.6	0.0	9.6	7.2	2.4	90.4	100.0	142
Kagera	0.5	859	7.8	0.5	8.3	7.8	0.5	91.7	100.0	198
Mwanza	0.0	523	14.8	1.6	16.5	12.8	3.7	83.5	100.0	225
Mara	0.8	394	9.3	0.0	9.3	9.3	0.0	90.7	100.0	114
Manyara	0.0	203	14.1	0.0	14.1	13.3	0.8	85.9	100.0	91
Njombe	2.0	130	5.9	0.0	5.9	5.0	0.9	94.1	100.0	50
Katavi	1.3	479	24.9	0.0	24.9	13.9	11.0	75.1	100.0	35
Simiyu	0.3	485	7.7	0.6	8.4	7.6	0.8	91.6	100.0	136
Geita	0.0	56	5.6	0.0	5.6	5.6	0.0	94.4	100.0	118
Kaskazini Unguja	0.6	35	10.2	0.0	10.2	5.9	4.3	89.8	100.0	13
Kusini Unguja	0.7	201	17.5	0.0	17.5	7.0	10.5	82.5	100.0	9
Mjini Magharibi	0.9	56	7.3	0.0	7.3	6.0	1.3	92.7	100.0	40
Kaskazini Pemba	0.7	55	4.8	0.0	4.8	3.6	1.2	95.2	100.0	14
Kusini Pemba			7.2	0.0	7.2	6.2	1.1	92.8	100.0	13

(Continued…)

Table 3.10—*Continued*

Background characteristic	Women		Men							
	Percentage who smoke[1]		Percentage who smoke[1]			Smoking frequency				
	Any type of tobacco	Number of women	Cigarettes[2]	Other type of tobacco[3]	Any type of tobacco	Daily smoker	Occasional smoker[4]	Non-smoker	Total	Number of men
Education	1.2	1,946								
No education	0.4	1,559	22.7	1.5	22.7	20.8	1.9	77.3	100.0	283
Primary incomplete	0.5	6,652	15.1	1.7	15.8	13.5	2.6	83.9	100.0	568
Primary complete	0.7	3,109	15.1	0.6	15.4	12.7	2.6	84.6	100.0	1,673
Secondary+	0.3	2,904	6.8	0.2	6.8	5.1	1.8	93.2	100.0	990
Wealth quintile										
Lowest	1.1	2,246	17.7	0.9	18.5	14.6	3.9	81.5	100.0	598
Second	0.6	2,274	13.6	0.2	13.8	12.1	1.7	86.2	100.0	575
Middle	0.2	2,329	14.1	0.7	14.1	12.8	1.3	85.9	100.0	659
Fourth	0.5	2,822	12.7	0.6	12.7	9.5	3.2	87.3	100.0	764
Highest	0.7	3,596	10.5	0.9	10.8	9.2	1.8	89.0	100.0	918
Total 15-49	0.6	13,266	13.4	0.7	13.6	11.3	2.3	86.3	100.0	3,514

[1] Includes daily and occasional (less than daily) use
[2] Includes manufactured cigarettes, hand-rolled cigarettes, and kreteks
[3] Includes pipes, cigars, cheroots, cigarillos, water pipes, and betel quid with tobacco
[4] Occasional refers to less often than daily use

Table 3.11 Average number of cigarettes smoked daily: Men

Among men age 15-49 who smoke cigarettes daily, percent distribution by average number of cigarettes smoked per day, according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Average number of cigarettes smoked per day[1]						Total	Number of respondents who smoke cigarettes daily[1]
	<5	5-9	10-14	15-24	≥25	Don't know/ missing		
Age								
15-19	*	*	*	*	*	*	*	6
20-24	(59.9)	(22.0)	(11.8)	(6.2)	(0.0)	(0.0)	(6.2)	23
25-29	54.0	36.8	4.7	1.3	0.0	3.2	4.5	58
30-34	42.7	22.0	25.1	8.2	0.0	2.1	10.3	67
35-39	37.3	32.3	10.8	3.9	7.1	8.6	19.6	68
40-44	(33.6)	(24.1)	(9.5)	(32.8)	(0.0)	(0.0)	(32.8)	45
45-49	31.2	35.8	17.7	9.5	5.7	0.0	15.2	74
Residence								
Urban	39.6	34.3	18.9	3.4	2.6	1.2	7.2	116
Rural	41.8	27.5	12.1	12.5	2.7	3.4	18.6	226
Tanzania Mainland/ Zanzibar								
Mainland	41.3	29.3	14.4	9.5	2.7	2.7	14.9	336
Urban	39.8	33.8	19.1	3.4	2.6	1.2	7.3	114
Rural	42.1	27.0	12.1	12.6	2.7	3.5	18.8	222
Zanzibar	(22.3)	(62.3)	(10.6)	(4.7)	(0.0)	(0.0)	(4.7)	5
Unguja	*	*	*	*	*	*	*	4
Pemba	*	*	*	*	*	*	*	1
Education								
No education	(39.4)	(34.3)	(12.3)	(9.3)	(0.0)	(4.8)	(14.1)	48
Primary incomplete	45.4	30.3	8.4	15.9	0.0	0.0	15.9	67
Primary complete	42.0	26.5	15.9	7.7	4.0	3.8	15.6	179
Secondary+	(32.9)	(37.0)	(19.3)	(6.9)	(3.9)	(0.0)	(10.8)	48
Wealth quintile								
Lowest	55.2	27.3	12.3	2.9	0.0	2.3	5.2	78
Second	41.4	26.4	11.7	19.0	0.0	1.4	20.4	62
Middle	33.5	26.6	11.5	13.0	8.4	6.9	28.3	72
Fourth	23.1	50.1	10.0	9.4	5.1	2.4	16.9	60
Highest	47.9	21.6	25.8	4.7	0.0	0.0	4.7	70
Total 15-49	41.0	29.8	14.4	9.4	2.7	2.7	14.8	341

Note: Table includes women and men who use smokeless tobacco daily or occasionally (less than daily). Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Includes snuff by mouth, snuff by nose, chewing tobacco, and betel quid with tobacco
[2] Includes all types of smokeless shown in this table plus cigarettes, kreteks, pipes, cigars, cheroots, cigarillos, water pipes

Table 3.12 Male circumcision

Percent distribution of men age 15-49 by circumcision status and provider of circumcision, and percentage of men circumcised, according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Circumcised by:				Not circumcised	Total	Percentage of men circumcised[1]	Number of men
	Traditional practitioner / family friend	Health worker / professional	Other	Don't know				
Age								
15-24	21.6	55.0	0.8	4.7	17.9	100.0	82.1	1,508
15-19	21.7	52.8	1.0	5.3	19.2	100.0	80.8	932
20-24	21.5	58.6	0.4	3.7	15.8	100.0	84.2	576
25-29	26.8	47.2	1.3	4.9	19.7	100.0	80.1	482
30-39	29.7	48.1	0.3	3.9	18.0	100.0	82.0	876
40-49	28.8	41.7	0.5	2.8	26.2	100.0	73.8	648
Residence								
Urban	26.8	58.8	0.7	4.9	8.7	100.0	91.3	1,251
Rural	25.0	44.7	0.6	3.8	25.8	100.0	74.2	2,263
Tanzania Mainland/ Zanzibar								
Mainland	26.2	49.6	0.7	3.3	20.2	100.0	79.8	3,425
Urban	27.3	58.8	0.7	4.3	8.9	100.0	91.1	1,224
Rural	25.6	44.5	0.6	2.8	26.5	100.0	73.5	2,201
Zanzibar	5.5	55.6	0.8	37.5	0.1	100.0	99.5	89
Unguja	4.5	71.7	0.9	22.8	0.1	100.0	99.9	62
Pemba	7.8	19.5	0.7	70.6	0.0	100.0	98.7	28
Zone								
Western	8.6	48.5	0.5	4.5	37.9	100.0	62.1	322
Northern	29.1	63.0	0.5	4.6	2.8	100.0	97.2	415
Central	40.8	54.1	1.2	0.9	3.0	100.0	97.0	372
Southern Highlands	21.9	53.1	1.2	2.4	21.4	100.0	78.6	234
Southern	77.7	21.6	0.7	0.0	0.0	100.0	100.0	180
South West Highlands	3.5	42.3	0.3	3.7	50.2	100.0	49.8	308
Lake	11.0	51.4	0.8	3.9	32.8	100.0	67.1	933
Eastern	44.2	46.5	0.2	3.6	5.4	100.0	94.6	659
Zanzibar	5.5	55.6	0.8	37.5	0.1	100.0	99.5	89
Region								
Dodoma	48.4	50.4	1.3	0.0	0.0	100.0	100.0	175
Arusha	41.5	44.1	0.0	5.4	9.1	100.0	90.9	129
Kilimanjaro	5.0	87.3	0.9	6.8	0.0	100.0	100.0	110
Tanga	35.1	61.7	0.6	2.6	0.0	100.0	100.0	176
Morogoro	56.9	40.9	0.0	0.9	1.3	100.0	98.7	143
Pwani	54.4	22.4	2.3	16.8	4.1	100.0	95.9	68
Dar es Salaam	38.6	52.0	0.0	2.5	7.0	100.0	93.0	448
Lindi	84.5	15.5	0.0	0.0	0.0	100.0	100.0	66
Mtwara	73.7	25.2	1.1	0.0	0.0	100.0	100.0	115
Ruvuma	41.3	35.1	2.5	4.0	17.1	100.0	82.9	112
Iringa	4.9	73.9	0.0	1.0	20.2	100.0	79.8	71
Mbeya	4.1	49.9	0.0	1.0	45.0	100.0	55.0	202
Singida	17.5	74.3	0.0	0.8	7.4	100.0	92.6	106
Tabora	7.3	52.5	0.9	1.6	37.6	100.0	62.4	199
Rukwa	0.0	25.2	0.9	7.5	66.4	100.0	33.6	71
Kigoma	10.7	41.9	0.0	9.1	38.3	100.0	61.7	124
Shinyanga	3.8	50.2	0.0	0.0	45.5	100.0	54.0	142
Kagera	3.9	43.0	0.0	10.4	42.8	100.0	57.2	198
Mwanza	14.4	61.9	2.2	0.0	21.5	100.0	78.5	225
Mara	46.1	40.8	0.0	10.1	3.0	100.0	97.0	114
Manyara	53.3	37.8	2.6	2.8	3.5	100.0	96.5	91
Njombe	2.7	63.6	0.0	1.0	32.7	100.0	67.3	50
Katavi	6.9	33.6	0.5	11.6	47.3	100.0	52.7	35
Simiyu	1.0	43.8	0.0	2.9	52.3	100.0	47.7	136
Geita	3.2	65.7	2.3	0.0	28.7	100.0	71.3	118
Kaskazini Unguja	4.4	87.4	2.0	6.2	0.0	100.0	100.0	13
Kusini Unguja	3.7	74.8	0.0	20.5	0.9	100.0	99.1	9
Mjini Magharibi	4.7	65.8	0.7	28.9	0.0	100.0	100.0	40
Kaskazini Pemba	9.7	20.2	1.5	67.8	0.0	100.0	99.1	14
Kusini Pemba	5.8	18.9	0.0	73.5	0.0	100.0	98.2	13
Total 15-49	25.7	49.8	0.7	4.2	19.7	100.0	80.3	3,514

Note: Some totals do not sum up to 100 due to missing information

[1] Includes all men who report they are circumcised, regardless of provider

Table 3.13 Prevalence of medical injections

Percentage of women and men age 15-49 who received at least one medical injection in the last 12 months, the average number of medical injections per person in the last 12 months, and among those who received a medical injection, the percentage of last medical injections for which the syringe and needle were taken from a new, unopened package, by background characteristics, Tanzania DHS-MIS 2015-16

	Women					Men				
Background characteristic	Percentage who received a medical injection in the last 12 months	Average number of medical injections per person in the last 12 months	Number of respondents	For last injection, syringe and needle taken from a new, unopened package	Number of respondents receiving medical injections in the last 12 months	Percentage who received a medical injection in the last 12 months	Average number of medical injections per person in the last 12 months	Number of respondents	For last injection, syringe and needle taken from a new, unopened package	Number of respondents receiving medical injections in the last 12 months
Age										
15-24	33.9	1.0	5,387	98.4	1,826	17.3	0.6	1,508	96.0	261
15-19	28.6	0.8	2,904	97.9	830	17.9	0.6	932	96.1	167
20-24	40.1	1.2	2,483	98.8	996	16.3	0.6	576	96.0	94
25-29	37.1	1.2	2,125	98.7	789	18.6	0.8	482	92.2	90
30-39	31.4	1.2	3,393	98.6	1,066	17.9	0.6	876	98.2	157
40-49	21.2	0.8	2,361	98.8	500	15.2	0.8	648	99.4	98
Marital status										
Never married	28.8	0.9	3,353	98.7	965	18.7	0.7	1,510	97.1	283
Ever had sex	34.1	1.1	1,706	99.0	582	19.9	0.7	921	98.5	183
Never had sex	23.2	0.7	1,647	98.3	383	17.0	0.5	589	94.6	100
Married/Living together	33.5	1.1	8,210	98.5	2,749	16.3	0.6	1,825	95.9	297
Divorced/Separated/ Widowed	27.4	1.1	1,703	98.7	466	14.3	1.2	180	(98.7)	26
Residence										
Urban	35.0	1.2	4,811	99.0	1,685	20.3	0.8	1,251	98.0	253
Rural	29.5	0.9	8,455	98.3	2,495	15.6	0.6	2,263	95.5	353
Tanzania Mainland/ Zanzibar										
Mainland	31.6	1.1	12,862	98.6	4,063	17.1	0.7	3,425	96.5	586
Urban	35.2	1.3	4,675	99.0	1,643	20.1	0.8	1,224	98.0	246
Rural	29.6	0.9	8,187	98.3	2,420	15.4	0.6	2,201	95.5	340
Zanzibar	28.9	0.8	404	98.0	117	22.9	0.6	89	98.4	20
Unguja	31.1	0.9	293	97.9	91	22.1	0.5	62	97.5	14
Pemba	22.9	0.7	111	98.5	26	24.7	0.8	28	(100.0)	7
Zone										
Western	23.8	0.8	1,278	98.4	304	11.0	0.3	322	(93.2)	36
Northern	38.1	1.4	1,575	97.8	600	15.8	0.4	415	94.5	66
Central	27.3	0.8	1,336	99.2	365	11.5	0.4	372	(100.0)	43
Southern Highlands	35.9	1.2	807	97.7	289	21.4	0.8	234	98.6	50
Southern	35.1	1.2	700	99.4	246	26.1	1.0	180	100.0	47
South West Highlands	31.2	0.9	1,246	99.2	388	22.5	0.7	308	87.2	69
Lake	28.0	0.9	3,463	98.4	968	11.4	0.6	933	95.5	107
Eastern	36.7	1.3	2,457	98.9	902	25.6	1.1	659	100.0	168
Zanzibar	28.9	0.8	404	98.0	117	22.9	0.6	89	98.4	20
Education										
No education	22.8	0.8	1,946	97.4	444	11.0	0.4	283	(98.9)	31
Primary incomplete	26.3	0.8	1,559	97.1	411	16.1	0.8	568	93.9	91
Primary complete	32.4	1.1	6,652	98.7	2,153	16.7	0.6	1,673	96.7	279
Secondary+	37.7	1.3	3,109	99.4	1,172	20.7	0.8	990	97.2	205
Wealth quintile										
Lowest	24.5	0.7	2,239	96.6	549	10.8	0.4	609	92.8	66
Second	29.2	0.9	2,281	98.9	666	14.2	0.5	577	93.4	82
Middle	30.4	1.0	2,314	98.6	704	16.6	0.7	649	98.6	108
Fourth	33.7	1.2	2,826	98.9	953	18.4	0.7	762	96.0	140
Highest	36.3	1.3	3,606	99.0	1,307	22.9	0.8	917	98.4	210
Total 15-49	31.5	1.1	13,266	98.6	4,180	17.2	0.7	3,514	96.6	606

Note:
- Medical injections are those given by a doctor, nurse, pharmacist, dentist, or other health worker.
- Figures in parentheses are based on 25-49 unweighted cases.
- Total includes five women/men/households for whom information on age is missing.

MARRIAGE AND SEXUAL ACTIVITY 4

Key Findings

- ***Current marital status and age at first marriage:*** Sixty-two percent of women and 52% of men in Tanzania are currently in union; the median age at first marriage for women and men was 19.2 and 24.3 years, respectively, a difference of 5.1 years.
- ***Polygyny:*** Eighteen percent of married women have co-wives; 9% of married men have more than one wife.
- ***Sexual initiation:*** On average, men tend to initiate sexual activity one year later than women. The median age at first intercourse for men age 25-49 is 18.2 years, whereas the median age for women of the same age is 17.2 years.

Marriage and sexual activity help determine the extent to which women are exposed to the risk of pregnancy. Thus, they are important determinants of fertility levels. However, the timing and circumstances of marriage and sexual activity also have profound consequences for women's and men's lives.

This chapter presents information on marital status, polygyny, age at first marriage, age at first sexual intercourse, recent sexual activity, premarital sexual intercourse, and condom use during premarital sexual intercourse among youth.

4.1 MARITAL STATUS

Currently in Union

Women and men who report being married or living together with a partner as though married at the time of the survey

Sample: Women and men age 15-49

The civil registration system in Tanzania routinely monitors major vital events including the status of marriage and widowhood. However, the coverage is low due to the fact that many events are not reported to the responsible authorities. The survey collected information on marriage status among women and men age 15-49. Sixty-two percent of women and 52% of men in Tanzania are currently in union (married or living together) **(Table 4.1)**.

Trends: Overall, the percentages of both women and men who are currently in union have remained almost unchanged since the 2010 TDHS. The percentage of women who are divorced, separated, or widowed has slightly increased from 12%, as reported in the 2010 TDHS, to 13% in the 2015-16 TDHS-MIS. Over this same time period, the percentage of men who are divorced, separated, or widowed has slightly decreased, from 6% to 5%.

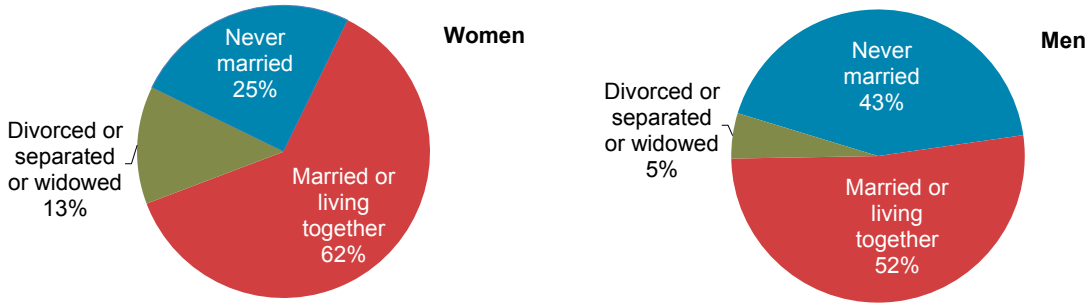
From the 2010 TDHS to the 2015-16 TDHS-MIS, the differences in the percentages of individuals who are currently in union are largest in age group 15-19 among women (an increase of 5%) and age group 20-24 among men (an increase of 7%).

Patterns by background characteristics

- There are marked differences in marital status by sex. For instance, below age 30, the percentage of married women is higher than that of men, whereas above age 30 the reverse is true. For example, 23% of women age 15-19 are currently married or living together compared with only 2% of men in the same age category.
- For women, the percentage currently in union increases up to age group 35-39 at which point it starts to decrease, whereas for men, the percentage currently in union increases as age increases up to age 40-44.
- Overall, women are more than twice as likely as men to be separated, divorced, or widowed.
- Women are less likely to be single than men; 1 in 4 women (25%) and more than 4 in 10 men (43%) have never been married **(Figure 4.1)**.

Figure 4.1 **Marital status**

Percent distribution of women and men age 15-49 by current marital status



4.2 POLYGYNY

Polygyny
The practice of having more than one wife.
Sample: Currently married women and men age 15-49

In Tanzania, like many other African countries, polygyny is commonly practiced in some parts of the country. Polygyny has implications for the frequency of sexual activity and for the fertility rate.

The results from the 2015-16 TDHS-MIS show that 18% of married women have co-wives **(Table 4.2.1)**. About 8 in 10 married women reported that their husbands have no other wives. About 9% of married men have more than one wife **(Table 4.2.2)**.

Trends: The percentages of women and men who reported that they were in polygynous unions have decreased slightly from 21% in the 2010 TDHS to 18% in the 2015-16 TDHS-MIS for women and from 10% in the 2010 TDHS to 9% for men, respectively.

Patterns by background characteristics

- In general, older women are much more likely than younger women to have co-wives. For example, only 9% of currently married women age 15-19 are in polygynous unions compared with 26% of women age 45-49 **(Table 4.2.1)**.

- Currently married women in rural areas are almost twice as likely (21%) to be in polygynous unions as those in urban areas (11%).
- There are marked regional differences in the percentage of women currently in polygynous unions. While 30% or more of married women in Kusini Pemba, Mara, and Tabora regions are in polygynous unions, less than 7% of women in Kilimanjaro, Dar es Salaam, and Morogoro regions are in a polygynous union.
- Less educated women are more likely to have co-wives; 31% of married women with no education have co-wives compared with 8% of women with a secondary or higher education.
- The practice of polygyny is inversely related to the level of wealth; only 10% of married women in households in the highest wealth quintile have co-wives, compared with 29% of married women with co-wives in households in the lowest wealth quintile.
- Similar to women, older men (age 35-49), men in rural areas, men with no education or primary incomplete education and men in households in the lowest wealth quintile are more likely to have two or more wives than other men. Men in Zanzibar are more likely to be in polygynous unions than men in the Mainland (13% and 8%**,** respectively) **(Table 4.2.2)**.

4.3 AGE AT FIRST MARRIAGE

Median age at first marriage
Age by which half of respondents have been married.
Sample: Women age 25-49 and men age 25-49.

Marriage is a primary indication of the regular exposure of women to the risk of pregnancy and therefore is important for the understanding of fertility. Populations in which age at first marriage is low tend to have early childbearing and high fertility. Women tend to marry considerably earlier than men in Tanzania. The median age at first marriage is 19.2 years among women age 25-49 and 24.3 years among men age 25-49 **(Table 4.3)**. Thirty-six percent of women age 25-49 marry before their 18th birthday, and 59% marry before their 20th birthday. For men of the same age, the percentages are 5% and 15%, respectively. A large majority of women (85%) are married by age 25, while only 55% of men are married by that age.

Trends: The median ages at first marriage for both women and men age 25-49 reported in the 2015-16 TDHS-MIS have remained almost at the same level as those reported over the past 10 years. In the 2010 TDHS, the median ages at first marriage were 18.8 years for women and 24.3 years for men, among those age 25-49. Similarly, in the 2004-05 TDHS, the median ages at first marriage were 18.6 for women and 24.2 for men.

Patterns by background characteristics

- Both women and men in rural areas are more likely to marry earlier than their urban counterparts. For women age 25-49, the median age at first marriage is 1.7 years earlier among rural than among urban women (18.7 years versus 20.4 years). The rural-urban gap for men age 30-49 is larger; men in rural areas marry 2.6 years earlier than men in urban areas (23.4 years versus 26.0 years) **(Table 4.4)**.
- Median age at first marriage is directly related to levels of education and wealth. For women age 25-49, there is almost a 6-year difference in the median age at first marriage between women with no education and women with secondary or higher education (17.8 years versus 23.6 years). For men age 30-49, the difference in the median age at first marriage between men with no education and men with secondary or higher education is 4.6 years. The more years they spend in school, the later they marry.

4.4 AGE AT FIRST SEXUAL INTERCOURSE

Median age at first sexual intercourse
Age by which half of respondents have had sexual intercourse
Sample: Women and men age 20-49

Age at first marriage is often used as a proxy for first exposure to sexual activity, but the two events do not necessarily occur at the same time. The 2015-16 TDHS-MIS collected information on the timing of first sexual intercourse for both women and men. The median age at first intercourse for women age 25-49 is 17.2 years and among men of the same age is 18.2 years **(Table 4.5)**.

Nine percent of men age 25-49 have experienced sexual activity by age 15 and 47% have had sex by age 18. More than half of men age 15-19 have never had sexual intercourse (54%).

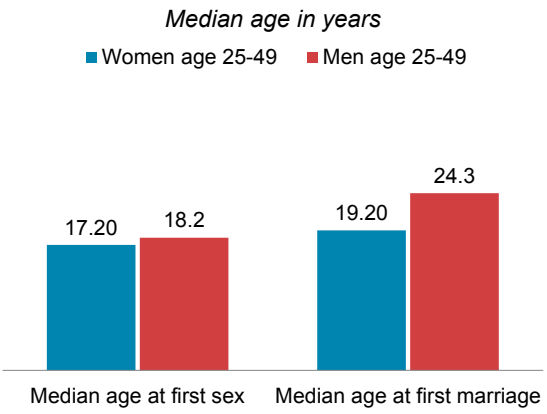
Trends: The median age at sexual debut for both women and men age 25-49 recorded in the 2015-16 TDHS-MIS has remained almost unchanged from that reported in the 2010 TDHS. In the 2010 TDHS, the median age at first sexual intercourse was 17.4 years for women and 18.5 years for men, whereas in the 2004-05 TDHS the figures were 17.0 years for women and 18.5 years for men.

Patterns by background characteristics

- On average, men tend to initiate sexual activity one year later than women. In general, the median age at which both women and men initiate sexual activity occurs prior to the age of first marriage, and the median age of men at sexual debut and first marriage is older than that of women **(Figure 4.2)**. Women start sexual activity 2 years before entering into marriage, while for men it is 6 years.

- Urban women age 25-49 initiate sexual activity 1 year later than women in the same age group in rural areas (17.8 and 16.9 years, respectively). Unlike women, on average, urban and rural men age 25-49 initiate sexual activity at 18 years **(Table 4.6)**.

Figure 4.2 **Median age at first sex and first marriage among women and men**



- The median age at first sexual intercourse for women age 25-49 in Zanzibar (19.6 years) is higher by almost three years than for women in the Mainland (17.1 years).

- Educated women and men wait longer before having sex. Among women age 25-49, there is a 3.4 year difference in the median age at first sex between women with secondary or higher education and those with no education (age 19.5 versus age 16.1).The difference in the two levels of education for men age 25-49 is 1.3 years.

- Women age 25-49 in households in the lowest wealth quintile initiate sexual activity nearly 2 years earlier than women of the same age in households in the highest wealth quintile (16.4 years and 18.3 years, respectively). Men age 25-49 in households in the lowest wealth quintile initiate sexual activity somewhat earlier than those in households in the highest wealth quintile (17.9 and 18.5).

4.5 Recent Sexual Activity

In the absence of contraception, the chances of becoming pregnant are related to the frequency of sexual intercourse. Thus, information on sexual activity can be used to refine measures of exposure to HIV and other sexually transmitted infections, as well as pregnancy.

Women and men age 15-49 interviewed in the 2015-16 TDHS-MIS were asked about their recent sexual activity. Over half of women and men age 15-49 reported having sexual intercourse in the four weeks preceding the survey (57% of women and 58% of men) **(Tables 4.7.1 and 4.7.2)**. Twelve percent of women and 17 percent of men age 15-49 never had sexual intercourse.

Patterns by background characteristics

- As expected, recent sexual activity is far more common among currently married women and men than among those who never married, or are divorced, separated, or widowed. For example, 80% of currently married women and 85% of currently married men reported having had sex in the four weeks before the survey, compared with only 13% of never-married women and 27% of never-married men **(Tables 4.7.1 and 4.7.2)**.

- The percentage of women age 15-49 reporting having had sex in the four weeks before the survey increases with age up to age 30-34, then starts to decrease gradually as age increases. As for men of the same age group, the percentage reporting having had sex in the four weeks before the survey generally increases with increasing age.

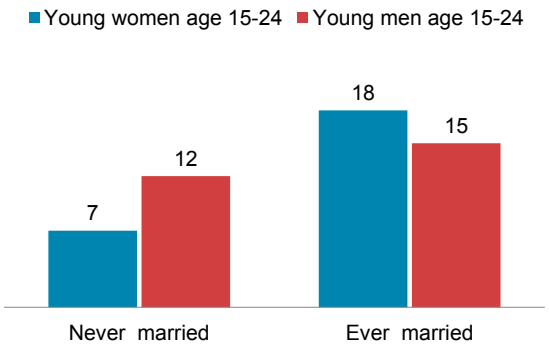
4.6 Age at First Sexual Intercourse among Young People

Young people who initiate sex at an early age are typically at a higher risk of becoming pregnant or contracting sexually transmitted infections than young people who initiate sex later. The percentage of young women and men who had sexual intercourse before reaching age 15 and age 18 is presented in **Table 4.8**.

Overall, there is a slight difference in the timing of sexual debut between young women and men age 15-24 in Tanzania. Twelve percent of young women and 13% of young men age 15-24 had sex before they were 15. About 60% of women and 51% of men age 18-24 reported having had sex before reaching age 18.

Figure 4.3 **Sexual intercourse among youth age 15-24 by marital status**

Percentage who had sexual intercourse before age 15 by marital status



Patterns by background characteristics

- The percentage of never married young women and men (age 15-24) who had their sexual debut by age 15 is 7% and 12%, respectively, a difference of 5 percentage points. The corresponding percentages for ever-married young women and men age 15-24 are 18% and 15%, respectively **(Figure 4.3)**. This finding is expected because women in Tanzania tend to marry considerably earlier than men.

- There is a strong negative relationship between a person's level of education and age at first sex. The percentage of women and men who had their first sex by age 15 decreases substantially as level of education increases. Women age 15-24 with no education are far more likely to have had sex before

age 15 (31%) than young women with secondary education and above (4%). There is a similar but less pronounced pattern among young men of the same age.

4.7 Premarital Sexual Intercourse and Condom Use during Premarital Sexual Intercourse among Youth

The period between first sexual intercourse and marriage is often a time of sexual experimentation. Youth are often at a greater risk of contracting sexually transmitted infections, including HIV/AIDS, and of having unwanted pregnancies during this time; they are more likely to have shorter relationships with more partners before marriage. Consistent use of condoms can reduce the chances of becoming pregnant and the risk of contracting sexually transmitted infections, including HIV/AIDS. **Table 4.9** shows the percentage of never-married women and men age 15-24 who have not yet engaged in sex, the percentage who had premarital sexual intercourse in the 12 months preceding the survey, and the percentage who used a condom at their most recent sexual intercourse.

Among never-married youth in Tanzania, 55% of women and 43% of men reported that they have never had sex. Thirty-five percent of young women and 47% of young men had sex during the 12 months preceding the survey. Condom use during premarital sex is not that high in Tanzania; only 37% of women and 41% of men reported that they used a condom the last time they had sex.

Patterns by background characteristics

- The percentage of unmarried youth who had sex during the 12 months preceding the survey increases with age regardless of gender.
- Among unmarried young women, use of a condom at the last sexual intercourse was the highest among adolescents age 18-19. Older unmarried young men (age 20-24) were more likely to use a condom at their last sexual intercourse than younger unmarried men (age 15-19).
- Condom use and premarital sex are higher among young men and women in urban areas than in rural areas.

List of Tables

For more information on marriage and sexual activity, see the following tables:

- **Table 4.1 Current marital status**
- **Table 4.2.1 Number of women's co-wives**
- **Table 4.2.2 Number of men's wives**
- **Table 4.3 Age at first marriage**
- **Table 4.4 Median age at first marriage by background characteristics**
- **Table 4.5 Age at first sexual intercourse**
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- **Table 4.7.1 Recent sexual activity: Women**
- **Table 4.7.2 Recent sexual activity: Men**
- **Table 4.8 Age at first sexual intercourse among young people**
- **Table 4.9 Premarital sexual intercourse and condom use during premarital sexual intercourse among youth**

Table 4.1 Current marital status

Percent distribution of women and men age 15-49 by current marital status, according to age, Tanzania DHS-MIS 2015-16

Age	Marital status						Total	Percentage of respondents currently in union	Number of respondents
	Never married	Married	Living together	Divorced	Separated	Widowed			
					WOMEN				
15-19	74.7	14.3	8.7	1.2	1.1	0.0	100.0	23.0	2,904
20-24	30.1	40.3	19.3	4.0	5.8	0.5	100.0	59.6	2,483
25-29	11.3	52.9	23.2	5.3	6.1	1.2	100.0	76.1	2,125
30-34	5.0	58.8	19.9	6.6	7.0	2.8	100.0	78.7	1,752
35-39	4.0	59.1	20.5	5.6	6.3	4.4	100.0	79.7	1,641
40-44	1.9	60.4	15.3	7.1	6.7	8.5	100.0	75.8	1,364
45-49	1.6	59.0	14.1	7.1	7.8	10.5	100.0	73.1	997
Total 15-49	25.3	44.9	17.0	4.7	5.3	2.9	100.0	61.9	13,266
					MEN				
15-19	98.2	0.9	0.6	0.3	0.0	0.0	100.0	1.5	932
20-24	67.4	16.2	12.5	1.3	2.6	0.0	100.0	28.7	576
25-29	27.2	39.4	27.6	3.0	2.8	0.0	100.0	67.0	482
30-34	8.9	57.5	25.2	3.8	4.5	0.2	100.0	82.7	410
35-39	4.5	59.9	25.5	5.8	2.6	1.7	100.0	85.4	466
40-44	3.7	70.0	20.5	1.7	3.0	1.1	100.0	90.5	334
45-49	1.5	72.5	17.6	5.6	1.8	1.0	100.0	90.1	314
Total 15-49	43.0	36.1	15.8	2.6	2.1	0.4	100.0	51.9	3,514

Table 4.2.1 Number of women's co-wives

Percent distribution of currently married women age 15-49 by number of co-wives, according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Number of co-wives				Total	Number of women
	0	1	2+	Don't know		
Age						
15-19	89.7	6.8	2.2	1.4	100.0	668
20-24	85.7	11.1	2.0	1.2	100.0	1,479
25-29	85.2	11.1	2.7	0.9	100.0	1,616
30-34	80.1	15.6	2.8	1.4	100.0	1,378
35-39	76.5	19.0	3.7	0.9	100.0	1,308
40-44	74.2	20.1	5.3	0.5	100.0	1,033
45-49	73.2	19.8	6.1	1.0	100.0	728
Residence						
Urban	87.5	9.6	1.4	1.6	100.0	2,535
Rural	78.1	16.9	4.2	0.8	100.0	5,675
Tanzania Mainland/Zanzibar						
Mainland	81.2	14.4	3.3	1.0	100.0	7,990
Urban	88.0	9.1	1.3	1.6	100.0	2,468
Rural	78.2	16.8	4.3	0.8	100.0	5,523
Zanzibar	72.1	23.9	3.6	0.4	100.0	220
Unguja	72.7	24.2	2.5	0.6	100.0	151
Pemba	70.8	23.3	5.9	0.0	100.0	69
Zone						
Western	72.4	20.3	6.9	0.5	100.0	879
Northern	81.5	14.0	3.2	1.3	100.0	906
Central	83.4	13.0	3.2	0.4	100.0	886
Southern Highlands	83.1	14.0	1.8	1.1	100.0	503
Southern	79.7	16.1	2.6	1.6	100.0	452
South West Highlands	80.7	15.6	3.1	0.6	100.0	765
Lake	77.0	17.8	4.4	0.8	100.0	2,192
Eastern	91.9	5.5	0.6	2.0	100.0	1,407
Zanzibar	72.1	23.9	3.6	0.4	100.0	220
Region						
Dodoma	83.7	13.9	2.1	0.3	100.0	383
Arusha	77.9	15.1	6.4	0.7	100.0	325
Kilimanjaro	93.5	4.5	0.0	1.9	100.0	195
Tanga	78.5	17.8	2.2	1.5	100.0	385
Morogoro	90.0	6.3	0.4	3.3	100.0	399
Pwani	86.6	9.6	1.8	2.0	100.0	184
Dar es Salaam	93.9	4.3	0.4	1.4	100.0	824
Lindi	80.9	15.6	3.5	0.0	100.0	191
Mtwara	78.8	16.5	2.0	2.7	100.0	261
Ruvuma	85.5	12.2	0.9	1.5	100.0	226
Iringa	82.1	14.6	2.8	0.5	100.0	143
Mbeya	81.1	15.3	2.7	0.9	100.0	490
Singida	84.2	13.8	1.0	1.0	100.0	243
Tabora	68.4	22.5	8.8	0.3	100.0	514
Rukwa	82.1	15.7	1.9	0.3	100.0	183
Kigoma	77.9	17.2	4.1	0.8	100.0	365
Shinyanga	73.3	20.0	6.1	0.5	100.0	344
Kagera	81.6	15.7	2.4	0.4	100.0	418
Mwanza	84.4	12.1	2.7	0.7	100.0	465
Mara	67.7	24.0	6.5	1.8	100.0	340
Manyara	82.1	11.1	6.8	0.0	100.0	260
Njombe	80.0	16.5	2.4	1.2	100.0	134
Katavi	75.6	16.7	7.8	0.0	100.0	92
Simiyu	70.7	22.5	5.9	1.0	100.0	312
Geita	80.1	15.4	3.8	0.7	100.0	313
Kaskazini Unguja	75.2	20.1	3.7	1.0	100.0	35
Kusini Unguja	73.2	23.8	2.6	0.5	100.0	20
Mjini Magharibi	71.6	25.8	2.1	0.4	100.0	96
Kaskazini Pemba	71.6	21.9	6.5	0.0	100.0	37
Kusini Pemba	69.9	24.8	5.3	0.0	100.0	32
Education						
No education	68.0	23.0	7.7	1.2	100.0	1,559
Primary incomplete	77.6	17.3	4.2	0.9	100.0	971
Primary complete	83.3	13.4	2.1	1.1	100.0	4,445
Secondary+	91.4	6.6	1.5	0.5	100.0	1,235
Wealth quintile						
Lowest	70.4	21.6	7.6	0.4	100.0	1,670
Second	79.7	15.4	3.9	1.0	100.0	1,523
Middle	81.9	14.4	2.6	1.0	100.0	1,541
Fourth	83.0	13.5	2.1	1.3	100.0	1,642
Highest	89.0	8.9	0.6	1.4	100.0	1,835
Total	81.0	14.7	3.3	1.0	100.0	8,210

Table 4.2.2 Number of men's wives

Percent distribution of currently married men age 15-49 by number of wives, according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Number of wives		Total	Number of men
	1	2+		
Age				
15-19	*	*	100.0	14
20-24	98.5	1.5	100.0	165
25-29	96.3	3.7	100.0	323
30-34	96.0	4.0	100.0	339
35-39	88.6	11.4	100.0	398
40-44	84.1	15.9	100.0	302
45-49	88.1	11.9	100.0	283
Residence				
Urban	95.7	4.3	100.0	605
Rural	89.4	10.6	100.0	1,219
Tanzania Mainland/Zanzibar				
Mainland	91.6	8.4	100.0	1,788
Urban	95.9	4.1	100.0	593
Rural	89.5	10.5	100.0	1,194
Zanzibar	87.4	12.6	100.0	37
Unguja	86.6	13.4	100.0	26
Pemba	89.2	10.8	100.0	11
Zone				
Western	89.9	10.1	100.0	166
Northern	93.1	6.9	100.0	210
Central	91.8	8.2	100.0	200
Southern Highlands	88.9	11.1	100.0	118
Southern	88.0	12.0	100.0	108
South West Highlands	90.6	9.4	100.0	163
Lake	88.8	11.2	100.0	482
Eastern	97.8	2.2	100.0	340
Zanzibar	87.4	12.6	100.0	37
Region				
Dodoma	98.1	1.9	100.0	89
Arusha	91.3	8.7	100.0	73
Kilimanjaro	(96.0)	(4.0)	100.0	52
Tanga	92.8	7.2	100.0	85
Morogoro	(98.3)	(1.7)	100.0	84
Pwani	(90.6)	(9.4)	100.0	33
Dar es Salaam	98.7	1.3	100.0	223
Lindi	85.3	14.7	100.0	42
Mtwara	89.7	10.3	100.0	66
Ruvuma	91.3	8.7	100.0	59
Iringa	(90.6)	(9.4)	100.0	30
Mbeya	(92.4)	(7.6)	100.0	102
Singida	90.3	9.7	100.0	50
Tabora	83.5	16.5	100.0	102
Rukwa	90.8	9.2	100.0	41
Kigoma	100.0	0.0	100.0	64
Shinyanga	84.7	15.3	100.0	81
Kagera	89.0	11.0	100.0	95
Mwanza	91.7	8.3	100.0	112
Mara	90.1	9.9	100.0	69
Manyara	83.9	16.1	100.0	61
Njombe	82.2	17.8	100.0	28
Katavi	81.2	18.8	100.0	20
Simiyu	84.9	15.1	100.0	60
Geita	91.1	8.9	100.0	66
Kaskazini Unguja	(91.7)	(8.3)	100.0	6
Kusini Unguja	(74.2)	(25.8)	100.0	4
Mjini Magharibi	87.6	12.4	100.0	16
Kaskazini Pemba	(93.8)	(6.2)	100.0	6
Kusini Pemba	(83.9)	(16.1)	100.0	5
Education				
No education	87.7	12.3	100.0	187
Primary incomplete	86.8	13.2	100.0	243
Primary complete	91.8	8.2	100.0	1,038
Secondary+	96.0	4.0	100.0	357
Wealth quintile				
Lowest	86.7	13.3	100.0	365
Second	91.2	8.8	100.0	321
Middle	90.9	9.1	100.0	343
Fourth	91.3	8.7	100.0	376
Highest	96.6	3.4	100.0	420
Total 15-49	91.5	8.5	100.0	1,825

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 4.3 Age at first marriage

Percentage of women and men age 15-49 who were first married by specific exact ages and median age at first marriage, according to current age, Tanzania DHS-MIS 2015-16

Current age	Percentage first married by exact age: 15	18	20	22	25	Percentage never married	Number of respondents	Median age at first marriage
					WOMEN			
15-19	3.4	na	na	na	na	74.7	2,904	a
20-24	5.2	30.5	53.0	na	na	30.1	2,483	19.7
25-29	5.9	32.6	53.9	67.7	82.8	11.3	2,125	19.6
30-34	7.4	37.1	59.5	73.4	85.0	5.0	1,752	19.1
35-39	5.6	33.1	58.4	70.7	82.7	4.0	1,641	19.2
40-44	9.6	40.7	62.1	77.0	88.1	1.9	1,364	18.8
45-49	8.5	40.4	64.8	76.6	87.3	1.6	997	18.7
20-49	6.7	34.8	57.5	na	na	11.4	10,362	19.3
25-49	7.1	36.1	58.9	72.3	84.8	5.5	7,879	19.2
					MEN			
15-19	0.0	na	na	na	na	98.2	932	a
20-24	0.5	3.9	9.7	na	na	67.4	576	a
25-29	0.9	5.2	14.7	27.8	55.9	27.2	482	24.4
30-34	0.3	5.3	14.9	30.9	54.2	8.9	410	24.5
35-39	0.1	5.2	17.9	34.8	57.8	4.5	466	23.8
40-44	0.7	4.1	14.9	32.0	56.9	3.7	334	24.0
45-49	1.7	2.8	12.2	29.7	51.2	1.5	314	24.9
20-49	0.6	4.5	13.9	na	na	23.0	2,582	a
25-49	0.7	4.7	15.1	31.1	55.4	10.3	2,006	24.3

Note: The age at first marriage is defined as the age at which the respondent began living with her/his first spouse/partner.
na = Not applicable due to censoring
a = Omitted because less than 50 percent of the women or men began living with their spouse or partner for the first time before reaching the beginning of the age group

Table 4.4 Median age at first marriage by background characteristics

Median age at first marriage among women age 20-49 and age 25-49, and median age at first marriage among men age 25-49 and 30-49, according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Age						Women age		Men age	
	20-24	25-29	30-34	35-39	40-44	45-49	20-49	25-49	25-49	30-49
Residence										
Urban	a	21.5	20.5	20.1	19.6	18.8	a	20.4	a	26.0
Rural	18.8	18.8	18.5	18.9	18.5	18.6	18.7	18.7	23.6	23.4
Tanzania Mainland/Zanzibar										
Mainland	19.6	19.6	19.1	19.2	18.8	18.7	19.2	19.1	24.3	24.3
Urban	a	21.4	20.5	20.1	19.6	18.8	a	20.3	a	26.0
Rural	18.7	18.8	18.5	18.9	18.5	18.7	18.7	18.7	23.5	23.4
Zanzibar	a	22.6	20.8	20.0	19.2	18.2	a	20.3	a	25.8
Unguja	a	23.3	21.0	20.1	19.8	18.1	a	20.8	a	26.3
Pemba	a	20.6	20.0	19.4	18.5	18.4	19.6	19.3	a	25.1
Zone										
Western	18.5	18.8	17.8	18.6	18.0	18.6	18.4	18.4	23.1	23.0
Northern	a	21.9	19.9	20.5	20.5	19.5	a	20.5	a	25.8
Central	19.4	19.2	18.9	19.4	18.9	18.9	19.2	19.1	24.5	24.7
Southern Highlands	a	20.0	20.6	19.1	20.4	19.4	a	19.9	23.3	22.7
Southern	18.5	19.6	18.0	18.3	18.4	17.7	18.5	18.4	22.7	22.2
South West Highlands	19.0	19.3	18.8	19.1	18.3	18.3	18.8	18.8	22.7	22.8
Lake	18.9	18.5	18.1	18.6	18.1	18.6	18.5	18.4	23.9	23.8
Eastern	a	20.8	20.9	20.7	19.7	18.7	a	20.4	a	26.4
Zanzibar	a	22.6	20.8	20.0	19.2	18.2	a	20.3	a	25.8
Education										
No education	17.0	17.3	17.9	18.2	17.7	18.2	17.7	17.8	23.0	23.0
Primary incomplete	17.6	18.2	18.4	18.4	17.9	17.2	18.0	18.1	23.2	22.9
Primary complete	18.8	19.2	19.0	19.2	19.0	18.7	19.0	19.1	23.8	23.9
Secondary+	a	24.4	22.8	24.3	22.0	21.4	a	23.6	a	27.6
Wealth quintile										
Lowest	18.1	18.1	18.1	18.5	18.6	18.5	18.3	18.3	22.8	22.8
Second	18.2	18.8	18.1	18.6	18.3	18.4	18.4	18.5	23.6	23.7
Middle	19.2	18.5	18.5	18.9	18.8	18.7	18.8	18.7	23.6	23.5
Fourth	a	19.9	19.4	19.5	18.5	18.2	19.6	19.3	24.1	23.9
Highest	a	23.1	21.0	21.2	20.0	19.9	a	21.4	a	26.8
Total	19.7	19.6	19.1	19.2	18.8	18.7	19.3	19.2	24.3	24.3

Note: The age at first marriage is defined as the age at which the respondent began living with her/his first spouse/partner.
a = Omitted because less than 50 percent of the respondents began living with their spouse/partners for the first time before reaching the beginning of the age group

Table 4.5 Age at first sexual intercourse

Percentage of women and men age 15-49 who had first sexual intercourse by specific exact ages, percentage who never had sexual intercourse, and median age at first sexual intercourse, according to current age, Tanzania DHS-MIS 2015-16

Current age	Percentage who had first sexual intercourse by exact age: 15	18	20	22	25	Percentage who never had intercourse	Number of respondents	Median age at first intercourse
				WOMEN				
15-19	12.7	na	na	na	na	47.8	2,904	a
20-24	11.7	56.9	81.0	na	na	8.5	2,483	17.5
25-29	12.2	58.2	81.3	90.6	96.4	1.3	2,125	17.4
30-34	13.6	61.1	81.4	91.1	95.8	0.7	1,752	17.1
35-39	13.3	62.1	82.2	91.0	95.1	0.2	1,641	17.2
40-44	16.2	63.5	84.2	92.4	96.1	0.2	1,364	16.9
45-49	13.6	62.3	85.4	92.5	97.3	0.1	997	17.2
20-49	13.2	60.1	82.2	na	na	2.5	10,362	a
25-49	13.6	61.1	82.5	na	na	0.6	7,879	17.2
15-24	12.2	na	na	na	na	29.7	5,387	17.8
				MEN				
15-19	13.8	na	na	na	na	54.1	932	a
20-24	10.7	48.2	76.7	na	na	10.6	576	18.1
25-29	9.4	43.7	69.8	83.4	94.4	3.5	482	18.3
30-34	10.4	51.6	76.4	87.2	93.6	0.7	410	17.9
35-39	7.7	48.0	72.9	86.4	93.8	0.2	466	18.1
40-44	8.5	42.5	66.9	82.2	89.1	0.3	334	18.5
45-49	10.8	48.6	68.4	83.4	90.2	0.2	314	18.1
20-49	9.6	47.2	72.4	na	na	3.2	2,582	a
25-49	9.3	46.9	71.2	na	na	1.1	2,006	18.2
15-24	12.6	na	na	na	na	37.5	1,508	18.6

na = Not applicable due to censoring
a = Omitted because less than 50 percent of the respondents had sexual intercourse for the first time before reaching the beginning of the age group

Table 4.6 Median age at first sexual intercourse by background characteristics

Median age at first sexual intercourse among women age 20-49 and age 25-49, and median age at first sexual intercourse among men age 20-49 and age 25-49, according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Age						Women age		Men age	
	20-24	25-29	30-34	35-39	40-44	45-49	20-49	25-49	20-49	25-49
Residence										
Urban	18.3	18.1	18.0	17.5	17.5	17.5	17.9	17.8	18.4	18.4
Rural	17.1	16.9	16.7	16.9	16.7	17.0	16.9	16.9	18.1	18.1
Mainland/Zanzibar										
Mainland	17.4	17.3	17.1	17.1	16.9	17.1	17.2	17.1	18.1	18.1
Urban	18.2	18.0	18.0	17.5	17.5	17.5	17.9	17.8	18.3	18.3
Rural	17.0	16.8	16.7	16.9	16.7	17.0	16.9	16.8	18.0	18.1
Zanzibar	a	21.5	20.1	19.2	19.0	17.8	a	19.6	a	22.8
Unguja	a	21.9	20.1	19.2	19.3	17.7	a	19.7	a	22.2
Pemba	a	20.6	20.1	19.5	18.5	18.0	19.5	19.3	a	24.7
Zone										
Western	17.1	16.8	16.8	17.3	16.3	16.7	16.9	16.8	18.0	18.2
Northern	18.6	18.4	17.9	18.0	18.3	17.9	18.2	18.1	18.1	18.2
Central	17.4	17.6	16.8	17.3	17.2	17.2	17.3	17.2	18.1	18.2
Southern Highlands	17.7	17.7	17.7	17.5	17.6	17.5	17.6	17.6	18.0	17.9
Southern	16.7	16.8	16.1	16.1	15.9	16.1	16.4	16.2	17.7	17.5
South West Highlands	17.2	17.3	17.0	16.8	17.0	17.3	17.1	17.0	18.9	18.7
Lake	16.9	16.7	16.5	16.4	16.5	16.9	16.7	16.6	18.2	18.2
Eastern	18.0	17.7	17.9	17.6	17.3	17.4	17.7	17.6	17.9	18.0
Zanzibar	22.2	21.5	20.1	19.2	19.0	17.8	20.1	19.6	22.8	22.8
Education										
No education	15.8	16.2	15.9	16.1	16.0	16.7	16.1	16.1	17.5	17.6
Primary incomplete	16.1	16.0	16.0	16.2	15.8	16.3	16.0	16.0	18.0	18.0
Primary complete	17.1	17.3	17.5	17.3	17.3	17.3	17.3	17.3	18.1	18.1
Secondary+	18.9	19.6	19.1	20.2	19.3	18.8	19.2	19.5	18.8	18.9
Wealth quintile										
Lowest	16.5	16.5	16.4	16.4	16.1	16.5	16.4	16.4	17.8	17.9
Second	16.8	16.7	16.3	16.7	16.7	17.0	16.7	16.7	18.0	18.1
Middle	17.2	16.7	16.8	16.9	16.9	17.0	16.9	16.8	18.4	18.4
Fourth	17.6	17.6	17.4	17.5	17.1	17.2	17.4	17.4	17.8	17.9
Highest	18.9	18.6	18.4	17.9	17.8	18.0	18.4	18.3	18.6	18.5
Total	17.5	17.4	17.1	17.2	16.9	17.2	17.3	17.2	18.2	18.2

a = Omitted because less than 50 percent of the respondents had intercourse for the first time before reaching the beginning of the age group

Table 4.7.1 Recent sexual activity: Women

Percent distribution of women age 15-49 by timing of last sexual intercourse, according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Timing of last sexual intercourse				Total	Number of women
	Within the past 4 weeks	Within 1 year[1]	One or more years	Never had sexual intercourse		
Age						
15-19	24.7	20.3	7.2	47.8	100.0	2,904
20-24	55.7	28.6	7.3	8.5	100.0	2,483
25-29	68.7	24.7	5.2	1.3	100.0	2,125
30-34	70.4	21.6	7.3	0.7	100.0	1,752
35-39	69.5	22.0	8.3	0.2	100.0	1,641
40-44	69.3	18.2	12.3	0.2	100.0	1,364
45-49	64.7	18.0	17.1	0.1	100.0	997
Marital status						
Never married	12.8	26.9	11.2	49.1	100.0	3,353
Married or living together	80.3	17.0	2.7	0.0	100.0	8,210
Divorced/separated/ widowed	29.3	41.0	29.7	0.0	100.0	1,703
Marital duration[2]						
0-4 years	77.1	20.8	2.0	0.0	100.0	2,000
5-9 years	80.0	17.8	2.2	0.0	100.0	1,376
10-14 years	82.3	14.5	3.2	0.0	100.0	1,081
15-19 years	80.7	15.9	3.4	0.0	100.0	954
20-24 years	82.3	15.1	2.6	0.0	100.0	688
25+ years	81.9	13.9	4.2	0.0	100.0	645
Married more than once	81.7	15.7	2.6	0.0	100.0	1,466
Residence						
Urban	51.7	25.2	8.4	14.8	100.0	4,811
Rural	59.6	21.1	8.3	11.1	100.0	8,455
Mainland/Zanzibar						
Mainland	57.0	22.9	8.4	11.8	100.0	12,862
Urban	51.9	25.6	8.4	14.1	100.0	4,675
Rural	59.9	21.3	8.4	10.4	100.0	8,187
Zanzibar	47.8	12.6	6.4	33.1	100.0	404
Unguja	45.7	13.3	7.3	33.7	100.0	293
Pemba	53.4	11.0	4.1	31.5	100.0	111
Zone						
Western	60.9	20.3	6.7	12.1	100.0	1,278
Northern	50.1	23.5	9.6	16.8	100.0	1,575
Central	57.1	23.4	8.6	11.0	100.0	1,336
Southern Highlands	59.3	20.8	9.7	10.2	100.0	807
Southern	60.0	24.7	9.0	6.3	100.0	700
South West Highlands	57.4	20.6	11.2	10.8	100.0	1,246
Lake	58.4	22.5	7.6	11.5	100.0	3,463
Eastern	55.4	25.5	7.4	11.7	100.0	2,457
Zanzibar	47.8	12.6	6.4	33.1	100.0	404
Region						
Dodoma	63.3	21.3	6.1	9.3	100.0	572
Arusha	50.3	21.4	12.7	15.5	100.0	508
Kilimanjaro	51.8	19.3	9.4	19.5	100.0	361
Tanga	49.1	27.1	7.4	16.4	100.0	706
Morogoro	61.3	24.6	8.0	6.0	100.0	636
Pwani	56.8	27.9	7.1	8.0	100.0	285
Dar es Salaam	52.8	25.4	7.2	14.7	100.0	1,536
Lindi	61.9	25.5	7.4	5.2	100.0	288
Mtwara	58.6	24.1	10.1	7.1	100.0	412
Ruvuma	66.0	20.6	5.7	7.7	100.0	360
Iringa	49.4	24.6	12.0	14.0	100.0	245
Mbeya	54.7	21.8	11.3	12.2	100.0	828
Singida	56.5	23.4	7.0	13.1	100.0	370
Tabora	63.2	22.0	6.0	8.8	100.0	737
Rukwa	60.5	17.4	13.6	8.5	100.0	288
Kigoma	57.8	17.9	7.7	16.6	100.0	542
Shinyanga	61.2	19.9	9.2	9.6	100.0	504
Kagera	64.8	15.9	6.0	13.4	100.0	612
Mwanza	52.3	27.2	9.5	11.1	100.0	859
Mara	56.8	25.7	6.9	10.6	100.0	523
Manyara	48.7	26.3	13.7	11.3	100.0	394
Njombe	59.5	16.7	13.8	10.0	100.0	203
Katavi	68.1	19.6	5.0	7.3	100.0	130
Simiyu	57.3	23.5	6.2	13.0	100.0	479
Geita	61.1	20.9	6.6	11.4	100.0	485
Kaskazini Unguja	56.5	7.6	4.6	31.3	100.0	56
Kusini Unguja	51.3	17.5	7.0	24.2	100.0	35
Mjini Magharibi	41.7	14.1	8.2	36.0	100.0	201
Kaskazini Pemba	54.8	13.1	2.3	29.8	100.0	56
Kusini Pemba	51.9	8.9	5.9	33.3	100.0	55

(Continued…)

Table 4.7.1—*Continued*

Background characteristic	Timing of last sexual intercourse: Within the past 4 weeks	Within 1 year[1]	One or more years	Never had sexual intercourse	Total	Number of women
Education						
No education	67.5	20.7	9.3	2.4	100.0	1,946
Primary incomplete	56.9	20.8	9.3	12.9	100.0	1,559
Primary complete	61.2	22.2	8.3	8.3	100.0	6,652
Secondary+	40.2	25.4	7.2	27.2	100.0	3,109
Wealth quintile						
Lowest	59.7	23.7	8.6	7.9	100.0	2,246
Second	58.8	23.0	9.6	8.7	100.0	2,274
Middle	61.5	19.4	8.4	10.6	100.0	2,329
Fourth	57.5	21.3	7.8	13.4	100.0	2,822
Highest	49.8	24.6	7.6	18.0	100.0	3,596
Total	56.7	22.6	8.3	12.4	100.0	13,266

[1] Excludes women who had sexual intercourse within the last 4 weeks
[2] Excludes women who are not currently married

Table 4.7.2 Recent sexual activity: Men

Percent distribution of men age 15-49 by timing of last sexual intercourse, according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Timing of last sexual intercourse				Total	Number of men
	Within the past 4 weeks	Within 1 year[1]	One or more years	Never had sexual intercourse		
Age						
15-19	19.7	17.5	8.7	54.1	100.0	932
20-24	55.6	24.7	9.0	10.6	100.0	576
25-29	71.1	21.0	4.4	3.5	100.0	482
30-34	77.1	19.5	2.7	0.7	100.0	410
35-39	79.9	16.9	2.9	0.2	100.0	466
40-44	79.3	18.1	2.3	0.3	100.0	334
45-49	80.0	16.8	3.1	0.2	100.0	314
Marital status						
Never married	26.9	23.6	10.5	39.0	100.0	1,510
Married or living together	85.3	14.2	0.4	0.0	100.0	1,825
Divorced/separated/ widowed	47.9	35.4	16.8	0.0	100.0	180
Marital duration[2]						
0-4 years	85.5	14.4	0.1	0.0	100.0	431
5-9 years	85.0	14.2	0.9	0.0	100.0	281
10-14 years	82.6	16.5	0.9	0.0	100.0	215
15-19 years	89.9	9.6	0.1	0.0	100.0	182
20-24 years	77.7	22.3	0.0	0.0	100.0	100
25+ years	(87.5)	(12.5)	(0.0)	(0.0)	100.0	40
Married more than once	86.2	13.4	0.4	0.0	100.0	577
Residence						
Urban	55.1	22.9	5.5	16.5	100.0	1,251
Rural	60.1	17.3	5.7	16.9	100.0	2,263
Mainland/Zanzibar						
Mainland	58.8	19.4	5.6	16.1	100.0	3,425
Urban	55.5	23.2	5.5	15.8	100.0	1,224
Rural	60.7	17.3	5.7	16.3	100.0	2,201
Zanzibar	40.4	14.8	4.0	40.7	100.0	89
Unguja	41.7	17.1	3.5	37.8	100.0	62
Pemba	37.7	9.8	5.3	47.2	100.0	28
Zone						
Western	52.4	18.4	9.8	19.4	100.0	322
Northern	59.9	18.9	9.0	12.2	100.0	415
Central	57.9	19.2	3.8	19.2	100.0	372
Southern Highlands	57.5	22.5	5.4	14.6	100.0	234
Southern	67.9	17.8	3.8	10.5	100.0	180
South West Highlands	57.2	17.2	5.9	19.5	100.0	308
Lake	60.7	16.9	5.1	17.3	100.0	933
Eastern	57.9	24.3	3.7	14.1	100.0	659
Zanzibar	40.4	14.8	4.0	40.7	100.0	89
Region						
Dodoma	58.9	16.6	1.3	23.2	100.0	175
Arusha	55.1	22.0	8.1	14.7	100.0	129
Kilimanjaro	53.0	18.7	12.9	15.5	100.0	110
Tanga	67.8	16.8	7.2	8.2	100.0	176
Morogoro	60.0	22.9	6.5	10.6	100.0	143
Pwani	62.1	15.4	6.2	16.3	100.0	68
Dar es Salaam	56.5	26.1	2.5	14.8	100.0	448
Lindi	72.0	13.3	2.8	11.8	100.0	66
Mtwara	65.5	20.4	4.4	9.7	100.0	115
Ruvuma	63.1	24.8	3.8	8.3	100.0	112
Iringa	44.0	23.5	7.3	25.2	100.0	71
Mbeya	56.3	15.2	6.0	22.6	100.0	202
Singida	50.0	27.9	4.8	17.4	100.0	106
Tabora	51.0	23.3	10.3	15.3	100.0	199
Rukwa	59.2	20.0	6.3	13.7	100.0	71
Kigoma	54.5	10.5	8.9	26.0	100.0	124
Shinyanga	56.3	24.0	11.1	8.6	100.0	142
Kagera	49.6	15.9	7.8	26.7	100.0	198
Mwanza	62.7	18.3	5.6	13.4	100.0	225
Mara	73.6	12.2	0.0	14.2	100.0	114
Manyara	64.9	14.3	7.3	13.4	100.0	91
Njombe	64.1	16.2	6.2	13.5	100.0	50
Katavi	58.5	23.0	4.6	13.9	100.0	35
Simiyu	64.5	13.8	0.4	21.4	100.0	136
Geita	64.0	15.2	2.9	17.9	100.0	118
Kaskazini Unguja	41.1	9.9	0.5	48.5	100.0	13
Kusini Unguja	46.5	19.4	2.8	31.3	100.0	9
Mjini Magharibi	40.8	19.0	4.7	35.5	100.0	40
Kaskazini Pemba	39.6	6.3	3.2	50.9	100.0	14
Kusini Pemba	35.8	13.6	7.5	43.2	100.0	13

(Continued…)

Table 4.7.2—*Continued*

Background characteristic	Timing of last sexual intercourse: Within the past 4 weeks	Within 1 year[1]	One or more years	Never had sexual intercourse	Total	Number of men
Education						
No education	66.2	17.8	4.8	11.2	100.0	283
Primary incomplete	52.4	18.1	7.3	22.2	100.0	568
Primary complete	65.9	18.5	4.4	11.2	100.0	1,673
Secondary+	46.8	21.8	6.9	24.6	100.0	990
Wealth quintile						
Lowest	63.4	18.8	4.0	13.8	100.0	598
Second	62.0	14.7	5.2	18.1	100.0	575
Middle	59.3	19.1	5.6	15.9	100.0	659
Fourth	59.1	16.9	6.1	17.9	100.0	764
Highest	51.5	24.6	6.4	17.5	100.0	918
Total 15-49	58.3	19.3	5.6	16.7	100.0	3,514

Note: Figures in parentheses are based on 25-49 unweighted cases.
[1] Excludes men who had sexual intercourse within the last 4 weeks
[2] Excludes men who are not currently married

Table 4.8 Age at first sexual intercourse among young people

Percentage of young women and young men age 15-24 who had sexual intercourse before age 15 and percentage of young women and young men age 18-24 who had sexual intercourse before age 18, according to background characteristics, Tanzania DHS-MIS 2015-16

	Women				Men			
Background characteristic	Percentage who had sexual intercourse before age 15	Number of respondents (15-24)	Percentage who had sexual intercourse before age 18	Number of respondents (18-24)	Percentage who had sexual intercourse before age 15	Number of respondents (15-24)	Percentage who had sexual intercourse before age 18	Number of respondents (18-24)
Age								
15-19	12.7	2,904	na	na	13.8	932	na	na
15-17	13.3	1,703	na	na	14.5	584	na	na
18-19	11.9	1,201	65.1	1,201	12.8	349	55.8	349
20-24	11.7	2,483	56.9	2,483	10.7	576	48.2	576
20-22	11.5	1,585	58.2	1,585	9.7	355	48.9	355
23-24	12.0	897	54.4	897	12.2	220	47.1	220
Marital status								
Never married	7.2	2,917	37.3	1,425	12.2	1,304	48.3	721
Ever married	18.2	2,470	73.6	2,259	15.1	204	60.9	203
Residence								
Urban	8.6	2,029	48.0	1,402	9.6	523	46.7	346
Rural	14.4	3,358	66.7	2,282	14.2	984	53.7	579
Tanzania Mainland/ Zanzibar								
Mainland	12.6	5,213	60.9	3,569	13.0	1,464	52.4	895
Urban	8.8	1,971	49.1	1,360	9.8	510	48.0	336
Rural	14.9	3,242	68.1	2,209	14.7	954	55.1	558
Zanzibar	2.6	174	18.2	115	0.4	44	11.0	30
Unguja	2.9	125	16.1	84	0.3	29	13.7	20
Pemba	1.9	49	23.8	31	0.8	14	5.7	10
Zone								
Western	16.0	550	73.3	374	14.2	156	57.0	91
Northern	7.4	619	40.9	407	28.5	165	57.3	104
Central	11.6	511	62.1	362	8.0	158	52.0	95
Southern Highlands	10.8	286	57.5	200	15.7	95	47.7	59
Southern	15.5	247	71.0	174	15.1	65	(51.3)	37
South West Highlands	14.2	495	61.7	326	8.4	124	44.1	69
Lake	14.5	1,550	67.6	1,054	9.1	458	48.3	287
Eastern	10.2	955	52.8	671	13.0	242	60.0	151
Zanzibar	2.6	174	18.2	115	0.4	44	11.0	30
Education								
No education	31.1	405	85.1	317	19.3	82	57.3	50
Primary incomplete	21.2	660	81.4	370	11.2	303	62.3	146
Primary complete	13.0	2,377	67.8	1,643	15.1	573	57.5	343
Secondary+	4.3	1,946	37.6	1,354	9.8	549	40.3	385
Total	12.2	5,387	59.5	3,684	12.6	1,508	51.1	924

na = Not available

Table 4.9 Premarital sexual intercourse and condom use during premarital sexual intercourse among youth

Among never-married women and men age 15-24, the percentage who have never had sexual intercourse, the percentage who had sexual intercourse in the past 12 months, and, among those who had premarital sexual intercourse in the past 12 months, the percentage who used a condom at the last sexual intercourse, by background characteristics, Tanzania DHS-MIS 2015-16

	Women					Men				
Background characteristic	Percentage who have never had sexual intercourse	Percentage who had sexual intercourse in the past 12 months	Number of never married respondents	Percentage who used a condom at last sexual intercourse	Number of respondents	Percentage who have never had sexual intercourse	Percentage who had sexual intercourse in the past 12 months	Number of never married respondents	Percentage who used a condom at last sexual intercourse	Number of respondents
Age										
15-19	64.0	27.8	2,170	37.1	604	55.1	36.0	916	34.6	330
15-17	72.6	21.7	1,492	32.3	323	66.3	26.7	583	27.1	155
18-19	45.2	41.4	678	42.6	281	35.6	52.3	333	41.3	174
20-24	28.1	57.2	746	35.8	427	15.8	71.1	388	49.5	276
20-22	29.9	56.8	528	34.4	300	16.9	71.1	275	52.4	195
23-24	23.8	58.0	219	39.1	127	13.2	71.3	113	42.7	81
Residence										
Urban	49.8	41.0	1,377	43.0	564	41.6	49.0	466	48.8	228
Rural	59.3	30.3	1,540	28.8	467	44.4	45.0	838	36.9	377
Tanzania Mainland/ Zanzibar										
Mainland	53.1	36.7	2,790	36.7	1,025	42.2	47.5	1,262	41.6	600
Urban	48.3	42.2	1,329	43.1	561	40.3	50.2	453	49.0	227
Rural	57.5	31.7	1,460	28.8	463	43.3	46.0	809	37.0	373
Zanzibar	92.0	5.0	127	(19.5)	6	79.3	14.6	42	(27.3)	6
Unguja	89.9	6.3	96	(20.4)	6	76.4	18.3	28	(32.8)	5
Pemba	98.6	0.9	31	*	0	85.2	7.4	14	*	1
Zone										
Western	64.1	27.7	237	31.7	66	46.2	37.8	133	(42.6)	50
Northern	61.7	30.8	411	36.8	126	31.7	50.6	148	43.7	75
Central	60.2	30.5	242	18.2	74	48.6	45.9	147	46.9	67
Southern Highlands	47.1	39.7	171	21.7	68	38.5	49.3	83	58.0	41
Southern	41.1	45.8	108	36.9	49	32.1	60.8	56	(38.2)	34
South West Highlands	49.8	37.8	262	43.6	99	54.0	37.5	108	(40.4)	41
Lake	53.0	35.5	745	31.2	265	43.3	46.2	368	37.9	170
Eastern	45.7	45.3	614	49.0	278	39.2	55.5	219	37.6	121
Zanzibar	92.0	5.0	127	(19.5)	6	79.3	14.6	42	(27.3)	6
Education										
No education	53.0	36.5	74	(29.7)	27	45.3	46.6	64	(15.8)	30
Primary incomplete	62.7	24.7	318	20.7	79	46.3	42.3	264	15.3	112
Primary complete	50.4	39.0	1,064	32.9	415	39.6	50.8	464	42.6	236
Secondary+	56.4	34.9	1,461	42.3	510	45.2	44.7	512	56.3	229
Total	54.8	35.3	2,917	36.5	1,031	43.4	46.5	1,304	41.4	606

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] For this table, the following responses are not considered a source for condoms: friends, family members, and home

FERTILITY 5

Key Findings

- ***Total fertility rate:*** The total fertility rate has declined significantly over the past decade, from 5.7 children in the 2004-05 TDHS to the current TFR of 5.2 children.
- ***Patterns of fertility:*** Fertility levels are markedly lower among urban women, highly educated women, and women in wealthy households compared with other women.
- ***Birth intervals:*** The median birth interval has lengthened to 35 months, up from 33 months over the previous decade.
- ***Age at first birth:*** The median age at first birth is 19.8 among young people age 20-49. Increases have been incremental from a median age of 19.0 in 1991-92 and 19.5 in 2010.
- ***Teenage childbearing:*** The percentage of women age 15-19 who have either had a birth or are pregnant is 27%; it has increased from 26% in 2004-05 and 23% in 2010.

The number of children that a woman bears depends on many factors, including the age she begins childbearing, how long she waits between births, and her fecundity. Postponing first births and extending the interval between births have played a role in reducing fertility levels in many countries. These factors also have positive health consequences. In contrast, short birth intervals (of less than 24 months) can lead to harmful outcomes for both newborns and their mothers, such as preterm birth, low birth weight, and death. Childbearing at a very young age is associated with an increased risk of complications during pregnancy and childbirth and higher rates of neonatal mortality.

The National Population Policy (2006) notes that in Tanzania fertility and mortality are the most important factors influencing population growth at the national level. Fertility regulation interventions in Tanzania were stipulated in two key health sector documents. The Health Sector Strategic Plan III stipulated that, between 2009 and 2015, youth-friendly reproductive health services would be promoted, and availability of family planning methods and child health interventions would increase. The National Road Map Strategic Plan to Accelerate Reduction of Maternal, Newborn and Child Deaths in Tanzania (2008-2015) notes that lengthening the intervals between pregnancies can prevent 20% to 35% of all maternal deaths. The National Road Map Strategic Plan focuses on improving access to family planning services through implementation of community-based programs in districts throughout Tanzania.

This chapter describes the current level of fertility in the country and some of its proximate determinants. It presents information on the total fertility rate, birth interval lengths, insusceptibility to pregnancy (due to postpartum amenorrhoea, postpartum abstinence, or menopause), age at first birth, and teenage childbearing.

5.1 CURRENT FERTILITY

Total fertility rate

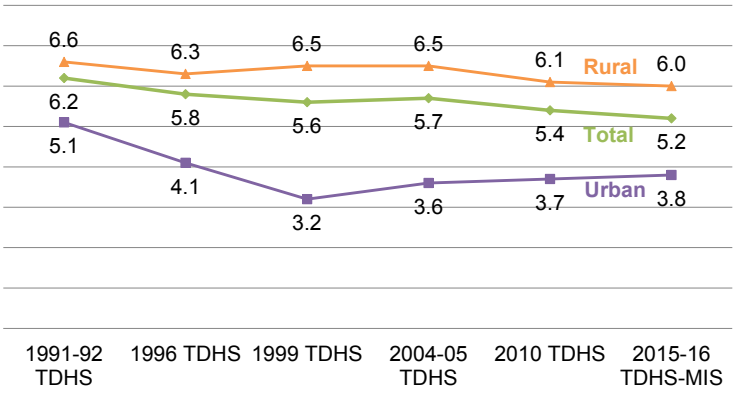
The average number of children a woman would have by the end of her childbearing years if she bore children at the current age-specific fertility rates. Age-specific fertility rates are calculated for the 3 years before the survey, based on detailed birth histories provided by women.

Sample: Women age 15-49

The total fertility rate (TFR) in Tanzania is 5.2 children per woman **(Table 5.1)**. Childbearing peaks at age 20-24 at 236 births per 1,000 women, and drops steadily thereafter, reaching 15 births per 1,000 women at age 45-49. Rural women have 2.2 more children, on average, than urban women (6.0 versus 3.8 children).

Figure 5.1 **Trends fertility by residence**

TFR for the 3 years before each survey



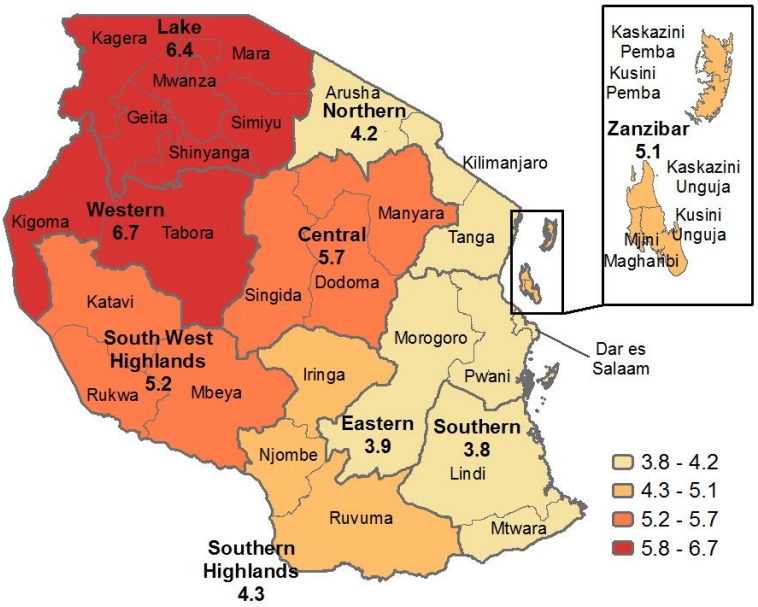
Trends: The TFR declined by 1 child over the last decade, from 5.7 to 5.2 children per woman **(Figure 5.1)**. However, while the TFR among rural women has declined from 6.5 to 6.0 children, the TFR among urban women has increased from 3.6 to 3.8 children.

Patterns by background characteristics

- There is no longer much difference between the total fertility rate in Tanzania Mainland (5.2 children) and Zanzibar (5.1 children); however, marked differences exist across zones. The TFR ranges from lows of 3.8 children in Southern Zone and 3.9 children in Eastern Zone to highs of 6.4 children in Lake Zone and 6.7 children in Western Zone **(Figure 5.2)**.
- The universal pattern of decreasing fertility with increasing education is illustrated in Tanzania. Women with no education have as many as 3.3 more children than women with secondary or higher education (6.9 versus 3.6 children) **(Table 5.2)**.

Figure 5.2 **Fertility by zone**

Total fertility rate for the 3 years before the survey

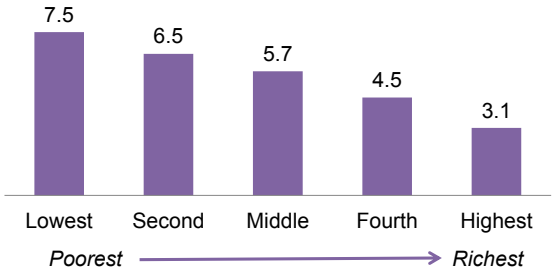


- Fertility also declines dramatically with increasing wealth. Women in the lowest wealth quintile have 4.4 more children than women in the highest wealth quintile (7.5 versus 3.1 children) **(Figure 5.3)**.

Table 5.3.1 presents age-specific fertility rates for 5-year periods preceding the survey, by mother's age at the time of the birth. Fertility has been falling among all age groups, and especially among ages 30 and older. More information on trends in age-specific fertility rates across Tanzania DHS surveys is found in **Table 5.3.2.**

Figure 5.3 **Total fertility rate by wealth index**

TFR for the 3 years preceding the survey



5.2 CHILDREN EVER BORN AND LIVING

The survey also collected data on the number of children ever born to women age 15-49 and the number still living. Of the average of 6.0 children ever born to women age 45-49, 5.1 survived to the time of the survey. For more information on children ever born and living, by mother's age, see **Table 5.4**.

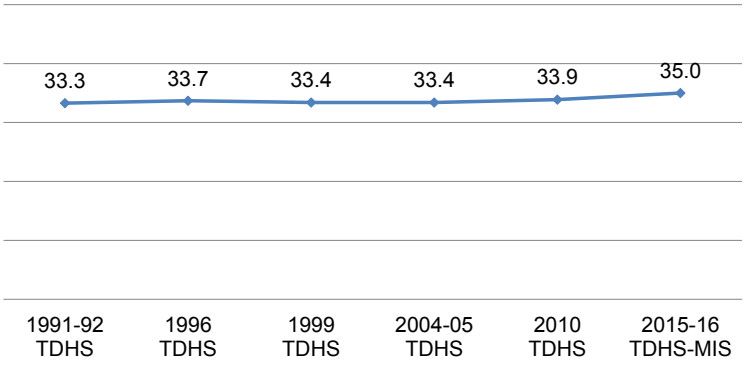
5.3 BIRTH INTERVALS

Median birth interval
Number of months since the preceding birth by which half of children are born
Sample: Non-first births in the 5 years before the survey

Short birth intervals, typically thought of as intervals of less than 24 months, place newborns and their mothers at increased health risk. The median birth interval length in Tanzania is 35 months, thus, half of non-first births occur within three years after a previous birth. One in five births (19%) is born within two years of the previous birth. One in three births (34%) occur within 24-35 months after the previous birth, and nearly one in every two births (48%) occur at least three years after the previous birth **(Table 5.5 and Figure 5.4)**.

Figure 5.4 **Trends in birth interval**

Median number of months since preceding birth



Trends: Birth intervals have increased modestly over the last decade in Tanzania, with the median interval lengthening by about 1.6 months between 2004-05 and 2015-16 (from 33.4 to 35.0 months). Nevertheless, the percentage of children born too soon (after an interval of less than 24 months) has increased from 16% to 19% over the last decade.

Patterns by background characteristics

- Births to older women occur after longer intervals than births to younger women. The median birth interval among women age 40-49 is nearly 15 months longer than among women age 15 to 19 (39.0 months versus 24.1 months).

- The median birth interval is 9 months longer if the preceding birth is living than if the preceding birth died.
- The median birth interval is longer by 4.6 months for lower birth orders (2-3 children) compared to higher birth orders (7 or more children), 36 months versus 31.4 months.
- The median interval between urban births is 10 months longer than it is between rural births (42.9 versus 33.2 months).
- The median birth interval is longer in the Tanzania Mainland (35.0 months) than in Zanzibar (31.8 months) and it ranges from 29.6 months in Lake Zone to almost double that in Southern Zone (57.6 months). Across regions, the median birth interval ranges from 27.2 months in Simiyu region to 58.0 months in Mtwara.
- Births to women in wealthier households occur after longer birth intervals. The median birth interval in the highest wealth quintile is 15.6 months longer than in the lowest quintile (46.3 versus 30.7 months).

5.4 INSUSCEPTIBILITY TO PREGNANCY

Median duration of postpartum amenorrhoea

Number of months after childbirth by which time half of women have begun menstruating

Sample: Women who gave birth in the 3 years before the survey

Median duration of postpartum insusceptibility

Number of months after childbirth by which time half of women are no longer protected against pregnancy either by postpartum amenorrhoea or abstinence from sex

Sample: Women who gave birth in the 3 years before the survey

Postpartum amenorrhoea refers to the interval between childbirth and the return of menstruation. The length and intensity of breastfeeding influence the duration of amenorrhoea, which offers protection from conception. Postpartum abstinence refers to the period between childbirth and the time when a woman resumes sexual activity. Almost all women are insusceptible to pregnancy during the first 2 months after a birth, and continued postpartum amenorrhoea and abstinence from sexual intercourse may protect them from pregnancy for longer periods.

Among births in the 3 years preceding the survey, the median duration of postpartum amenorrhoea is 8.4 months, and the median duration of abstinence from sexual intercourse is 3.9 months after giving birth. Women are insusceptible to pregnancy after childbirth for a median of 10.0 months **(Table 5.6)**.

Trends: A comparison of the 2010 TDHS data with the 2015-16 TDHS-MIS data indicates that there has been a decrease in the median duration of postpartum amenorrhoea (9.8 months to 8.4 months, respectively). In contrast, the median duration of postpartum abstinence is nearly identical between the two surveys (3.8 and 3.9 months, respectively). Overall, the median duration of insusceptibility has declined from 11.4 months in the 2010 TDHS to 10.0 months in the 2015-16 TDHS-MIS.

Patterns by background characteristics

- Older women have a longer duration of postpartum amenorrhoea: 9.8 months among women age 30-49 versus 7.6 months among women age 15-29. Older and younger women have a similar median duration of postpartum abstinence (3.9 and 3.8 months) **(Table 5.7)**.

- Rural women have a longer period of postpartum amenorrhoea than urban women (9.5 months and 6.0 months, respectively) and a longer median period of postpartum insusceptibility than urban women (10.9 months and 7.6 months, respectively). However, there is only about a half month difference in the median length of postpartum abstinence between urban and rural women (4.2 months and 3.7 months, respectively). **(Table 5.7)**.

- The duration of postpartum amenorrhoea decreases as education of the mother increases, falling from 10.4 months among women with no education, to 5.8 months for women with secondary or higher education.

- The duration of postpartum amenorrhoea also decreases as wealth increases, falling from 10.1 months in the lowest quintile and 11.6 months in the second quantile to only 4.6 months for women in the highest quintile. **(Table 5.7)**.

Menopause

Women are considered to have reached menopause if they are neither pregnant nor postpartum amenorrhoeic and have not had a menstrual period in the 6 months before the survey, or if they report being menopausal.

Sample: Women age 30-49

Once women reach menopause, they are no longer able to become pregnant. Overall, 8% of women age 30-49 are menopausal. As expected, the percentage of women who are menopausal increases with age, ranging from 2% of women age 30-34 to 35% of women age 48-49. **(Table 5.8)**. Overall, the percentage of women age 30-49 who are menopausal has slightly decreased from 9% in both 2004-05 and 2010 to 8% in 2015-16.

5.5 Age at First Birth

Median age at first birth

Age by which half of women have had their first child.

Sample: Women age 25-49

The age at which childbearing commences is an important determinant of the overall level of fertility as well as the health and welfare of the mother and the child. In some societies, postponement of first births due to an increase in age at marriage has contributed to overall fertility decline. A rise in the median age at first birth is a typical sign of transition to lower fertility levels. Government guidelines advise women to start child bearing at age 20 or older. The results indicate that, in Tanzania, the median age at first birth is 19.8 years among women age 25-49. This means that half of women give birth for the first time before age 20. While many women are still beginning childbearing before age 20, the median age at first birth has been slowly increasing over time, from age 18.8 in 1991-92, to 19.4 in 2004-05, to 19.8 in 2015-16.

Patterns by background characteristics among women age 25-49

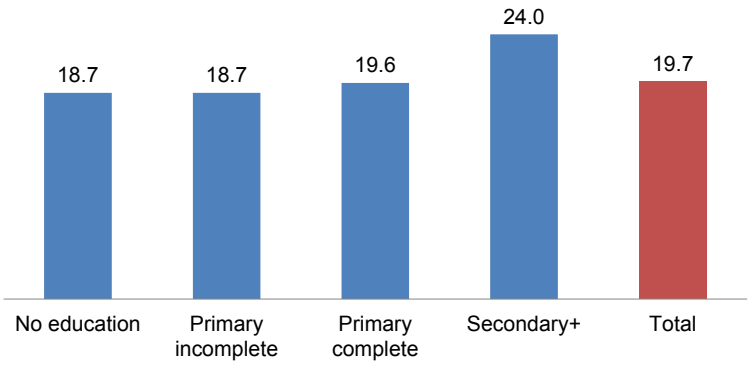
- Women in urban areas generally begin childbearing a year later than rural women (20.5 versus 19.4 years) **(Table 5.10)**.

- In Mainland Tanzania, the median age at first birth ranges from 18.9 years in Southern Zone to 20.5 in the Northern zone. In Zanzibar, the median age at first birth is relatively high 21.7 years.

- Women with secondary education or higher begin childbearing slightly more than 5 years later on average than women with no education (24.0 versus 18.7 years) **(Figure 5.5)**.
- Women in the highest wealth quintile have their first birth 2 years later, on average, than women in the lowest quintile (21.4 versus 19.2 years).

Figure 5.5 **Median age at first birth by education**

Median age at first birth among women age 25-49



5.6 TEENAGE CHILDBEARING

Teenage childbearing

Percentage of women age 15-19 who have given birth or are pregnant with their first child

Sample: Women age 15-19

Teenage pregnancy is a major health concern because of its association with higher morbidity and mortality for both the mother and child. Childbearing during the teenage years frequently has adverse social consequences, particularly for educational attainment, because women who become mothers in their teens are more likely to curtail their education. Results show that in Tanzania, 27% of women age 15-19 have begun childbearing: 21% have given birth, and an additional 6% are pregnant with their first child **(Table 5.11)**.

Trends: Teenage childbearing has been relatively steady over the last decade. The percentage of teenagers who had a child or who were pregnant was 26% in 2004-05, after which it decreased to 23% in 2010, then increased to 27% in 2015-16.

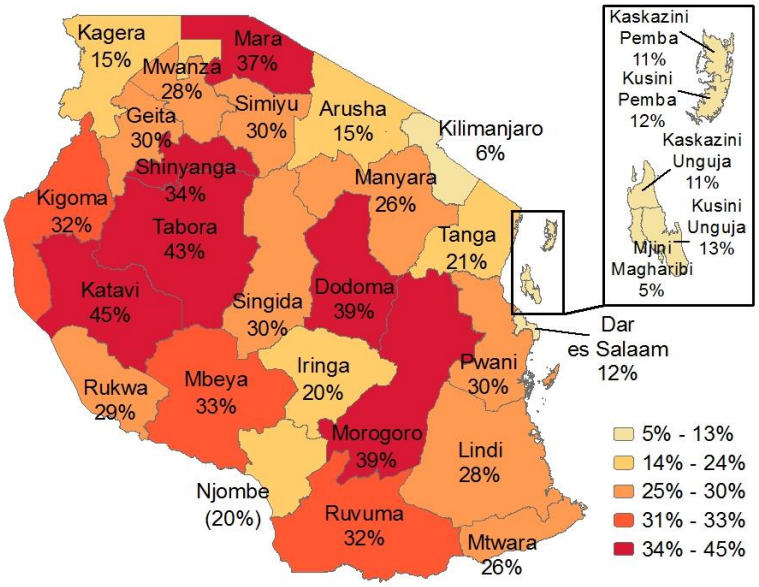
Patterns by background characteristics

- Teenagers in rural areas are considerably more likely to have begun childbearing than their urban peers: 32% of rural teenagers have had a live birth or are pregnant, compared with 19% of urban teenagers.
- Teenage childbearing is much higher in Tanzania Mainland than in Zanzibar; the percentage of teenagers who have had a child or are pregnant is 27% in the Tanzania Mainland, more than three times higher than in Zanzibar (8%).

- The Western Zone and South West Highlands Zone have the highest levels of teenage childbearing in Tanzania (38% and 34%, respectively); whereas Zanzibar and Northern Zone have the lowest rates of teenage childbearing (8% and 16% respectively) **(Figure 5.6).**

Figure 5.6 Teenage childbearing by region

Percentage of women age 15-19 who have begun childbearing



- Differences in teenage childbearing rates exist across regions, ranging from a low of 5% in Mjini Magharibi region and 6% in Kilimanjaro region to a high of 45% in Katavi and 43% in Tabora regions.
- Teenage childbearing decreases drastically with increasing education level of young women, from 52% among young women with no education to 10% among young women with secondary or higher education.
- Teenage childbearing is much less common among young women in the wealthiest households. Teenagers in the lowest wealth quintile are more than three times more likely to have started childbearing than those in the highest quintile (42% versus 12%).

LIST OF TABLES

For more information on fertility levels and some of the determinants of fertility, see the following tables:

- **Table 5.1 Current fertility**
- **Table 5.2 Fertility by background characteristics**
- **Table 5.3.1 Trends in age-specific fertility rates**
- **Table 5.3.2 Trends in age-specific and total fertility rates**
- **Table 5.4 Children ever born and living**
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- **Table 5.7 Median duration of amenorrhoea, postpartum abstinence, and postpartum insusceptibility**
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Table 5.1 Current fertility

Age-specific and total fertility rates, the general fertility rate, and the crude birth rate for the 3 years preceding the survey, by residence, Tanzania DHS-MIS 2015-16

	Tanzania Mainland				
Age group	Urban	Rural	Total	Zanzibar	Total
15-19	83	167	135	47	132
20-24	176	277	238	184	236
25-29	197	255	233	255	234
30-34	161	222	199	223	200
35-39	95	173	147	183	147
40-44	39	90	75	85	75
45-49	9	16	14	38	15
TFR(15-49)	3.8	6.0	5.2	5.1	5.2
GFR	133	204	178	155	178
CBR	34.8	38.2	37.2	36.3	37.2

Notes: Age-specific fertility rates are per 1,000 women. Rates for age group 45-49 may be slightly biased due to truncation. Rates are for the period 1-36 months prior to interview.
TFR = Total fertility rate expressed per woman
GFR = General fertility rate expressed per 1,000 women age 15-44
CBR = Crude birth rate, expressed per 1,000 population

Table 5.2 Fertility by background characteristics

Total fertility rate for the 3 years preceding the survey, percentage of women age 15-49 currently pregnant, and mean number of children ever born to women age 40-49, by background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Total fertility rate	Percentage of women age 15-49 currently pregnant	Mean number of children ever born to women age 40-49
Residence			
Urban	3.8	7.1	4.4
Rural	6.0	9.4	6.3
Tanzania Mainland/ Zanzibar			
Mainland	5.2	8.6	5.7
Urban	3.8	7.1	4.4
Rural	6.0	9.5	6.3
Zanzibar	5.1	7.6	5.9
Unguja	4.4	5.8	5.2
Pemba	6.8	12.3	7.8
Zone			
Western	6.7	11.8	6.7
Northern	4.2	5.7	4.8
Central	5.7	10.0	6.1
Southern Highlands	4.3	6.9	5.0
Southern	3.8	6.9	4.7
South West Highlands	5.2	9.1	5.7
Lake	6.4	10.3	6.9
Eastern	3.9	6.3	4.3
Zanzibar	5.1	7.6	5.9
Education			
No education	6.9	10.3	6.6
Primary incomplete	6.2	10.5	6.1
Primary complete	5.3	8.6	5.7
Secondary+	3.6	6.4	3.6
Wealth quintile			
Lowest	7.5	11.8	7.0
Second	6.5	10.4	6.3
Middle	5.7	8.7	6.3
Fourth	4.5	7.5	5.3
Highest	3.1	6.1	3.8
Total	5.2	8.6	5.7

Note: Total fertility rates are for the period 1-36 months prior to interview.

Table 5.3.1 Trends in age-specific fertility rates

Age-specific fertility rates for 5-year periods preceding the survey, by mother's age at the time of the birth, Tanzania DHS-MIS 2015-16

	Number of years preceding survey			
Mother's age at birth	0-4	5-9	10-14	15-19
15-19	126	130	134	133
20-24	236	244	251	262
25-29	235	242	240	268
30-34	199	220	217	233
35-39	150	169	183	*
40-44	77	104	*	*
45-49	18	*	*	*

Note:
- Age-specific fertility rates are per 1,000 women. Estimates in brackets are truncated. Rates exclude the month of interview.
- An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 5.3.2 Trends in age-specific and total fertility rates

Age-specific and total fertility rates (TFRs) for the 5-year period preceding several surveys, Tanzania DHS-MIS 2015-16

Mother's age at birth	1991-92 DHS	1996 DHS	1999 DHS	2004-05 TDHS	2010 TDHS	2015-16 TDHS
15-19	144	135	138	132	116	132
20-24	282	260	268	274	260	236
25-29	270	255	240	254	249	234
30-34	231	217	213	218	207	200
35-39	177	167	138	156	161	147
40-44	108	87	78	79	72	75
45-49	37	42	37	18	22	15
TFR 15-49	6.2	5.8	5.6	5.7	5.4	5.2

Note: Age-specific fertility rates are per 1,000 women.

Table 5.4 Children ever born and living

Percent distribution of all women and currently married women age 15-49 by number of children ever born, mean number of children ever born, and mean number of living children, according to age group, Tanzania DHS-MIS 2015-16

	Number of children ever born														
Age	0	1	2	3	4	5	6	7	8	9	10+	Total	Number of women	Mean number of children ever born	Mean number of living children
ALL WOMEN															
Age															
15-19	79.0	18.2	2.6	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	2,904	0.24	0.22
20-24	28.6	36.8	22.8	9.4	2.1	0.2	0.1	0.0	0.0	0.0	0.0	100.0	2,483	1.20	1.13
25-29	9.4	18.0	27.0	20.8	14.6	6.8	2.6	0.6	0.1	0.1	0.0	100.0	2,125	2.48	2.30
30-34	4.0	7.3	18.3	20.9	19.4	14.4	9.8	3.5	1.6	0.6	0.2	100.0	1,752	3.60	3.28
35-39	2.9	6.1	10.5	14.7	14.2	15.8	13.1	10.8	6.5	3.5	2.0	100.0	1,641	4.65	4.18
40-44	2.5	4.7	8.8	10.9	11.7	12.9	12.9	10.7	9.6	6.4	8.7	100.0	1,364	5.48	4.79
45-49	1.4	3.7	5.7	8.6	11.4	12.8	14.2	13.0	10.2	7.4	11.6	100.0	997	6.01	5.12
Total	25.4	16.2	14.2	11.5	9.1	7.3	5.7	4.0	2.8	1.7	2.0	100.0	13,266	2.74	2.46
CURRENTLY MARRIED WOMEN															
Age															
15-19	40.6	48.0	10.5	0.7	0.2	0.0	0.0	0.0	0.0	0.0	0.0	100.0	668	0.72	0.67
20-24	11.7	40.3	30.9	13.3	3.5	0.3	0.0	0.0	0.0	0.0	0.0	100.0	1,479	1.58	1.48
25-29	4.6	14.9	27.7	23.7	17.2	8.2	2.7	0.7	0.1	0.1	0.0	100.0	1,616	2.74	2.56
30-34	2.1	5.6	17.0	22.0	19.6	15.8	11.2	4.1	1.6	0.7	0.2	100.0	1,378	3.81	3.48
35-39	2.1	4.3	9.3	14.0	14.0	15.8	15.0	11.5	7.6	4.0	2.3	100.0	1,308	4.92	4.45
40-44	1.1	4.0	8.2	10.8	11.1	12.1	13.4	11.6	10.8	6.9	9.9	100.0	1,033	5.76	5.07
45-49	0.7	2.6	4.3	9.1	11.4	11.3	14.0	14.6	10.8	8.5	12.9	100.0	728	6.28	5.41
Total	7.2	16.5	17.6	15.2	12.0	9.4	7.7	5.4	3.8	2.4	2.8	100.0	8,210	3.59	3.23

Table 5.5 Birth intervals

Percent distribution of non-first births in the five years preceding the survey by number of months since preceding birth, and median number of months since preceding birth, according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Months since preceding birth						Total	Number of non-first births	Median number of months since preceding birth
	7-17	18-23	24-35	36-47	48-59	60+			
Age									
15-19	14.2	35.0	39.5	8.1	2.6	0.7	100.0	88	24.1
20-29	7.3	17.3	37.8	19.0	9.3	9.3	100.0	3,211	30.7
30-39	3.9	9.8	30.6	20.2	12.2	23.2	100.0	3,241	38.6
40-49	3.7	10.6	29.6	18.4	12.2	25.6	100.0	1,016	39.0
Sex of preceding birth									
Male	5.2	14.1	32.6	20.0	10.9	17.1	100.0	3,804	35.2
Female	5.7	12.7	34.6	18.6	10.8	17.6	100.0	3,751	34.7
Survival of preceding birth									
Living	4.1	13.0	34.0	19.9	11.0	18.0	100.0	6,956	35.6
Dead	21.1	18.7	28.8	12.6	8.9	9.9	100.0	599	26.6
Birth order									
2-3	5.7	13.1	31.3	18.8	10.7	20.5	100.0	3,433	36.0
4-6	4.8	12.3	33.7	20.2	11.8	17.2	100.0	2,795	35.7
7+	6.1	16.8	39.4	18.6	9.4	9.6	100.0	1,328	31.4
Residence									
Urban	5.1	9.0	24.1	18.2	13.7	29.9	100.0	1,869	42.9
Rural	5.5	14.9	36.7	19.7	10.0	13.2	100.0	5,687	33.2
Tanzania Mainland/ Zanzibar									
Mainland	5.4	13.3	33.6	19.4	10.9	17.5	100.0	7,350	35.0
Urban	5.0	8.9	23.8	18.2	13.8	30.2	100.0	1,818	43.3
Rural	5.5	14.7	36.8	19.8	9.9	13.3	100.0	5,532	33.3
Zanzibar	7.2	18.2	35.2	16.6	9.9	12.9	100.0	205	31.8
Unguja	5.6	14.4	32.3	19.0	11.1	17.6	100.0	124	35.4
Pemba	9.6	24.0	39.8	13.0	8.1	5.6	100.0	81	27.9
Zone									
Western	5.9	16.8	42.4	19.5	6.6	8.7	100.0	950	30.5
Northern	3.4	9.7	29.2	20.1	13.1	24.5	100.0	674	39.2
Central	4.6	11.2	28.9	23.2	14.3	17.8	100.0	859	37.8
Southern Highlands	5.0	5.9	27.4	24.9	15.1	21.7	100.0	390	40.6
Southern	2.3	3.0	16.6	17.2	14.6	46.4	100.0	267	57.6
South West Highlands	5.2	10.4	31.8	22.5	14.6	15.5	100.0	721	37.0
Lake	7.7	18.6	41.3	16.3	7.5	8.6	100.0	2,490	29.6
Eastern	2.2	8.6	21.0	19.5	13.6	35.1	100.0	1,000	47.2
Zanzibar	7.2	18.2	35.2	16.6	9.9	12.9	100.0	205	31.8
Region									
Dodoma	2.1	9.5	26.7	21.7	16.7	23.4	100.0	315	41.7
Arusha	3.7	8.9	24.6	24.1	15.1	23.6	100.0	261	40.6
Kilimanjaro	4.3	12.7	28.6	18.5	13.3	22.6	100.0	117	37.7
Tanga	2.9	9.3	33.4	17.2	11.3	25.9	100.0	296	38.1
Morogoro	0.5	8.6	23.2	24.0	15.3	28.4	100.0	336	45.3
Pwani	2.1	7.8	24.6	23.8	13.5	28.2	100.0	160	43.4
Dar es Salaam	3.3	8.8	18.4	15.1	12.6	41.7	100.0	505	50.3
Lindi	2.3	5.5	21.5	16.0	7.5	47.2	100.0	121	54.0
Mtwara	2.2	0.9	12.4	18.2	20.5	45.7	100.0	146	58.0
Ruvuma	5.6	2.6	26.1	26.3	14.9	24.5	100.0	172	42.5
Iringa	6.3	11.0	27.3	21.1	17.1	17.2	100.0	118	38.0
Mbeya	4.3	8.7	24.2	24.3	19.9	18.6	100.0	393	42.0
Singida	5.8	12.1	32.9	23.5	10.2	15.5	100.0	271	35.7
Tabora	5.6	16.5	42.3	19.5	8.2	8.1	100.0	543	30.7
Rukwa	6.6	10.7	41.2	19.9	8.0	13.6	100.0	221	32.9
Kigoma	6.4	17.3	42.6	19.5	4.6	9.6	100.0	408	30.2
Shinyanga	6.1	20.9	40.5	16.1	4.8	11.6	100.0	352	29.1
Kagera	4.5	13.5	45.8	18.6	7.8	9.9	100.0	430	32.4
Mwanza	10.4	15.6	36.8	19.8	8.2	9.1	100.0	568	30.5
Mara	9.7	20.2	37.0	16.2	8.8	8.1	100.0	371	29.1
Manyara	6.2	12.2	27.6	24.8	15.7	13.5	100.0	272	37.2
Njombe	2.4	5.6	29.6	26.9	13.1	22.4	100.0	100	39.7
Katavi	5.5	15.6	40.6	21.5	8.5	8.3	100.0	108	32.2
Simiyu	6.8	25.8	44.7	11.7	6.6	4.4	100.0	388	27.2
Geita	7.9	17.8	44.3	13.4	8.5	8.1	100.0	380	29.1
Kaskazini Unguja	8.0	16.4	40.3	17.4	10.4	7.6	100.0	37	31.4
Kusini Unguja	3.4	11.7	27.1	21.9	15.6	20.3	100.0	20	40.8
Mjini Magharibi	5.0	14.1	29.5	19.1	10.1	22.3	100.0	67	36.7
Kaskazini Pemba	10.2	22.4	42.0	10.6	9.0	5.8	100.0	43	28.0
Kusini Pemba	8.9	25.8	37.3	15.8	7.0	5.3	100.0	38	27.8

(Continued…)

Table 5.5—*Continued*

Background characteristic	Months since preceding birth						Total	Number of non-first births	Median number of months since preceding birth
	7-17	18-23	24-35	36-47	48-59	60+			
Education									
No education	5.3	14.0	38.4	20.8	9.5	12.1	100.0	1,876	33.3
Primary incomplete	5.7	15.4	37.3	18.0	9.9	13.6	100.0	1,068	32.5
Primary complete	5.4	13.0	31.5	18.7	12.0	19.4	100.0	3,939	36.1
Secondary+	5.7	11.3	26.5	20.8	9.8	26.0	100.0	672	38.8
Wealth quintile									
Lowest	5.7	16.5	42.2	18.3	8.2	9.1	100.0	1,952	30.7
Second	6.4	15.7	38.2	19.1	8.9	11.5	100.0	1,692	32.3
Middle	5.0	13.1	32.1	23.1	12.6	14.2	100.0	1,501	35.9
Fourth	5.6	10.1	26.3	18.5	13.8	25.6	100.0	1,353	39.9
Highest	3.6	8.8	21.9	17.3	12.8	35.8	100.0	1,058	46.3
Total	5.4	13.4	33.6	19.3	10.9	17.4	100.0	7,556	35.0

Note: First-order births are excluded. The interval for multiple births is the number of months since the preceding pregnancy that ended in a live birth.

Table 5.6 Postpartum amenorrhea, abstinence and insusceptibility

Percentage of births in the three years preceding the survey for which mothers are postpartum amenorrhoeic, abstaining, and insusceptible, by number of months since birth, and median and mean durations, Tanzania DHS-MIS 2015-16

Months since birth	Percentage of births for which the mother is:			Number of births
	Amenorrhoeic	Abstaining	Insusceptible[1]	
< 2	91.2	87.1	97.0	392
2-3	76.5	59.0	86.6	355
4-5	71.0	43.8	80.7	288
6-7	64.1	26.9	71.7	390
8-9	41.4	22.0	51.6	312
10-11	40.3	21.5	48.8	328
12-13	34.7	12.3	41.1	363
14-15	23.0	10.9	31.5	390
16-17	22.0	9.6	27.5	389
18-19	13.3	6.0	19.3	348
20-21	11.7	6.7	17.4	343
22-23	6.5	6.1	11.4	366
24-25	5.1	3.3	8.4	328
26-27	2.7	2.6	5.0	332
28-29	1.6	2.3	3.9	327
30-31	2.0	1.6	3.6	313
32-33	1.7	0.4	1.7	300
34-35	1.3	2.7	4.0	287
Total	29.3	18.7	35.0	6,151
Median	8.4	3.9	10.0	na
Mean	10.5	6.8	12.5	na

Note: Estimates are based on status at the time of the survey.
na = Not applicable
[1] Includes births for which mothers are either still amenorrhoeic or still abstaining (or both) following birth

Table 5.7 Median duration of amenorrhea, postpartum abstinence and postpartum insusceptibility

Median number of months of postpartum amenorrhea, postpartum abstinence, and postpartum insusceptibility following births in the three years preceding the survey, by background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Postpartum amenorrhea	Postpartum abstinence	Postpartum insusceptibility[1]
Mother's age			
15-29	7.6	3.8	9.4
30-49	9.8	3.9	11.2
Residence			
Urban	6.0	4.2	7.6
Rural	9.5	3.7	10.9
Tanzania Mainland/ Zanzibar			
Mainland	8.5	3.9	10.0
Urban	6.0	4.2	7.6
Rural	9.5	3.8	11.1
Zanzibar	6.0	2.5	7.3
Unguja	7.4	2.9	8.5
Pemba	4.3	*	4.8
Zone			
Western	8.9	3.3	9.7
Northern	6.3	5.5	10.9
Central	8.8	4.9	9.8
Southern Highlands	7.5	7.9	12.7
Southern	(11.3)	(11.6)	(14.1)
South West Highlands	8.9	3.0	11.0
Lake	9.4	3.0	9.9
Eastern	6.3	4.2	8.5
Zanzibar	6.0	2.5	7.3
Education			
No education	10.4	3.9	11.9
Primary incomplete	9.5	3.3	10.4
Primary complete	8.5	3.9	10.3
Secondary+	5.8	4.0	7.1
Wealth quintile			
Lowest	10.1	4.3	11.9
Second	11.6	3.4	13.1
Middle	8.5	3.4	10.1
Fourth	7.0	4.4	8.6
Highest	4.9	3.5	6.4
Total	8.4	3.9	10.0

Note: Medians are based on the status at the time of the survey (current status)
[1] Includes births for which mothers are either still amenorrhoeic or still abstaining (or both) following birth
Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 5.8 Menopause

Percentage of women age 30-49 who are menopausal, by age, Tanzania DHS-MIS 2015-16

Age	Percentage menopausal[1]	Number of women
Age		
30-34	2.1	1,752
35-39	3.2	1,641
40-41	4.5	648
42-43	9.2	529
44-45	10.5	451
46-47	27.0	401
48-49	35.0	332
Total	7.6	5,754

[1] Percentage of all women who are not pregnant and not postpartum amenorrhoeic whose last menstrual period occurred six or more months preceding the survey

Table 5.9 Age at first birth

Percentage of women age 15-49 who gave birth by exact ages, percentage who have never given birth, and median age at first birth, according to current age, Tanzania DHS-MIS 2015-16

	Percentage who gave birth by exact age					Percentage who have never given birth	Number of women	Median age at first birth
Current age	15	18	20	22	25			
Age								
15-19	0.7	na	na	na	na	79.0	2,904	a
20-24	2.2	22.4	49.8	na	na	28.6	2,483	a
25-29	2.2	24.7	52.3	70.1	84.2	9.4	2,125	19.8
30-34	3.1	27.2	54.4	72.2	85.5	4.0	1,752	19.7
35-39	2.5	23.6	51.9	71.5	84.7	2.9	1,641	19.9
40-44	3.7	29.7	54.8	74.2	88.0	2.5	1,364	19.5
45-49	3.7	28.2	58.2	77.1	88.2	1.4	997	19.5
20-49	2.8	25.4	52.9	na	na	10.4	10,362	19.8
25-49	2.9	26.3	53.9	72.4	85.8	4.7	7,879	19.7

na = Not applicable due to censoring
a = Omitted because less than 50 percent of women had a birth before reaching the beginning of the age group.

Table 5.10 Median age at first birth

Median age at first birth among women age 20-49 years by five year age group, according to background characteristics, Tanzania DHS-MIS 2015-16

	Age						Women age 20-49	Women age 25-49
Background characteristic	20-24	25-29	30-34	35-39	40-44	45-49		
Residence								
Urban	a	20.9	20.8	20.5	20.3	19.6	a	20.5
Rural	19.4	19.5	19.2	19.6	19.2	19.4	19.4	19.4
Tanzania Mainland/ Zanzibar								
Mainland	19.9	19.8	19.6	19.8	19.5	19.5	19.7	19.7
Urban	a	20.8	20.7	20.4	20.2	19.6	a	20.4
Rural	19.3	19.4	19.2	19.6	19.2	19.4	19.4	19.4
Zanzibar	a	24.4	22.1	21.0	20.6	19.9	a	21.7
Unguja	a	24.9	22.7	21.2	21.3	20.1	a	22.2
Pemba	a	22.0	21.0	20.7	19.7	19.5	a	20.6
Zone								
Western	19.3	19.8	19.1	19.7	19.1	19.1	19.4	19.5
Northern	a	21.0	20.1	20.1	21.1	20.0	a	20.5
Central	a	19.7	19.5	20.3	19.9	19.4	19.8	19.7
Southern Highlands	19.8	20.0	19.7	19.3	20.4	20.1	19.8	19.8
Southern	18.9	19.7	18.6	19.3	18.4	18.5	18.9	18.9
South West Highlands	19.8	19.8	19.7	20.0	19.0	19.2	19.6	19.6
Lake	19.4	19.2	19.0	19.4	18.9	19.5	19.2	19.2
Eastern	a	20.3	21.3	20.5	19.6	19.5	a	20.3
Zanzibar	a	24.4	22.1	21.0	20.6	19.9	a	21.7
Education								
No education	18.1	18.2	18.5	19.1	18.9	19.7	18.6	18.7
Primary incomplete	18.3	18.7	18.9	18.9	18.8	18.1	18.6	18.7
Primary complete	19.3	19.5	19.7	19.9	19.5	19.4	19.6	19.6
Secondary+	a	24.5	23.2	24.5	23.1	21.9	a	24.0
Wealth quintile								
Lowest	18.7	18.9	19.2	19.4	19.6	19.3	19.1	19.2
Second	18.9	19.4	18.9	19.5	19.0	19.2	19.1	19.2
Middle	19.7	19.2	19.1	19.6	19.4	19.4	19.4	19.3
Fourth	a	20.0	19.7	19.9	19.3	19.2	19.8	19.7
Highest	a	22.7	21.4	20.8	20.7	20.4	a	21.4
Total	a	19.8	19.7	19.9	19.5	19.5	19.8	19.7

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
a = Omitted because less than 50 percent of the women had a birth before reaching the beginning of the age group

Table 5.11 Teenage pregnancy and motherhood

Percentage of women age 15-19 who have had a live birth or who are pregnant with their first child, and percentage who have begun childbearing, by background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Percentage of women age 15-19 who: Have had a live birth	Are pregnant with first child	Percentage who have begun childbearing	Number of women
Age				
15	1.8	2.6	4.4	668
16	7.6	3.8	11.4	515
17	17.6	5.4	23.0	519
18	28.2	10.0	38.2	618
19	50.1	6.6	56.7	584
Residence				
Urban	14.0	4.5	18.5	1,083
Rural	25.1	6.4	31.6	1,821
Tanzania Mainland/ Zanzibar				
Mainland	21.5	5.8	27.3	2,808
Urban	14.3	4.6	18.8	1,053
Rural	25.8	6.6	32.4	1,755
Zanzibar	6.4	1.8	8.2	97
Unguja	5.5	1.5	7.0	68
Pemba	8.8	2.5	11.2	28
Zone				
Western	29.6	8.6	38.2	324
Northern	12.0	3.5	15.5	335
Central	25.7	6.4	32.1	261
Southern Highlands	19.6	6.4	26.0	147
Southern	20.0	6.8	26.7	118
South West Highlands	27.0	6.7	33.6	268
Lake	23.8	5.4	29.2	849
Eastern	14.4	5.3	19.7	505
Zanzibar	6.4	1.8	8.2	97
Region				
Dodoma	33.5	5.0	38.6	108
Arusha	14.9	0.0	14.9	87
Kilimanjaro	5.5	0.0	5.5	83
Tanga	13.8	7.1	20.9	165
Morogoro	28.6	9.9	38.5	114
Pwani	25.5	4.5	30.0	50
Dar es Salaam	8.0	3.8	11.9	341
Lindi	21.7	5.9	27.6	55
Mtwara	18.5	7.6	26.1	64
Ruvuma	26.2	5.8	32.0	74
Iringa	13.9	6.1	20.0	49
Mbeya	26.3	6.7	33.0	188
Singida	20.1	9.6	29.7	75
Tabora	33.2	9.4	42.6	190
Rukwa	25.7	3.5	29.2	50
Kigoma	24.6	7.4	32.0	134
Shinyanga	27.9	5.6	33.5	114
Kagera	11.0	3.6	14.5	113
Mwanza	22.1	6.3	28.4	230
Mara	33.0	4.4	37.4	139
Manyara	20.2	5.3	25.5	77
Njombe	(11.2)	(8.5)	(19.7)	24
Katavi	33.3	11.8	45.1	30
Simiyu	29.9	0.4	30.3	128
Geita	18.4	11.3	29.7	126
Kaskazini Unguja	7.5	3.9	11.4	13
Kusini Unguja	10.3	2.5	12.7	9
Mjini Magharibi	4.0	0.6	4.6	46
Kaskazini Pemba	9.9	0.9	10.8	15
Kusini Pemba	7.4	4.3	11.7	13
Education				
No education	42.0	10.3	52.3	174
Primary incomplete	26.1	5.9	32.0	424
Primary complete	27.1	7.2	34.3	1,287
Secondary+	7.5	2.8	10.4	1,019
Wealth quintile				
Lowest	35.2	7.2	42.4	503
Second	29.2	9.3	38.5	461
Middle	22.9	5.3	28.2	469
Fourth	18.9	4.5	23.4	609
Highest	8.7	4.0	12.7	862
Total	21.0	5.7	26.7	2,904

Figures in parentheses are based on 25-49 unweighted cases.

FERTILITY PREFERENCES 6

Key Findings

- ***Desire for another child:*** Around two in three currently married women age 15 to 49 want to have another child. Twenty-two percent want to have that child soon, while 42% would like to wait at least 2 years before adding another child to their family. Most other women want to limit childbearing, that is, they do not want to have any more children (26%) or are sterilised (3%). Overall, women are slightly more likely than men to want to limit childbearing (22%).
- ***Limiting childbearing:*** The likelihood of not wanting more children increases with the number of children the woman already has. Among currently married women with two living children, 11% want no more children or are sterilised, compared with 67% of women with six or more living children.
- ***Ideal family size:*** The ideal family size has dropped only slightly over the past decade for both women and men. Women currently want 4.7 children, on average, while men want 5.1 children.
- ***Unwanted births:*** Among all births in the past five years, and including current pregnancies, the majority (69%) were wanted at the time of conception (pregnancy was planned), 27% were mistimed (pregnancy was wanted, but at a later time) and 4% were not wanted at all.
- ***Wanted Fertility:*** The total wanted fertility rate (4.5) is consistently lower than the actual total fertility rate (5.2) across all background attributes; but the size of the gap varies.

The total fertility rate is one of the indicators that was prioritised by the Tanzanian government in the Health Sector Strategic Plan III for tracking maternal health outcomes. The National Road Map Strategic Plan to Accelerate Reduction of Maternal, Newborn, and Child Deaths in Tanzania (2008–2015) also identified this indicator for tracking the implementation of family planning interventions. Information on fertility preferences can help family planning programme planners gauge the desire for children, the extent of mistimed and unwanted pregnancies, and the demand for contraception to space or limit births. The information is useful for assessing the direction that fertility patterns may take in the future.

6.1 DESIRE FOR ANOTHER CHILD

Desire for another child

Women and men were asked whether they wanted more children and, if so, how long they would prefer to wait before the next child. Women and men who had been sterilised were assumed not to want any more children.

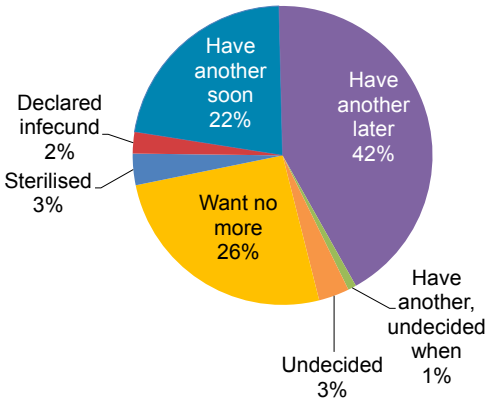
Sample: Currently married women and men age 15-49

Around two out of three currently married women age 15-49 want to have a child. Forty-two percent want to wait at least 2 years before having a child, while 22% want to have a child within the next 2 years **(Table 6.1)**. Most other women want to limit childbearing: 26% do not want to have any more children while 3% are sterilised.

Men are slightly less likely than women to want to limit childbearing: 21% do not want more children, and 1% are sterilised.

***Figure 6.1* Desire for more children among married women**

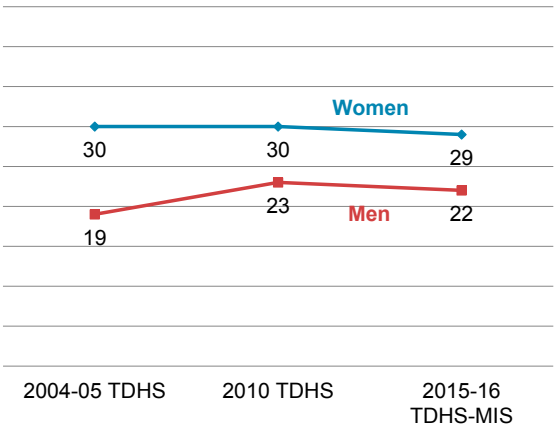
Percent of married women



Trends: The percentage of currently married women who either want no more children or are sterilised has remained relatively unchanged over the past decade—30% in 2004-05 and 2010 and 29% in 2015-16. Currently married men display a similar, largely stable trend; 19% wanted to limit childbearing in 2004-05, 23% in 2010, and 22% in 2015. **(Figure 6.2)**.

***Figure 6.2* Trends in desire to limit childbearing**

Percentage of currently married women and men age 15-49 who want no more children



Patterns by background characteristics

- The more children a woman already has, the less likely she wants a child soon. More than nine in ten (92%) currently married women with no children want to have a child within the next 2 years, compared with 28% of women with one child, a quarter (25%) of women with two children, and 6% of women with six or more children **(Table 6.1)**.
- Men are generally less likely than women to want to have a child soon, no matter how many children they already have (19% of men compared with 22% of women) **(Table 6.1)**. More than eight in ten (87%) currently married men with no children want to have a child within the next 2 years, compared with about a quarter (24%) of men with one child, 14% of men with two children, and 12% of men with six or more children.
- The desire to limit childbearing (want no more children or are sterilised) among currently married women increases with number of children they already have, from less than 1% among currently married women with no children, to 26% for those with 3 children and 67% for those with 6 or more children.

- The desire to limit childbearing among currently married men also increases with number of children, although at a slower rate than among women, peaking at 46% among men with 6 or more children.
- The percentage wanting to limit childbearing differs only slightly by urban-rural residence among both women (30% and 29% respectively) and men (23% and 22% respectively) **(Table 6.2)**.
- On the other hand, there is marked difference in the percentage of currently married women wanting to limit childbearing between Tanzania Mainland and Zanzibar (29% and 19% respectively). The difference between Tanzania Mainland and Zanzibar is even greater among men (23% and 8% respectively).
- Zonal differences are also notable, with women most likely to want to limit childbearing in the South West Highlands (38%) and Southern Highlands zones (37%) and men expressing that desire most often in the Northern (32%) and Southern Highlands (30 percent).

6.2 IDEAL FAMILY SIZE

Ideal family size

Respondents with no children were asked, "If you could choose exactly the number of children to have in your whole life, how many would that be?" Respondents who had children were asked: "If you could go back to the time when you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be?"

Sample: Women and men age 15-49

In general, a large percentage of Tanzanians, regardless of the number of living children they already have, consider five or more children to be ideal. If women could choose their family size, they would choose to have 4.7 children, on average, while men would choose to have 5.1 children **(Table 6.3** and **Figure 6.3**. The ideal size is even higher among currently married women (5.2) and men (5.6).

Trends: Over the past decade, there has been a gradual decline in preferred family size in Tanzania. The ideal family size decreased from 5.0 to 4.7 children for women. Among men, the ideal family size dropped from 5.3 children in 2004-05 to 4.8 children in 2010, but then rose slightly to 5.1 children in 2015-16 **(Figure 6.4)**.

Figure 6.3 **Ideal family size**

Mean ideal number of children among women and men age 15-49

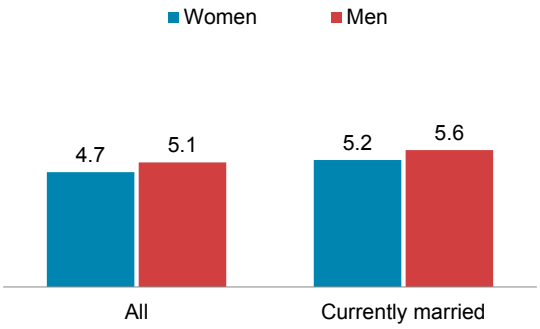
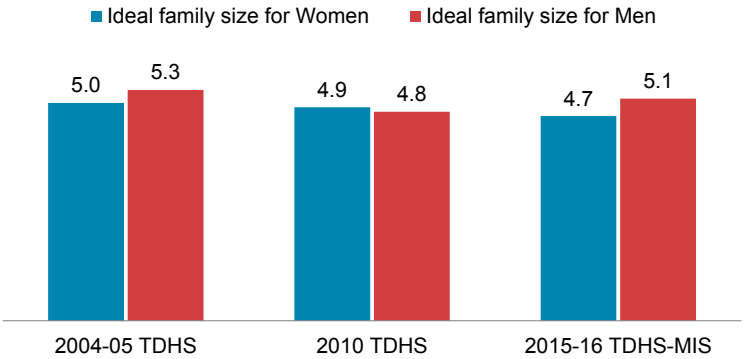


Figure 6.4 **Ideal family size**

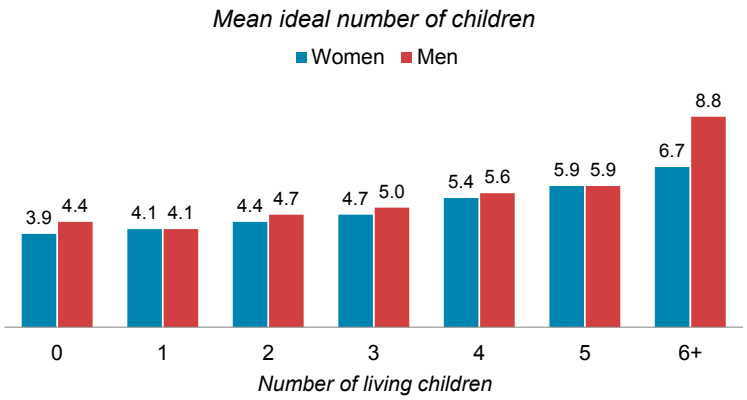
Mean ideal number of children



Patterns by background characteristics

- The results show that the desired family size increases with the number of children that respondents already have. For example, women who have no children consider 3.9 children to be ideal, on average. In contrast, women who have six or more children consider 6.7 children to be ideal. The same applies to men; those who have no child consider 4.4 children to be ideal, on average, and those who have six or more children consider 8.8 children to be ideal **(Figure 6.5)**.

Figure 6.5 Ideal family size by number of living children



- Family size norms vary by residence, with rural women desiring more children (5.2 children) than urban women (3.9 children). The desire also varies between Tanzania Mainland and Zanzibar and by zone. Women in Tanzania Mainland want smaller families—4.7 children, on average—while women in Zanzibar want 6.1 children. On Tanzania Mainland, women in Western Zone desire the largest number of children (5.9 children), followed by those in the Lake Zone (5.2 children), as compared with women in Southern Highlands Zone and Eastern Zone who desire 3.9 children **(Table 6.4)**.

- As expected, family size norms increase with age. Young women (age 15-19) want smaller families (4.1 children) compared with women age 45-49 who want more than 6 children, on average.

- Women with no education want the largest families. The mean ideal number of children increases from 3.7 children among women with secondary or higher education to 6.2 children among women with no education.

- Women in wealthy households want smaller families. The ideal number of children is 5.8 among women in the lowest wealth quintile compared with 3.7 children among women in the highest quintile.

6.3 Fertility Planning Status

Planning status of birth

Women reported whether their most recent birth was wanted at the time (planned birth), at a later time (mistimed birth), or not at all (unwanted birth).

Sample: Current pregnancies and births in the 5 years before the survey to women age 15-49

The survey results show that the majority of births (69%) were wanted at the time of conception (pregnancy was planned), 27% were mistimed (pregnancy was wanted, but at a later time), and 4% were not wanted at all (**Table 6.5 and Figure 6.6**).

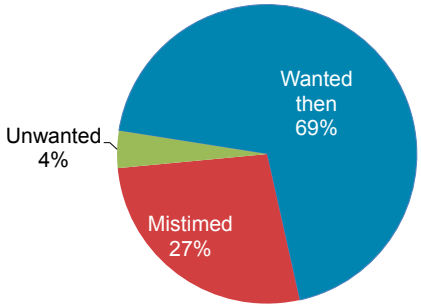
Trends: The percentage of births wanted at the time of conception has gradually decreased from 76% in 2004-05 to 69% in 2015-16, but remains high. The percentage of births that were mistimed has increased by around 50 percent, from 18% in 2004-05 to 27% in 2015-16. The percentage of unwanted births has remained almost constant (5% in 2004-05 compared with 4% in 2015-16).

Patterns by background characteristics

- The more children a woman has, the less likely it is that her last birth was wanted. Seventy-four percent of first births were wanted, compared with 71% of second and third births and 64% of fourth or higher order births **(Table 6.5)**.

***Figure 6.6* Fertility planning status**

Percent distribution of births to women age 15-49 in the five years before the survey (including current pregnancies) by planning status of births



- The percentage of births that were mistimed generally decreases as mother's age increases, ranging from 32% of births to women less than age 20 to 17% of births to women age 45-49.
- The percentage of births that were not wanted at all increases with the mother's age, ranging from 1% of births to women less than age 20, to 12% for women age 35-39, and 29% of births to women age 45-49.

6.4 WANTED FERTILITY RATES

Wanted fertility rate

The average number of children a woman would have over the course of her lifetime if she bore children at current age-specific fertility rates, excluding unwanted births. A birth is considered wanted if the number of living children at the time of conception is lower than the ideal number of children currently reported by the respondent.

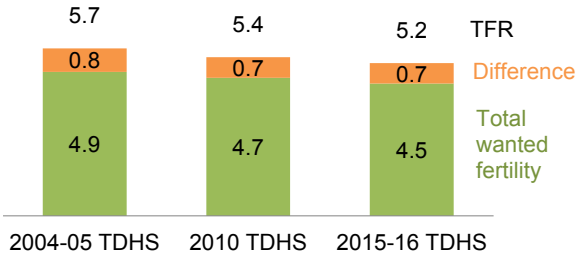
Sample: Births to women age 15-49 during the 3 years before the survey

The wanted fertility rate reflects the level of fertility that would result if all unwanted births were prevented. The wanted fertility rate in Tanzania is 4.5 children, compared with the actual total fertility rate of 5.2 children **(Table 6.6)**.

Trends: The total wanted fertility rate in Tanzania has gradually declined from 4.9 children in 2004-05 to 4.5 children in 2015-16. During the same period, actual fertility has also gradually declined, from 5.7 children to 5.2 children. The current total wanted fertility rate per woman is 0.7 births less than the actual total fertility rate. The gap between wanted and actual fertility has remained relatively constant over time **(Figure 6.7)**.

***Figure 6.7* Trends in wanted and actual fertility**

Wanted and actual number of children per woman



Patterns by background characteristics

The total wanted fertility rate is consistently lower than the actual total fertility rate across all background attributes; but the size of the gap varies.

- The gap between actual and wanted fertility is twice as large in rural areas, 0.9 children (6.0 actual - 5.1 wanted) compared to 0.4 children in urban areas (3.8 actual - 3.4 wanted) **(Table 6.6)**.

- Women in Tanzania Mainland have a slightly larger gap between actual and wanted fertility (0.7 children) as compared to Zanzibar (0.5 children). The largest gap between actual and wanted fertility is observed in Lake and Western Zones (1 child). The Southern zone has the smallest gap (0.3 children). The regions with the largest gap between actual and wanted fertility are Geita (1.6 children), Manyara (1.3 children) and Kigoma (1.2 children).

- Women with more than secondary education have the smallest gap (0.2 children) between wanted and actual fertility compared with women in all other educational categories.

- The gap between wanted and actual fertility steadily narrows with wealth, dropping from 1.0 child in the lowest wealth quintile to 0.2 children in the highest wealth quintile.

List of Tables

For more information on fertility preferences, see the following tables:

- **Table 6.1 Fertility preferences by number of living children**
- **Table 6.2 Desire to limit childbearing**
- **Table 6.3 Ideal number of children by number of living children**
- **Table 6.4 Mean ideal number of children**
- **Table 6.5 Fertility planning status**
- **Table 6.6 Wanted fertility rates**

Table 6.1 Fertility preferences by number of living children

Percent distribution of currently married women and currently married men age 15-49 by desire for children, according to number of living children, Tanzania DHS-MIS 2015-16

Desire for children	Number of living children[1]							Total 15-49
	0	1	2	3	4	5	6+	
				WOMEN				
Have another soon[2]	92.4	28.4	24.6	17.3	16.1	11.5	6.3	22.1
Have another later[3]	3.5	65.1	59.1	48.6	35.0	32.2	17.5	42.2
Have another, undecided when	0.7	1.5	1.2	0.9	0.7	0.6	0.6	0.9
Undecided	0.0	1.6	3.3	4.6	2.9	4.4	4.4	3.3
Want no more	0.6	1.6	9.8	23.5	38.6	42.4	58.5	25.7
Sterilised[4]	0.0	0.1	0.9	2.8	5.4	5.4	8.6	3.4
Declared infecund	2.8	1.8	1.1	2.2	1.3	3.4	3.9	2.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	447	1,486	1,567	1,376	1,083	779	1,472	8,210
				MEN[5]				
Have another soon[2]	86.6	23.5	13.6	19.5	14.5	9.3	12.3	19.3
Have another later[3]	4.6	72.1	68.1	56.7	48.5	44.5	33.0	51.7
Have another, undecided when	4.0	2.0	3.0	1.2	1.0	2.8	1.5	2.0
Undecided	1.5	0.9	1.7	4.2	5.0	4.0	5.6	3.4
Want no more	0.0	0.6	11.5	16.6	30.0	36.3	44.2	21.4
Sterilised[4]	0.0	0.0	0.0	1.7	0.0	1.3	2.2	0.9
Declared infecund	3.3	1.0	2.1	0.0	0.9	1.2	0.9	1.2
Missing	0.0	0.0	0.0	0.0	0.0	0.6	0.5	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	93	287	353	301	255	179	357	1,825

na=Not applicable
[1] The number of living children includes the current pregnancy
[2] Wants next birth within 2 years
[3] Wants to delay next birth for 2 or more years
[4] Includes both female and male sterilisation
[5] The number of living children includes one additional child if respondent's wife is pregnant (or if any wife is pregnant for men with more than one current wife).

Table 6.2 Desire to limit childbearing

Percentage of currently married women age 15-49 who want no more children, by number of living children, and percentage of all currently married men who want no more children, according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Number of living children[1]							Total women	Total men
	0	1	2	3	4	5	6+		
Residence									
Urban	0.0	2.8	16.0	36.9	64.6	63.4	76.9	30.3	23.2
Rural	0.9	1.0	7.1	19.2	36.5	44.3	65.4	28.6	21.9
Mainland/Zanzibar									
Mainland	0.5	1.6	10.9	26.7	44.5	48.6	67.8	29.4	22.6
Urban	0.0	2.8	16.3	37.4	65.6	65.1	78.1	30.6	23.4
Rural	0.8	1.0	7.2	19.4	37.0	44.9	66.0	28.9	22.2
Zanzibar	2.2	2.1	2.1	11.5	21.1	23.2	49.3	19.4	8.4
Unguja	0.5	1.9	2.4	14.1	26.3	30.1	51.6	19.3	8.7
Pemba	*	2.7	1.3	(4.4)	(8.4)	(8.7)	46.5	19.6	7.6
Zone									
Western	(0.0)	1.2	4.9	13.7	23.2	33.0	53.4	23.0	18.8
Northern	(0.0)	0.0	14.2	33.3	55.2	56.3	79.0	33.7	31.8
Central	(6.1)	1.4	5.1	27.8	31.1	40.2	61.6	27.2	21.7
Southern Highlands	(0.0)	2.2	17.2	30.2	58.6	72.2	84.1	37.3	30.3
Southern	(0.0)	0.0	4.4	20.4	43.3	(64.8)	(68.1)	21.3	13.5
South West Highlands	(0.0)	0.8	13.4	31.1	62.8	64.4	77.8	38.2	25.7
Lake	0.0	1.0	4.3	19.2	34.1	41.4	69.3	29.5	21.8
Eastern	0.0	4.2	19.0	33.6	59.9	44.7	65.8	27.0	19.1
Zanzibar	2.2	2.1	2.1	11.5	21.1	23.2	49.3	19.4	8.4
Education									
No education	0.0	2.7	6.4	15.5	32.5	33.4	58.9	29.8	10.5
Primary incomplete	0.0	1.0	2.9	16.5	26.2	49.5	65.8	26.8	19.9
Primary complete	1.1	1.3	8.8	28.6	49.5	53.5	71.9	31.6	24.8
Secondary+	0.2	2.0	22.1	39.3	57.8	63.8	70.6	21.3	22.9
Wealth quintile									
Lowest	2.6	0.5	3.2	12.6	26.0	36.3	59.3	25.1	13.7
Second	0.1	0.3	6.7	12.3	35.6	43.4	61.7	27.3	20.3
Middle	0.0	1.9	7.9	18.4	39.4	49.1	72.2	32.1	24.5
Fourth	0.3	1.5	9.7	30.9	49.7	56.6	77.6	31.5	25.8
Highest	0.0	2.9	19.0	43.4	66.8	68.2	75.6	29.8	26.4
Total	0.6	1.6	10.7	26.3	43.9	47.9	67.1	29.2	22.3

Notes: Women who have been sterilised are considered to want no more children. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based in fewer than 25 unweighted cases and has been suppressed.

[1] The number of living children includes the current pregnancy.

Table 6.3 Ideal number of children by number of living children

Percent distribution of women and men age 15-49 by ideal number of children, and mean ideal number of children for all respondents and for currently married respondents, according to the number of living children, Tanzania DHS-MIS 2015-16

Ideal number of children	Number of living children							Total
	0	1	2	3	4	5	6+	
				WOMEN				
0	1.0	0.6	0.5	0.8	1.1	1.4	1.2	0.9
1	0.7	0.7	0.5	0.4	0.3	0.1	0.0	0.5
2	16.2	9.3	5.8	3.5	1.7	1.1	0.6	7.2
3	28.5	28.5	18.7	11.1	3.7	5.7	2.3	17.3
4	23.3	30.0	36.7	33.8	26.6	15.3	12.2	26.2
5	14.6	16.1	18.4	23.3	21.8	17.7	12.9	17.3
6+	12.3	12.8	17.1	24.3	40.5	51.5	61.6	26.6
Non-numeric responses	3.3	2.0	2.4	2.9	4.3	7.3	9.3	4.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	3,202	2,359	2,028	1,694	1,303	986	1,693	13,266
Mean ideal number of children for:[2]								
All	3.9	4.1	4.4	4.7	5.4	5.9	6.7	4.7
Number	3,096	2,311	1,980	1,646	1,247	915	1,536	12,731
Currently married	4.6	4.3	4.5	4.8	5.4	6.0	6.7	5.2
Number of currently married	427	1,447	1,525	1,331	1,040	724	1,336	7,830
				MEN				
0	0.7	0.4	0.6	0.4	1.9	0.8	0.3	0.7
1	1.0	0.6	0.4	0.4	0.0	0.0	0.0	0.6
2	9.8	7.7	6.3	5.6	3.7	0.4	0.0	6.8
3	23.3	32.2	16.9	10.8	3.3	8.5	4.0	18.1
4	26.5	27.1	34.0	28.4	18.6	16.6	11.5	24.9
5	19.3	16.6	18.1	25.5	20.3	16.3	7.7	18.1
6+	17.2	12.8	21.6	27.1	46.0	51.9	66.5	27.3
Non-numeric responses	2.2	2.6	2.1	1.9	6.1	5.5	10.0	3.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	1,549	422	383	333	273	185	369	3,514
Mean ideal number of children for:[2]								
All	4.4	4.1	4.7	5.0	5.6	5.9	8.8	5.1
Number	1,515	411	375	327	256	174	333	3,391
Currently married	4.6	4.2	4.7	5.0	5.6	5.8	8.6	5.6
Number of currently married	92	277	346	295	238	169	320	1,738

[1] The number of living children includes current pregnancy for women.
[2] Means are calculated excluding respondents who gave non-numeric responses.
[3] The number of living children includes one additional child if respondent's wife is pregnant (or if any wife is pregnant for men with more than one current wife).

Table 6.4 Mean ideal number of children

Mean ideal number of children for all women age 15-49 by background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Mean	Number of women[1]
Age		
15-19	4.1	2,815
20-24	4.3	2,420
25-29	4.6	2,062
30-34	4.9	1,677
35-39	5.2	1,560
40-44	5.6	1,284
45-49	6.1	912
Residence		
Urban	3.9	4,718
Rural	5.2	8,013
Mainland/Zanzibar		
Mainland	4.7	12,363
Urban	3.9	4,594
Rural	5.2	7,769
Zanzibar	6.1	368
Unguja	5.4	261
Pemba	7.8	107
Zone		
Western	5.9	1,192
Northern	4.2	1,510
Central	4.9	1,260
Southern Highlands	3.9	788
Southern	4.6	680
South West Highlands	4.6	1,174
Lake	5.2	3,387
Eastern	3.9	2,371
Zanzibar	6.1	368
Region		
Dodoma	4.7	520
Arusha	4.5	495
Kilimanjaro	3.7	356
Tanga	4.2	659
Morogoro	4.5	599
Pwani	5.1	271
Dar es Salaam	3.5	1,502
Lindi	4.9	280
Mtwara	4.3	400
Ruvuma	4.0	355
Iringa	3.9	233
Mbeya	4.3	786
Singida	4.9	348
Tabora	5.7	696
Rukwa	5.0	266
Kigoma	6.2	497
Shinyanga	5.2	496
Kagera	5.1	596
Mwanza	4.9	843
Mara	5.1	516
Manyara	5.1	391
Njombe	3.6	200
Katavi	5.8	122
Simiyu	5.7	459
Geita	5.6	477
Kaskazini Unguja	6.4	50
Kusini Unguja	5.8	30
Mjini Magharibi	5.0	181
Kaskazini Pemba	7.9	56
Kusini Pemba	7.7	50
Education		
No education	6.2	1,773
Primary incomplete	5.3	1,489
Primary complete	4.7	6,415
Secondary+	3.7	3,053
Wealth quintile		
Lowest	5.8	2,108
Second	5.4	2,165
Middle	5.1	2,223
Fourth	4.4	2,734
Highest	3.7	3,501
Total	4.7	12,731

[1] Number of women who gave a numeric response

Table 6.5 Fertility planning status

Percent distribution of births to women age 15-49 in the 5 years preceding the survey (including current pregnancies), by planning status of the birth, according to birth order and mother's age at birth, Tanzania DHS-MIS 2015-16

Birth order and mother's age at birth	Planning status of birth			Total	Number of births
	Wanted then	Wanted later	Wanted no more		
Birth order					
1	74.3	25.4	0.3	100.0	2,779
2	70.8	28.5	0.7	100.0	2,168
3	70.8	27.5	1.7	100.0	1,695
4+	64.1	27.0	8.9	100.0	4,544
Mother's age at birth					
<20	67.4	31.9	0.7	100.0	1,971
20-24	69.3	30.0	0.7	100.0	2,972
25-29	71.6	26.1	2.3	100.0	2,574
30-34	69.4	26.2	4.4	100.0	1,856
35-39	67.4	21.1	11.5	100.0	1,272
40-44	62.9	12.3	24.7	100.0	500
45-49	54.3	16.5	29.2	100.0	43
Total	68.9	26.9	4.1	100.0	11,187

Table 6.6 Wanted fertility rates

Total wanted fertility rates and total fertility rates for the 3 years preceding the survey, by background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Total wanted fertility rates	Total fertility rate
Residence		
Urban	3.4	3.8
Rural	5.1	6.0
Mainland/Zanzibar		
Mainland	4.5	5.2
Urban	3.4	3.8
Rural	5.1	6.0
Zanzibar	4.6	5.1
Unguja	4.1	4.4
Pemba	6.2	6.8
Zone		
Western	5.7	6.7
Northern	3.7	4.2
Central	4.8	5.7
Southern Highlands	3.6	4.3
Southern	3.5	3.8
South West Highlands	4.5	5.2
Lake	5.4	6.4
Eastern	3.5	3.9
Zanzibar	4.6	5.1
Region		
Dodoma	4.5	5.2
Arusha	3.9	4.6
Kilimanjaro	2.9	3.4
Tanga	4.1	4.4
Morogoro	4.6	4.9
Pwani	4.3	4.6
Dar es Salaam	3.0	3.3
Lindi	3.7	4.0
Mtwara	3.3	3.6
Ruvuma	3.7	4.4
Iringa	4.0	4.4
Mbeya	3.9	4.5
Singida	5.1	6.2
Tabora	5.7	6.6
Rukwa	5.3	6.4
Kigoma	5.7	6.9
Shinyanga	5.1	6.1
Kagera	4.8	5.5
Mwanza	5.0	6.0
Mara	5.6	6.7
Manyara	4.7	6.0
Njombe	2.9	4.0
Katavi	6.1	6.9
Simiyu	6.5	7.5
Geita	5.5	7.1
Kaskazini Unguja	5.4	6.5
Kusini Unguja	5.5	5.7
Mjini Magharibi	3.5	3.6
Kaskazini Pemba	6.7	7.2
Kusini Pemba	5.7	6.6
Education		
No education	6.2	6.9
Primary incomplete	5.1	6.2
Primary complete	4.5	5.3
Secondary+	3.4	3.6
Wealth quintile		
Lowest	6.5	7.5
Second	5.5	6.5
Middle	4.8	5.7
Fourth	3.9	4.5
Highest	2.9	3.1
Total	4.5	5.2

Notes: Rates are calculated based on births to women age 15-49 in the period 1-36 months preceding the survey. The total fertility rates are the same as those presented in Table 5.2.

FAMILY PLANNING 7

Key Findings

- ***Modern contraceptive use:*** Modern contraceptive use by currently married women has steadily increased over the last decade from 20% in 2004-05 to 27% in 2010 and 32% in 2015-16. Injectables are the most popular contraceptive, used by 13% of currently married women.
- ***Sources of modern methods:*** Six in 10 modern contraceptive users obtain their methods from government/parastatal suppliers.
- ***Contraceptive discontinuation:*** Among women who started using a contraceptive method in the 5 years preceding the survey, one in four discontinued the method within 12 months. Methods with highest discontinuation rates are the Pill (34%), injectable and withdrawal (32% each), and male condoms (28%).
- ***Percentage of demand for family planning satisfied:*** About half (53%) of existing demand for family planning among currently married women is satisfied by use of modern methods.
- ***Unmet need for family planning:*** Unmet need for family planning among currently married women has remained between 22% and 24% since 1999.

Couples can use contraceptive methods to limit or space the number of children they get. This chapter presents information on the use and sources of contraceptive methods, informed choice of methods, and rates and reasons for discontinuing contraceptives. It also examines the potential demand for family planning and the extent of the contact that nonusers have with family planning providers.

In Tanzania, family planning services area component of the Reproductive, Maternal, Newborn, Child, and Adolescent Health (RMNCAH) interventions provided by the Ministry of Health, Community Development, Gender, Elderly, and Children (MoHCDGEC). The provision of these services is reflected in various Tanzanian government documents, including the Tanzania Development Vision (2025), Health Sector Strategic Plan III (2009-2015), National Road Map Strategic Plan to Accelerate Reduction of Maternal, Newborn and Child Deaths in Tanzania-One Plan (2008 – 2015), and Family Planning Costed Implementation Plan (2010-2015).

7.1 CONTRACEPTIVE KNOWLEDGE AND USE

Knowledge of contraceptive methods is universal in Tanzania, with 99% of currently married women age 15-49 and 100% of currently married men age 15-49 knowing at least one method of contraception. For more information on contraceptive knowledge by method and by background characteristics, see **Tables 7.1 and 7.2**.

Contraceptive prevalence rate
Percentage who use any contraceptive method
Sample: Currently married women age 15-49

The contraceptive prevalence rate (CPR) among currently married women in Tanzania is 38%. Most women who are using contraception are using a modern method (32% of currently married women) **(Table 7.3)**. Among sexually active unmarried women age 15-29, 54% are using contraception; 46% are using a modern method.

Modern methods
Include male and female sterilisation, injectables, intrauterine contraceptive devices (IUCDs), contraceptive pills, implants, male condoms, emergency contraception, and lactational amenorrhea method (LAM).

Among currently married women, the most commonly used methods are injectables (13%), followed by implants (7%) and pills (6%) **(Figure 7.1)**. Among sexually active unmarried women, male condoms and injectables are the most commonly used methods (15% each), followed by implants (8%) and pills (6%) **(Table 7.3)**.

Figure 7.1 **Contraceptive use**

Percentage of currently married women age 15-49 currently using a contraceptive method

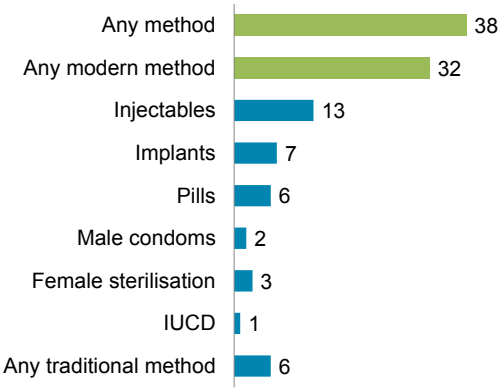
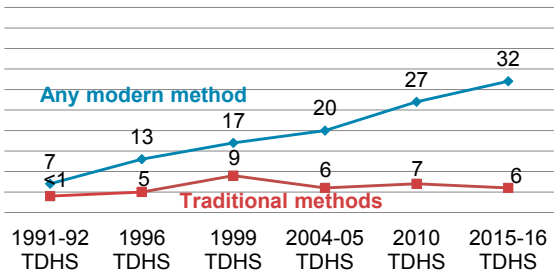


Figure 7.2 **Trends of contraceptive use from 1991-92 to 2015-16**

Percentage of currently married women currently using a contraceptive method



Trends: Modern contraceptive use by currently married women has steadily increased over the last 2 to 3 decades from 7% in 1991-92 to 20% in 2004-05, and up to 32% in 2015-16 **(Figure 7.2)**. The greatest gains over the last decade were in the use of injectables and implants. Use of injectables increased from 8% in 2004-05 to 11% in 2010 and further to 13% in 2015-16; use of implants increased from less than 1% in 2004-05 to 7% in 2015-16 **(Table 7.4.1)**.

Patterns by background characteristics

- Modern contraceptive use among currently married women is highest among women age 35-39 (37%) followed by age groups 30-34 and 25-29 (36% each) **(Table 7.3)**.
- Urban married women are slightly more likely to use modern contraceptives than rural married women (35% versus 31%). Injectables are the most commonly used method among married women both in

urban and rural areas (13% each). However, urban married women are more than two times as likely to use a traditional method (mostly rhythm and withdrawal) as rural married women (11% versus 4%) **(Table 7.4.2)**.

- Currently married women in Tanzania Mainland are substantially more likely to use modern contraceptive methods than women in Zanzibar (33% versus 14%). In Zanzibar, married women in Unguja are more likely to use modern methods (16%) than married women in Pemba (9%).

- There is a notable difference in contraceptive use across zones and across regions. Modern contraceptive use is highest among currently married in the Southern Zone (51%), followed by the Southern Highlands Zone (44%), and the lowest in Zanzibar (14%). In the regions, modern contraceptive use ranges from a low of 7% among currently married women in Kusini Pemba to a high of 52% of women in Lindi and 51% in Ruvuma **(Figure 7.3).**

Figure 7.3 Modern contraceptive use by region

Percentage of currently married women age 15-49

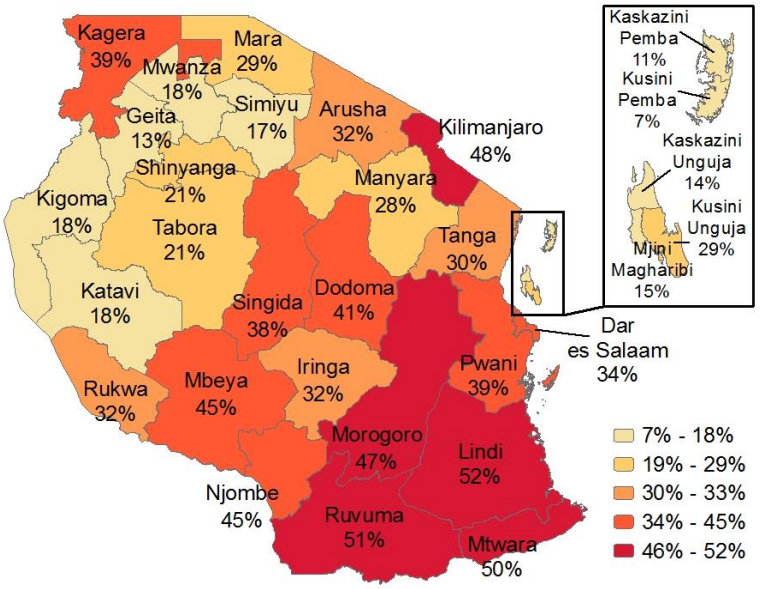
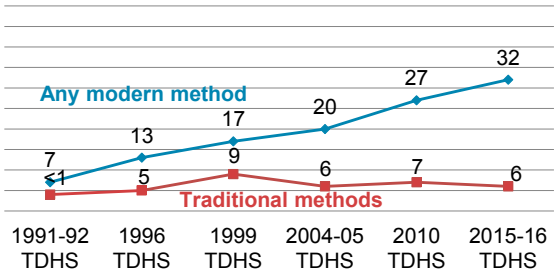


Figure 7.4 Modern contraceptive use by education

Percentage of currently married women currently using a contraceptive method



- Modern contraceptive use generally increases with education. Thirty-six percent of married women with completed primary education and 33% of those with more than a secondary education use a modern method compared with 24% of married women with no education **(Figure 7.4)**.

- Modern contraceptive use also tends to increase with household wealth from 20% among married women in the lowest quintile to 40% among those in the fourth quintile, and 35% among women in the highest wealth quintile.

7.2 SOURCE OF MODERN CONTRACEPTIVE METHODS

Source of modern contraceptives

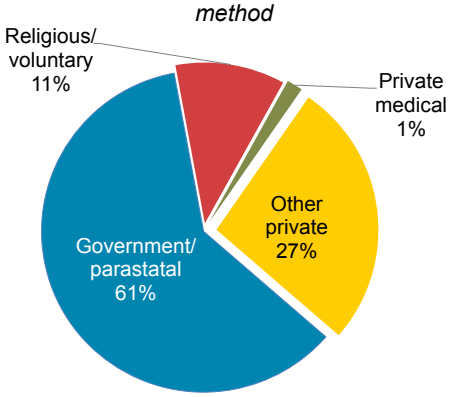
Place where the modern method currently being used was obtained the last time it was acquired

Sample: Women age 15-49 currently using a modern contraceptive method

Six in 10 (61%) of all modern contraceptive users obtain their methods from the government or parastatal sector, 11% from the religious or voluntary sector, 2% from the private medical sector, and 27% from other sources, the main ones being the pharmacy (11%) and the accredited drug dispensing outlet (ADDO) (10%) **(Figure 7.5)**. However, the importance of each source varies, depending on the method **(Table 7.6)**.

***Figure 7.5* Source of modern contraceptive methods**

Percent distribution of current users of modern methods by most recent source of method



- ***Implants, IUCDs, injectables, and pills:*** Nine in 10 users of implants (89%) and two-thirds of IUCD and injectable users (67% each) obtain their method from the government or parastatal sector, mostly from dispensaries, clinics, or health centres. About half of pill users (53%) obtain their pills from the government or parastatal sector, followed by 41% from other private services, mainly pharmacies (21%) and accredited drug dispensing outlets (18%).
- ***Male condoms:*** The predominant sources for male condoms are pharmacies (31%), accredited drug dispensing outlets (25%), and shops or kiosks (23%).
- ***Female sterilisation:*** Two-thirds of women who underwent sterilisation (68%) had the procedure done in government or parastatal sector facilities and 27% of them had the procedure done in a religious or voluntary health facility.

7.3 INFORMED CHOICE

Informed choice

Informed choice consists of women being informed at the time they started the current episode of method use about side effects of the method, what to do if they experience side effects, and other methods they could use.

Sample: Women age 15-49 who are currently using selected modern contraceptive methods and who started the last episode of use within the 5 years before the survey

Six in 10 women (62%) using modern contraceptives were informed about side effects or other potential problems associated with the method they were using, and more than half (56%) were informed what to do if they experienced side effects. Eight in 10 women (82%) were informed of alternative methods they could use **(Table 7.8)**.

7.4 DISCONTINUATION OF CONTRACEPTIVES

Contraceptive discontinuation rate

Percentage of contraceptive use episodes discontinued within 12 months

Sample: Women age 15-49 who started an episode of contraceptive use within the 5 years before the survey

Among women who began an episode of contraceptive use in the 5 years before the survey, one out of every four times (26%) that women began using a contraceptive method, they discontinued the method in less than 12 months. In 6% of episodes, women switched to another method. Discontinuation rates are highest for pills (34%) followed by injectables and withdrawal (32% each) **(Table 7.9)**.

Reasons for discontinuation depend on the method. Overall, the most common reason for discontinuing a method in less than 12 months is the desire to become pregnant (38%), followed by method-related side effects or health concerns (26%). About 1 in 10 women became pregnant while using a method (11%), and another 1 in 10 women wanted a more effective method (9%) **(Table 7.10)**. A higher percentage of women cited method-related health concerns and side effects as a reason for discontinuing IUCDs (47%), implants (39%), injectables (37%), and pills (28%) than for discontinuing male condoms (3%).

Knowledge of the Fertile Period

The survey also collected information on women's knowledge of the fertile period. Only one in five women (21%) (36% of users of rhythm method and 20% of nonusers of rhythm method) know that a woman is most likely to conceive halfway between two periods **(Table 7.11)**.

7.5 DEMAND FOR FAMILY PLANNING

Unmet need for family planning

Proportion of women who (1) are not pregnant and not postpartum amenorrhoeic and are considered fecund and want to postpone their next birth for 2 or more years or stop childbearing altogether, but are not using a contraceptive method, or(2) have a mistimed or unwanted current pregnancy, or (3) are postpartum amenorrhoeic and their last birth in the last 2 years was mistimed or unwanted.

Sample: Currently married women age 15-49

Demand for family planning:

$$\text{Unmet need for family planning} + \text{current contraceptive use (any method)}$$

Proportion of demand satisfied:

$$\frac{\text{Current contraceptive use (any method)}}{\text{Unmet need + current contraceptive use (any method)}}$$

Proportion of demand satisfied by modern methods:

$$\frac{\text{Current contraceptive use (any modern method)}}{\text{Unmet need + current contraceptive use (any method)}}$$

Total demand for family planning is high in Tanzania. Six in 10 currently married women age 15-49 have a demand for family planning; 39% want to space births, and 22% want to limit births (therefore 39% have no need for family planning). Thirty-eight percent of currently married women are already using a contraceptive method either to space (23%) or to limit births (15%); that is, their family planning need is met. However, 22% of currently married women have an unmet need for family planning: they want to space or limit births but are not currently using contraception **(Table 7.12.1, Figure 7.6)**. If all of these women adopted a method, the contraceptive prevalence rate would increase from 38% to 61%.

Trends: The total demand for family planning among currently married women age 15-49 in Tanzania has increased significantly over time, rising from 38% in 1991-92, to 61% in 2015-16 **(Figure 7.7)**. Met need for family planning has also increased significantly over the same period; most of the need has been met with modern methods, rising from 7% in 1991-92 to 32% in 2015-16. Note that unmet need for family planning among married women has declined slightly over time, from 28% in 1991-92 to 22% in 2015-16, but demand has increased more than unmet need has decreased.[1]

***Figure 7.6* Demand for family planning**

Percent distribution of currently married women age 15-49 by need for family planning

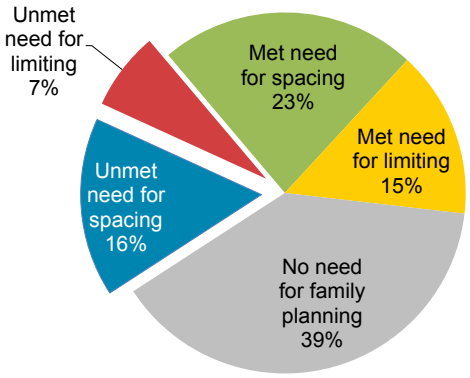
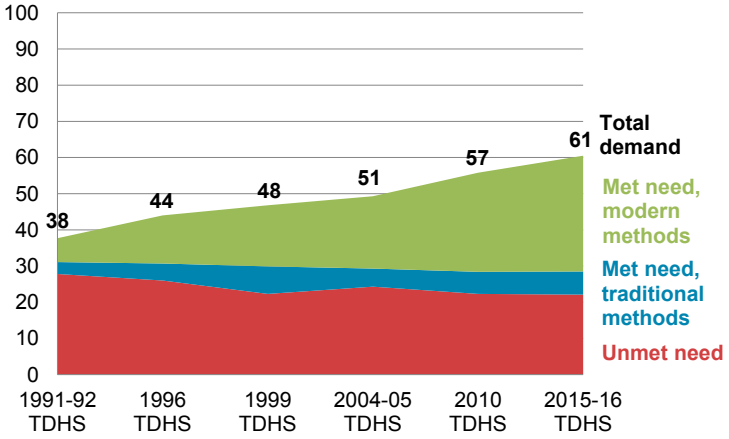


***Figure 7.7* Trends in demand for family planning**

Percentage of currently married women age 15-49



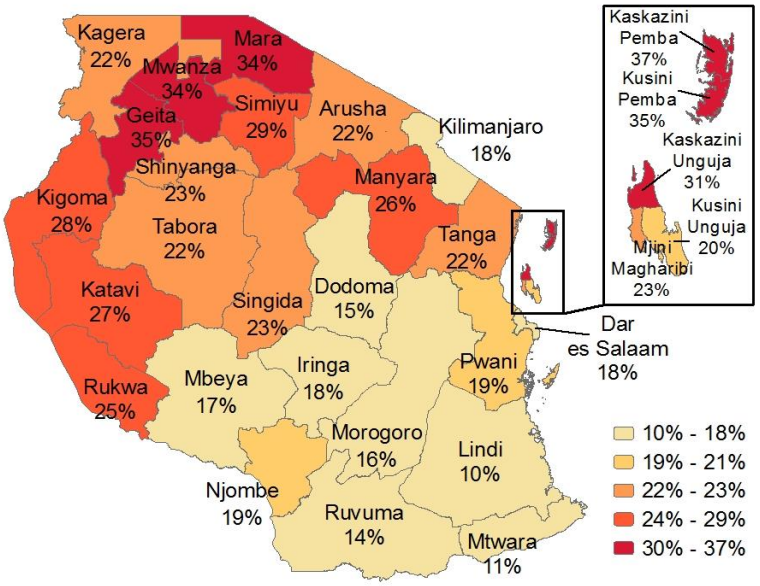
[1] The definition of unmet need for family planning has been revised so that data on levels of unmet need are comparable over time and across surveys. The unmet need estimates for all previous TDHS surveys have been recalculated using the revised definition of unmet need but differ only slightly from the numbers published in the previous final reports.

Patterns by background characteristics

- Unmet need for family planning among currently married women ranges from a low of 10% in the Southern Zone to a high of 30% in the Lake Zone **(Figure 7.8)**.
- By region, total unmet need for family planning among currently married women ranges from a low of 10% in Lindi to a high of 37% in Kaskazini Pemba.
- Unmet need for family planning declines steadily with increasing education, falling from a high of 27% among currently married women with no education to a low of 17% among those with a secondary or higher education.
- Unmet need for family planning also declines with increasing wealth quintile, from 29% among currently married women in the lowest wealth quintile to 17% among those in the highest wealth quintile.

Figure 7.8 **Unmet need by region**

Percentage of currently married women age 15-49 with unmet need for family planning



For more information on need and demand for family planning among all women and among women who are not currently married, see **Table 7.12.2**.

Future Use of Contraception

The TDHS-MIS 2015-16 also collected information on nonusers' intent to use contraception in the future. Fifty-three percent of currently married women age 15-49 who are not currently using contraception intend to use family planning at some future time. As many as 46% of currently married women non users who have four or more children do not intend to use family planning in the future **(Table 7.13)**.

Exposure to Family Planning Messages in the Media

Table 7.14 shows information on exposure to family planning messages in the media in the few months prior to the survey, among women and men age 15-49. The majority of women and men reported hearing a family planning message on the radio (62% of women and 75% of men). People were also exposed to family planning messages via television (31% of women and 47% of men) and newspapers/magazines (25% of women and 35% of men).

7.6 CONTACT OF NONUSERS WITH FAMILY PLANNING PROVIDERS

Contact of nonusers with family planning providers

Respondents discussed family planning in the 12 months before the survey with a fieldworker or during a visit to a health facility.

Sample: Women age 15-49 who are not currently using any contraceptive methods

The vast majority of women (80%) age 15-49 who are not using a contraceptive method said they had not discussed family planning with a fieldworker or health facility staff member in the 12 months before the survey **(Table 7.15)**. Only 2% reported discussing family planning with a fieldworker who visited them and 18% with a provider at a health facility. Notably, 41% of nonusers had visited a health facility in the past 12 months but did not discuss family planning during that visit.

Patterns by background characteristics

- Women in the Mainland are more likely to have discussed family planning while visiting a health facility than women in Zanzibar (19% versus 11%).
- Katavi and Kagera regions have the highest percentage of women who discussed family planning while visiting a health facility (34% and 31%, respectively), while Lindi has the lowest percentage of women who have done so (7%).
- Women with the highest education level (13%) and women in the highest wealth quintile are less likely to have discussed family planning while visiting a health facility (12%).

List of Tables

For detailed information on family planning, see the following tables:

- **Table 7.1** **Knowledge of contraceptive methods**
- **Table 7.2** **Knowledge of contraceptive methods by background characteristics**
- **Table 7.3** **Current use of contraception by age**
- **Table 7.4.1** **Trends in the current use of contraception**
- **Table 7.4.2** **Current use of contraception by background characteristics**
- **Table 7.5.1** **Timing of sterilization**
- **Table 7.5.2** **Timing of modern contraceptive use after birth**
- **Table 7.6** **Source of modern contraception methods**
- **Table 7.7** **Use of social marketing brand pills and condoms**
- **Table 7.8** **Informed choice**
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- **Table 7.13** **Future use of contraception**
- **Table 7.14** **Exposure to family planning messages**
- **Table 7.15** **Contact of nonusers with family planning providers**

Table 7.1 Knowledge of contraceptive methods

Percentage of all respondents, currently married respondents, and sexually active unmarried respondents age 15-49 who know any contraceptive method, by specific method, Tanzania DHS-MIS 2015-16

	Women			Men		
Method	All women	Currently married women	Sexually active unmarried women[1]	All men	Currently married men	Sexually active unmarried men[1]
Any method	98.2	99.1	99.8	98.3	99.6	99.4
Any modern method	98.1	99.1	99.8	98.2	99.6	99.3
Female sterilisation	84.5	87.9	88.2	78.8	89.7	74.0
Male sterilisation	42.8	46.9	39.2	51.3	60.7	47.7
Pill	96.2	98.1	98.3	91.5	97.6	90.3
IUCD	83.0	88.9	88.3	66.9	82.4	57.9
Injectables	95.5	98.1	98.4	86.1	96.3	84.2
Implants	90.8	95.2	94.0	75.6	90.1	69.0
Male condom	94.8	95.8	98.9	96.2	98.5	97.9
Female condom	79.7	80.8	89.2	79.7	86.7	81.8
Emergency contraception	19.6	20.7	21.1	20.4	24.5	22.2
Standard days method	10.1	11.5	11.1	26.8	33.6	24.0
Lactational amenorrhoea (LAM)	33.5	37.9	31.5	27.9	36.8	25.9
Other modern method	9.5	11.9	9.6	2.6	4.2	1.9
Any traditional method	78.3	81.0	85.8	75.0	85.8	77.3
Rhythm	70.1	71.1	79.0	61.4	71.0	61.8
Withdrawal	61.1	67.7	66.7	64.7	77.1	66.4
Other	0.2	0.2	0.4	0.0	0.0	0.0
Mean number of methods known by respondents 15-49	8.7	9.1	9.1	8.3	9.5	8.1
Number of respondents	13,266	8,210	928	3,514	1,825	493

[1] Had last sexual intercourse within 30 days preceding the survey

Table 7.2 Knowledge of contraceptive methods by background characteristics

Percentage of currently married women and currently married men age 15-49 who have heard of at least one contraceptive method and who have heard of at least one modern method by background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Women			Men		
	Heard of any method	Heard of any modern method[1]	Number	Heard of any method	Heard of any modern method[1]	Number
Age						
15-19	96.3	96.2	668	*	*	14
20-24	99.3	99.3	1,479	98.0	98.0	165
25-29	99.2	99.2	1,616	100.0	100.0	323
30-34	99.3	99.2	1,378	99.7	99.7	339
35-39	99.7	99.7	1,308	99.8	99.8	398
40-44	99.7	99.7	1,033	100.0	100.0	302
45-49	99.0	99.0	728	100.0	99.9	283
Residence						
Urban	99.8	99.8	2,535	99.5	99.5	605
Rural	98.8	98.8	5,675	99.7	99.7	1,219
Tanzania Mainland/ Zanzibar						
Mainland	99.1	99.1	7,990	99.6	99.6	1,788
Urban	99.8	99.8	2,468	99.5	99.5	593
Rural	98.8	98.8	5,523	99.7	99.7	1,194
Zanzibar	99.7	99.7	220	99.6	98.9	37
Unguja	99.9	99.9	151	100.0	98.9	26
Pemba	99.3	99.3	69	98.8	98.8	11
Zone						
Western	98.6	98.6	879	99.4	99.4	166
Northern	97.3	97.3	906	99.4	99.4	210
Central	98.5	98.2	886	100.0	100.0	200
Southern Highlands	99.6	99.6	503	100.0	100.0	118
Southern	100.0	100.0	452	100.0	100.0	108
South West Highlands	98.6	98.6	765	100.0	100.0	163
Lake	99.7	99.7	2,192	99.3	99.3	482
Eastern	99.9	99.9	1,407	99.7	99.7	340
Zanzibar	99.7	99.7	220	99.6	98.9	37
Region						
Dodoma	100.0	100.0	383	100.0	100.0	89
Arusha	93.5	93.5	325	100.0	100.0	73
Kilimanjaro	100.0	100.0	195	(100.0)	(100.0)	52
Tanga	99.1	99.1	385	98.5	98.5	85
Morogoro	100.0	100.0	399	(100.0)	(100.0)	84
Pwani	99.5	99.5	184	(97.3)	(97.3)	33
Dar es Salaam	100.0	100.0	824	100.0	100.0	223
Lindi	100.0	100.0	191	100.0	100.0	42
Mtwara	100.0	100.0	261	100.0	100.0	66
Ruvuma	99.2	99.2	226	100.0	100.0	59
Iringa	100.0	100.0	143	(100.0)	(100.0)	30
Mbeya	98.9	98.9	490	(100.0)	(100.0)	102
Singida	100.0	100.0	243	100.0	100.0	50
Tabora	98.8	98.8	514	99.0	99.0	102
Rukwa	98.0	98.0	183	100.0	100.0	41
Kigoma	98.4	98.4	365	100.0	100.0	64
Shinyanga	99.8	99.8	344	100.0	100.0	81
Kagera	100.0	100.0	418	100.0	100.0	95
Mwanza	99.7	99.7	465	97.1	97.1	112
Mara	99.4	99.4	340	100.0	100.0	69
Manyara	95.0	94.0	260	100.0	100.0	61
Njombe	100.0	100.0	134	100.0	100.0	28
Katavi	98.1	98.1	92	100.0	100.0	20
Simiyu	100.0	100.0	312	100.0	100.0	60
Geita	99.5	99.5	313	100.0	100.0	66
KaskaziniUnguja	99.6	99.6	35	(100.0)	(95.3)	6
KusiniUnguja	100.0	100.0	20	(100.0)	(100.0)	4
MjiniMagharibi	100.0	100.0	96	100.0	100.0	16
Kaskazini Pemba	99.1	99.1	37	(100.0)	(100.0)	6
Kusini Pemba	99.6	99.6	32	(97.5)	(97.5)	5
Education						
No education	97.3	97.2	1,559	99.4	99.4	187
Primary incomplete	98.9	98.9	971	99.0	98.9	243
Primary complete	99.7	99.6	4,445	99.9	99.9	1,038
Secondary+	99.8	99.8	1,235	99.4	99.4	357

(Continued…)

Table 7.2—*Continued*

Background characteristic	Women			Men		
	Heard of any method	Heard of any modern method[1]	Number	Heard of any method	Heard of any modern method[1]	Number
Wealth quintile						
Lowest	97.2	97.1	1,670	99.0	99.0	365
Second	99.0	99.0	1,523	100.0	100.0	321
Middle	99.7	99.7	1,541	99.7	99.7	343
Fourth	100.0	100.0	1,642	99.4	99.4	376
Highest	99.8	99.8	1,835	100.0	100.0	420
Total 15-49	99.1	99.1	8,210	99.6	99.6	1,825

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Female sterilisation, male sterilisation, Pill, IUD, injectables, implants, male condom, female condom, emergency contraception, standard days method (SDM), lactational amenorrhoea method (LAM), and other modern methods.

Table 7.3 Current use of contraception by age

Percent distribution of all women, currently married women, and sexually active unmarried women age 15-49 by contraceptive method currently used, according to age, Tanzania DHS-MIS 2015-16

Age	Any method	Any modern method	Modern method									Traditional method					Number of women
			Female sterilisation	Male sterilisation	Pill	IUCD	Injectables	Implants	Male condom	Emergency contraception	LAM	Any traditional method	Rhythm	Withdrawal	Other	Not currently using	Total	
ALL WOMEN																		
15-19	10.4	8.6	0.0	0.0	0.9	0.0	2.7	1.5	3.4	0.0	0.0	1.8	1.3	0.4	0.1	89.6	100.0	2,904
20-24	34.7	28.9	0.0	0.0	3.3	0.2	12.2	7.6	5.3	0.0	0.2	5.9	4.0	1.6	0.2	65.3	100.0	2,483
25-29	41.3	35.2	0.1	0.0	5.6	0.7	14.9	8.7	4.4	0.0	0.7	6.2	4.0	2.0	0.2	58.7	100.0	2,125
30-34	43.5	36.1	1.2	0.1	6.6	1.0	15.2	7.8	3.7	0.1	0.3	7.4	5.0	2.1	0.3	56.5	100.0	1,752
35-39	41.3	35.8	4.5	0.1	7.4	1.6	11.7	6.3	3.4	0.0	0.8	5.5	3.9	1.2	0.4	58.7	100.0	1,641
40-44	37.8	30.6	8.8	0.0	4.3	1.1	7.6	4.9	3.7	0.0	0.2	7.2	4.7	1.2	1.4	62.2	100.0	1,364
45-49	30.5	24.9	12.1	0.2	2.5	1.2	5.6	1.2	2.2	0.0	0.0	5.6	2.6	1.6	1.4	69.5	100.0	997
Total	32.4	27.1	2.5	0.0	4.1	0.7	9.9	5.6	3.9	0.0	0.3	5.3	3.5	1.4	0.4	67.6	100.0	13,266
CURRENTLY MARRIED WOMEN																		
15-19	14.7	13.3	0.0	0.0	2.3	0.0	6.8	2.7	1.5	0.0	0.0	1.4	0.3	0.9	0.2	85.3	100.0	668
20-24	35.4	29.9	0.0	0.0	4.3	0.3	14.7	8.1	2.2	0.0	0.3	5.5	2.8	2.4	0.3	64.6	100.0	1,479
25-29	41.7	35.8	0.1	0.0	6.2	0.6	15.9	9.2	2.8	0.0	0.9	5.9	3.0	2.7	0.2	58.3	100.0	1,616
30-34	44.6	36.3	1.0	0.1	7.4	0.8	15.7	8.3	2.4	0.0	0.4	8.3	5.6	2.3	0.4	55.4	100.0	1,378
35-39	43.3	37.2	5.0	0.1	7.4	1.7	13.0	6.6	2.5	0.0	1.0	6.1	4.2	1.4	0.5	56.7	100.0	1,308
40-44	40.4	32.0	9.3	0.0	5.1	1.2	7.8	5.4	2.9	0.0	0.2	8.4	5.3	1.6	1.6	59.6	100.0	1,033
45-49	35.1	27.6	13.6	0.2	2.9	1.5	6.6	1.4	1.4	0.0	0.0	7.5	3.5	2.2	1.9	64.9	100.0	728
Total	38.4	32.0	3.4	0.1	5.5	0.9	12.6	6.7	2.4	0.0	0.5	6.4	3.7	2.0	0.6	61.6	100.0	8,210
SEXUALLY ACTIVE UNMARRIED WOMEN[1]																		
15-19	39.2	33.1	0.0	0.0	1.5	0.0	7.9	6.9	16.7	0.0	0.0	6.1	5.6	0.5	0.0	60.8	100.0	189
20-24	67.0	53.9	0.4	0.0	4.5	0.5	19.1	11.8	17.6	0.0	0.0	13.1	10.9	1.9	0.2	33.0	100.0	222
25-49	53.9	46.9	3.7	0.0	7.6	0.8	15.5	6.2	12.8	0.2	0.1	7.1	6.3	0.8	0.0	46.1	100.0	516
Total	54.1	45.8	2.1	0.0	5.6	0.6	14.8	7.7	14.8	0.1	0.1	8.3	7.3	1.0	0.1	45.9	100.0	928

Note: If more than one method is used, only the most effective method is considered in this tabulation.
LAM = Lactational amenorrhoea method
[1] Women who have had sexual intercourse within 30 days preceding the survey

Table 7.4.1 Trends in the current use of contraception

Percent distribution of currently married women age 15-49 by contraceptive method currently used, according to several surveys, Tanzania DHS-MIS 2015-16

Method	1991-92 TDHS	1996 TDHS	1999 TDHS	2004-05 TDHS	2010 TDHS	2015-16 TDHS-MIS
Any method	10.4	18.4	25.4	26.4	34.4	38.4
Any modern method	6.6	13.3	16.9	20.0	27.4	32.0
Female sterilisation	1.6	1.9	2.0	2.6	3.5	3.4
IUCD	0.4	0.6	0.4	0.2	0.6	0.9
Pill	3.4	5.5	5.3	5.9	6.7	5.5
Injectables	0.4	4.5	6.3	8.3	10.6	12.6
Implants	0.0	0.0	0.1	0.5	2.3	6.7
Male condom	0.7	0.8	2.7	2.0	2.3	2.4
Other modern method	0.0	0.0	0.0	0.5	1.3	0.5
[0]						
Any traditional method	3.9	5.1	8.5	6.4	7.0	6.4
Rhythm	1.3	2.0	2.2	2.0	3.1	3.7
Withdrawal	1.9	2.6	3.5	3.0	2.9	2.0
Other	0.6	0.4	1.0	1.3	0.9	0.6
Not currently using	89.6	81.6	74.6	73.6	65.6	61.6
Total	100.0	100.0	100.0	100.0	100	100
Number of women	6038	5411	2653	6,950	6412	8210

Table 7.4.2 Current use of contraception by background characteristics

Percent distribution of currently married women age 15-49 by contraceptive method currently used, according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Any method	Any modern method	Modern method								Any traditional method	Traditional method			Not currently using	Total	Number of women
			Female sterilisation	Male sterilisation	Pill	IUCD	Injectables	Implants	Male condom	LAM		Rhythm	Withdrawal	Other			
Number of living children																	
0	4.5	2.6	0.0	0.0	0.9	0.0	0.9	0.5	0.3	0.0	1.9	1.7	0.3	0.0	95.5	100.0	668
1-2	39.6	32.3	0.5	0.0	6.3	0.3	13.7	7.6	3.6	0.3	7.3	4.5	2.4	0.4	60.4	100.0	2,990
3-4	45.7	38.6	3.9	0.1	6.8	1.3	15.9	7.7	2.3	0.6	7.1	4.4	2.4	0.3	54.3	100.0	2,384
5+	39.0	33.4	7.7	0.1	4.3	1.4	11.0	6.5	1.5	0.8	5.6	2.4	1.7	1.5	61.0	100.0	2,168
Residence																	
Urban	46.1	35.2	3.6	0.0	7.2	0.8	12.9	6.4	4.0	0.3	10.9	7.3	3.1	0.5	53.9	100.0	2,535
Rural	34.9	30.6	3.2	0.1	4.8	0.9	12.5	6.9	1.6	0.5	4.3	2.1	1.5	0.7	65.1	100.0	5,675
Tanzania Mainland/ Zanzibar																	
Mainland	38.8	32.5	3.4	0.1	5.6	0.9	12.8	6.8	2.4	0.5	6.3	3.7	1.9	0.6	61.2	100.0	7,990
Urban	46.6	35.8	3.7	0.0	7.3	0.8	13.1	6.5	4.1	0.3	10.8	7.3	3.0	0.5	53.4	100.0	2,468
Rural	35.3	31.0	3.3	0.1	4.8	0.9	12.7	7.0	1.7	0.6	4.3	21	1.5	0.7	64.7	100.0	5,523
Zanzibar	23.4	14.0	1.3	0.0	2.8	0.2	6.1	3.1	0.4	0.0	9.4	3.3	5.8	0.3	76.6	100.0	220
Unguja	29.1	16.3	1.3	0.0	2.8	0.2	7.5	3.8	0.6	0.0	12.7	4.5	7.8	0.4	70.9	100.0	151
Pemba	11.2	9.1	1.5	0.0	2.7	0.0	3.1	1.6	0.2	0.0	2.1	0.6	1.5	0.0	88.8	100.0	69
Zone																	
Western	22.8	19.3	3.0	0.0	2.4	0.3	8.3	3.7	1.7	0.0	3.5	1.2	2.0	0.3	77.2	100.0	879
Northern	40.4	34.3	2.7	0.0	8.7	1.4	13.5	6.9	1.1	0.1	6.1	4.3	1.6	0.2	59.6	100.0	906
Central	42.0	36.4	3.0	0.0	6.8	0.4	14.6	8.7	1.1	1.9	5.6	3.4	1.9	0.4	58.0	100.0	886
Southern Highlands	53.3	43.9	4.7	0.0	7.3	2.0	14.7	10.9	4.3	0.0	9.4	4.3	3.5	1.5	46.7	100.0	503
Southern	53.1	50.5	3.0	0.0	15.9	0.2	21.7	8.5	0.9	0.2	2.6	0.9	1.1	0.6	46.9	100.0	452
South West Highlands	45.6	38.8	3.3	0.0	3.6	0.9	15.8	11.9	3.3	0.0	6.8	3.7	1.6	1.5	54.4	100.0	765
Lake	26.3	23.4	4.4	0.2	2.2	0.9	9.3	4.7	1.1	0.6	2.9	1.7	0.5	0.7	73.7	100.0	2,192
Eastern	51.6	38.0	2.7	0.0	7.3	1.1	14.3	6.3	5.9	0.6	13.5	8.9	4.2	0.4	48.4	100.0	1,407
Zanzibar	23.4	14.0	1.3	0.0	2.8	0.2	6.1	3.1	0.4	0.0	9.4	3.3	5.8	0.3	76.6	100.0	220
Region																	
Dodoma	49.2	41.2	1.4	0.0	10.5	0.0	17.4	8.7	1.5	1.7	8.0	4.0	3.1	0.9	50.8	100.0	383
Arusha	37.8	31.8	2.9	0.0	7.5	2.5	10.7	7.8	0.4	0.0	6.0	4.3	1.0	0.7	62.2	100.0	325
Kilimanjaro	56.4	47.8	5.3	0.0	8.0	1.3	21.0	9.5	2.4	0.4	8.6	7.2	1.4	0.0	43.6	100.0	195
Tanga	34.6	29.6	1.2	0.0	10.1	0.5	12.0	4.8	1.0	0.0	4.9	2.7	2.2	0.0	65.4	100.0	385
Morogoro	54.3	46.9	2.9	0.0	7.5	1.3	19.3	11.5	4.0	0.4	7.5	4.7	1.6	1.2	45.7	100.0	399
Pwani	44.4	39.1	1.4	0.0	8.9	1.4	19.0	5.3	2.3	0.6	5.3	2.2	2.4	0.7	55.6	100.0	184
Dar es Salaam	51.8	33.5	2.8	0.0	6.8	0.9	10.8	3.9	7.5	0.6	18.3	12.4	5.9	0.0	48.2	100.0	824
Lindi	55.3	51.6	1.1	0.0	10.9	0.6	24.8	13.1	1.1	0.0	3.7	1.1	1.9	0.7	44.7	100.0	191
Mtwara	51.5	49.7	4.4	0.0	19.6	0.0	19.3	5.1	0.8	0.4	1.8	0.8	0.5	0.6	48.5	100.0	261
Ruvuma	57.2	50.8	4.9	0.0	8.1	0.8	17.1	15.6	4.3	0.0	6.3	2.6	3.3	0.4	42.8	100.0	226
Iringa	46.6	32.1	4.0	0.0	5.7	3.0	7.8	7.1	4.6	0.0	14.5	8.4	4.6	1.6	53.4	100.0	143
Mbeya	53.6	45.0	3.8	0.0	4.0	1.3	16.6	14.6	4.7	0.0	8.5	4.3	2.5	1.6	46.4	100.0	490
Singida	41.8	38.4	5.6	0.0	6.3	0.6	12.2	10.0	0.4	3.3	3.4	2.8	0.7	0.0	58.2	100.0	243
Tabora	21.9	20.5	3.4	0.0	2.7	0.4	7.1	4.8	2.1	0.0	1.4	0.8	0.0	0.6	78.1	100.0	514
Rukwa	36.4	32.4	3.2	0.0	3.3	0.3	17.9	6.7	1.0	0.0	4.1	3.4	0.0	0.7	63.6	100.0	183
Kigoma	24.1	17.5	2.3	0.0	1.9	0.2	10.0	2.0	1.1	0.0	6.5	1.6	4.9	0.0	75.9	100.0	365
Shinyanga	24.0	21.3	3.7	0.0	2.4	0.0	7.8	5.2	1.3	0.6	2.7	1.6	0.0	1.2	76.0	100.0	344
Kagera	43.4	38.7	8.5	1.2	5.6	2.9	13.5	5.3	1.0	0.5	4.8	3.0	1.1	0.7	56.6	100.0	418
Mwanza	20.2	18.4	3.6	0.0	0.8	0.3	8.4	4.9	0.4	0.0	1.8	0.7	0.7	0.4	79.8	100.0	465
Mara	33.1	29.1	3.1	0.0	1.5	0.8	14.9	5.0	2.7	1.2	4.0	3.2	0.3	0.5	66.9	100.0	340
Manyara	31.7	27.5	3.0	0.0	1.7	0.7	12.7	7.3	1.3	0.8	4.1	3.0	1.1	0.0	68.3	100.0	260
Njombe	54.0	45.0	5.3	0.0	7.5	3.0	18.0	7.2	4.1	0.0	9.0	2.8	2.8	3.4	46.0	100.0	134
Katavi	21.5	18.1	0.8	0.0	2.0	0.0	7.3	7.5	0.5	0.0	3.3	0.7	0.0	2.7	78.5	100.0	92
Simiyu	19.1	16.9	4.0	0.0	1.6	0.4	5.4	4.0	0.7	0.8	2.1	0.8	0.7	0.6	80.9	100.0	312
Geita	14.9	12.9	2.3	0.0	0.7	0.5	4.3	3.4	0.9	0.5	1.9	1.1	0.0	0.8	85.1	100.0	313
KaskaziniUnguja	19.6	14.2	0.9	0.0	0.9	0.0	8.6	3.8	0.0	0.0	5.4	0.3	4.6	0.4	80.4	100.0	35
KusiniUnguja	41.1	28.9	1.1	0.0	5.7	0.0	16.0	5.5	0.6	0.0	12.2	1.9	7.7	2.7	58.9	100.0	20
MjiniMagharibi	30.0	14.5	1.4	0.0	2.9	0.4	5.3	3.5	0.8	0.0	15.5	6.5	9.0	0.0	70.0	100.0	96
Kaskazini Pemba	13.0	11.0	0.5	0.0	5.0	0.0	4.2	1.3	0.0	0.0	2.0	0.6	1.4	0.0	87.0	100.0	37
Kusini Pemba	9.1	6.8	2.7	0.0	0.0	0.0	1.8	1.8	0.4	0.0	2.3	0.6	1.6	0.0	90.9	100.0	32
Education																	
No education	26.6	24.2	3.2	0.1	3.8	0.2	9.8	5.5	0.9	0.7	2.5	0.7	0.9	0.8	73.4	100.0	1,559
Primary incomplete	29.9	27.0	1.3	0.0	4.8	1.2	11.8	5.6	1.8	0.2	3.0	1.9	0.5	0.6	70.1	100.0	971
Primary complete	41.8	35.5	4.1	0.1	6.1	1.1	14.2	7.1	2.4	0.5	6.3	3.1	2.5	0.7	58.2	100.0	4,445
Secondary+	47.5	33.2	2.5	0.0	5.9	0.9	11.0	8.0	4.5	0.4	14.3	11.0	3.1	0.2	52.5	100.0	1,235

(Continued…)

Table 7.4.2—*Continued*

Background characteristic	Any method	Any modern method	Modern method: Female sterilisation	Male sterilisation	Pill	IUCD	Injectables	Implants	Male condom	LAM	Any traditional method	Traditional method: Rhythm	Withdrawal	Other	Not currently using	Total	Number of women
Wealth quintile																	
Lowest	23.0	20.3	1.8	0.0	3.0	0.7	9.1	4.5	0.7	0.5	2.7	0.8	1.0	0.9	77.0	100.0	1,670
Second	32.1	27.9	2.4	0.3	4.0	0.6	11.9	6.8	1.5	0.5	4.2	2.3	1.0	0.9	67.9	100.0	1,523
Middle	39.9	35.8	4.2	0.0	5.0	1.0	14.9	7.8	2.1	0.7	4.1	1.4	2.3	0.4	60.1	100.0	1,541
Fourth	46.1	40.4	4.1	0.0	7.5	1.1	16.2	8.7	2.6	0.3	5.8	3.1	2.2	0.5	53.9	100.0	1,642
Highest	49.2	35.4	4.2	0.0	7.6	1.0	11.3	6.1	4.7	0.4	13.8	9.9	3.4	0.5	50.8	100.0	1,835
Total	38.4	32.0	3.4	0.1	5.5	0.9	12.6	6.7	2.4	0.5	6.4	3.7	2.0	0.6	61.6	100.0	8,210

Note: If more than one method is used, only the most effective method is considered in this tabulation.
LAM = Lactational amenorrhoea method

Table 7.5.1 Timing of sterilisation

Percent distribution of sterilised women age 15-49 by age at the time of sterilisation and median age at sterilisation, according to the number of years since the operation, Tanzania DHS-MIS 2015-16

Years since operation	Age at time of sterilisation: <25	25-29	30-34	35-39	40-44	45-49	Total	Number of women	Median age[1]
<2	1.6	4.8	14.4	45.3	29.4	4.5	100.0	59	35.8
2-3	0.0	4.9	8.6	39.8	39.9	6.7	100.0	55	36.8
4-5	0.0	1.7	29.5	34.4	34.4	0.0	100.0	64	36.1
6-7	(0.0)	(8.7)	(51.9)	(31.2)	(8.3)	(0.0)	100.0	48	(33.8)
8-9	(6.1)	(8.7)	(34.7)	(49.9)	(0.5)	(0.0)	100.0	41	(35.0)
10+	12.4	25.7	29.6	32.2	0.0	0.0	100.0	71	a
Total	3.6	9.6	27.3	38.1	19.4	1.9	100.0	338	34.8

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[a] = Not calculated due to censoring
[1] Median age at sterilisation is calculated only for women sterilised before age 40 to avoid problems of censoring

Table 7.5.2 Timing of modern contraceptive use after birth

Percent distribution of women age 15-49 who are currently using any modern contraception and who gave birth in the5 years preceding the survey by number of months between the most recent birth in the past5 years and the contraceptive method, Tanzania DHS-MIS 2015-16

Woman's age	Months after delivery started using a modern contraceptive method: <3	3-6	7-12	12+	Total	Number of women
<20	12.2	33.8	29.1	24.9	100.0	137
20-24	15.9	22.9	23.4	37.8	100.0	618
25-29	13.7	25.5	22.0	38.8	100.0	622
30-34	15.7	21.5	24.7	38.1	100.0	500
35-39	16.5	22.3	17.6	43.6	100.0	379
40-44	17.5	21.4	21.6	39.5	100.0	170
45-49	25.8	12.8	12.6	48.8	100.0	50
Total	15.5	23.5	22.4	38.6	100.0	2,476

Table 7.6 Source of modern contraception methods

Percent distribution of users of modern contraceptive methods age 15-49 by most recent source of method, according to method, Tanzania DHS-MIS 2015-16

Source	Female sterili-sation	Pill	IUCD	Injectables	Implants	Male condom	Total
Government/parastatal	67.7	52.6	67.3	66.7	88.7	9.4	60.8
National/zonal referral/ spec. hospital	4.2	0.0	0.0	0.1	1.0	1.5	0.8
Regional referral hospital	7.5	0.6	2.5	0.4	1.6	0.1	1.4
Regionalhospital	6.7	1.0	0.0	0.5	0.9	0.1	1.2
District hospital	23.8	3.6	9.4	5.4	10.0	1.4	7.3
Health centre	13.2	10.1	28.0	14.5	21.9	0.9	13.7
Dispensary/clinic	12.3	37.0	27.4	45.6	53.4	5.0	36.3
Community health worker (CHW)	0.0	0.4	0.0	0.2	0.0	0.3	0.2
Religious/voluntary	27.1	5.5	22.0	11.5	9.1	3.0	10.5
Referral/ spec. hospital	1.0	0.0	1.3	0.0	0.3	0.0	0.2
District hospital	8.7	0.6	3.8	0.7	2.4	1.2	1.9
Hospital	9.9	0.3	1.2	0.3	0.6	0.1	1.3
Health centre	6.9	3.7	10.9	6.9	3.7	0.6	4.9
Dispensary/clinic	0.6	0.9	4.7	3.6	2.0	1.1	2.2
Private medical	3.1	0.3	9.6	2.0	1.2	0.5	1.6
Specialised hospital	0.0	0.0	4.9	0.0	0.0	0.0	0.1
Hospital	2.4	0.2	2.2	0.7	0.2	0.0	0.6
Health centre	0.8	0.1	2.5	1.4	0.9	0.5	0.9
Other private	2.1	40.8	1.1	19.9	1.1	87.2	26.9
Pharmacy	0.0	20.5	0.0	8.7	0.0	31.3	11.0
Accredited drug dispensing outlet (ADDO)	0.0	18.3	0.0	10.2	0.4	24.8	10.3
Shop/kiosk	0.0	1.6	0.0	0.0	0.0	22.8	3.6
Other	2.1	0.4	1.1	1.0	0.7	8.3	2.0
Missing	0.0	0.7	0.0	0.0	0.0	0.0	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	338	549	91	1,315	737	516	3,558

Note: Total includes other modern methods but excludes lactational amenorrhoea method (LAM). Male sterilisation, female condom, emergency contraception, and standard days method(SDM) are included in the total but not shown separately because they are reported by fewer than 25 unweighted women.

Table 7.7 Use of social marketing brand pills and condoms

Percentage of pill and condom users age 15-49 using a social marketing brand, by background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Among pill users		Among condom users[1]	
	Percentage using Familia or Flexipills	Number of women	Percentage using Salama or Dume or Familia	Number of women
Age				
15-19	*	22	98.2	89
20-24	34.9	76	85.9	123
25-29	47.9	115	77.3	88
30-34	40.5	115	(80.5)	63
35-39	30.7	116	(78.5)	50
40-44	22.8	55	(92.6)	48
45-49	*	24	*	20
Residence				
Urban	51.5	214	82.5	304
Rural	26.0	310	92.8	178
Education				
No education	24.6	70	*	24
Primary incomplete	(32.5)	59	*	33
Primary complete	37.8	313	90.5	204
Secondary+	43.9	83	82.5	221
Wealth quintile				
Lowest	22.5	58	*	22
Second	15.1	84	(86.6)	43
Middle	38.9	88	94.7	64
Fourth	34.0	138	91.1	101
Highest	53.8	156	81.6	251
Total	36.4	524	86.3	482

Note: Table excludes pill and condom users who do not know the brand name. Condom use is based on women's reports. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Among condom users not also using the pill

Table 7.8 Informed choice

Among current users of modern methods age 15-49 who started the last episode of use within the five years preceding the survey, the percentage who were informed about possible side effects or problems of that method, the percentage who were informed about what to do if they experienced side effects, and the percentage who were informed about other methods they could use, by method and initial source, Tanzania DHS-MIS 2015-16

	Among women who started last episode of modern contraceptive method within five years preceding the survey:			
Method/source	Percentage who were informed about side effects or problems of method used	Percentage who were informed about what to do if experienced side effects	Percentage who were informed by a health or family planning worker of other methods that could be used	Number of women
Method				
Female sterilisation	62.4	54.7	79.9	154
Pill	57.2	49.7	76.9	494
IUCD	90.2	81.3	89.3	72
Injectables	56.0	49.4	79.6	1,232
Implants	73.7	70.8	88.9	716
Initial source of method[1]				
Government/parastatal	65.6	60.7	85.8	1,990
Hospital	70.1	64.4	87.1	288
Health Centre	67.9	63.5	87.8	453
Dispensary/clinic	63.5	58.7	84.7	1,243
CHW	*	*	*	7
Religious/voluntary	64.1	56.6	86.0	179
Hospital	61.0	50.1	90.4	73
Health Centre	(74.9)	(70.1)	(87.4)	56
Dispensary/clinic	(56.5)	(51.2)	(77.9)	50
Private medical	64.3	49.7	70.9	120
Hospital	*	*	*	2
Hospital	*	*	*	20
Health Centre	*	*	*	24
Dispensary/clinic	(59.0)	(39.8)	(64.1)	67
NA - Clinic	*	*	*	6
Other private	42.0	34.0	62.4	351
Pharmacy	37.9	30.4	69.2	172
Accredited drug dispensing outlet (ADDO)	45.9	37.4	55.9	179
Other	*	*	*	27
Total	62.3	56.4	81.9	2,669

Note: Table includes users of only the methods listed individually. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Source at start of current episode of use

Table 7.9 Twelve-month contraceptive discontinuation rates

Among women age 15-49 who started an episode of contraceptive use within the 5 years preceding the survey, the percentage of episodes discontinued within 12 months, by reason for discontinuation and specific method, Tanzania DHS-MIS 2015-16

Method	Method failure	Desire to become pregnant	Other fertility related reasons[1]	Side effects/ health concerns	Wanted more effective method	Other method related reasons[2]	Other reasons	Any reason[3]	Switched to another method[4]	Number of episodes of use[5]
Female sterilisation	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	169
Pill	3.0	6.7	3.1	15.2	2.6	1.6	1.7	34.0	7.8	1,096
Injectables	0.6	6.6	2.2	16.1	1.9	2.2	2.3	32.0	5.5	2,529
Implants	0.6	2.0	0.3	6.4	0.1	0.0	0.2	9.6	1.7	999
Male condom	1.5	5.5	6.2	1.5	7.4	1.4	4.5	27.9	11.4	660
Rhythm	8.0	5.4	0.6	0.2	3.1	0.7	1.3	19.5	4.4	661
Withdrawal	10.1	2.1	1.5	0.2	17.6	0.6	0.1	32.1	17.8	348
Other[6]	4.9	2.1	1.9	4.5	6.3	0.3	2.6	22.7	8.0	362
All methods	2.5	5.1	2.2	9.8	3.3	1.3	1.9	26.1	6.4	6,825

Note:
- Figures are based on life table calculations using information on episodes of use that began 3-62 months preceding the survey.
- Figures in parentheses are based on 25-49 unweighted cases.

[6] Includes LAM, male sterilisation, IUCD, female condom, and emergency contraception
[1] Includes infrequent sex/husband away, difficult to get pregnant/menopausal, and marital dissolution/separation
[2] Includes lack of access/too far, costs too much, and inconvenient to use
[3] Reasons for discontinuation are mutually exclusive and add to the total given in this column.
[4] The episodes of use included in this column are a subset of the discontinued episodes included in the discontinuation rate. A woman is considered to have switched to another method if she used a different method in the month following discontinuation or if she gave "wanted a more effective method" as the reason for discontinuation and started another method within 2 months of discontinuation.
[5] Number of episodes of use includes both episodes of use that were discontinued during the period of observation and episodes of use that were not discontinued during the period of observation.

Table 7.10 Reasons for discontinuation

Percent distribution of discontinuations of contraceptive methods in the five years preceding the survey by main reason stated for discontinuation, according to specific method, Tanzania DHS-MIS 2015-16

Reason	IUCD	Inject-ables	Implants	Pill	Male condom	Rhythm	With-drawal	Other	All methods
Became pregnant while using	8.8	3.2	2.6	9.2	8.9	40.9	36.8	24.4	10.8
Wanted to become pregnant	28.5	40.0	43.2	39.0	32.3	35.9	19.1	37.3	37.7
Husband disapproved	2.4	2.5	2.2	2.0	8.9	0.7	3.6	0.5	2.8
Wanted a more effective method	4.9	4.7	2.7	7.6	22.0	11.2	32.9	19.7	9.0
Side effects/health concerns	47.2	36.8	39.0	28.0	2.8	0.3	0.6	3.0	26.4
Lack of access/too far	0.0	3.7	2.7	1.9	1.0	0.0	0.0	1.5	2.4
Cost too much	0.0	1.2	0.0	0.2	1.0	0.0	0.0	0.0	0.6
Inconvenient to use	0.0	0.3	0.0	2.4	2.5	2.4	1.7	1.6	1.2
Up to God/fatalistic	0.0	0.2	0.3	0.3	0.0	0.3	0.0	1.3	0.2
Difficult to get pregnant/menopausal	1.0	0.3	0.1	0.4	0.0	1.6	0.0	1.8	0.4
Infrequent sex/husband away	3.3	2.8	0.8	6.1	14.2	3.1	2.4	5.4	4.2
Marital dissolution/separation	1.3	1.1	0.7	0.6	4.0	0.9	1.6	0.0	1.1
Other	2.5	3.1	5.7	1.9	2.1	2.1	1.0	3.6	2.8
Don't know	0.0	0.1	0.0	0.0	0.5	0.0	0.0	0.0	0.1
Missing	0.0	0.2	0.0	0.4	0.0	0.6	0.3	0.0	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of discontinuations	80	2,095	494	1,007	377	459	254	141	4,925

Note: Female condom, emergency contraception, and SDM users are included in the total but not shown separately because they are reported by fewer than 25 unweighted women.

Table 7.11 Knowledge of fertile period

Percent distribution of women age 15-49 by knowledge of the fertile period during the ovulatory cycle, according to current use of the rhythm method, Tanzania DHS-MIS 2015-16

Perceived fertile period	Users of rhythm method	Nonusers of rhythm method	All women
Just before her menstrual period begins	7.0	8.1	8.0
During her menstrual period	0.7	2.1	2.0
Right after her menstrual period has ended	33.7	36.2	36.1
Halfway between two menstrual periods	36.2	20.3	20.8
Other	0.0	0.1	0.1
No specific time	18.7	18.5	18.5
Don't know	3.7	14.8	14.4
Missing	0.0	0.0	0.0
Total	100.0	100.0	100.0
Number of women	464	12,802	13,266

Table 7.12.1 Need and demand for family planning among currently married women

Percentage of currently married women age 15-49 with unmet need for family planning, percentage with met need for family planning, the total demand for family planning, and the percentage of the demand for contraception that is satisfied, by background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Unmet need for family planning			Met need for family planning (currently using)			Total demand for family planning[1]			Percentage of demand satisfied[2]	Percentage of demand satisfied by modern methods[3]	Number of women
	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total			
Age												
15-19	23.0	0.0	23.0	14.1	0.6	14.7	37.1	0.6	37.7	39.0	35.3	668
20-24	21.4	1.4	22.7	34.6	0.8	35.4	55.9	2.2	58.1	60.9	51.4	1,479
25-29	20.9	2.5	23.4	35.8	5.9	41.7	56.7	8.4	65.1	64.0	55.0	1,616
30-34	16.5	4.4	21.0	30.4	14.2	44.6	46.9	18.6	65.5	68.0	55.3	1,378
35-39	11.7	11.1	22.9	17.9	25.5	43.3	29.6	36.6	66.2	65.5	56.2	1,308
40-44	7.7	16.7	24.3	6.2	34.2	40.4	13.9	50.9	64.8	62.4	49.4	1,033
45-49	1.1	13.7	14.8	2.7	32.4	35.1	3.8	46.1	49.9	70.4	55.2	728
Residence												
Urban	13.2	6.5	19.7	28.4	17.6	46.1	41.6	24.2	65.8	70.0	53.5	2,535
Rural	16.6	6.6	23.2	21.3	13.6	34.9	37.8	20.2	58.1	60.1	52.6	5,675
Tanzania Mainland/ Zanzibar												
Mainland	15.4	6.5	22.0	23.5	15.3	38.8	38.9	21.8	60.7	63.8	53.5	7,990
Urban	13.1	6.5	19.5	28.6	18.0	46.6	41.7	24.4	66.1	70.4	54.1	2,468
Rural	16.4	6.6	23.0	21.2	14.0	35.3	37.7	20.6	58.3	60.5	53.2	5,523
Zanzibar	20.4	7.6	28.0	18.5	4.9	23.4	38.9	12.5	51.4	45.6	27.3	220
Unguja	17.0	7.3	24.3	23.4	5.7	29.1	40.4	12.9	53.3	54.5	30.6	151
Pemba	27.8	8.3	36.0	8.0	3.2	11.2	35.7	11.5	47.2	23.7	19.2	69
Zone												
Western	19.1	5.0	24.2	14.0	8.8	22.8	33.1	13.9	47.0	48.5	41.0	879
Northern	14.7	6.1	20.8	20.8	19.7	40.4	35.5	25.8	61.2	66.1	56.1	906
Central	14.9	5.5	20.4	28.2	13.8	42.0	43.1	19.3	62.4	67.3	58.3	886
Southern Highlands	10.1	6.2	16.3	30.1	23.2	53.3	40.1	29.4	69.6	76.6	63.2	503
Southern zone	7.9	2.2	10.1	40.6	12.5	53.1	48.5	14.8	63.2	84.0	79.8	452
South West Highlands	12.3	7.5	19.8	24.0	21.6	45.6	36.3	29.1	65.4	69.7	59.3	765
Lake	20.1	9.4	29.5	14.3	11.9	26.3	34.4	21.3	55.7	47.2	41.9	2,192
Eastern	12.6	5.1	17.6	34.5	17.1	51.6	47.0	22.1	69.2	74.5	55.0	1,407
Zanzibar	20.4	7.6	28.0	18.5	4.9	23.4	38.9	12.5	51.4	45.6	27.3	220
Region												
Dodoma	9.5	5.2	14.7	35.0	14.2	49.2	44.5	19.4	63.8	77.0	64.5	383
Arusha	14.7	6.9	21.6	21.3	16.5	37.8	36.0	23.4	59.4	63.7	53.6	325
Kilimanjaro	7.6	10.1	17.7	24.8	31.6	56.4	32.4	41.7	74.1	76.1	64.5	195
Tanga	18.2	3.4	21.7	18.3	16.3	34.6	36.5	19.7	56.2	61.5	52.7	385
Morogoro	11.3	4.8	16.1	37.6	16.7	54.3	48.9	21.5	70.4	77.2	66.6	399
Pwani	15.7	3.4	19.2	33.0	11.4	44.4	48.8	14.9	63.6	69.8	61.5	184
Dar es Salaam	12.5	5.6	18.0	33.3	18.5	51.8	45.7	24.1	69.8	74.2	48.0	824
Lindi	7.9	1.7	9.5	46.5	8.9	55.3	54.3	10.5	64.8	85.3	79.5	191
Mtwara	7.9	2.7	10.5	36.3	15.2	51.5	44.2	17.9	62.0	83.0	80.1	261
Ruvuma	9.2	4.3	13.5	38.2	18.9	57.2	47.4	23.2	70.6	80.9	71.9	226
Iringa	11.7	6.6	18.3	22.3	24.4	46.6	34.0	30.9	64.9	71.9	49.5	143
Mbeya	8.7	7.9	16.6	27.9	25.6	53.6	36.6	33.6	70.2	76.3	64.2	490
Singida	18.7	4.3	23.0	26.3	15.6	41.8	45.0	19.9	64.8	64.5	59.3	243
Tabora	17.2	4.4	21.7	12.0	9.9	21.9	29.2	14.4	43.6	50.3	47.0	514
Rukwa	18.5	6.2	24.8	18.8	17.7	36.4	37.3	23.9	61.2	59.5	52.9	183
Kigoma	21.8	5.9	27.7	16.8	7.3	24.1	38.6	13.2	51.8	46.5	33.8	365
Shinyanga	14.0	9.0	23.1	12.9	11.1	24.0	27.0	20.1	47.1	51.0	45.2	344
Kagera	14.7	7.6	22.3	22.5	20.9	43.4	37.1	28.6	65.7	66.1	58.8	418
Mwanza	22.7	11.4	34.1	11.4	8.8	20.2	34.1	20.2	54.3	37.1	33.8	465
Mara	24.6	9.8	34.4	18.4	14.7	33.1	43.0	24.5	67.5	49.0	43.1	340
Manyara	19.3	7.1	26.4	20.1	11.5	31.7	39.4	18.6	58.0	54.5	47.4	260
Njombe	9.8	8.9	18.7	24.7	29.3	54.0	34.5	38.2	72.7	74.2	61.9	134
Katavi	19.4	7.8	27.2	13.3	8.2	21.5	32.7	15.9	48.6	44.1	37.3	92
Simiyu	20.1	8.3	28.5	10.7	8.3	19.1	30.9	16.7	47.5	40.1	35.6	312
Geita	25.2	9.4	34.7	8.7	6.2	14.9	33.9	15.7	49.6	30.0	26.1	313
KaskaziniUnguja	23.2	7.7	30.8	15.8	3.8	19.6	38.9	11.5	50.4	38.9	28.2	35
KusiniUnguja	15.9	4.2	20.1	36.1	4.9	41.1	52.1	9.1	61.2	67.1	47.2	20
MjiniMagharibi	15.0	7.8	22.8	23.6	6.5	30.0	38.6	14.2	52.8	56.9	27.5	96
Kaskazini Pemba	30.5	6.6	37.1	10.7	2.4	13.0	41.1	9.0	50.1	26.0	22.0	37
Kusini Pemba	24.7	10.1	34.8	4.9	4.2	9.1	29.5	14.3	43.9	20.7	15.5	32
Education												
No education	18.0	8.4	26.5	15.6	11.1	26.6	33.6	19.5	53.1	50.1	45.5	1,559
Primary incomplete	18.1	6.5	24.6	18.5	11.4	29.9	36.5	17.9	54.5	54.9	49.5	971
Primary complete	14.9	6.4	21.4	24.3	17.5	41.8	39.2	23.9	63.1	66.2	56.2	4,445
Secondary+	12.6	4.8	17.4	33.8	13.7	47.5	46.4	18.5	64.9	73.1	51.1	1,235

(Continued…)

Table 7.12.1—*Continued*

Background characteristic	Unmet need for family planning			Met need for family planning (currently using)			Total demand for family planning[1]			Percentage of demand satisfied[2]	Percentage of demand satisfied by modern methods[3]	Number of women
	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total			
Wealth quintile												
Lowest	21.2	7.6	28.7	15.3	7.7	23.0	36.5	15.3	51.8	44.5	39.2	1,670
Second	17.7	7.2	24.9	20.2	11.9	32.1	37.9	19.1	57.0	56.3	48.9	1,523
Middle	15.9	6.8	22.6	23.2	16.7	39.9	39.1	23.5	62.6	63.8	57.2	1,541
Fourth	13.0	5.5	18.5	27.1	19.0	46.1	40.1	24.5	64.6	71.4	62.5	1,642
Highest	10.6	6.0	16.6	30.2	19.0	49.2	40.8	25.0	65.8	74.8	53.8	1,835
Total	15.5	6.6	22.1	23.4	15.0	38.4	38.9	21.5	60.5	63.4	52.9	8,210

Note: Numbers in this table correspond to the revised definition of unmet need described in Bradley et al. 2012.
[1] Total demand is the sum of unmet need and met need.
[2] Percentage of demand satisfied is met need divided by total demand.
[3] Modern methods include female sterilisation, male sterilisation, pill, IUD, injectables, implants, male condom, female condom, emergency contraception, standard days method (SDM), lactational amenorrhoea method (LAM), and other modern methods.

Table 7.12.2 Need and demand for family planning for all women and for women who are not currently married

Percentage of all women and women not currently married age 15-49 with unmet need for family planning, percentage with met need for family planning, the total demand for family planning and the percentage of the demand for contraception that is satisfied, by background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Unmet need for family planning			Met need for family planning (currently using)			Total demand for family planning[1]			Percentage of demand satisfied[2]	Percentage of demand satisfied by modern methods[3]	Number of women
	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total			
					ALL WOMEN							
Age												
15-19	10.8	0.0	10.8	10.0	0.3	10.4	20.8	0.3	21.1	49.0	40.6	2,904
20-24	16.6	1.1	17.7	33.6	1.2	34.7	50.2	2.2	52.4	66.3	55.0	2,483
25-29	17.8	2.3	20.1	35.6	5.7	41.3	53.4	8.0	61.5	67.2	57.2	2,125
30-34	14.5	4.0	18.5	29.4	14.1	43.5	43.9	18.1	62.0	70.1	58.2	1,752
35-39	10.1	9.9	19.9	16.9	24.3	41.3	27.0	34.2	61.2	67.4	58.5	1,641
40-44	6.5	13.9	20.4	6.3	31.5	37.8	12.8	45.4	58.2	65.0	52.6	1,364
45-49	0.9	11.2	12.1	2.7	27.8	30.5	3.6	39.0	42.6	71.6	58.4	997
Residence												
Urban	9.8	3.9	13.8	25.6	11.7	37.3	35.4	15.6	51.0	73.0	56.5	4,811
Rural	13.6	5.0	18.5	18.4	11.2	29.7	32.0	16.2	48.2	61.5	54.3	8,455
Tanzania Mainland/ Zanzibar												
Mainland	12.2	4.6	16.8	21.3	11.7	33.0	33.5	16.3	49.8	66.2	55.6	12,862
Urban	9.9	3.9	13.8	26.0	11.9	37.9	35.8	15.8	51.7	73.4	57.0	4,675
Rural	13.5	5.0	18.6	18.6	11.5	30.2	32.2	16.5	48.7	61.9	54.8	8,187
Zanzibar	12.4	4.3	16.7	11.5	2.9	14.4	23.9	7.2	31.1	46.3	28.8	404
Unguja	10.5	4.0	14.4	13.9	3.1	17.0	24.3	7.1	31.4	54.1	31.7	293
Pemba	17.6	5.1	22.7	5.3	2.3	7.6	22.9	7.4	30.3	25.0	20.7	111
Zone												
Western	15.2	3.7	18.9	13.3	7.4	20.8	28.5	11.1	39.6	52.4	44.1	1,278
Northern	10.4	3.8	14.2	17.3	13.1	30.3	27.6	16.9	44.5	68.1	58.0	1,575
Central	11.9	4.3	16.3	23.3	11.6	34.9	35.2	16.0	51.2	68.2	59.8	1,336
Southern Highlands	9.5	4.9	14.4	27.3	17.4	44.7	36.7	22.3	59.1	75.7	63.1	807
Southern	7.7	1.6	9.3	39.3	10.4	49.7	47.0	12.1	59.1	84.2	80.3	700
South West Highlands	10.3	4.7	15.0	21.9	16.1	38.0	32.2	20.9	53.0	71.7	61.8	1,246
Lake	16.1	6.8	22.8	12.8	9.3	22.1	28.9	16.0	44.9	49.2	44.3	3,463
Eastern	9.7	3.4	13.1	31.5	12.6	44.2	41.3	16.0	57.3	77.1	56.4	2,457
Zanzibar	12.4	4.3	16.7	11.5	2.9	14.4	23.9	7.2	31.1	46.3	28.8	404
Region												
Dodoma	8.4	4.5	13.0	28.5	13.2	41.7	36.9	17.7	54.6	76.3	65.2	572
Arusha	11.0	4.4	15.4	20.5	11.7	32.1	31.5	16.0	47.5	67.6	55.1	508
Kilimanjaro	5.0	6.0	11.1	18.6	20.5	39.1	23.6	26.5	50.1	77.9	67.3	361
Tanga	12.7	2.2	14.9	14.3	10.3	24.5	27.0	12.5	39.5	62.2	54.3	706
Morogoro	11.4	3.7	15.2	33.8	14.3	48.2	45.3	18.1	63.3	76.1	63.8	636
Pwani	12.3	2.8	15.1	29.2	9.0	38.1	41.5	11.8	53.3	71.6	62.9	285
Dar es Salaam	8.5	3.4	11.9	31.0	12.6	43.6	39.6	16.0	55.5	78.6	51.7	1,536
Lindi	8.7	1.1	9.8	43.6	7.2	50.7	52.3	8.3	60.6	83.8	79.2	288
Mtwara	7.0	2.0	9.0	36.3	12.7	49.0	43.3	14.7	58.0	84.5	81.1	412
Ruvuma	10.2	3.5	13.7	34.5	16.5	51.0	44.7	19.9	64.6	78.8	71.2	360
Iringa	9.0	5.1	14.1	21.9	16.4	38.2	30.9	21.5	52.4	73.0	51.4	245
Mbeya	7.4	4.7	12.1	25.5	18.2	43.7	32.8	22.9	55.8	78.4	66.8	828
Singida	13.5	3.5	16.9	22.2	11.9	34.1	35.6	15.4	51.1	66.8	61.8	370
Tabora	14.9	3.1	18.0	13.6	8.8	22.4	28.5	11.9	40.4	55.5	50.0	737
Rukwa	14.6	4.3	18.9	15.5	14.0	29.6	30.2	18.3	48.5	61.0	55.1	288
Kigoma	15.7	4.4	20.1	13.0	5.6	18.5	28.6	10.0	38.6	48.0	35.8	542
Shinyanga	12.2	6.5	18.7	12.7	9.5	22.2	24.8	16.0	40.9	54.4	49.2	504
Kagera	11.2	5.7	16.9	17.5	16.8	34.3	28.7	22.5	51.1	67.0	60.3	612
Mwanza	17.1	6.8	24.0	11.7	6.2	17.9	28.9	13.0	41.9	42.8	38.3	859
Mara	20.2	7.7	27.9	17.5	11.0	28.5	37.7	18.7	56.5	50.6	46.0	523
Manyara	15.6	4.9	20.5	16.8	9.1	25.9	32.5	14.0	46.4	55.8	48.5	394
Njombe	8.6	7.2	15.8	20.9	20.5	41.4	29.6	27.7	57.2	72.3	59.7	203
Katavi	19.0	6.0	25.0	13.1	7.3	20.5	32.2	13.3	45.5	45.0	38.5	130
Simiyu	15.2	6.5	21.7	9.5	7.5	17.0	24.7	13.9	38.7	44.0	39.7	479
Geita	20.7	7.6	28.3	7.2	4.8	12.0	27.9	12.3	40.3	29.8	26.2	485
KaskaziniUnguja	15.8	4.9	20.8	10.3	2.4	12.7	26.1	7.3	33.4	37.9	26.6	56
KusiniUnguja	10.7	2.9	13.5	24.0	3.7	27.7	34.7	6.5	41.2	67.2	49.3	35
MjiniMagharibi	8.9	3.9	12.8	13.1	3.2	16.3	22.0	7.1	29.1	56.0	29.0	201
Kaskazini Pemba	20.4	4.3	24.7	7.0	1.5	8.5	27.3	5.9	33.2	25.6	21.7	56
Kusini Pemba	14.7	5.9	20.7	3.5	3.1	6.6	18.3	9.0	27.3	24.2	19.4	55
Education												
No education	16.4	7.5	23.8	14.8	10.3	25.2	31.2	17.8	49.0	51.3	47.3	1,946
Primary incomplete	13.5	5.0	18.6	15.9	9.2	25.1	29.4	14.2	43.7	57.5	53.2	1,559
Primary complete	12.5	4.8	17.3	21.6	14.6	36.3	34.1	19.5	53.6	67.6	58.3	6,652
Secondary+	8.3	2.1	10.4	26.1	6.3	32.4	34.5	8.3	42.8	75.7	53.0	3,109

(Continued…)

Table 7.12.2—*Continued*

Background characteristic	Unmet need for family planning			Met need for family planning (currently using)			Total demand for family planning[1]			Percentage of demand satisfied[2]	Percentage of demand satisfied by modern methods[3]	Number of women
	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total			
Wealth quintile												
Lowest	18.0	6.1	24.1	13.4	7.8	21.2	31.3	13.9	45.2	46.8	41.9	2,246
Second	15.2	5.9	21.1	17.9	10.5	28.4	33.1	16.4	49.4	57.4	50.4	2,274
Middle	12.6	5.2	17.8	20.7	13.0	33.6	33.3	18.1	51.4	65.4	59.4	2,329
Fourth	11.2	3.6	14.8	23.1	13.4	36.5	34.3	17.0	51.3	71.2	62.5	2,822
Highest	7.3	3.3	10.6	26.3	11.7	38.0	33.6	14.9	48.5	78.3	56.6	3,596
Total	12.2	4.6	16.8	21.0	11.4	32.4	33.2	16.0	49.2	65.9	55.1	13,266
SEXUALLY ACTIVE UNMARRIED WOMEN[4]												
Age												
15-19	42.4	0.0	42.4	38.2	1.0	39.2	80.6	1.0	81.6	48.1	40.6	189
20-24	19.6	1.9	21.6	64.1	2.9	67.0	83.7	4.8	88.5	75.6	60.9	222
25-29	15.5	1.9	17.5	54.2	5.9	60.2	69.7	7.9	77.6	77.5	62.3	160
30-34	10.6	6.1	16.7	40.9	16.4	57.3	51.5	22.4	73.9	77.4	69.1	120
35-39	8.5	10.1	18.6	23.8	28.0	51.9	32.4	38.2	70.5	73.6	69.2	100
40-44	8.7	14.7	23.4	13.7	34.7	48.5	22.5	49.4	71.9	67.4	56.0	86
45-49	(1.6)	(23.6)	(25.2)	(4.3)	(35.3)	(39.6)	(5.9)	(58.9)	(64.8)	(61.2)	(61.2)	50
Residence												
Urban	19.2	3.6	22.7	48.8	11.5	60.3	68.0	15.1	83.1	72.6	57.2	449
Rural	19.3	6.9	26.2	35.4	12.8	48.2	54.6	19.7	74.4	64.8	59.3	478
Tanzania Mainland/ Zanzibar												
Mainland	19.1	5.3	24.4	41.9	12.2	54.2	61.0	17.5	78.5	69.0	58.4	921
Urban	19.2	3.5	22.7	48.7	11.5	60.0	67.9	15.1	83.0	72.6	57.3	447
Rural	19.0	7.0	25.9	35.5	12.9	48.4	54.4	19.9	74.3	65.1	59.6	474
Zanzibar	(39.9)	(6.1)	(46.0)	(35.0)	(6.3)	(41.3)	(74.9)	(12.3)	(87.2)	(47.3)	(34.9)	7
Unguja	(43.8)	(6.6)	(50.4)	(38.4)	(1.6)	(39.9)	(82.1)	(8.2)	(90.4)	(44.2)	(31.1)	6
Pemba	*	*	*	*	*	*	*	*	*	*	*	1
Zone												
Western	15.8	2.4	18.2	39.7	12.4	52.1	55.5	14.9	70.3	74.1	60.9	61
Northern	18.5	5.1	23.6	45.1	14.5	59.5	63.6	19.6	83.2	71.6	65.1	89
Central	18.9	9.9	28.8	29.2	18.1	47.3	48.1	28.0	76.1	62.1	60.4	94
Southern Highlands	16.4	7.3	23.7	51.2	13.6	64.7	67.6	20.8	88.4	73.2	60.1	74
Southern	17.1	0.0	17.1	59.2	10.9	70.1	76.3	10.9	87.2	80.3	80.3	66
South West Highlands	17.6	1.9	19.5	40.0	15.4	55.4	57.7	17.2	74.9	73.9	65.5	83
Lake	26.3	7.4	33.7	24.5	8.5	33.1	50.9	15.9	66.8	49.5	42.9	221
Eastern	15.2	4.4	19.6	55.8	11.3	67.1	71.0	15.7	86.7	77.4	57.1	233
Zanzibar	(39.9)	(6.1)	(46.0)	(35.0)	(6.3)	(41.3)	(74.9)	(12.3)	(87.2)	(47.3)	(34.9)	7
Education												
No education	21.4	9.3	30.7	28.3	13.0	41.3	49.7	22.3	72.0	57.4	57.4	104
Primary incomplete	15.4	12.9	28.3	30.4	13.8	44.2	45.8	26.7	72.5	61.0	60.3	102
Primary complete	18.6	5.1	23.7	36.5	17.0	53.5	55.1	22.1	77.2	69.3	63.5	452
Secondary+	20.9	1.2	22.1	60.4	3.3	63.7	81.3	4.5	85.8	74.2	49.9	270
Wealth quintile												
Lowest	25.7	4.8	30.4	17.5	21.8	39.3	43.2	26.5	69.7	56.4	55.0	96
Second	23.5	11.8	35.3	34.4	10.9	45.4	58.0	22.7	80.7	56.2	50.7	133
Middle	13.3	8.4	21.7	39.6	11.9	51.5	52.9	20.3	73.2	70.3	66.7	149
Fourth	23.2	4.1	27.4	40.2	10.3	50.5	63.5	14.4	77.9	64.9	56.4	251
Highest	14.9	2.0	16.9	55.4	11.5	66.9	70.3	13.5	83.8	79.9	60.0	299
Total	19.2	5.3	24.5	41.9	12.2	54.1	61.1	17.5	78.6	68.8	58.2	928

Note:

- Numbers in this table correspond to the revised definition of unmet need described in Bradley et al. 2012.
- Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Total demand is the sum of unmet need and met need.

[2] Percentage of demand satisfied is met need divided by total demand.

[3] Modern methods include female sterilisation, male sterilisation, pill, IUD, injectables, implants, male condom, female condom, emergency contraception, standard days method (SDM), lactational amenorrhoea method (LAM), and other modern methods.

[4] Women who have had sexual intercourse within 30 days preceding the survey

Table 7.13 Future use of contraception

Percent distribution of currently married women age 15-49 who are not using a contraceptive method by intention to use in the future, according to number of living children, Tanzania DHS-MIS 2015-16

	Number of living children[1]					
Intention	0	1	2	3	4+	Total
Intends to use	49.6	55.8	59.9	55.3	49.5	53.4
Unsure	13.1	6.3	4.9	4.8	4.6	5.7
Does not intend to use	37.3	37.7	35.2	39.9	45.9	40.8
Missing	0.0	0.2	0.0	0.0	0.1	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	416	956	914	762	2,012	5,061

[1] Includes current pregnancy

Table 7.14 Exposure to family planning messages

Percentage of women and men age 15-49 who heard or saw a family planning message on radio, on television, in a newspaper or magazine, or on a mobile phone in the past few months, according to background characteristics, Tanzania DHS-MIS 2015-16

	Women						Men					
Background characteristic	Radio	Tele-vision	News-paper/ magazine	Mobile phone	None of these four media sources	Number of women	Radio	Tele-vision	News-paper/ magazine	Mobile phone	None of these four media sources	Number of men
Age												
15-19	54.4	30.2	24.1	3.4	37.1	2,904	65.8	38.7	25.3	3.4	27.5	932
20-24	64.4	36.1	30.6	7.1	29.2	2,483	75.1	49.7	35.7	6.2	19.1	576
25-29	67.3	34.2	28.3	7.6	28.4	2,125	81.9	50.4	38.8	7.6	11.6	482
30-34	64.6	31.2	26.7	5.8	30.4	1,752	78.6	53.6	37.9	9.4	14.3	410
35-39	65.2	28.7	22.8	3.6	29.8	1,641	81.0	51.9	42.9	7.1	14.8	466
40-44	60.3	25.1	19.6	4.5	35.0	1,364	77.2	48.0	40.3	9.4	18.0	334
45-49	61.4	23.5	19.8	3.1	34.9	997	75.8	39.3	39.4	3.6	21.4	314
Residence												
Urban	71.9	55.2	37.3	10.3	19.3	4,811	79.8	69.4	51.7	9.7	11.1	1,251
Rural	56.6	17.0	18.6	2.3	39.3	8,455	72.4	33.9	26.3	4.3	23.8	2,263
Tanzania Mainland/ Zanzibar												
Mainland	62.9	31.0	25.8	5.2	31.4	12,862	75.7	47.0	35.9	6.2	18.7	3,425
Urban	72.9	55.7	37.9	10.4	18.5	4,675	80.5	70.2	52.5	9.8	10.6	1,224
Rural	57.2	16.8	18.9	2.2	38.8	8,187	73.0	34.0	26.7	4.3	23.3	2,201
Zanzibar	37.7	28.2	12.7	4.8	53.3	404	50.4	30.7	13.9	5.2	39.1	89
Unguja	44.2	34.1	16.0	6.1	45.4	293	58.7	30.0	10.5	5.4	32.0	62
Pemba	20.5	12.9	4.0	1.5	74.3	111	31.9	32.4	21.7	4.6	54.9	28
Zone												
Western	60.4	19.3	18.4	2.4	34.6	1,278	70.2	34.0	20.2	5.8	27.2	322
Northern	65.3	41.4	24.1	5.4	27.7	1,575	73.0	55.7	32.8	5.4	20.3	415
Central	50.5	17.7	20.3	2.5	44.4	1,336	77.1	41.6	33.9	5.4	18.7	372
Southern Highlands	67.9	35.0	28.6	4.1	27.2	807	67.3	35.6	50.1	8.0	21.1	234
Southern	55.2	22.1	26.5	5.7	40.1	700	96.9	74.8	52.2	5.9	1.7	180
South West Highlands	54.9	23.1	25.8	4.6	41.0	1,246	54.3	37.1	35.8	3.0	34.6	308
Lake	66.7	25.3	20.9	3.3	29.3	3,463	79.9	36.8	23.1	5.6	16.9	933
Eastern	68.8	50.8	39.5	11.2	22.0	2,457	80.4	66.2	55.3	9.3	12.6	659
Zanzibar	37.7	28.2	12.7	4.8	53.3	404	50.4	30.7	13.9	5.2	39.1	89
Region												
Dodoma	49.1	16.1	17.7	2.5	46.8	572	73.5	31.3	36.6	4.6	22.1	175
Arusha	59.2	36.0	28.0	6.5	32.7	508	78.0	52.8	36.8	7.0	18.4	129
Kilimanjaro	73.8	48.4	24.4	6.8	18.4	361	79.9	60.5	33.7	7.3	10.0	110
Tanga	65.3	41.7	21.2	3.9	28.9	706	65.1	54.8	29.3	3.1	28.1	176
Morogoro	66.5	31.1	31.4	2.9	30.0	636	72.0	37.7	31.6	5.4	24.8	143
Pwani	63.7	29.5	29.3	3.7	33.2	285	48.6	38.7	34.4	5.0	39.7	68
Dar es Salaam	70.7	62.9	44.8	16.0	16.6	1,536	88.0	79.4	66.0	11.2	4.6	448
Lindi	45.8	23.5	25.1	6.9	47.7	288	100.0	88.1	53.6	7.2	0.0	66
Mtwara	61.8	21.2	27.5	4.9	34.8	412	95.2	67.1	51.3	5.1	2.7	115
Ruvuma	64.3	35.6	18.5	2.1	32.3	360	57.2	33.4	43.3	5.6	28.8	112
Iringa	63.0	34.0	44.1	7.9	30.0	245	78.3	43.3	61.1	10.7	10.7	71
Mbeya	48.8	23.3	27.4	5.6	45.8	828	58.8	33.2	45.0	3.1	31.5	202
Singida	57.0	23.2	24.2	3.1	38.5	370	74.9	36.3	37.2	4.5	19.7	106
Tabora	60.7	20.4	16.8	2.6	35.9	737	62.4	32.9	14.2	5.9	35.0	199
Rukwa	64.6	20.9	20.3	2.4	33.8	288	41.7	39.9	17.4	2.3	44.5	71

(Continued…)

Table 7.14—*Continued*

Background characteristic	Women						Men					
	Radio	Tele-vision	News-paper/ magazine	Mobile phone	None of these four media sources	Number of women	Radio	Tele-vision	News-paper/ magazine	Mobile phone	None of these four media sources	Number of men
Kigoma	60.0	17.8	20.5	2.2	32.9	542	82.7	35.8	29.7	5.6	14.7	124
Shinyanga	74.7	28.1	23.3	2.6	20.7	504	73.4	44.3	21.1	8.9	19.3	142
Kagera	69.6	23.2	25.1	2.7	26.3	612	83.0	31.8	24.2	5.5	11.9	198
Mwanza	62.8	29.6	20.9	5.5	34.0	859	72.1	34.5	30.5	9.5	25.0	225
Mara	72.3	30.6	26.6	3.1	23.4	523	99.4	49.2	18.2	0.9	0.6	114
Manyara	46.4	14.9	20.3	1.8	46.4	394	86.4	67.4	24.9	7.9	11.0	91
Njombe	80.1	35.4	27.8	3.0	14.8	203	74.4	29.5	49.6	9.6	18.5	50
Katavi	71.7	26.9	27.3	2.4	26.3	130	53.9	54.2	19.5	3.6	32.4	35
Simiyu	55.3	22.0	15.4	1.8	38.7	479	86.4	35.8	19.0	1.2	13.3	136
Geita	67.1	14.9	12.0	2.8	31.1	485	71.0	29.9	19.2	4.3	27.2	118
KaskaziniUnguja	40.3	15.4	9.8	3.5	54.4	56	64.1	17.3	6.5	3.6	30.8	13
KusiniUnguja	45.8	18.7	7.2	2.6	50.2	35	53.4	14.2	7.5	3.8	37.3	9
MjiniMagharibi	45.0	42.0	19.3	7.5	42.0	201	58.1	37.6	12.4	6.4	31.3	40
Kaskazini Pemba	19.8	10.9	2.3	0.5	75.4	56	36.8	38.4	27.9	6.4	48.2	14
Kusini Pemba	21.1	15.0	5.8	2.6	73.3	55	26.7	26.1	15.1	2.8	62.1	13
Education												
No education	45.8	9.2	1.9	0.5	53.0	1,946	60.9	20.5	3.8	3.1	36.4	283
Primary incomplete	54.7	15.6	8.3	1.7	42.4	1,559	65.4	29.7	15.4	1.9	30.2	568
Primary complete	64.8	29.3	26.7	4.1	29.9	6,652	77.0	43.5	34.3	5.6	18.1	1,673
Secondary+	70.5	55.5	45.8	12.2	18.4	3,109	81.3	68.8	57.4	10.7	10.0	990
Wealth quintile												
Lowest	44.5	7.1	10.4	1.0	53.1	2,246	63.0	22.3	17.5	3.7	34.0	598
Second	54.2	11.2	15.5	1.0	42.0	2,274	70.7	28.8	20.1	2.3	24.3	575
Middle	61.3	14.5	19.8	2.3	35.2	2,329	73.9	34.0	27.7	4.2	23.0	659
Fourth	70.4	33.2	30.0	5.4	24.9	2,822	80.5	52.5	41.1	7.3	14.0	764
Highest	72.3	66.9	41.1	12.2	16.3	3,596	81.8	77.4	57.2	10.9	8.1	918
Total 15-49	62.2	30.9	25.4	5.2	32.1	13,266	75.0	46.5	35.3	6.2	19.3	3,514

Table 7.15 Contact of nonusers with family planning providers

Among women age 15-49 who are not using contraception, the percentage who during the past 12 months were visited by a fieldworker who discussed family planning, the percentage who visited a health facility and discussed family planning, the percentage who visited a health facility but did not discuss family planning, and the percentage who did not discuss family planning either with a fieldworker or at a health facility, by background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Percentage of women who were visited by fieldworker who discussed family planning	Percentage of women who visited a health facility in the past 12 months and who:		Percentage of women who did not discuss family planning either with fieldworker or at a health facility	Number of women
		Discussed family planning	Did not discuss family planning		
Age					
15-19	1.5	8.0	34.0	90.7	2,604
20-24	2.3	23.1	44.8	75.4	1,620
25-29	2.8	29.5	43.1	68.8	1,246
30-34	2.0	24.3	44.5	74.4	990
35-39	2.6	25.1	43.8	73.5	964
40-44	2.3	16.2	44.1	81.9	848
45-49	2.4	9.1	40.8	89.4	693
Residence					
Urban	2.2	14.8	46.2	83.6	3,017
Rural	2.2	19.9	38.2	78.7	5,948
Tanzania Mainland/ Zanzibar					
Mainland	2.2	18.5	41.0	80.0	8,619
Urban	2.2	15.0	46.4	83.4	2,902
Rural	2.2	20.2	38.3	78.3	5,717
Zanzibar	1.9	11.1	38.8	87.6	346
Unguja	1.7	10.8	40.3	87.8	243
Pemba	2.4	11.6	35.2	87.2	103
Zone					
Western	1.9	26.2	39.0	72.8	1,013
Northern	1.2	11.2	49.3	88.0	1,098
Central	1.6	17.5	36.8	81.6	869
Southern Highlands	2.5	14.9	40.2	82.8	447
Southern	3.3	9.7	52.5	88.3	352
South West Highlands	3.4	15.2	35.0	82.2	772
Lake	2.3	23.0	36.3	75.5	2,698
Eastern	2.2	15.6	48.4	82.7	1,372
Zanzibar	1.9	11.1	38.8	87.6	346
Region					
Dodoma	0.6	15.8	32.1	84.2	334
Arusha	0.9	10.9	41.8	88.2	345
Kilimanjaro	1.2	8.8	47.9	90.5	220
Tanga	1.5	12.4	54.7	86.8	533
Morogoro	2.3	25.9	39.0	72.6	330
Pwani	0.0	24.9	35.8	75.1	176
Dar es Salaam	2.5	9.8	54.6	88.0	866
Lindi	2.9	7.1	52.3	91.0	142
Mtwara	3.6	11.4	52.6	86.4	210
Ruvuma	2.6	17.4	42.4	80.5	177
Iringa	1.4	15.2	39.8	83.4	151
Mbeya	5.0	9.1	35.6	86.8	466
Singida	2.7	21.7	43.9	77.0	244
Tabora	2.3	24.7	45.4	74.0	572
Rukwa	0.8	19.5	33.8	80.2	202
Kigoma	1.3	28.0	30.7	71.3	441
Shinyanga	4.9	23.6	48.2	73.5	392
Kagera	2.0	31.0	24.4	68.6	403
Mwanza	2.2	18.8	39.1	79.2	705
Mara	1.6	20.8	41.0	78.0	374
Manyara	1.7	15.8	36.2	82.5	292
Njombe	3.6	11.0	37.4	85.4	119
Katavi	0.9	34.1	34.9	65.7	103
Simiyu	2.1	18.9	29.8	79.5	397
Geita	1.4	27.8	33.9	71.7	427
KaskaziniUnguja	1.0	18.2	35.2	80.9	49
KusiniUnguja	1.9	13.2	38.9	84.9	26
MjiniMagharibi	1.9	8.3	42.0	90.2	168
Kaskazini Pemba	2.1	11.3	40.9	88.0	52
Kusini Pemba	2.7	11.9	29.5	86.4	51
Education					
No education	1.6	21.2	39.6	77.7	1,457
Primary incomplete	2.5	19.3	35.6	79.1	1,167
Primary complete	1.8	19.6	40.5	79.3	4,240
Secondary+	3.0	12.6	45.6	84.8	2,101

(Continued…)

Table 7.15—*Continued*

Background characteristic	Percentage of women who were visited by fieldworker who discussed family planning	Percentage of women who visited a health facility in the past 12 months and who:		Percentage of women who did not discuss family planning either with fieldworker or at a health facility	Number of women
		Discussed family planning	Did not discuss family planning		
Wealth quintile					
Lowest	2.0	20.6	39.1	77.9	1,770
Second	1.8	22.4	36.2	76.8	1,628
Middle	2.0	20.2	37.7	78.4	1,546
Fourth	2.9	18.3	40.6	79.7	1,791
Highest	2.1	11.8	48.2	86.6	2,230
Total	2.2	18.2	40.9	80.3	8,965

INFANT AND CHILD MORTALITY 8

Key Findings

- ***Current levels:*** For the 5-year period preceding the survey, the under-5 mortality rate is 67 deaths per 1,000 live births, and the infant mortality rate is 43 deaths per 1,000 live births.
- ***Trends:*** Over the past 15 years, childhood mortality rates in Tanzania have been decreasing. The neonatal mortality rate for the 5 years before the survey has declined from 40 deaths per 1,000 live births in 1999 to 25 deaths per 1,000 live births in 2015-2016. Over the same period, the infant and under-5 mortality rates have declined from 99 deaths to 43 deaths per 1,000 live births and from 147 to 67 deaths per 1,000 live births, respectively. The infant, child and under-5 mortality rates recorded in the 2015-16 TDHS-MIS are almost similar to those recorded in the 2012 Population and Housing Census of Tanzania.
- ***Perinatal mortality:*** The perinatal mortality rate for the 5 years preceding the survey is 39 deaths per 1,000 pregnancies.

Measures of infant and child mortality are important indicators of a country's socioeconomic development and its people's quality of life (UNDP 2007). Childhood mortality estimates can be used to identify children who may be at high risk of death. Such estimates are used to formulate appropriate strategies to reduce the risk.

This chapter first analyses information on mortality levels, trends, and differentials in neonatal, postnatal, infant, child and under-5 mortality. The chapter then combines information on pregnancy losses with data on neonatal deaths to estimate perinatal mortality levels. The chapter concludes by discussing fertility behaviours that increase mortality risks for infants and children.

The data for child mortality estimation were obtained from the Individual Questionnaire, which was administered to women age 15-49. Women were asked to provide their complete birth history. Each woman was asked to list all her biological children who were born alive, starting with the first birth. For each child, information was collected on the name; single or twin status; sex, month, and year of birth; and survivorship. For each living child, the current age was reported. For dead children, the age at death was reported.

The quality of mortality estimates calculated from birth histories depends on the mother's ability to recall all the children she has given birth to, as well as their birth dates and ages at death. Potential data quality problems include:

- The selective omission from the birth histories of those births that did not survive, which can result in under estimation of childhood mortality.

- The displacement of birth dates, which may distort mortality trends. This can occur if an interviewer knowingly records a birth as occurring in a different year than the one in which it actually occurred. This may happen if an interviewer is trying to cut down on overall work load, because any live births in the 5 years before the interview are the subject of a lengthy set of additional questions.

- The quality of data on age at death. Misreporting the child's age at death may distort the age pattern of mortality, especially if the net effect of the age misreporting is to transfer deaths from one age bracket to another.

- Any method of measuring childhood mortality that relies on the mothers' reports (for example, birth histories) assumes that female adult mortality is not high, or if it is high, there is little or no correlation between the mortality risks of the mothers and those of their children.

8.1 DATA QUALITY

A thorough review of the 2015-16 TDHS-MIS data quality was conducted because of a large decline in infant and child mortality. The quality of mortality estimates calculated from retrospective birth histories depends upon the completeness with which births and deaths are reported and recorded. The data show strong internal consistency, supporting the conclusion that mortality levels in Tanzania declined substantially over the 5-year period prior to the 2015-16 TDHS-MIS. This section highlights selected data quality parameters. Appendix C includes several tables that can be used to assess the extent to which the 2015-16 TDHS-MIS mortality data may be subject to common reporting errors.

A common data quality problem may arise from errors in the reporting of birth dates. Displacement of births can affect the accuracy of mortality trends if they result in deaths being transferred from one time period to another, for example, from the period 0- 4 years to the period 5- 9 years before the survey. Displacement may result from recall problems among mothers. However, it also may have been due to deliberate transference of births from one period to another by interviewers interested in reducing their workload; they could thus avoid the detailed set of maternal and child health questions included in DHS surveys for births occurring in the last 5 years. The distribution of the 2015-16 TDHS-MIS birth history data by calendar year shows no evidence of major transference of births from 2011 to previous years, however (Appendix Table C.4).

Omission of deaths, or failure to report births that did not survive, can lead to serious underestimation of mortality, if severe. The omission, which can be difficult to detect, is assumed to occur most often for deaths in early infancy and to increase during time periods that are more remote from the survey. One way of looking for evidence of omission is to compare the ratio of neonatal deaths to all infant deaths before the survey and the ratio of early neonatal deaths (deaths in the first week of life) to all neonatal deaths to see if these measures fall within expected ranges. It is expected that, as mortality levels decline, a larger proportion of infant deaths will take place during the early neonatal period. Appendix Table C.5 shows data on age at death for early infant deaths. Selective underreporting of early neonatal deaths would result in an abnormally low ratio of deaths within the first 7 days of life to all neonatal deaths. A percentage below 60% can indicate underreporting of early deaths. Early neonatal deaths do not appear to be underreported; the ratio of early neonatal deaths to all neonatal deaths is 85% in the period 0- 4 years prior to the survey. Over time, the figures vary within a narrow range for the 20 years preceding the survey, suggesting no selective omission of early infant deaths. Examination of the 2015-16 TDHS-MIS infant death data shows that the percentage of neonatal to infant deaths ranges from 62% in the period 0-4 years prior to the survey to 39% during the period 15-19 years before the survey (Appendix Table C.6).

Another potential data quality problem is heaping of the age at death. Errors in the reporting of the age at death may result in the transference of deaths from one age bracket for which mortality rates are being calculated to another. For example, heaping on age 1 year or 12 months can result in an underestimation of the infant mortality rate and an overestimation of the child mortality level. To minimize errors in reporting of age at death, interviewers were instructed to record age at death in days if the death took place in the

month following the birth, in months if the child died before age 2, and in years if the child was at least age 2. Interviewers also were asked to probe for deaths reported at 1year to determine a more precise age at death in terms of months. Despite the emphasis during interviewer training and fieldwork monitoring on probing for accurate age at death, the distribution of deaths under age 2 during the 20 years prior to the survey by age at death in months shows that there is heaping at age 12 months during any of the periods before the survey, with corresponding deficits in adjacent months. Appendix Table C.6 shows that there are 82 reported deaths at 12 months compared with 57 deaths at 11 months, 63 deaths at 13 months, and 62 deaths at 14 months. This is likely to slightly underestimate infant mortality and overestimate child mortality. This will not affect the mortality estimates for the period 0-4 years before the survey, however, because heaping of deaths at age 12 months is much less pronounced in the most recent period of 0-4 years prior to the survey (7 deaths) than in the periods of 5-9 years and 10-14 years prior the survey (21-25 deaths).

In addition to recall errors for the more distant retrospective periods, there are structural reasons for limiting mortality estimation to recent periods, preferably to the periods 0-4, 5-9, and 10-14 years before the survey. In fact, except for the first period (0-4 years), the other periods have slightly biased estimates because they are based on the child mortality experiences of women age 15-44 and 15-39, respectively, instead of women age 15-49 as in the period 0-4 years preceding the survey. Therefore, estimating mortality for periods more than 10-14 years before the survey is not advisable.

It is also possible to substantiate the current mortality levels using information from other sources such as the 2012 Population and Housing Census. The results of the 2012 Population and Housing Census also indicate that mortality has been declining.

Selected indicators of the quality of the mortality data on which the estimates of mortality in this chapter are based are presented in Appendix C, Tables C.4-C.6.

8.2 Infant and Child Mortality

Neonatal, infant, and under-5 mortality rates

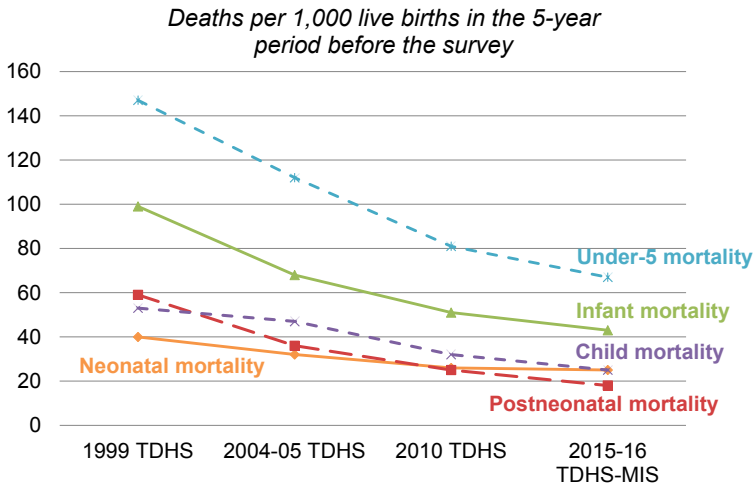
Neonatal, infant, and under-5 mortality are direct estimates of the risk of dying within 1 month, 1 year, and 5 years after birth, respectively. They are reported as the number of deaths per 1,000 live births.

Sample: Live births to women age 15-49

Neonatal, infant, and under-5 mortality rates for three successive 5-year periods before the survey are presented in **Table 8.1**. For the 5 years immediately preceding the survey (approximate calendar years 2010/11–2015/16), the infant mortality rate was 43 deaths per 1,000 live births and the under-5 mortality rate was 67 deaths per 1,000 live births. During the same period, the neonatal mortality rate was 25 deaths per 1,000 live births.

Trends: The data in **Table 8.1** show a continuous decline in child mortality over the 15-year period prior to the 2015-16 TDHS-MIS. **Figure 8.1** presents trends in neonatal, postneonatal, infant, child, and under-5 mortality rates for the 5 years before the 2015-16 TDHS surveys. The data reveal a consistent, remarkable decline in mortality rates since 1999.

Figure 8.1 **Trends in early childhood mortality**



Patterns by background characteristics

Table 8.2 shows child mortality estimates, calculated for the 10-year period before the survey, by background characteristics. The longer period was used to have a sufficient number of births to study mortality differentials across population subgroups.

- Because urban areas usually have better health services, education, and living conditions than rural areas, childhood mortality is expected to be lower among children living in urban areas than among those in rural areas. Contrary to that expectation, the 2015-16 TDHS-MIS found that infant mortality in urban areas is higher than in rural areas (63 and 47 deaths per 1,000 live births, respectively). This difference is entirely due to higher neonatal mortality rates in urban areas.
- Overall, childhood mortality rates are higher in Mainland than in Zanzibar.
- Across zones, neonatal mortality ranges between 23 deaths per 1,000 live births in the Northern zone and 47 deaths per 1,000 live births in the Southern zone. Infant mortality ranges from a low of 38 deaths per 1,000 in the Northern zone to a high of 70 deaths per 1,000 live births in the South West Highlands zone.
- The relationship between neonatal, postneonatal, infant, and under-5 mortality rates and mother's education is an inverted "V"-like structure. For example, the infant mortality rate increases from 43 deaths per 1,000 live births among children born to mothers with no education to 66 deaths per 1,000 among children born to mothers with incomplete primary school education, and then drops to 47 deaths per 1,000 live births for mothers with secondary or higher education.
- Unexpectedly, the 2015-16 TDHS-MIS found that neonatal and infant mortality rates are higher among households in the highest wealth quintile.

Further investigation is needed in order to understand factors that cause unexpected relationships between some childhood mortality rate and residence, education, and wealth of the respondents.

8.3 Bio-demographic Risk Factors

Researchers have identified multiple risk factors for infant and child mortality based on the characteristics of the mother and child and the circumstances at birth. **Table 8.3** presents differentials in childhood mortality by bio-demographic risk characteristics of the mother and the child.

- Differences in mortality rate by sex show the expected pattern of higher mortality for boys than girls, particularly in the neonatal period.

- Mother's age at birth is associated with childhood mortality in a U-shaped pattern. Children born to young mothers (under 20 years) and old mothers (age 40-49) have higher risk of dying than children born to mothers in the middle age groups.
- Shorter birth intervals are associated with higher mortality. The under-5 mortality rate for children born less than 2 years after the preceding birth is almost twice as high as that of children born 4 or more years after their preceding sibling.
- Children reported to be small or very small are almost four times as likely to die in the first month of life as children reported to be average or larger.

8.4 PERINATAL MORTALITY

Perinatal mortality rate

Perinatal deaths comprise stillbirths (pregnancy loss that occurs after 7 months of gestation) and early neonatal deaths (deaths of live births within the first 7 days of life). The perinatal mortality rate is calculated as the number of perinatal deaths per 1,000 pregnancies of 7 or more months' duration.

Sample: Number of pregnancies of 7 or more months' duration among women age 15-49 in the 5-year period preceding the survey.

The causes of stillbirths and early neonatal deaths are closely linked, and examining just one or the other can bias the true level of mortality around delivery. In this case, the perinatal mortality rate encompasses both stillbirths and early neonatal deaths, thus offering a better measure of the level of mortality around delivery. The 2015-16 TDHS-MIS asked women to report on any pregnancy loss that occurred in the 5 years preceding the survey. For each pregnancy that did not end in a live birth, the duration of the pregnancy was recorded. During the 5 years prior to the survey, the perinatal mortality rate in Tanzania was 39 deaths per 1,000 pregnancies of 7 or more months of gestation **(Table 8.4)**.

Patterns by background characteristics

- The perinatal mortality rate is highest among the youngest mothers (less than age 20) and the oldest mothers (age 40-49).
- The perinatal mortality rate is higher in urban than in rural areas (47 deaths versus 37 deaths per 1,000 pregnancies, respectively).
- Unlike child mortality rates, the perinatal mortality rate is higher in Zanzibar than in Mainland (49 deaths versus 39 deaths per 1,000 pregnancies, respectively).

8.5 HIGH-RISK FERTILITY BEHAVIOUR

There is a strong relationship between children's chances of dying and the fertility behaviour of their mothers. The probability of dying in early childhood is much greater for children born to mothers relatively young or old, born soon after another birth, and born to mothers with a large number of previous births.

Very young mothers may experience difficult pregnancies and deliveries because of their physical immaturity. Older women may also experience age-related problems during pregnancy and delivery. In this report, a mother is considered to be "too young" if she is less than 18 years and "too old" if she is above 34 years at the time of delivery. A short birth interval is a birth occurring within 24 months of a previous birth.

Table 8.5 presents the distribution of children born in the 5 years preceding the survey by risk category. These children are classified into four categories: not in any high-risk category; in an unavoidable risk category; in a single high-risk category; and in a multiple high-risk category.

- Column 1 shows that in the 5-year period before the survey, 26% of births were not in any high-risk category, 34% of births were in a single high-risk category, and 21% were in a multiple high-risk category. First births to women age 18-34 are treated as a separate risk category and considered to be an unavoidable risk category. They contribute to 19% of the total risk.
- Column 2 shows risk ratios for births in various high-risk categories relative to births not having any high-risk characteristics. The risk ratio for children who are in any avoidable high-risk category (1.23) is 23% higher than for children who are not in any high-risk category. The risk ratio for births in a single high-risk category is 1.12, which means that children in a single high-risk category are 12% more likely to die than children who are not in any high-risk category. Births in multiple high-risk categories are 41% more likely to die than births that are not in any high-risk category.
- The last column focuses on the future and addresses the question of how many currently married women have the potential of having a high-risk birth. A simulation procedure was carried out on mothers who are in a risk category. The result is a distribution of currently married women by the risk category into which a birth conceived at the time of the survey would fall. For example, a woman who was 40 years old at the time of survey and had three previous births would be classified in the multiple high-risk category for being too old (35 or older) and at risk of having a high-order birth (more than three previous births). Twenty-six percent of currently married women would fall into this category. Overall, 41% of currently married women are in a multiple high-risk category, and about 7 in 10 currently married women (72%) have the potential to give birth to a child with an elevated risk of dying.

LIST OF TABLES

For detailed information on infant and child mortality, see the following tables:

- **Table 8.1 Early childhood mortality rates**
- **Table 8.2 Early childhood mortality rates by socioeconomic characteristics**
- **Table 8.3 Early childhood mortality rates by demographic characteristics**
- **Table 8.4 Perinatal mortality**
- **Table 8.5 High-risk fertility behaviour**

Table 8.1 Early childhood mortality rates

Neonatal, postneonatal, infant, child, and under-5 mortality rates for 5-year periods preceding the survey, Tanzania DHS-MIS 2015-16

Years preceding the survey	Neonatal mortality (NN)	Postneonatal mortality (PNN)[1]	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under-5 mortality ($_5q_0$)
0-4	25	18	43	25	67
5-9	33	28	61	32	90
10-14	31	36	67	43	107

[1] Computed as the difference between the neonatal and infant mortality rates

Table 8.2 Early childhood mortality rates by socioeconomic characteristics

Neonatal, postneonatal, infant, child, and under-5 mortality rates for the 10-year period preceding the survey, by background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Neonatal mortality (NN)	Post-neonatal mortality (PNN)[1]	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under-5 mortality ($_5q_0$)
Residence					
Urban	43	20	63	25	86
Rural	24	23	47	29	75
Mainland/Zanzibar					
Mainland	29	23	52	29	79
Urban	44	20	63	25	87
Rural	24	24	47	30	76
Zanzibar	28	17	45	11	56
Unguja	33	17	50	7	57
Pemba	19	18	37	18	54
Zone					
Western	25	15	41	30	69
Northern	23	15	38	18	56
Central	29	15	44	24	66
Southern Highlands	30	15	46	21	65
Southern	47	22	69	11	79
South West Highlands	40	31	70	27	95
Lake	24	28	52	38	88
Eastern	35	25	60	27	85
Zanzibar	28	17	45	11	56
Education					
No education	20	23	43	41	83
Primary incomplete	37	30	66	29	93
Primary complete	31	21	52	24	75
Secondary+	30	16	47	14	60
Wealth quintile					
Lowest	20	25	45	34	78
Second	30	24	55	34	86
Middle	26	23	48	26	73
Fourth	36	18	54	26	78
Highest	37	21	59	15	73

[1] Postneonatal mortality rate is computed as the difference between the infant and neonatal morality rates

Table 8.3 Early childhood mortality rates by demographic characteristics

Neonatal, postneonatal, infant, child, and under-5 mortality rates for the 10-year period preceding the survey, by demographic characteristics, Tanzania DHS-MIS 2015-16

Demographic characteristic	Neonatal mortality (NN)	Post-neonatal mortality (PNN)[1]	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under-5 mortality ($_5q_0$)
Child's sex					
Male	33	23	56	26	80
Female	25	22	47	31	76
Mother's age at birth					
<20	36	25	61	34	93
20-29	25	20	45	25	69
30-39	29	24	53	31	82
40-49	51	23	74	(24)	(97)
Birth order					
1	39	18	57	29	84
2-3	22	23	45	25	69
4-6	22	22	44	29	71
7+	44	31	75	33	105
Previous birth interval[2]					
<2 years	38	39	77	38	112
2 years	22	19	41	29	68
3 years	23	21	44	21	64
4+ years	24	19	43	24	66
Birth size[3]					
Small/very small	75	21	95	na	na
Average or larger	19	18	37	na	na

Note: Figures in parentheses are based on 25-49 unweighted cases
na = Not available
[1] Computed as the difference between the infant and neonatal mortality rates
[2] Excludes first-order births
[3] Rates for the five-year period before the survey

Table 8.4 Perinatal mortality

Number of stillbirths and early neonatal deaths, and the perinatal mortality rate for the 5-year period preceding the survey, by background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Number of stillbirths[1]	Number of early neonatal deaths[2]	Perinatal mortality rate[3]	Number of pregnancies of 7+ months duration
Mother's age at birth				
<20	42	51	52	1,787
20-29	80	98	35	5,029
30-39	49	53	36	2,845
40-49	16	12	55	503
Previous pregnancy interval in months[4]				
First pregnancy	58	76	56	2,371
<15	29	33	42	1,446
15-26	25	32	25	2,243
27-38	19	29	30	1,584
39+	57	45	40	2,520
Residence				
Urban	43	87	47	2,751
Rural	145	127	37	7,412
Tanzania Mainland/ Zanzibar				
Mainland	179	209	39	9,894
Urban	41	86	47	2,680
Rural	138	123	36	7,213
Zanzibar	8	5	49	269
Unguja	5	4	51	169
Pemba	4	1	46	100
Zone				
Western	15	24	32	1,232
Northern	14	16	32	942
Central	25	16	36	1,124
Southern Highlands	9	12	38	548
Southern	14	15	73	402
South West Highlands	11	26	38	981
Lake	65	51	36	3,236
Eastern	26	48	52	1,429
Zanzibar	8	5	49	269
Education				
No education	42	21	30	2,124
Primary incomplete	24	37	46	1,338
Primary complete	100	123	42	5,255
Secondary+	21	33	37	1,446
Wealth quintile				
Lowest	39	37	31	2,453
Second	35	47	38	2,153
Middle	53	32	43	1,959
Fourth	33	50	44	1,906
Highest	27	48	44	1,691
Total	187	214	39	10,163

[1] Stillbirths are fetal deaths in pregnancies lasting 7 or more months.
[2] Early neonatal deaths are deaths at age 0-6 days among live-born children.
[3] The sum of the number of stillbirths and early neonatal deaths divided by the number of pregnancies of 7 or more months' duration, expressed per 1,000.
[4] Categories correspond to birth intervals of <24 months, 24-35 months, 36-47 months, and 48+ months.

Table 8.5 High-risk fertility behaviour

Percent distribution of children born in the 5 years preceding the survey by category of elevated risk of mortality and the risk ratio, and percent distribution of currently married women by category of risk if they were to conceive a child at the time of the survey, Tanzania DHS-MIS 2015-16

Risk category	Births in the 5 years preceding the survey		Percentage of currently married women[1]
	Percentage of births	Risk ratio[a]	
Not in any high-risk category	26.3	1.00	22.4[a]
Unavoidable risk category			
First-order births between ages 18 and 34	18.7	1.47	5.7
Single high-risk category			
Mother's age <18	6.3	1.81	1.0
Mother's age >34	1.3	0.67	4.9
Birth interval <24 months	6.0	1.35	10.0
Birth order >3	20.5	0.87	15.1
Subtotal	34.1	1.12	31.0
Multiple high-risk category			
Age <18 and birth interval <24 months[2]	0.4	(0.81)	0.3
Age >34 and birth interval <24 months	0.0	*	0.2
Age >34 and birth order >3	12.8	1.49	25.9
Age >34 and birth interval <24 months and birth order >3	2.1	1.27	5.1
Birth interval <24 months and birth order >3	5.6	1.32	9.4
Subtotal	20.9	1.41	40.8
In any avoidable high-risk category	55.0	1.23	71.8
Total	100.0	na	100.0
Number of births/women	10,052	na	8,210

Notes: Risk ratio is the ratio of the proportion dead among births in a specific high-risk category to the proportion dead among births not in any high-risk category. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
na = Not applicable
[1] Women are assigned to risk categories according to the status they would have at the birth of a child if they were to conceive at the time of the survey: current age less than 17 years and 3 months or more than 34 years and 2 months, latest birth less than 15 months ago, or latest birth being of order 3 or higher.
[2] Includes the category of age <18 and birth order >3
[a] Includes sterilized women

MATERNAL HEALTH CARE 9

Key Findings

- ***Antenatal care coverage (ANC):*** Ninety-eight percent of women who gave birth in the 5 years before the survey received antenatal care from a skilled provider for their most recent birth.
- ***Timing and number of ANC visits:*** Twenty-four percent of pregnant women started antenatal care in their first trimester, and over half (51%) had four or more ANC visits as recommended. These two indicators have improved since the 2010 TDHS.
- ***Components of antenatal care:*** The majority of women have a blood sample taken (87%), their blood pressure measured (71%), and a urine sample collected (60%) during antenatal care. They are more likely to take iron tablets/syrup (81%) than antimalarial (71%) or anti-parasitic (63%) drugs during pregnancy.
- ***Protection against neonatal tetanus:*** A large majority of births (88%) in the 5 years before the survey were protected against neonatal tetanus.
- ***Delivery:*** Sixty-three percent of births in Tanzania are delivered in health facilities, a substantial increase from 50% recorded in the 2010 TDHS. The percentage of births that take place in health facilities ranges between 40% in Simiyu and 94% in Dar es Salaam.
- ***Assistance at delivery:*** Sixty-four percent of births were assisted by health professionals in the 2015-16 TDHS-MIS compared with 51% in the 2010 TDHS.
- ***Caesarean Delivery:*** The rate of caesarean section deliveries in Tanzania is 6% according to the 2015-16 TDHS-MIS, which is slightly higher than the rate in the 2010 TDHS (5%).
- ***Postnatal checks:*** The majority (66%) of mothers and newborns (58%) are not receiving recommended postnatal care within 2 days after birth.

Maternal health refers to the health of women during pregnancy, childbirth, and the postpartum period. Health care services during pregnancy and childbirth and after delivery are important for the survival and wellbeing of both the mother and the infant. While motherhood is often a positive and fulfilling experience, for too many women it is associated with suffering, ill health, and even death. Government policies and programs place a high priority on improving maternal health care and reducing maternal deaths. Tanzania Vision 2025 cites "access to quality reproductive health services for all individuals and reduction in infant and maternal mortality" as among the most important health service

goals. The national post-MDG agenda seeks to improve maternal, newborn, and child health (MNCH) as one of its major objectives. The Primary Health Service Development Programme (PHSDP/MMAM 2007-2017) addresses the crucial issue of equity by calling for increased coverage and quality of primary health care services, including maternal health services for communities in rural and remote areas. The Health Sector Strategic Plan III 2016-2020 (HSSP IV) also addresses the importance of reducing maternal and child morbidity and mortality.

If a woman receives antenatal care early in her pregnancy, it provides an opportunity for early diagnosis and treatment of infections in the mother, and for monitoring her pregnancy and screening for complications for both the mother and her baby. Delivery at a health facility, with the assistance of skilled medical professionals, reduces the risk of complications and infections during labour and delivery. Timely postnatal care can treat complications arising from delivery and teach the mother how to care for herself and her infant.

The first part of this chapter provides information on ANC care, including the overall level of utilization of ANC services, the number and timing of ANC visits, and various components of the care mothers receive during pregnancy. Information on the place of delivery, assistance during delivery, caesarean deliveries, and postnatal health checks for mothers and newborns is then covered. The chapter concludes by examining the barriers that women may face when seeking care during pregnancy, delivery, and the postnatal period.

9.1 Antenatal Care Coverage and Content

Antenatal care (ANC) from a skilled provider

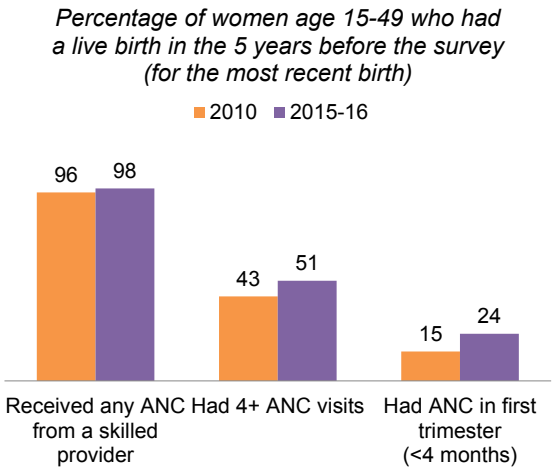
Pregnancy care received from skilled providers, that is, a doctor/assistant medical officer (AMO), clinical officer, assistant clinical officer, nurse/midwife, assistant nurse, and maternal and child health (MCH) aide

Sample: Women age 15-49 who had a live birth in the 5 years before the survey

Ninety-eight percent of women age 15-49 received ANC from a skilled provider during the pregnancy of their most recent birth **(Table 9.1)**. The majority of women (80%) received ANC from nurses/midwives and nurse assistants, and another 11% received care from doctors/assistant medical officers or clinical officers/assistant clinical officers.

Trends: ANC coverage in Tanzania has exceeded 90 percent for at least 2 decades. The percentage of women age 15-49 receiving ANC from a skilled provider is continuing to move slowly toward universal coverage, rising from 96% in the 2010 TDHS to 98% in the 2015-16 TDHS-MIS **(Figure 9.1)**.

Figure 9.1 **Antenatal care coverage**



Patterns by Background Characteristics

- Urban women are more than twice as likely as rural women to receive ANC from doctors, assistant medical officers (AMOs), clinical officers, and assistant clinical officers (19% versus 8%). The highest percentages of women receiving antenatal from these groups are found in Dar es Salaam (35%), Kilimanjaro (25%), Kigoma (22%), and Mara (19%) **(Table 9.1)**.

- As expected, the percentage of women receiving antenatal care from doctors, AMOs, clinical officers, and assistant clinical officers rises with a woman's educational level, from 5% among women with no education to 19% among women with secondary and higher levels of education. A similar trend is seen among women for the wealth quintile, which rises from 5% at the lowest level to 22% at the highest wealth quintile.

9.2 Timing and Number of ANC Visits

Antenatal care can be most effective in avoiding adverse pregnancy outcomes when it is sought early in pregnancy and continues through to delivery. World Health Organization (WHO) recommends that a pregnant woman without complications has at least four antenatal visits and that the first visit occur during the first trimester of pregnancy.

Fifty-one percent of women had at least four ANC visits during their last pregnancy **(Table 9.2)**. However, only 24% of women started ANC before the fourth month of pregnancy, and 26% did not seek care until at least the sixth month of pregnancy. Urban women were more likely than rural women to have four or more ANC visits and to seek care early in pregnancy.

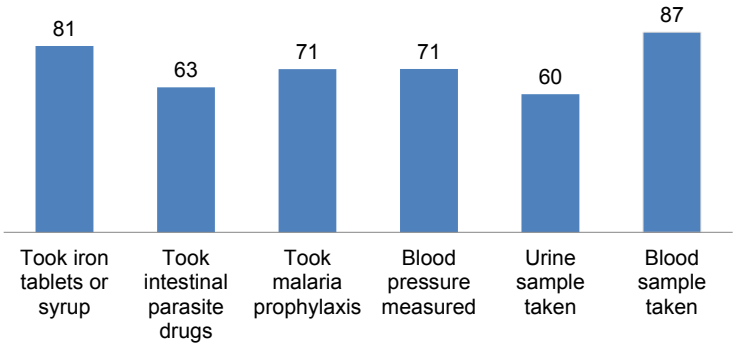
Trends: The percentage of women who received the recommended four or more ANC visits increased from 43% in the 2010 TDHS to 51% in the 2015-16 TDHS-MIS **(Figure 9.1)**. The percentage of women seeking ANC during the first trimester also increased from 15% in 2010 to 24% in 2015-16. The median number of months pregnant at the first ANC visit has decreased slightly, from 5.4 months in 2010 to 5 months in 2015-16.

9.3 Components of ANC Visits

During pregnancy, maternal demand for iron increases to meet the needs of both the mother and the growing foetus. Therefore, daily intake of oral iron (30–60 mg of elemental iron) and folic acid (0.4 mg) supplementation is recommended as part of antenatal care to reduce the risk of low birth weight, maternal anaemia, and iron deficiency. Furthermore, prophylaxis against malaria and parasites that suck blood leading to anaemia should be provided to pregnant women. Blood and urine samples also should be taken as part of ANC care to check for anaemia and urine protein, sugar, blood, and signs of infection.

***Figure 9.2* Components of antenatal care**

Percentage of women with a live birth in the 5 years preceding the survey that had specific components of ANC care



- About 8 in 10 pregnant women took iron tablets or syrup for prophylaxis of anaemia **(Table 9.3 and Figure 9.2)**.
- About 7 in 10 pregnant women took antimalarial drugs. Sixty-three percent of pregnant women took anti-parasitic intestinal drugs.
- Women attending ANC were somewhat more likely to have their blood pressure measured (71%) and a blood sample taken (87%) than to have a urine sample (60%).

Trends: Between 2010 and 2016, substantial increases were observed in the percentages of women who reported receiving several components of ANC care. The largest change—from 59% in 2010 to 81% in

2016—was in the percentage of women who took iron tablets or syrup. Blood samples were taken from 87% of pregnant women in 2016 compared with 77% in 2010, and urine sample collection rose from 52% in 2010 to 60% in 2016.

9.4 Protection against Neonatal Tetanus

Protection against neonatal tetanus

The number of tetanus toxoid injections needed to protect a baby from neonatal tetanus depends on the mother's vaccinations. A birth is protected against neonatal tetanus if the mother has received any of the following:

- Two tetanus toxoid injections during that pregnancy
- Two or more injections, the last one within 3 years of the birth
- Three or more injections, the last one within 5 years of the birth
- Four or more injections, the last one within 10 years of the birth
- Five or more injections at any time prior to the birth

Sample: Last live births in the 5 years before the survey to women age 15-49

Depending on whether and when a pregnant woman has been vaccinated against tetanus before the most recent pregnancy, she may need as many as two tetanus toxoid injections during her pregnancy to protect her baby against neonatal tetanus.

Eighty-eight percent of women's last births were protected against neonatal tetanus. Slightly more than half of the women had received two or more tetanus toxoid injections during their last pregnancy **(Table 9.4)**.

Trends: The percentage of women whose last birth was protected against neonatal tetanus is the same as that reported in the 2010 TDHS. However, there was a slight increase in the percentage of women receiving one or two tetanus toxoid injections during their last pregnancy, from 48% in the 2010 TDHS to 52% in the 2015-16 TDHS-MIS.

Patterns by background characteristics

- Higher birth orders were more likely to be fully protected against tetanus than first births (91%-92% and 78% respectively). Births to mothers under age 20 were also less likely to have been protected against neonatal tetanus than births to older mothers (74% versus 90%-91%). Most encouraging is the fact that young pregnant women of first-order births were more likely than other women to receive two or more tetanus toxoid injections during pregnancy.

- The percentage of women receiving two or more tetanus toxoid injections during pregnancy was much lower in rural than in urban areas (47% versus 64%).

- The percentage of women whose last birth was protected against neonatal tetanus and the percentage who received two or more tetanus toxoid injections during pregnancy generally increased with education and wealth.

9.5 Delivery Services

Institutional deliveries

Deliveries that take place in a health facility

Sample: All live births in the 5 years before the survey

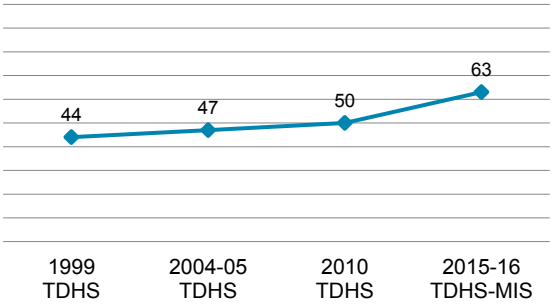
A clean and safe birth is an important component in prevention of complications related to giving birth. Therefore, increasing the percentage of women who deliver in health facilities is an important indicator of improved maternal health.

More than 6 in 10 births in Tanzania are delivered at health facilities. Most institutional deliveries take place at public sector facilities, with about half (51%) of all births occurring in government health facilities **(Table 9.5)**.

Trends: Facility deliveries in Tanzania have been increasing. The percentage of births taking place in health facilities rose from 44% in the 1999 TDHS to 63% in the 2015-16 TDHS-MIS **(Figure 9.3)**.

Figure 9.3 Trends in institutional deliveries

Percentage of live births in the 5 years before the survey

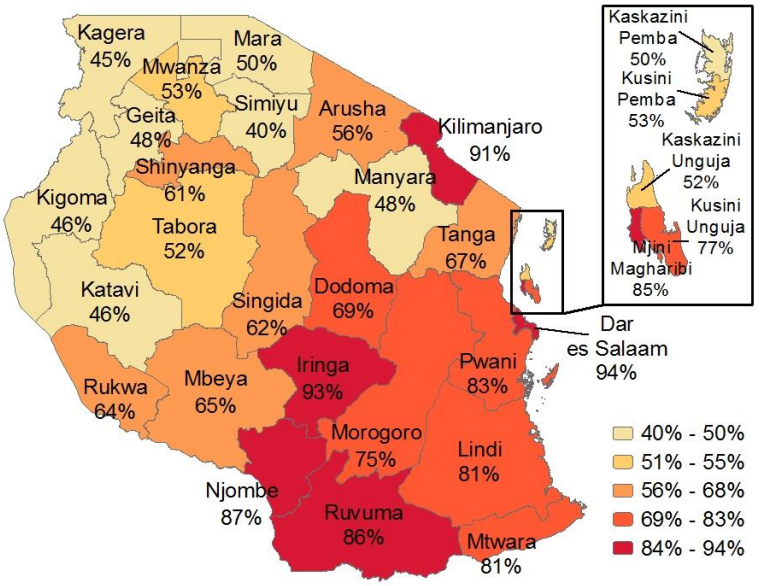


Patterns by background characteristics

- Young women (less than age 20 and 20 to 34) are more likely to deliver at a health facility (67% and 63%, respectively) than older women (age 35 or more) (56%). Higher-order births also are less likely to occur in a health facility; only 46% of sixth or higher-order births occur at a health facility compared with 77% of first births.
- Antenatal care increases the likelihood of a facility delivery. A woman with four or more ANC visits is more likely to deliver in a health facility (75%) than a woman with no ANC visits (32%).
- Urban residents are more likely to deliver in a health facility than rural women (86% and 54%, respectively).
- Zanzibar has slightly more facility deliveries (66%) than Tanzania Mainland (63%). Within Zanzibar, Unguja has more facility deliveries (75%) than Pemba (51%).
- The rate of facility deliveries varies widely by zone and region, ranging from 50% in Western and Lake Zones to 88% in Southern Highlands Zone and 87% in Eastern Zone **(Figure 9.4)** and from 40% in Simiyu region to 94% in Dar es Salaam. In Zanzibar, Mjini Magharibi (85%) has the highest rate of facility deliveries and the lowest is in Kaskazini Pemba (50%).

Figure 9.4 Institutional deliveries by region

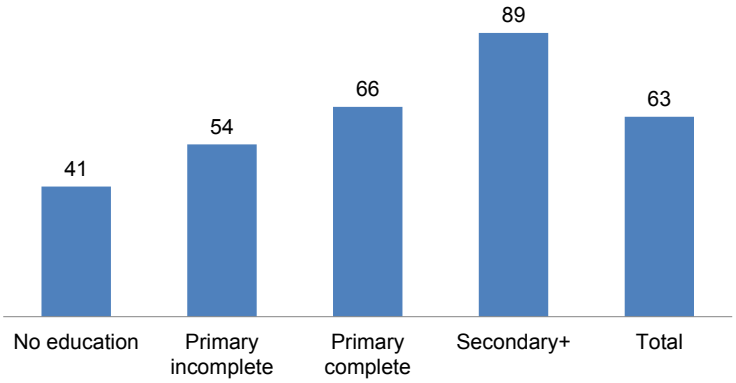
Percentage of live births in the 5 years before the survey that were delivered in a health facility



- Facility deliveries are more common among women with secondary or more education (89%) **(Figure 9.5)** and among women in households in the highest wealth quintile (94%) than among other women.

***Figure 9.5* Institutional deliveries by mother's education**

Percentage of live births in the 5 years preceding the survey that were delivered at a health facility



9.6 Skilled Assistance during Delivery

Skilled assistance during delivery

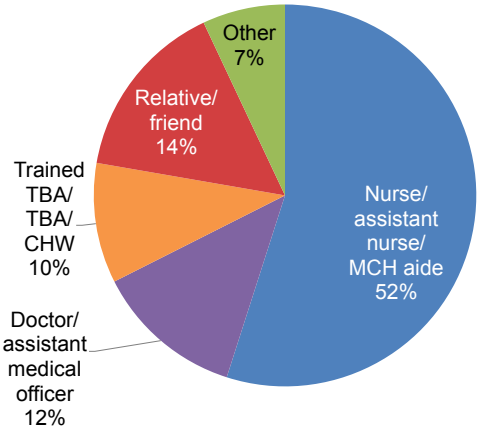
Births delivered with the assistance of doctors, assistant medical officers, clinical officers/assistant clinical officers, nurse/midwives, and MCH aides

Sample: All live births in the 5 years before the survey

In Tanzania, the majority of births are assisted by a skilled provider at birth. More than half of all births (52%) are attended by a nurse, midwife, or assistant nurse while doctors, assistant medical officers, and clinical officers assist 12% of deliveries **(Table 9.6 and Figure 9.6)**. About one quarter of deliveries are assisted by Traditional Birth Attendants (TBAs) or relatives or friends.

***Figure 9.6* Assistance during delivery**

Percent distribution of births in the 5 years before the survey



Trends: Skilled assistance during delivery has been increasing rapidly in Tanzania, rising from 51% at the time of the 2010 TDHS to 64% in the 2015-16 TDHS-MIS.

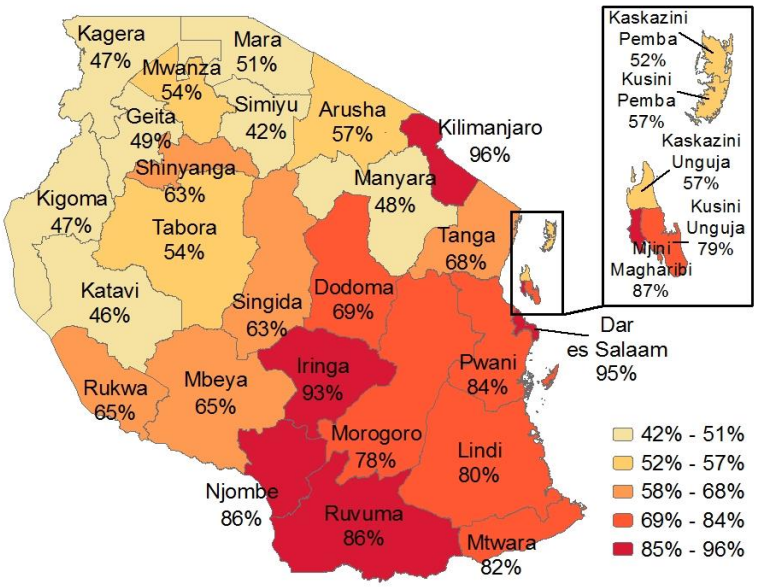
Patterns by background characteristics

- Skilled assistance at birth declines with respondent's age and birth order. Sixty-eight percent of births among women less than 20 years old are assisted by skilled providers compared with 57% of births among women age 35-49. Likewise, 78% of first births are assisted by a skilled provider, compared with 47% of sixth or higher-order births **(Table 9.6)**.

- Women with four or more antenatal visits are more likely to be assisted by a skilled provider during delivery than women with no antenatal care visits (76% and 33% respectively).
- Urban deliveries are much more likely than rural deliveries to be assisted by a skilled provider (87% and 55% respectively).
- Zanzibar has slightly more deliveries assisted by skilled providers than Tanzania Mainland (69% versus 64%). In Zanzibar, more deliveries in Unguja are assisted by skilled providers than those in Pemba (78% versus 54%).

Figure 9.7 Skilled assistance at delivery by region

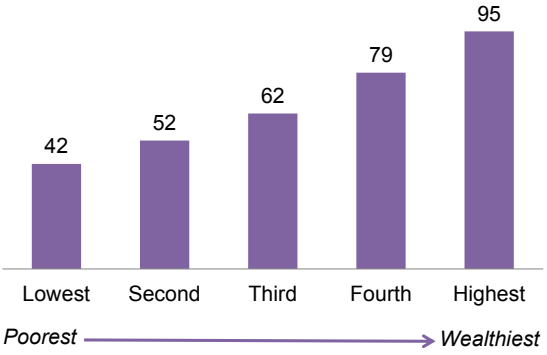
Percentage of live births in the 5 years before the survey assisted by a skilled provider



- Assistance at birth by a skilled provider varies widely by zone. It is the highest in Southern Highlands and Eastern zones (88%) and the lowest in Western and Lake zones (51%).
- The percentage of births assisted by skilled providers is highest in Kilimanjaro (96%) and Dar es Salaam (95%) and lowest in Simiyu (42%). Other regions where fewer than half of births were attended by skilled providers include Katavi (46%), Kagera (47%), Kigoma (47%), Manyara (48%) and Geita (49%). (**Figure 9.7).**
- Women with secondary education or more are more than twice as likely to be assisted during delivery by a skilled provider as women with no education (91% and 42% respectively).
- The likelihood of a woman being assisted at delivery by a skilled provider increases with wealth, from 42% in the lowest quintile to 95% of women in the highest wealth quintile **(Figure 9.8)**.

Figure 9.8 Skilled assistance at delivery by wealth quintile

Percentage of live births in the 5 years before the survey assisted by a skilled provider



9.7 CAESAREAN SECTION

Access to a caesarean section can reduce maternal and neonatal mortality and complications such as obstetric fistula. However, WHO advises that caesarean sections should only be done when medically necessary. A caesarean delivery without medical need can put women at risk of short- and long-term health problems. WHO does not recommend a target rate for caesarean deliveries; however, research conducted by WHO has found that caesarean section rates above 10% are not associated with reductions in maternal and newborn mortality rates (WHO 2015a).

The caesarean section rate in Tanzania stands at 6%, although it is higher in some population groups. While the majority of caesarean deliveries are decided after onset of labour, 2% of all births are elective caesarean sections, that is, the decision to have a caesarean delivery was made prior to onset of labour **(Table 9.7)**.

Trends: The current caesarean section rate (6%) is slightly higher than the rate reported in the 2010 TDHS (5%).

Patterns by background characteristics

- Caesarean deliveries are more common in urban than in rural areas (12% and 4% respectively).
- The percentage of caesarean births is the same in Tanzania Mainland and Zanzibar (6%). Dar es Salaam region (17%) has the highest percentage of caesarean deliveries and Katavi and Simiyu have the lowest rates (1% each).
- Two percent of deliveries among women with no education are caesarean births compared with 15% among highly educated women.
- Women in the highest wealth quintile are eight times more likely to undergo a caesarean section during child birth (whether elective or emergency) than women in the lowest quintile (16% versus 2%).

9.8 POSTNATAL CARE FOR MOTHERS

The days and weeks immediately following childbirth–the postnatal period–is a critical phase in the lives of mothers and newborn babies. Most maternal and infant deaths occur during this period (WHO, 2004).

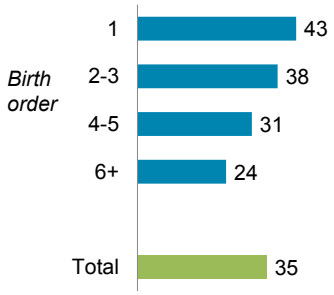
In Tanzania, 37% of mothers who gave birth in the 2 years before the survey reported seeing someone for a check up after their last live birth. Thirty-four percent had a timely check up, that is, within the first 2 days after birth, and 22% reported they were checked within 4 hours after giving birth **(Table 9.8)**. Most women receiving timely postnatal care reported seeing a doctor, an assistant medical officer, a clinical officer, or a nurse or midwife for the postnatal check-up (32%) **(Table 9.9)**.

Patterns by background characteristics

- Postnatal care rates do not vary much with age. However, the likelihood a mother received timely postnatal care decreases markedly with the child's birth order, from 42% for first order births to 22% among sixth or higher order births **(Table 9.8 and Figure 9.9)**.
- Women who delivered in a health facility were much more likely to have had a postnatal health check-up within 2 days of delivery than those who delivered elsewhere (50% versus 6%).
- Urban women received timely postnatal care more often than rural women (48% versus 29%).
- There are marked regional differences in the percentage of women who received postnatal care within the first 2 days after giving birth. Simiyu and Geita regions have the lowest percentages having a postnatal check-up (9% and 13%) while Iringa region has the highest percentage (72%), followed by Kilimanjaro (59%) and Dar es Salaam (58%).

Figure 9.9 **Postnatal care for mothers by birth order**

Percentage of women giving birth in the 2 years preceding the survey who received postnatal care within 2 days of delivery



- The likelihood a new mother had a timely postnatal check-up rises with education, from 23% among women who never attended school to 51% of women with secondary or more education.
- Women from the wealthiest households (54%) are more than twice as likely to receive timely postnatal care as women from the poorest households (22%).

9.9 Postnatal Health Checks for Newborns

9.9.1 Timing and Type of Provider

Postnatal care services for newborns should start as soon as possible after birth because many neonatal deaths occur within the first 48 hours of life. The majority (56%) of babies born in the 2 years before the 2015-16 TDHS-MIS did not receive any postnatal health check **(Table 9.10)**. Forty-two percent of newborns received timely postnatal care, that is, someone checked on their health within 2 days after birth. Thirty-nine percent of newborns were seen by a doctor, medical officer, clinical officer, nurse, or midwife for the first postnatal check-up **(Table 9.11)**.

Patterns by background characteristics

- Newborns delivered in a health facility were much more likely to receive a postnatal health check-up within 2 days after birth than those delivered elsewhere (60% versus 10%) **(Table 9.10)**.
- Timely postnatal care for newborns is much more common in urban than rural areas (61% versus 35%).
- The percentage of newborns who received a postnatal health check within 2 days ranges from 15% in the Simiyu region to 80% in the Iringa region.
- The likelihood a newborn had a timely postnatal check-up increased with the mother's education, from 29% among those whose mothers had no education to 60% of those whose mothers had secondary education.
- Newborns in the highest wealth quintile were much more likely to have postnatal health check-up in the first 2 days after birth than newborns in the lowest wealth quintile (66% versus 27%).

9.9.2 Content of Newborn Care

Information was collected in the 2015-16 TDHS-MIS on whether six key elements of newborn care (signal functions) were performed within 2 days after the delivery for last births taking place during the 2 years before the survey **(Table 9.12)**. Almost two-thirds of newborns were weighed, but only 23% had their temperature taken. The cord was examined for 38% of newborns. Thirty-six percent of mothers reported that they were counselled about breastfeeding within 2 days after delivery, and a similar percentage of mothers reported that a provider observed them breastfeeding their newborns (35%). Fewer mothers received advice on signs of health problems (danger signs) they should watch for in their newborns (23%). Forty-seven percent of mothers reported at least two of these six signal functions were performed within 2 days after birth.

Patterns by background characteristics

- The likelihood that at least two of the elements were performed within 2 days after the birth decreased with the child's birth order, from 60% among first order births to 29% among sixth and higher order births.
- Health facility delivery increases the likelihood that at least two signal functions were performed during the 2 days after birth (18% for deliveries in a facility and 1% for deliveries elsewhere).

- Newborns were more likely to have had at least two signal functions performed in urban areas than in rural areas (26% versus 7%).
- Mara and Simiyu regions had the lowest percentages of mothers reporting at least two of the signal functions (2% each).

9.10 Problems in Accessing Health Care

Problems in accessing health care

Women were asked whether each of the following factors is a big problem in seeking medical advice or treatment for themselves when they are sick:

- getting permission to go to the doctor
- getting money for advice or treatment
- distance to a health facility
- not wanting to go alone

Sample: Women age 15-49

The questions included in the 2015-16 TDHS-MIS on problems women may experience in going for health care for themselves are important in understanding and addressing the barriers to maternal health care that women in Tanzania face. About two-thirds of women (66%) in Tanzania reported at least one of the mentioned factors to be a problem in accessing health care for themselves. The percentage of women reporting at least one of the mentioned factors to be a problem in accessing health care for themselves ranges from 39% in Kilimanjaro region to 84% in Katavi and Simiyu **(13)**.

The problems most often reported by women are failure to get money to pay for treatment (50%) and distance to the health facility (42%). Not wanting to go alone was reported by 30% of the women and failure to get permission from spouses to go for treatment by 14%.

List of Tables

For detailed information on maternal health care, see the following tables:

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- **Table 9.2 Number of antenatal care visits and timing of first visit**
- **Table 9.3 Components of antenatal care**
- **Table 9.4 Tetanus toxoid injections**
- **Table 9.5 Place of delivery**
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- **Table 9.8 Timing of first postnatal check-up for the mother**
- **Table 9.9 Type of provider of first postnatal check-up for the mother**
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- **Table 9.11 Type of provider of first postnatal check-up for the new-born**
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Table 9.1 Antenatal care

Percent distribution of women age 15-49 who had a live birth in the 5 years preceding the survey by antenatal care (ANC) provider during pregnancy for the most recent birth and the percentage receiving antenatal care from a skilled provider for the most recent birth, according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Antenatal care provider				No ANC	Total	Percentage receiving antenatal care from a skilled provider[1]	Number of women
	Doctor/ AMO	Clinical officer/ Assistant clinical officer	Nurse/ midwife/ Assistant nurse	MCH aid				
Mother's age at birth								
<20	6.1	4.7	81.9	5.7	1.5	100.0	98.5	1,169
20-34	6.2	5.3	80.1	6.5	1.9	100.0	98.1	4,636
35-49	5.6	4.8	79.1	7.7	2.9	100.0	97.1	1,273
Birth order								
1	8.9	6.8	77.6	5.3	1.4	100.0	98.6	1,748
2-3	7.3	4.3	80.4	6.2	1.7	100.0	98.3	2,443
4-5	3.9	4.8	82.5	6.6	2.1	100.0	97.9	1,471
6+	2.8	4.5	80.7	8.8	3.2	100.0	96.8	1,417
Residence								
Urban	13.1	5.6	74.1	5.7	1.5	100.0	98.5	2,123
Rural	3.1	4.8	82.9	7.0	2.2	100.0	97.8	4,955
Tanzania Mainland/ Zanzibar								
Tanzania Mainland	6.1	5.1	80.1	6.6	2.0	100.0	97.9	6,908
Urban	13.1	5.6	74.0	5.7	1.6	100.0	98.4	2,075
Rural	3.1	4.9	82.8	6.9	2.2	100.0	97.7	4,833
Zanzibar	5.0	4.5	83.0	7.1	0.3	100.0	99.7	171
Unguja	7.3	6.1	79.4	7.2	0.0	100.0	100.0	114
Pemba	0.4	1.4	90.4	7.1	0.8	100.0	99.2	57
Zone								
Western	2.5	8.5	80.8	6.8	1.3	100.0	98.7	779
Northern	5.9	7.2	72.9	11.4	2.6	100.0	97.4	699
Central	2.6	7.6	77.9	10.7	1.1	100.0	98.9	795
Southern Highlands	5.4	3.0	90.6	0.2	0.6	100.0	99.3	426
Southern	4.9	9.4	84.5	0.8	0.4	100.0	99.6	341
South West Highlands	4.0	1.6	85.5	6.2	2.7	100.0	97.3	715
Lake	4.0	2.3	82.3	8.3	3.1	100.0	96.9	2,015
Eastern	16.9	6.3	73.3	1.9	1.6	100.0	98.4	1,137
Zanzibar	5.0	4.5	83.0	7.1	0.3	100.0	99.7	171
Region								
Dodoma	1.9	14.8	67.7	14.8	0.8	100.0	99.2	328
Arusha	6.5	5.4	69.0	13.6	5.5	100.0	94.5	261
Kilimanjaro	13.2	11.4	73.7	0.0	1.7	100.0	98.3	126
Tanga	2.6	7.0	75.7	14.0	0.6	100.0	99.4	312
Morogoro	6.6	2.6	90.1	0.0	0.8	100.0	99.2	347
Pwani	6.2	1.5	88.3	3.3	0.6	100.0	99.4	156
Dar es Salaam	25.2	9.5	60.3	2.7	2.3	100.0	97.7	634
Lindi	8.6	9.5	81.1	0.0	0.9	100.0	99.1	150
Mtwara	2.0	9.4	87.2	1.4	0.0	100.0	100.0	191
Ruvuma	0.8	2.9	95.6	0.3	0.3	100.0	99.7	204
Iringa	12.2	3.0	84.2	0.0	0.6	100.0	99.4	118
Mbeya	5.1	0.8	90.3	1.6	2.3	100.0	97.7	436
Singida	2.8	3.8	83.3	9.2	0.8	100.0	99.2	225
Tabora	0.3	2.6	87.4	7.7	2.0	100.0	98.0	449
Rukwa	3.4	3.5	73.9	15.6	3.6	100.0	96.4	189
Kigoma	5.5	16.7	71.9	5.5	0.4	100.0	99.6	330
Shinyanga	0.8	0.6	94.8	1.9	1.9	100.0	98.1	300
Kagera	1.5	2.1	95.2	0.8	0.5	100.0	99.5	344
Mwanza	4.5	2.2	67.1	19.5	6.7	100.0	93.3	471
Mara	14.2	5.2	76.8	1.0	2.9	100.0	97.1	322
Manyara	3.4	1.5	86.8	6.6	1.8	100.0	98.2	242
Njombe	6.8	3.4	88.2	0.0	1.0	100.0	98.5	104
Katavi	0.2	1.4	86.3	9.2	2.8	100.0	97.2	90
Simiyu	0.1	2.4	95.7	0.0	1.5	100.0	98.2	296
Geita	1.8	1.3	71.0	22.4	3.5	100.0	96.5	282
Kaskazini Unguja	4.6	4.6	84.5	6.3	0.0	100.0	100.0	27
Kusini Unguja	0.7	6.1	70.9	22.3	0.0	100.0	100.0	18
Mjini Magharibi	10.1	6.7	79.5	3.7	0.0	100.0	100.0	69
Kaskazini Pemba	0.7	0.7	97.3	0.9	0.4	100.0	99.6	30
Kusini Pemba	0.0	2.1	82.4	14.2	1.2	100.0	98.8	26
Education								
No education	1.4	3.1	83.1	8.9	3.4	100.0	96.5	1,350
Primary incomplete	4.2	5.1	80.9	7.4	2.4	100.0	97.6	879
Primary complete	6.0	5.6	80.9	6.0	1.5	100.0	98.5	3,700
Secondary+	13.3	5.8	74.2	5.0	1.8	100.0	98.2	1,149
Wealth quintile								
Lowest	1.6	3.4	83.9	8.0	3.1	100.0	96.9	1,525
Second	3.5	3.7	83.7	7.4	1.7	100.0	98.3	1,422
Middle	2.9	5.8	82.4	7.1	1.7	100.0	98.3	1,349
Fourth	7.0	6.5	78.5	6.3	1.7	100.0	98.3	1,424
Highest	16.0	6.2	72.0	4.0	1.7	100.0	98.3	1,359
Total	6.1	5.1	80.2	6.6	2.0	100.0	98.0	7,079

Note: If more than one source of ANC was mentioned, only the provider with the highest qualifications is considered in this tabulation.
[1] doctor/assistant medical officer (AMO), clinical officer, assistant clinical officer, nurse/midwife, assistant nurse, and MCH aide

Table 9.2 Number of antenatal care visits and timing of first visit

Percent distribution of women age 15-49 who had a live birth in the 5 years preceding the survey, by number of antenatal care (ANC) visits for the most recent live birth, and by the timing of the first visit, and among women with ANC, median months pregnant at first visit, according to residence, Tanzania DHS-MIS 2015-16

	Tanzania Mainland				
Number and timing of ANC visits	Urban	Rural	Total	Zanzibar	Tanzania
Number of ANC visits					
None	1.6	2.2	2.0	0.3	2.0
1	2.1	4.4	3.7	1.6	3.6
2-3	31.9	48.0	43.2	44.8	43.2
4+	63.8	45.0	50.6	52.9	50.7
Don't know/missing	0.7	0.4	0.5	0.4	0.5
Total	100.0	100.0	100.0	100.0	100.0
Number of months pregnant at time of first ANC visit					
No antenatal care	1.6	2.2	2.0	0.3	2.0
<4	31.9	21.5	24.6	14.5	24.4
4-5	46.2	47.5	47.1	55.9	47.3
6-7	19.2	26.2	24.1	27.7	24.2
8+	0.9	2.5	2.0	1.4	2.0
Don't know/missing	0.1	0.1	0.1	0.2	0.1
Total	100.0	100.0	100.0	100.0	100.0
Number of women	2,075	4,833	6,908	171	7,079
Median months pregnant at first visit (for those with ANC)	4.7	5.1	5.0	5.2	5.0
Number of women with ANC	2,043	4,724	6,766	171	6,937

Table 9.3 Components of antenatal care

Among women age 15-49 with a live birth in the 5 years preceding the survey, the percentage who took iron tablets, syrup, and drugs for intestinal parasites or Fansidar during the pregnancy of the most recent birth, and among women receiving antenatal care (ANC) for the most recent live birth in the 5 years preceding the survey, the percentage receiving specific antenatal services, according to background characteristics, Tanzania DHS-MIS 2015-16

	Among women with a live birth in the past 5 years, the percentage who during the pregnancy of their last birth:				Among women who received antenatal care for their most recent birth in the past 5 years, the percentage with selected services			
Background characteristic	Took iron tablets or syrup	Took intestinal parasite drugs	Took antimalarial drugs (Fansidar)	Number of women with a live birth in the past 5 years	Blood pressure measured	Urine sample taken	Blood sample taken	Number of women with ANC for their most recent birth
Mother's age at birth								
<20	81.9	56.0	61.9	1,169	62.4	57.6	85.1	1,151
20-34	82.0	66.0	72.9	4,636	73.4	61.9	88.1	4,549
35-49	77.0	58.9	70.2	1,273	69.0	55.4	84.6	1,237
Birth order								
1	85.6	62.8	70.2	1,748	72.9	67.4	89.0	1,724
2-3	81.1	66.5	72.4	2,443	74.3	63.1	88.3	2,401
4-5	82.0	63.9	70.7	1,471	69.1	56.2	86.7	1,440
6+	74.6	56.5	67.7	1,417	63.9	49.4	82.5	1,372
Residence								
Urban	83.0	73.4	80.9	2,123	89.8	86.1	95.4	2,090
Rural	80.3	58.6	66.1	4,955	62.6	48.8	83.3	4,847
Tanzania Mainland/ Zanzibar								
Tanzania Mainland	81.1	63.4	71.1	6,908	70.2	59.1	86.7	6,766
Urban	83.3	74.1	81.7	2,075	89.6	85.8	95.3	2,043
Rural	80.2	58.7	66.6	4,833	61.7	47.6	83.0	4,724
Zanzibar	79.7	51.0	47.4	171	96.9	95.6	96.4	171
Unguja	78.4	44.2	44.0	114	97.2	98.1	97.9	114
Pemba	82.3	64.4	54.2	57	96.3	90.4	93.4	56
Zone								
Western	73.1	54.1	61.2	779	59.5	57.9	83.2	768
Northern	83.9	70.5	81.9	699	86.9	71.6	89.1	681
Central	89.5	69.6	74.7	795	66.6	48.1	88.6	786
Southern Highlands	80.4	64.3	76.0	426	76.6	58.0	86.1	424
Southern	90.4	69.8	79.6	341	69.9	55.3	90.6	340
South West Highlands	81.8	60.2	66.5	715	62.8	45.3	79.4	696
Lake	75.1	54.2	63.7	2,015	60.2	50.0	83.8	1,953
Eastern	86.9	76.8	80.7	1,137	89.3	86.2	95.1	1,119
Zanzibar	79.7	51.0	47.4	171	96.9	95.6	96.4	171
Region								
Dodoma	90.2	69.9	75.4	328	65.6	42.8	86.5	326
Arusha	80.6	69.8	75.3	261	87.3	66.9	90.0	247
Kilimanjaro	88.1	78.4	92.7	126	98.2	78.0	93.9	124
Tanga	84.9	67.8	83.1	312	82.1	72.8	86.5	310
Morogoro	90.7	70.9	75.8	347	78.2	70.6	89.9	344
Pwani	84.3	75.4	79.1	156	86.5	85.9	95.2	155
Dar es Salaam	85.5	80.3	83.7	634	96.1	94.9	97.9	620
Lindi	91.6	69.2	81.6	150	70.8	55.9	92.8	148
Mtwara	89.4	70.2	78.1	191	69.3	54.9	88.9	191
Ruvuma	79.3	57.7	72.1	204	70.5	51.1	85.6	203
Iringa	82.6	66.2	82.9	118	82.1	67.4	83.9	117
Mbeya	87.0	60.0	68.1	436	70.0	50.6	77.8	426
Singida	91.6	72.2	79.3	225	68.7	60.0	90.8	223
Tabora	73.0	57.8	55.4	449	57.9	64.0	84.4	439
Rukwa	77.1	59.8	67.0	189	51.6	34.3	81.5	182
Kigoma	73.3	49.1	69.0	330	61.7	49.7	81.5	329
Shinyanga	83.1	66.7	73.3	300	64.3	54.9	89.5	295
Kagera	86.7	74.8	77.8	344	65.5	35.1	86.5	342
Mwanza	68.1	49.2	62.4	471	66.2	66.2	87.7	439
Mara	79.3	51.2	59.3	322	65.4	51.8	82.7	313
Manyara	86.6	66.8	69.4	242	65.9	44.2	89.2	238
Njombe	80.1	75.1	75.9	104	82.1	61.1	89.6	103
Katavi	66.2	61.7	57.4	90	51.4	42.2	83.1	88
Simiyu	65.7	41.7	61.3	296	51.8	44.1	77.8	292
Geita	68.8	40.9	46.0	282	42.6	41.5	75.9	272
Kaskazini Unguja	83.1	52.0	44.2	27	90.8	96.2	92.6	27
Kusini Unguja	87.0	42.5	43.1	18	99.0	99.4	100.0	18
Mjini Magharibi	74.2	41.6	44.2	69	99.2	98.6	99.4	69
Kaskazini Pemba	83.4	66.2	58.9	30	96.9	86.3	95.8	30
Kusini Pemba	81.1	62.3	48.8	26	95.5	95.2	90.7	26
Education								
No education	75.4	57.4	58.2	1,350	57.9	44.2	83.7	1,304
Primary incomplete	79.1	59.2	64.7	879	62.2	52.3	84.1	858
Primary complete	82.5	63.8	74.1	3,700	72.1	60.6	86.6	3,646
Secondary+	84.8	70.1	78.3	1,149	88.1	82.4	94.1	1,128
Wealth quintile								
Lowest	76.5	53.6	59.2	1,525	57.4	44.2	82.4	1,479
Second	79.7	58.9	63.9	1,422	56.6	44.4	81.6	1,398
Middle	82.8	61.2	72.5	1,349	66.2	52.6	85.4	1,326
Fourth	81.5	68.0	75.3	1,424	81.7	71.0	89.8	1,399
Highest	85.7	74.7	83.5	1,359	93.7	89.6	96.2	1,335
Tanzania	81.1	63.1	70.6	7,079	70.8	60.0	87.0	6,937

Table 9.4 Tetanus toxoid injections

Among mothers age 15-49 with a live birth in the 5 years preceding the survey, the percentage receiving two or more tetanus toxoid injections during the pregnancy for the last live birth and the percentage whose last live birth was protected against neonatal tetanus, according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Percentage receiving two or more injections during last pregnancy	Percentage whose last birth was protected against neonatal tetanus[1]	Number of mothers
Mother's age at birth			
<20	61.6	74.4	1,169
20-34	53.2	90.9	4,636
35-49	37.8	90.0	1,273
Birth order			
1	69.4	77.8	1,748
2-3	56.1	91.7	2,443
4-5	43.8	91.3	1,471
6+	31.1	90.9	1,417
Residence			
Urban	63.7	91.0	2,123
Rural	46.7	86.7	4,955
Tanzania Mainland/Zanzibar			
Tanzania Mainland	52.3	87.8	6,908
Urban	64.3	90.9	2,075
Rural	47.1	86.5	4,833
Zanzibar	33.5	95.4	171
Unguja	37.7	95.8	114
Pemba	25.2	94.4	57
Zone			
Western	36.1	86.6	779
Northern	63.0	88.4	699
Central	52.0	88.0	795
Southern Highlands	49.0	85.5	426
Southern	48.1	84.2	341
South West Highlands	59.5	83.9	715
Lake	44.3	88.8	2,015
Eastern	69.1	90.8	1,137
Zanzibar	33.5	95.4	171
Region			
Dodoma	57.0	86.4	328
Arusha	59.6	88.2	261
Kilimanjaro	66.6	91.9	126
Tanga	64.3	87.3	312
Morogoro	69.2	90.9	347
Pwani	52.9	88.5	156
Dar es Salaam	73.0	91.4	634
Lindi	43.5	82.2	150
Mtwara	51.8	85.7	191
Ruvuma	47.2	82.4	204
Iringa	55.5	87.6	118
Mbeya	54.7	81.6	436
Singida	53.5	92.8	225
Tabora	42.3	82.8	449
Rukwa	71.8	90.6	189
Kigoma	27.6	91.7	330
Shinyanga	44.5	90.5	300
Kagera	34.0	94.6	344
Mwanza	47.1	84.4	471
Mara	50.2	87.0	322
Manyara	43.7	85.9	242
Njombe	45.1	89.1	104
Katavi	57.0	81.4	90
Simiyu	52.7	92.1	296
Geita	36.6	86.2	282
Kaskazini Unguja	24.6	95.6	27
Kusini Unguja	30.3	93.7	18
Mjini Magharibi	44.8	96.5	69
Kaskazini Pemba	28.3	93.7	30
Kusini Pemba	21.6	95.2	26
Education			
No education	43.9	85.8	1,350
Primary incomplete	45.8	84.7	879
Primary complete	51.6	88.6	3,700
Secondary+	66.5	91.4	1,149
Wealth quintile			
Lowest	44.1	83.2	1,525
Second	43.2	87.5	1,422
Middle	48.0	88.6	1,349
Fourth	56.0	88.2	1,424
Highest	69.0	93.2	1,359
Total	51.8	88.0	7,079

[1] Includes mothers with two injections during the pregnancy of her last birth, or two or more injections (the last within 3 years of the last live birth), or three or more injections (the last within 5 years of the last birth), or four or more injections (the last within 10 years of the last live birth), or five or more injections at any time prior to the last birth.

Table 9.5 Place of delivery

Percent distribution of live births in the 5 years preceding the survey by place of delivery and percentage delivered in a health facility, according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Health facility			Home	Other	Total	Percentage delivered in a health facility	Number of births
	Public sector	Private sector	Religious voluntary					
Mother's age at birth								
<20	54.7	2.7	9.4	32.0	1.1	100.0	66.9	1,753
20-34	50.8	2.5	9.7	35.4	1.6	100.0	63.0	6,668
35-49	45.4	1.6	9.2	41.0	2.8	100.0	56.2	1,631
Birth order								
1	61.3	2.8	13.3	21.8	0.8	100.0	77.4	2,496
2-3	53.5	3.1	9.3	32.5	1.6	100.0	65.9	3,433
4-5	46.0	1.4	7.7	42.6	2.3	100.0	55.1	2,122
6+	37.2	1.7	7.4	51.2	2.5	100.0	46.4	2,001
Antenatal care visits[1]								
None	24.5	3.2	4.7	67.2	0.4	100.0	32.3	142
1-3	47.1	1.9	9.4	39.8	1.8	100.0	58.4	3,314
4+	59.4	2.9	12.4	23.7	1.6	100.0	74.7	3,589
Don't know/missing	(57.8)	(5.3)	(14.2)	(22.8)	(0.0)	(100.0)	(77.2)	35
Residence								
Urban	71.5	4.6	10.3	12.8	0.8	100.0	86.4	2,727
Rural	42.9	1.6	9.3	44.2	2.1	100.0	53.7	7,325
Tanzania Mainland/ Zanzibar								
Tanzania Mainland	50.3	2.4	9.8	35.8	1.8	100.0	62.5	9,788
Urban	71.3	4.5	10.6	12.9	0.8	100.0	86.4	2,658
Rural	42.5	1.6	9.5	44.3	2.1	100.0	53.6	7,130
Zanzibar	63.2	1.9	0.9	33.7	0.3	100.0	66.0	264
Unguja	70.5	2.8	1.3	25.0	0.4	100.0	74.7	165
Pemba	50.8	0.4	0.2	48.5	0.1	100.0	51.4	98
Zone								
Western	42.0	1.7	5.9	47.8	2.5	100.0	49.7	1,225
Northern	47.4	2.4	17.3	32.4	0.6	100.0	67.0	935
Central	50.9	0.7	8.5	38.7	1.2	100.0	60.1	1,111
Southern Highlands	61.7	0.4	25.9	10.2	1.8	100.0	87.9	542
Southern	74.5	0.1	6.5	17.3	1.6	100.0	81.1	392
South West Highlands	48.9	0.3	12.8	35.2	2.8	100.0	62.0	974
Lake	40.2	2.8	6.7	48.5	1.8	100.0	49.8	3,194
Eastern	71.5	6.3	8.8	11.8	1.5	100.0	86.7	1,415
Zanzibar	63.2	1.9	0.9	33.7	0.3	100.0	66.0	264
Region								
Dodoma	61.0	0.0	8.1	30.3	0.5	100.0	69.1	425
Arusha	41.0	0.7	13.8	44.2	0.3	100.0	55.5	349
Kilimanjaro	56.9	3.8	30.8	8.0	0.6	100.0	91.4	169
Tanga	48.8	3.2	14.8	32.3	0.9	100.0	66.8	417
Morogoro	61.6	2.0	11.6	20.6	4.2	100.0	75.2	440
Pwani	72.3	2.6	8.2	16.2	0.7	100.0	83.1	203
Dar es Salaam	77.0	9.8	7.3	5.6	0.2	100.0	94.2	772
Lindi	73.9	0.3	6.5	18.5	0.8	100.0	80.8	177
Mtwara	74.9	0.0	6.4	16.4	2.3	100.0	81.3	215
Ruvuma	58.7	0.4	26.5	13.1	1.4	100.0	85.5	249
Iringa	73.2	0.0	19.7	5.5	1.7	100.0	92.8	162
Mbeya	46.6	0.0	18.3	30.7	4.3	100.0	64.9	559
Singida	50.2	0.5	11.1	35.6	2.7	100.0	61.8	334
Tabora	42.2	2.5	7.5	44.3	3.5	100.0	52.2	712
Rukwa	55.6	0.8	7.8	35.0	0.8	100.0	64.2	277
Kigoma	41.8	0.5	3.8	52.7	1.2	100.0	46.1	513
Shinyanga	53.9	3.9	2.9	37.5	1.9	100.0	60.6	467
Kagera	29.8	0.9	14.8	53.3	1.3	100.0	45.4	534
Mwanza	42.6	0.5	10.2	45.8	0.9	100.0	53.3	737
Mara	40.6	3.2	6.6	46.1	3.5	100.0	50.4	496
Manyara	39.2	1.8	6.4	51.8	0.7	100.0	47.5	352
Njombe	53.2	0.8	32.5	10.8	2.7	100.0	86.5	131
Katavi	44.3	0.8	0.8	53.6	0.5	100.0	45.9	139
Simiyu	31.1	8.0	1.2	58.0	1.6	100.0	40.4	496
Geita	44.1	1.6	1.8	50.7	1.8	100.0	47.5	464
Kaskazini Unguja	50.5	1.1	0.3	47.9	0.2	100.0	51.9	45
Kusini Unguja	76.1	0.7	0.0	23.1	0.0	100.0	76.9	25
Mjini Magharibi	78.6	4.1	2.2	14.5	0.6	100.0	84.9	95
Kaskazini Pemba	49.5	0.0	0.5	50.0	0.0	100.0	50.0	53
Kusini Pemba	52.2	0.8	0.0	46.7	0.3	100.0	53.0	45
Mother's education								
No education	34.6	1.1	5.1	56.5	2.7	100.0	40.8	2,103
Primary incomplete	46.2	1.3	6.8	44.6	1.1	100.0	54.3	1,323
Primary complete	53.3	2.2	10.7	32.1	1.7	100.0	66.1	5,193
Secondary+	68.6	6.1	14.7	9.8	0.8	100.0	89.4	1,432
Wealth quintile								
Lowest	34.1	1.1	5.8	56.6	2.5	100.0	40.9	2,427
Second	41.0	1.6	7.7	48.0	1.7	100.0	50.3	2,135
Middle	48.1	1.9	11.0	36.5	2.5	100.0	61.0	1,929
Fourth	64.0	2.3	11.5	21.2	1.0	100.0	77.8	1,887
Highest	74.8	5.9	13.7	5.2	0.4	100.0	94.4	1,674
Total	50.6	2.4	9.6	35.7	1.7	100.0	62.6	10,052

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Includes only the most recent birth in the 5years preceding the survey

Table 9.6 Assistance during delivery

Percent distribution of live births in the 5 years preceding the survey by person providing assistance during delivery, percentage of birth assisted by a skilled provider, according to background characteristics, Tanzania DHS-MIS 2015-16

	Person providing assistance during delivery											
Background characteristic	Doctor/ AMO	Clinical officer/ Assistant clinical officer	Nurse/ midwife/ Assistant nurse	MCH aid	Trained TBA/TBA	Relative/ friend	CHW	Other	No one	Total	Percentage delivered by a skilled provider[1]	Number of births
Mother's age at birth												
<20	7.6	3.2	57.0	0.3	8.4	15.1	0.1	7.1	1.1	100.0	68.2	1,753
20-34	9.2	3.4	51.4	0.1	9.4	14.3	0.2	6.5	5.4	100.0	64.2	6,668
35-49	7.6	2.5	46.4	0.4	10.5	13.9	0.1	6.4	12.2	100.0	56.8	1,631
Birth order												
1	13.3	4.5	60.4	0.2	6.2	9.8	0.2	4.8	0.7	100.0	78.4	2,496
2-3	10.0	3.6	53.3	0.2	9.7	13.8	0.2	6.6	2.8	100.0	67.0	3,433
4-5	5.3	2.6	48.6	0.2	10.4	16.2	0.3	7.9	8.6	100.0	56.7	2,122
6+	4.3	1.8	40.8	0.2	12.1	19.0	0.1	7.5	14.2	100.0	47.1	2,001
Antenatal care visits[2]												
None	10.3	0.1	22.8	0.0	8.0	30.5	0.0	12.9	15.4	100.0	33.2	142
1-3	7.2	3.1	49.0	0.3	9.7	16.5	0.2	7.2	6.8	100.0	59.5	3,314
4+	13.1	3.9	58.5	0.2	7.8	8.9	0.1	4.4	3.1	100.0	75.7	3,589
Don't know/missing	(4.3)	(19.0)	(53.9)	(0.0)	(10.6)	(10.0)	(0.0)	(2.2)	(0.0)	(100.0)	(77.2)	35
Place of delivery												
Health facility	13.8	5.0	80.3	0.3	0.1	0.1	0.0	0.2	0.0	100.0	99.5	6,291
Elsewhere	0.1	0.2	3.5	0.0	25.0	38.1	0.4	17.4	15.3	100.0	3.8	3,761
Residence												
Urban	19.0	3.5	64.4	0.2	2.3	6.0	0.1	2.1	2.4	100.0	87.0	2,727
Rural	4.9	3.1	46.8	0.2	12.1	17.5	0.2	8.2	7.0	100.0	55.0	7,325
Tanzania Mainland/ Zanzibar												
Tanzania Mainland	8.7	3.3	51.4	0.2	9.1	14.5	0.2	6.7	5.9	100.0	63.5	9,788
Urban	19.0	3.5	64.3	0.1	2.2	6.1	0.1	2.2	2.5	100.0	86.9	2,658
Rural	4.8	3.2	46.6	0.2	11.7	17.7	0.2	8.4	7.2	100.0	54.8	7,130
Zanzibar	8.5	2.0	57.5	0.8	21.9	7.0	0.1	2.0	0.2	100.0	68.8	264
Unguja	12.2	1.6	62.5	1.1	10.3	9.1	0.1	2.7	0.4	100.0	77.5	165
Pemba	2.2	2.7	49.1	0.1	41.5	3.5	0.0	0.9	0.0	100.0	54.1	98
Zone												
Western	3.8	2.4	44.7	0.2	11.3	26.4	0.3	4.2	6.6	100.0	51.1	1,225
Northern	12.5	3.5	52.8	0.0	9.9	15.9	0.0	4.9	0.5	100.0	68.8	935
Central	6.9	4.1	49.0	0.5	11.7	15.8	0.1	8.7	3.3	100.0	60.4	1,111
Southern Highlands	11.6	3.1	73.2	0.1	2.1	5.1	0.1	3.0	1.7	100.0	88.0	542
Southern	8.5	8.5	64.3	0.0	4.6	6.7	0.4	4.5	2.4	100.0	81.3	392
South West Highlands	9.6	1.8	50.7	0.5	11.0	11.8	0.1	8.4	6.0	100.0	62.6	974
Lake	5.2	1.7	44.2	0.0	9.4	17.5	0.3	10.1	11.7	100.0	51.0	3,194
Eastern	18.1	6.3	63.2	0.3	6.5	3.5	0.0	1.8	0.3	100.0	87.9	1,415
Zanzibar	8.5	2.0	57.5	0.8	21.9	7.0	0.1	2.0	0.2	100.0	68.8	264
Region												
Dodoma	7.9	6.5	53.6	1.3	9.2	16.1	0.0	2.8	2.6	100.0	69.3	425
Arusha	12.6	1.3	42.5	0.0	7.7	21.8	0.0	12.7	1.3	100.0	56.5	349
Kilimanjaro	19.1	11.3	65.1	0.0	0.6	3.1	0.0	0.8	0.0	100.0	95.5	169
Tanga	9.7	2.3	56.4	0.0	15.5	16.0	0.0	0.0	0.1	100.0	68.4	417
Morogoro	7.9	7.6	62.4	0.0	15.5	4.7	0.0	1.6	0.2	100.0	77.9	440
Pwani	4.5	6.8	71.2	0.9	6.1	7.2	0.0	3.2	0.0	100.0	83.5	203
Dar es Salaam	27.4	5.4	61.5	0.3	1.4	1.9	0.0	1.5	0.5	100.0	94.7	772
Lindi	8.0	7.9	64.5	0.0	3.6	7.3	0.3	7.3	1.2	100.0	80.4	177
Mtwara	8.9	9.0	64.1	0.0	5.5	6.2	0.5	2.2	3.5	100.0	82.0	215
Ruvuma	8.8	2.4	74.4	0.3	2.8	5.9	0.3	3.3	1.8	100.0	85.9	249
Iringa	13.9	3.4	76.0	0.0	0.8	4.7	0.0	0.4	0.8	100.0	93.3	162
Mbeya	12.1	0.2	53.1	0.0	6.8	7.1	0.0	13.3	7.4	100.0	65.4	559
Singida	4.4	3.5	54.8	0.0	9.1	14.0	0.2	6.9	7.0	100.0	62.8	334
Tabora	3.2	2.1	49.0	0.2	3.0	32.6	0.5	2.4	7.2	100.0	54.4	712
Rukwa	7.0	4.4	52.4	1.5	18.2	13.4	0.0	2.3	0.8	100.0	65.3	277
Kigoma	4.8	2.8	38.7	0.4	22.7	17.8	0.1	6.8	5.9	100.0	46.7	513
Shinyanga	3.4	2.4	56.9	0.0	8.3	15.0	0.0	4.9	9.0	100.0	62.7	467
Kagera	3.9	2.1	40.9	0.0	21.1	15.0	0.0	4.9	12.0	100.0	47.0	534
Mwanza	7.7	1.4	45.1	0.0	6.4	22.7	0.5	4.3	12.0	100.0	54.2	737
Mara	10.9	0.8	38.9	0.0	7.3	12.9	0.0	13.3	15.9	100.0	50.6	496
Manyara	8.0	1.6	37.9	0.0	17.2	17.3	0.0	17.5	0.5	100.0	47.5	352
Njombe	14.0	4.0	67.5	0.0	2.4	4.0	0.0	5.5	2.6	100.0	85.5	131
Katavi	4.6	3.2	37.8	0.4	13.7	27.7	0.5	1.0	11.2	100.0	46.0	139
Simiyu	1.5	1.9	38.5	0.0	9.1	14.7	0.0	27.3	7.0	100.0	41.9	496
Geita	2.2	1.5	45.4	0.0	4.5	22.3	1.4	8.5	14.1	100.0	49.1	464
Kaskazini Unguja	5.1	1.4	50.0	1.0	17.2	20.5	0.0	4.8	0.0	100.0	57.4	45
Kusini Unguja	5.3	3.1	69.2	0.9	11.3	3.5	1.0	5.5	0.3	100.0	78.5	25
Mjini Magharibi	17.5	1.4	66.7	1.2	6.7	5.1	0.0	0.9	0.5	100.0	86.8	95
Kaskazini Pemba	2.0	2.1	47.3	0.0	48.1	0.5	0.0	0.0	0.0	100.0	51.5	53
Kusini Pemba	2.4	3.4	51.1	0.3	33.8	7.1	0.0	1.9	0.0	100.0	57.2	45

(Continued…)

Table 9.6—Continued

Background characteristic	Person providing assistance during delivery										Percentage delivered by a skilled provider[1]	Number of births
	Doctor/ AMO	Clinical officer/ Assistant clinical officer	Nurse/ midwife/ Assistant nurse	MCH aid	Trained TBA/TBA	Relative/ friend	CHW	Other	No one	Total		
Mother's education												
No education	2.4	2.6	36.9	0.3	12.8	24.4	0.2	11.1	9.3	100.0	42.2	2,103
Primary incomplete	5.9	2.3	46.8	0.1	9.8	19.3	0.0	8.2	7.8	100.0	55.0	1,323
Primary complete	8.5	3.5	55.0	0.2	9.7	12.2	0.2	5.7	5.1	100.0	67.1	5,193
Secondary+	21.2	4.1	65.2	0.2	3.3	2.9	0.1	1.6	1.2	100.0	90.8	1,432
Wealth quintile												
Lowest	3.3	2.2	36.4	0.2	11.8	25.0	0.3	11.6	9.2	100.0	42.1	2,427
Second	3.8	2.1	45.4	0.2	13.0	18.7	0.2	7.7	8.8	100.0	51.5	2,135
Middle	5.2	4.4	52.6	0.1	12.4	13.9	0.2	6.5	4.7	100.0	62.3	1,929
Fourth	11.5	3.7	63.3	0.2	6.6	7.0	0.2	3.7	3.8	100.0	78.7	1,887
Highest	23.6	4.2	67.1	0.3	1.2	2.1	0.0	1.2	0.2	100.0	95.2	1,674
Total	8.7	3.2	51.6	0.2	9.4	14.4	0.2	6.6	5.8	100.0	63.7	10,052

Note: If the respondent mentioned more than one person attending during delivery, only the most qualified person is considered in this tabulation.
[1] Skilled provider includes doctor/assistant medical officer, clinical officer, assistant clinical officer, nurse/midwife, assistant nurse, and MCH aide.
[2] Includes only the most recent birth in the 5 years preceding the survey

Table 9.7 Caesarean section

Percentage of live births in the 5 years preceding the survey delivered by Caesarean section (C-section), percentage delivered by C-section that was planned before the onset of labour pains, and percentage delivered by C-section that was decided after the onset of labour pains, according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Percentage delivered by C-section	Timing of decision to conduct C-section		Number of births
		Decided before onset of labour pains	Decided after onset of labour pains	
Mother's age at birth				
<20	4.0	0.3	3.6	1,753
20-34	6.4	1.8	4.6	6,668
35-49	6.1	2.3	3.7	1,631
Birth order				
1	9.1	1.1	8.0	2,496
2-3	7.3	3.1	4.1	3,433
4-5	3.1	1.2	1.9	2,122
6+	2.7	0.3	2.4	2,001
Antenatal care visits[1]				
None	7.4	6.1	1.4	142
1-3	5.0	0.9	4.1	3,314
4+	8.9	2.9	6.0	3,589
Place of delivery				
Health facility	9.5	2.6	6.8	6,291
Elsewhere	0.0	0.0	0.0	3,761
Residence				
Urban	11.8	4.2	7.6	2,727
Rural	3.7	0.7	3.0	7,325
Tanzania Mainland/Zanzibar				
Tanzania Mainland	5.9	1.6	4.3	9,788
Urban	11.9	4.2	7.7	2,658
Rural	3.7	0.6	3.0	7,130
Zanzibar	6.0	2.6	3.4	264
Unguja	8.3	3.7	4.6	165
Pemba	2.1	0.8	1.3	98
Zone				
Western	3.2	0.4	2.8	1,225
Northern	8.7	1.8	6.9	935
Central	5.0	0.9	4.0	1,111
Southern Highlands	11.5	3.2	8.3	542
Southern	8.6	1.4	7.3	392
South West Highlands	5.2	1.1	4.1	974
Lake	2.9	0.8	2.1	3,194
Eastern	11.6	4.9	6.8	1,415
Zanzibar	6.0	2.6	3.4	264
Region				
Dodoma	5.6	0.9	4.7	425
Arusha	8.2	1.5	6.8	349
Kilimanjaro	9.7	3.1	6.6	169
Tanga	8.7	1.6	7.1	417
Morogoro	6.2	1.2	5.0	440
Pwani	3.0	0.5	2.4	203
Dar es Salaam	17.0	8.1	8.9	772
Lindi	6.6	0.3	6.3	177
Mtwara	10.3	2.3	8.1	215
Ruvuma	10.0	2.7	7.3	249
Iringa	11.9	3.6	8.3	162
Mbeya	6.9	1.7	5.1	559
Singida	4.8	1.3	3.5	334
Tabora	2.7	0.2	2.5	712
Rukwa	4.0	0.4	3.6	277
Kigoma	4.0	0.6	3.3	513
Shinyanga	3.6	0.7	3.0	467
Kagera	2.9	0.8	2.2	534
Mwanza	3.2	1.0	2.2	737
Mara	4.0	0.3	3.7	496
Manyara	4.3	0.6	3.7	352
Njombe	13.7	3.4	10.3	131
Katavi	0.8	0.0	0.8	139
Simiyu	1.1	0.4	0.7	496
Geita	2.1	1.4	0.7	464
Kaskazini Unguja	4.2	2.4	1.8	45
Kusini Unguja	3.9	2.0	1.9	25
Mjini Magharibi	11.5	4.8	6.7	95
Kaskazini Pemba	2.3	0.7	1.6	53
Kusini Pemba	1.9	0.9	1.0	45

(Continued….)

Table 9.7—*Continued*

Background characteristic	Percentage delivered by C-section	Timing of decision to conduct C-section		Number of births
		Decided before onset of labour pains	Decided after onset of labour pains	
Mother's education				
No education	2.1	0.3	1.9	2,103
Primary incomplete	3.9	1.1	2.8	1,323
Primary complete	5.4	1.1	4.3	5,193
Secondary+	15.4	6.4	9.0	1,432
Wealth quintile				
Lowest	2.4	0.1	2.3	2,427
Second	2.6	0.5	2.1	2,135
Middle	4.2	0.9	3.4	1,929
Fourth	7.1	1.8	5.3	1,887
Highest	15.8	6.0	9.8	1,674
Total	5.9	1.6	4.3	10,052

Note: Total includes 35 women with missing information on antenatal care visits.
[1] Includes only the most recent birth in the 5 years preceding the survey.

Table 9.8 Timing of first postnatal checkup

Among women age 15-49 giving birth in the 2 years preceding the survey, the percent distribution of the mother's first postnatal check-up for the last live birth by time after delivery, and the percentage of women with a live birth in the 2 years preceding the survey who received a postnatal checkup in the first 2 days after giving birth, according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Time after delivery of mother's first postnatal checkup[1]						No postnatal checkup[2]	Total	Percentage of women with a postnatal checkup in the first 2 days after birth[1]	Number of women
	Less than 4 hours	4-23 hours	1-2 days	3-6 days	7-41 days	Don't know/ missing				
Mother's age at birth										
<20	20.3	10.8	4.1	0.6	1.1	0.6	62.5	100.0	35.2	783
20-34	22.0	8.9	3.6	0.8	1.8	0.5	62.3	100.0	34.5	2,739
35-49	23.7	5.9	2.2	0.0	0.4	0.4	67.3	100.0	31.8	645
Birth order										
1	24.9	11.6	5.6	0.9	1.6	0.6	54.8	100.0	42.0	1,136
2-3	24.2	9.0	3.5	0.7	2.0	0.7	60.0	100.0	36.6	1,424
4-5	20.1	8.3	2.2	0.4	1.3	0.3	67.3	100.0	30.6	821
6+	15.8	5.0	1.6	0.5	0.6	0.2	76.3	100.0	22.4	786
Place of delivery										
Health facility	32.0	12.8	4.7	0.7	1.9	0.8	47.2	100.0	49.5	2,707
Elsewhere	3.4	1.4	1.1	0.7	0.7	0.0	92.7	100.0	6.0	1,460
Residence										
Urban	29.7	13.4	5.0	0.6	2.6	1.1	47.7	100.0	48.0	1,155
Rural	19.0	7.1	2.9	0.7	1.1	0.3	69.0	100.0	28.9	3,013
Tanzania Mainland/ Zanzibar										
Tanzania Mainland	21.7	8.8	3.5	0.6	1.5	0.5	63.3	100.0	34.1	4,061
Urban	29.5	13.5	5.0	0.6	2.6	1.1	47.7	100.0	48.0	1,128
Rural	18.8	7.1	2.9	0.7	1.0	0.3	69.3	100.0	28.7	2,933
Zanzibar	30.6	7.4	2.2	1.5	1.7	0.2	56.5	100.0	40.1	106
Unguja	34.4	10.1	1.3	1.1	2.0	0.4	50.8	100.0	45.8	68
Pemba	23.8	2.5	3.7	2.2	1.1	0.0	66.6	100.0	30.0	38
Zone										
Western	22.4	6.8	2.2	0.4	0.0	0.3	68.0	100.0	31.4	534
Northern	25.2	7.9	5.3	0.8	2.0	0.6	58.1	100.0	38.5	399
Central	24.1	9.9	4.3	1.0	0.5	0.2	60.1	100.0	38.3	486
Southern Highlands	32.6	19.5	6.4	2.1	2.9	1.6	34.9	100.0	58.5	218
Southern	33.8	12.3	4.8	0.4	4.6	0.7	43.4	100.0	51.0	148
South West Highlands	16.7	9.0	4.1	0.0	1.2	0.3	68.7	100.0	29.8	415
Lake	12.3	5.2	2.6	0.5	1.3	0.2	77.9	100.0	20.1	1,280
Eastern	34.1	13.4	2.7	0.9	2.5	1.4	44.9	100.0	50.3	581
Zanzibar	30.6	7.4	2.2	1.5	1.7	0.2	56.5	100.0	40.1	106
Region										
Dodoma	26.4	17.0	2.7	1.7	0.0	0.0	52.2	100.0	46.0	188
Arusha	18.7	6.7	4.1	0.8	3.7	0.0	66.1	100.0	29.5	141
Kilimanjaro	31.0	17.8	10.5	0.0	1.1	0.0	39.6	100.0	59.2	67
Tanga	28.0	5.4	4.3	1.0	1.1	1.3	58.8	100.0	37.8	190
Morogoro	22.9	10.6	3.6	2.4	3.9	1.6	55.1	100.0	37.1	165
Pwani	31.5	12.6	3.6	0.0	0.0	0.0	52.3	100.0	47.7	86
Dar es Salaam	40.3	15.1	2.1	0.5	2.5	1.6	37.9	100.0	57.5	330
Lindi	26.1	13.5	5.6	0.9	3.5	0.0	50.3	100.0	45.3	63
Mtwara	39.6	11.4	4.2	0.0	5.4	1.2	38.2	100.0	55.2	85
Ruvuma	30.3	19.4	3.4	0.8	3.6	1.0	41.5	100.0	53.1	101
Iringa	43.1	18.9	9.9	2.2	0.7	1.4	23.6	100.0	72.0	68
Mbeya	17.3	12.4	5.9	0.0	1.6	0.0	62.8	100.0	35.6	240
Singida	29.9	6.7	4.2	0.5	0.0	0.6	58.0	100.0	40.9	141
Tabora	23.1	6.9	1.8	0.3	0.0	0.4	67.5	100.0	31.8	318
Rukwa	14.5	5.0	1.9	0.0	0.6	1.1	76.8	100.0	21.4	120
Kigoma	21.3	6.6	2.8	0.5	0.0	0.0	68.8	100.0	30.7	217
Shinyanga	22.3	11.9	2.7	0.4	3.3	0.5	58.9	100.0	36.9	194
Kagera	11.4	7.8	3.5	2.3	3.1	0.0	71.9	100.0	22.7	203
Mwanza	12.8	2.8	5.2	0.2	0.5	0.0	78.6	100.0	20.7	290
Mara	9.3	7.3	2.2	0.0	0.3	0.0	81.0	100.0	18.8	199
Manyara	16.0	4.1	6.4	0.5	1.5	0.0	71.4	100.0	26.5	157
Njombe	23.0	20.4	7.7	4.6	4.4	3.1	36.8	100.0	51.1	50
Katavi	18.7	3.3	0.9	0.0	0.6	0.0	76.5	100.0	22.8	56
Simiyu	7.5	1.4	0.0	0.0	1.1	0.0	90.0	100.0	8.9	202
Geita	10.6	1.2	0.9	0.0	0.0	1.0	86.3	100.0	12.7	192
Kaskazini Unguja	26.4	4.7	0.0	0.9	0.9	1.4	65.7	100.0	31.1	18
Kusini Unguja	37.6	11.9	1.7	1.1	4.4	0.0	43.3	100.0	51.2	11
Mjini Magharibi	37.2	12.0	1.7	1.1	1.8	0.0	46.2	100.0	50.9	39
Kaskazini Pemba	20.6	2.7	4.9	1.6	1.5	0.0	68.8	100.0	28.2	21
Kusini Pemba	27.6	2.2	2.4	3.0	0.7	0.0	64.2	100.0	32.2	17
Education										
No education	15.4	6.3	1.1	0.4	0.4	0.4	75.9	100.0	22.9	801
Primary incomplete	18.8	4.8	3.3	0.3	1.2	0.6	71.0	100.0	26.9	540
Primary complete	21.8	9.5	3.5	0.8	1.3	0.3	62.8	100.0	34.8	2,121
Secondary+	32.3	12.7	6.1	1.0	3.4	1.1	43.4	100.0	51.1	704
Wealth quintile										
Lowest	15.7	5.0	1.5	0.7	0.5	0.3	76.4	100.0	22.2	1,011
Second	19.8	6.1	2.7	0.4	1.1	0.3	69.7	100.0	28.5	876
Middle	19.5	8.5	3.6	0.4	1.5	0.3	66.2	100.0	31.6	782
Fourth	25.2	11.8	4.2	0.7	1.3	0.5	56.3	100.0	41.2	794
Highest	32.8	14.7	6.1	1.2	3.5	1.4	40.2	100.0	53.6	704
Total	22.0	8.8	3.4	0.7	1.5	0.5	63.1	100.0	34.2	4,167

[1] Includes women who received a checkup from a doctor, midwife, nurse, community health worker, or traditional birth attendant
[2] Includes women who received a checkup after 41 days

Table 9.9 Type of provider of first postnatal checkup for the mother

Among women age 15-49 giving birth in the 2 years preceding the survey, the percent distribution by type of provider of the mother's first postnatal health check in the 2 days after the last live birth, according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Type of health provider of mother's first postnatal checkup						
	Doctor, assistant medical officer, clinical officer, nurse, midwife	Assistant clinical officer, assistant nurse, MCH aid	Traditional birth attendant	Community health worker	No postnatal checkup in the first 2 days after birth	Total	Number of women
Mother's age at birth							
<20	32.4	2.0	0.8	0.0	64.8	100.0	783
20-34	31.6	1.9	0.8	0.2	65.5	100.0	2,739
35-49	29.7	1.7	0.4	0.0	68.2	100.0	645
Birth order							
1	39.6	1.4	0.9	0.1	58.0	100.0	1,136
2-3	33.5	2.1	0.9	0.1	63.4	100.0	1,424
4-5	27.8	2.6	0.2	0.0	69.4	100.0	821
6+	20.0	1.7	0.5	0.2	77.6	100.0	786
Place of delivery							
Health facility	46.9	2.4	0.1	0.1	50.5	100.0	2,707
Elsewhere	2.9	0.9	1.9	0.2	94.0	100.0	1,460
Residence							
Urban	46.6	1.4	0.0	0.0	52.0	100.0	1,155
Rural	25.7	2.1	1.0	0.1	71.1	100.0	3,013
Tanzania Mainland/ Zanzibar							
Tanzania Mainland	31.3	1.9	0.7	0.1	65.9	100.0	4,061
Urban	46.6	1.4	0.0	0.0	52.0	100.0	1,128
Rural	25.5	2.1	1.0	0.1	71.3	100.0	2,933
Zanzibar	37.5	1.3	1.0	0.4	59.9	100.0	106
Unguja	44.1	1.0	0.6	0.0	54.2	100.0	68
Pemba	25.7	1.7	1.5	1.1	70.0	100.0	38
Zone							
Western	28.5	1.9	0.7	0.3	68.6	100.0	534
Northern	37.3	0.1	1.1	0.0	61.5	100.0	399
Central	31.7	5.1	1.4	0.0	61.7	100.0	486
Southern Highlands	56.9	1.2	0.4	0.0	41.5	100.0	218
Southern	47.1	3.1	0.7	0.0	49.0	100.0	148
South West Highlands	29.0	0.8	0.0	0.0	70.2	100.0	415
Lake	18.4	1.0	0.5	0.2	79.9	100.0	1,280
Eastern	46.1	3.3	0.9	0.0	49.7	100.0	581
Zanzibar	37.5	1.3	1.0	0.4	59.9	100.0	106
Region							
Dodoma	35.3	9.8	0.9	0.0	54.0	100.0	188
Arusha	27.4	0.0	2.1	0.0	70.5	100.0	141
Kilimanjaro	58.3	0.9	0.0	0.0	40.8	100.0	67
Tanga	37.1	0.0	0.7	0.0	62.2	100.0	190
Morogoro	30.7	3.2	3.2	0.0	62.9	100.0	165
Pwani	42.9	4.8	0.0	0.0	52.3	100.0	86
Dar Es Salaam	54.6	3.0	0.0	0.0	42.5	100.0	330
Lindi	44.5	0.8	0.0	0.0	54.7	100.0	63
Mtwara	49.1	4.8	1.3	0.0	44.8	100.0	85
Ruvuma	50.7	1.5	0.9	0.0	46.9	100.0	101
Iringa	72.0	0.0	0.0	0.0	28.0	100.0	68
Mbeya	35.6	0.0	0.0	0.0	64.4	100.0	240
Singida	35.2	4.6	1.1	0.0	59.1	100.0	141
Tabora	28.1	2.8	0.4	0.5	68.2	100.0	318
Rukwa	19.6	1.8	0.0	0.0	78.6	100.0	120
Kigoma	29.2	0.5	1.0	0.0	69.3	100.0	217
Shinyanga	33.3	2.3	0.8	0.5	63.1	100.0	194
Kagera	21.4	0.6	0.7	0.0	77.3	100.0	203
Mwanza	19.0	0.7	0.4	0.5	79.3	100.0	290
Mara	17.4	0.9	0.5	0.0	81.2	100.0	199
Manyara	24.1	0.0	2.4	0.0	73.5	100.0	157
Njombe	48.9	2.3	0.0	0.0	48.9	100.0	50
Katavi	20.7	2.1	0.0	0.0	77.2	100.0	56
Simiyu	7.3	1.2	0.5	0.0	91.1	100.0	202
Geita	12.1	0.6	0.0	0.0	87.3	100.0	192
Kaskazini Unguja	27.6	1.0	2.5	0.0	68.9	100.0	18
Kusini Unguja	48.6	2.5	0.0	0.0	48.8	100.0	11
Mjini Magharibi	50.3	0.6	0.0	0.0	49.1	100.0	39
Kaskazini Pemba	26.9	0.0	0.6	0.7	71.8	100.0	21
Kusini Pemba	24.3	3.8	2.7	1.5	67.8	100.0	17
Education							
No education	19.3	2.6	1.0	0.0	77.1	100.0	801
Primary incomplete	26.2	0.2	0.3	0.2	73.1	100.0	540
Primary complete	31.7	2.2	0.7	0.1	65.2	100.0	2,121
Secondary+	48.7	1.6	0.7	0.0	48.9	100.0	704
Wealth quintile							
Lowest	19.7	1.7	0.7	0.1	77.8	100.0	1,011
Second	25.2	2.2	1.2	0.0	71.5	100.0	876
Middle	28.2	2.3	0.9	0.2	68.4	100.0	782
Fourth	38.3	2.0	0.6	0.2	58.8	100.0	794
Highest	52.3	1.3	0.0	0.0	46.4	100.0	704
Total	31.5	1.9	0.7	0.1	65.8	100.0	4,167

Table 9.10 Timing of first postnatal checkup for the newborn

Percent distribution of last births in the 2 years preceding the survey by time after birth of first postnatal checkup, and the percentage of births with a postnatal checkup in the first 2 days after birth, according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Time after birth of newborn's first postnatal checkup[1]						No postnatal checkup[2]	Total	Percentage of births with a postnatal checkup in the first 2 days after birth	Number of births
	Less than 1 hour	1-3 hours	4-23 hours	1-2 days	3-6 days	Don't know/ missing				
Mother's age at birth										
<20	9.0	21.1	9.6	5.5	0.4	0.8	53.4	100.0	45.3	783
20-34	7.7	22.0	8.8	4.0	2.0	0.7	54.9	100.0	42.4	2,739
35-49	8.2	16.8	7.8	4.3	1.5	1.0	60.3	100.0	37.1	645
Birth order										
1	10.3	23.9	11.2	5.8	1.5	1.0	46.3	100.0	51.2	1,136
2-3	8.9	23.0	8.4	4.6	2.0	0.7	52.4	100.0	44.9	1,424
4-5	6.5	20.7	8.2	2.9	1.9	0.8	59.0	100.0	38.3	821
6+	4.6	13.6	6.6	3.1	0.8	0.6	70.6	100.0	28.0	786
Place of delivery										
Health facility	11.9	30.1	12.5	5.1	1.1	1.2	38.2	100.0	59.5	2,707
Elsewhere	0.8	4.2	2.0	2.9	2.5	0.0	87.6	100.0	9.9	1,460
Residence										
Urban	11.2	31.1	11.9	6.3	1.6	1.0	36.9	100.0	60.5	1,155
Rural	6.8	17.2	7.6	3.6	1.6	0.7	62.6	100.0	35.1	3,013
Tanzania Mainland/ Zanzibar										
Tanzania Mainland	7.8	21.1	8.9	4.4	1.6	0.8	55.4	100.0	42.2	4,061
Urban	10.9	31.4	12.0	6.5	1.5	1.0	36.8	100.0	60.7	1,128
Rural	6.7	17.1	7.8	3.6	1.6	0.7	62.6	100.0	35.1	2,933
Zanzibar	14.3	19.3	3.3	2.6	2.7	0.8	56.9	100.0	39.5	106
Unguja	21.2	19.2	3.8	1.1	2.3	1.2	51.3	100.0	45.2	68
Pemba	2.0	19.4	2.6	5.4	3.6	0.0	67.1	100.0	29.4	38
Zone										
Western	8.1	18.3	7.9	3.6	1.7	0.8	59.6	100.0	37.9	534
Northern	8.2	24.9	6.4	6.7	1.9	2.4	49.3	100.0	46.3	399
Central	5.9	22.4	8.9	4.4	1.8	0.0	56.6	100.0	41.6	486
Southern Highlands	11.2	26.7	16.0	7.1	1.3	1.2	36.4	100.0	61.1	218
Southern	7.0	37.0	12.6	5.6	0.0	2.0	35.9	100.0	62.2	148
South West Highlands	7.8	16.3	10.5	2.5	1.6	0.9	60.3	100.0	37.1	415
Lake	5.0	15.0	5.4	4.4	0.9	0.1	69.1	100.0	29.8	1,280
Eastern	14.1	30.4	14.7	3.3	3.1	1.0	33.4	100.0	62.5	581
Zanzibar	14.3	19.3	3.3	2.6	2.7	0.8	56.9	100.0	39.5	106
Region										
Dodoma	7.2	22.4	13.3	3.9	1.7	0.0	51.6	100.0	46.7	188
Arusha	2.4	20.0	5.9	5.6	1.7	0.0	64.3	100.0	34.0	141
Kilimanjaro	4.3	36.8	17.9	10.3	2.4	1.2	27.0	100.0	69.3	67
Tanga	13.9	24.3	2.8	6.3	1.9	4.7	46.1	100.0	47.3	190
Morogoro	15.7	17.2	15.9	3.8	2.2	1.6	43.5	100.0	52.7	165
Pwani	19.5	19.7	15.7	0.9	2.3	0.0	42.0	100.0	55.7	86
Dar es Salaam	11.9	39.8	13.8	3.7	3.7	1.0	26.1	100.0	69.2	330
Lindi	5.7	30.1	16.0	7.6	0.0	2.6	37.9	100.0	59.4	63
Mtwara	8.0	42.2	10.0	4.0	0.0	1.5	34.3	100.0	64.2	85
Ruvuma	9.4	22.8	15.6	2.8	1.5	1.0	46.8	100.0	50.7	101
Iringa	14.9	35.0	18.9	11.1	0.0	0.0	20.1	100.0	79.9	68
Mbeya	10.7	18.5	14.2	3.1	2.2	0.6	50.6	100.0	46.6	240
Singida	6.0	25.6	9.5	6.5	1.8	0.0	50.7	100.0	47.6	141
Tabora	8.1	19.3	7.6	3.3	1.6	1.4	58.8	100.0	38.2	318
Rukwa	3.2	11.6	6.5	2.4	0.0	1.6	74.7	100.0	23.7	120
Kigoma	8.2	17.0	8.4	3.9	1.8	0.0	60.8	100.0	37.5	217
Shinyanga	0.9	24.7	12.0	3.3	0.5	0.0	58.6	100.0	40.9	194
Kagera	2.8	14.3	12.7	4.0	3.9	0.0	62.3	100.0	33.8	203
Mwanza	8.0	19.5	1.8	10.0	0.0	0.5	60.2	100.0	39.3	290
Mara	3.4	13.5	4.7	2.9	1.0	0.0	74.5	100.0	24.5	199
Manyara	4.3	19.7	3.2	3.0	2.0	0.0	67.8	100.0	30.1	157
Njombe	9.9	23.4	12.9	10.5	2.6	3.1	37.7	100.0	56.5	50
Katavi	5.4	16.6	3.2	0.0	2.5	0.9	71.2	100.0	25.3	56
Simiyu	4.9	7.8	2.1	0.3	0.0	0.0	84.9	100.0	15.1	202
Geita	8.7	8.2	0.8	3.5	0.5	0.0	78.3	100.0	21.2	192
Kaskazini Unguja	12.2	18.8	0.5	0.9	3.8	0.7	63.0	100.0	32.5	18
Kusini Unguja	24.1	21.1	4.4	3.2	0.0	1.9	45.3	100.0	52.8	11
Mjini Magharibi	24.4	18.8	5.0	0.6	2.2	1.3	47.6	100.0	48.9	39
Kaskazini Pemba	0.9	20.8	3.5	7.1	1.6	0.0	66.2	100.0	32.2	21
Kusini Pemba	3.3	17.9	1.5	3.3	5.9	0.0	68.1	100.0	26.0	17
Mother's education										
No education	5.2	14.2	7.2	2.0	1.5	0.7	69.2	100.0	28.6	801
Primary incomplete	6.4	18.1	4.9	3.8	1.0	0.7	65.2	100.0	33.2	540
Primary complete	7.8	21.9	9.0	4.9	1.4	0.7	54.2	100.0	43.7	2,121
Secondary+	12.9	28.3	12.9	5.7	2.8	1.0	36.5	100.0	59.7	704
Wealth quintile										
Lowest	4.0	15.4	4.8	2.8	1.4	0.4	71.1	100.0	27.1	1,011
Second	6.7	16.5	6.7	3.4	2.0	0.5	64.2	100.0	33.2	876
Middle	7.8	17.4	9.2	4.6	1.2	0.5	59.4	100.0	39.0	782
Fourth	10.0	27.2	11.1	4.7	1.5	1.0	44.4	100.0	53.1	794
Highest	13.3	31.9	14.1	6.7	2.1	1.6	30.4	100.0	66.0	704
Total	8.0	21.0	8.8	4.3	1.6	0.8	55.5	100.0	42.1	4,167

[1] Includes newborns who received a checkup from a doctor, midwife, nurse, community health worker, or traditional birth attendant.
[2] Includes newborns who received a checkup after 41 days

Table 9.11 Type of provider of first postnatal checkup for the newborn

Percent distribution of last births in the 2 years preceding the survey by type of provider of the newborn's first postnatal health check during the 2 days after the last live birth, according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Type of health provider of newborn's first postnatal checkup					Total	Number of births
	Doctor/ assistant medical officer/ clinical officer, nurse/ midwife	Assistant clinical officer/ assistant nurse/ MCH aid	Traditional birth attendant	Community health worker	No postnatal checkup in the first 2 days after birth		
Mother's age at birth							
<20	42.5	2.1	0.6	0.0	54.7	100.0	783
20-34	39.6	1.9	0.8	0.2	57.6	100.0	2,739
35-49	32.6	3.1	1.3	0.1	62.9	100.0	645
Birth order							
1	48.9	1.7	0.4	0.1	48.8	100.0	1,136
2-3	42.0	1.9	1.0	0.1	55.1	100.0	1,424
4-5	35.3	2.3	0.5	0.2	61.7	100.0	821
6+	23.5	2.8	1.4	0.2	72.0	100.0	786
Place of delivery							
Health facility	56.9	2.6	0.0	0.0	40.5	100.0	2,707
Elsewhere	5.9	1.3	2.3	0.4	90.1	100.0	1,460
Residence							
Urban	58.5	1.6	0.4	0.0	39.5	100.0	1,155
Rural	31.6	2.3	1.0	0.2	64.9	100.0	3,013
Tanzania Mainland/ Zanzibar							
Tanzania Mainland	39.2	2.1	0.8	0.1	57.8	100.0	4,061
Urban	58.8	1.6	0.4	0.0	39.3	100.0	1,128
Rural	31.6	2.3	1.0	0.2	64.9	100.0	2,933
Zanzibar	35.1	1.5	1.6	1.3	60.5	100.0	106
Unguja	42.5	1.5	1.3	0.0	54.8	100.0	68
Pemba	22.0	1.6	2.2	3.6	70.6	100.0	38
Zone							
Western	34.2	3.3	0.4	0.0	62.1	100.0	534
Northern	44.5	0.2	1.6	0.0	53.7	100.0	399
Central	35.8	4.7	1.1	0.0	58.4	100.0	486
Southern Highlands	60.6	0.5	0.0	0.0	38.9	100.0	218
Southern	58.4	3.0	0.0	0.8	37.8	100.0	148
South West Highlands	36.1	0.9	0.1	0.0	62.9	100.0	415
Lake	27.6	1.0	0.9	0.3	70.2	100.0	1,280
Eastern	57.5	3.9	1.2	0.0	37.5	100.0	581
Zanzibar	35.1	1.5	1.6	1.3	60.5	100.0	106
Region							
Dodoma	36.0	10.0	0.7	0.0	53.3	100.0	188
Arusha	29.5	0.7	3.8	0.0	66.0	100.0	141
Kilimanjaro	69.3	0.0	0.0	0.0	30.7	100.0	67
Tanga	46.7	0.0	0.6	0.0	52.7	100.0	190
Morogoro	43.6	5.1	4.0	0.0	47.3	100.0	165
Pwani	47.7	8.0	0.0	0.0	44.3	100.0	86
Dar es Salaam	67.0	2.2	0.0	0.0	30.8	100.0	330
Lindi	56.4	3.0	0.0	0.0	40.6	100.0	63
Mtwara	59.9	2.9	0.0	1.4	35.8	100.0	85
Ruvuma	50.7	0.0	0.0	0.0	49.3	100.0	101
Iringa	79.9	0.0	0.0	0.0	20.1	100.0	68
Mbeya	46.6	0.0	0.0	0.0	53.4	100.0	240
Singida	44.1	2.9	0.6	0.0	52.4	100.0	141
Tabora	34.9	3.4	0.0	0.0	61.8	100.0	318
Rukwa	21.5	1.8	0.5	0.0	76.3	100.0	120
Kigoma	33.3	3.2	1.0	0.0	62.5	100.0	217
Shinyanga	36.2	2.2	1.9	0.5	59.1	100.0	194
Kagera	32.5	0.5	0.7	0.0	66.2	100.0	203
Mwanza	36.7	0.7	1.3	0.5	60.7	100.0	290
Mara	24.0	0.0	0.5	0.0	75.5	100.0	199
Manyara	28.1	0.0	2.0	0.0	69.9	100.0	157
Njombe	54.4	2.2	0.0	0.0	43.5	100.0	50
Katavi	22.7	2.6	0.0	0.0	74.7	100.0	56
Simiyu	13.9	1.2	0.0	0.0	84.9	100.0	202
Geita	18.2	1.7	0.7	0.5	78.8	100.0	192
Kaskazini Unguja	27.1	1.2	4.2	0.0	67.5	100.0	18
Kusini Unguja	50.6	1.0	1.2	0.0	47.2	100.0	11
Mjini Magharibi	47.2	1.7	0.0	0.0	51.1	100.0	39
Kaskazini Pemba	22.8	1.8	2.8	4.8	67.8	100.0	21
Kusini Pemba	21.0	1.4	1.4	2.2	74.0	100.0	17
Mother's education							
No education	24.0	3.5	0.9	0.2	71.4	100.0	801
Primary incomplete	32.2	0.7	0.0	0.2	66.8	100.0	540
Primary complete	40.6	1.9	1.2	0.1	56.3	100.0	2,121
Secondary+	56.8	2.4	0.3	0.2	40.3	100.0	704
Wealth quintile							
Lowest	23.8	2.3	0.8	0.2	72.9	100.0	1,011
Second	29.6	2.3	1.3	0.1	66.8	100.0	876
Middle	34.8	2.6	1.3	0.4	61.0	100.0	782
Fourth	50.4	1.9	0.7	0.1	46.9	100.0	794
Highest	64.7	1.3	0.0	0.0	34.0	100.0	704
Total	39.1	2.1	0.8	0.1	57.9	100.0	4,167

Table 9.12 Content of postnatal care for newborns

Among last births in the 2 years preceding the survey, percentage for whom selected functions were performed within 2 days after birth and percentage with at least two signal functions performed within 2 days after birth, according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Among last births in the 2 years preceding the survey, percentage for whom the selected function was performed within 2 days after birth:						Percentage with at least two signal functions performed during the 2 days after birth	Number of births
	Cord examined	Temperature measured	Counselling on danger signs	Counselling on breast-feeding	Observation of breast-feeding	Weighed[1]		
Mother's age at birth								
<20	41.8	23.9	24.2	38.7	39.6	69.5	51.0	783
20-34	38.3	23.3	22.9	36.5	35.0	65.1	46.8	2,739
35-49	33.8	17.7	19.6	28.8	28.0	60.2	40.7	645
Birth order								
1	48.1	30.5	29.4	46.9	46.8	78.1	59.7	1,136
2-3	40.4	25.4	24.8	38.5	37.5	68.1	48.8	1,424
4-5	32.4	18.3	20.3	31.1	27.9	60.0	41.4	821
6+	26.3	10.5	11.5	19.3	19.5	46.4	29.3	786
Place of delivery								
Health facility	49.5	32.1	31.2	49.3	48.3	94.5	64.2	2,707
Elsewhere	17.3	4.8	6.7	10.4	9.7	10.7	14.1	1,460
Residence								
Urban	52.3	40.2	39.5	55.9	53.4	88.8	65.9	1,155
Rural	32.9	15.8	16.2	28.0	27.6	56.1	39.2	3,013
Tanzania Mainland/ Zanzibar								
Tanzania Mainland	38.2	22.7	22.6	35.6	34.9	65.0	46.6	4,061
Urban	52.4	40.6	39.7	56.0	53.9	88.8	66.1	1,128
Rural	32.7	15.8	16.0	27.7	27.6	55.9	39.0	2,933
Zanzibar	40.8	17.7	24.0	40.3	27.9	70.3	49.0	106
Unguja	43.2	19.3	25.8	47.3	31.9	78.6	56.6	68
Pemba	36.7	14.7	20.6	27.9	20.7	55.5	35.3	38
Zone								
Western	32.7	13.4	19.7	27.9	26.3	55.3	37.4	534
Northern	40.7	26.2	24.9	37.6	41.2	65.0	51.3	399
Central	42.0	16.3	17.3	33.9	32.2	60.6	46.9	486
Southern Highlands	60.1	34.8	37.9	63.9	50.5	91.7	72.2	218
Southern	55.8	44.3	40.8	60.6	63.1	86.4	76.7	148
South West Highlands	30.9	22.7	17.1	28.5	29.4	64.4	40.8	415
Lake	27.9	14.9	14.2	20.6	21.4	52.1	31.7	1,280
Eastern	53.4	41.4	40.2	63.8	61.7	91.1	71.1	581
Zanzibar	40.8	17.7	24.0	40.3	27.9	70.3	49.0	106
Region								
Dodoma	37.6	19.1	18.0	29.3	25.1	70.5	42.5	188
Arusha	38.8	16.7	18.1	37.0	33.6	49.7	47.9	141
Kilimanjaro	61.2	51.0	39.7	62.4	65.9	93.4	77.6	67
Tanga	34.9	24.4	24.6	29.3	38.1	66.3	44.6	190
Morogoro	56.1	30.7	39.8	58.6	53.4	83.9	62.7	165
Pwani	46.4	32.1	23.6	40.4	46.8	81.1	59.8	86
Dar es Salaam	53.8	49.1	44.7	72.4	69.7	97.4	78.2	330
Lindi	41.8	37.9	31.3	55.8	58.1	80.6	68.4	63
Mtwara	66.3	49.1	47.8	64.2	66.8	90.7	82.9	85
Ruvuma	53.4	24.5	30.9	58.5	38.4	91.3	66.4	101
Iringa	70.8	48.2	51.8	72.7	65.4	92.9	82.3	68
Mbeya	43.4	33.4	23.9	42.3	43.9	71.8	60.6	240
Singida	36.6	12.9	16.9	37.5	34.9	63.5	48.0	141
Tabora	35.4	14.9	20.1	25.4	21.5	54.0	36.7	318
Rukwa	13.2	8.1	7.6	9.1	10.6	58.4	13.4	120
Kigoma	28.8	11.3	19.0	31.7	33.5	57.1	38.4	217
Shinyanga	35.5	16.1	19.3	24.5	28.0	62.4	37.6	194
Kagera	39.3	12.7	22.2	32.0	28.5	50.9	44.4	203
Mwanza	36.7	28.8	23.5	27.3	28.5	55.8	37.8	290
Mara	17.3	8.2	5.7	15.0	16.3	54.7	26.8	199
Manyara	52.1	16.1	16.9	36.2	38.3	46.0	51.1	157
Njombe	59.0	37.4	33.1	62.7	54.7	90.8	70.0	50
Katavi	15.4	7.9	7.9	10.4	7.3	45.4	14.8	56
Simiyu	17.1	5.2	5.3	9.3	7.4	36.8	18.9	202
Geita	17.3	12.1	4.9	12.1	16.3	50.9	21.6	192
Kaskazini Unguja	36.8	14.9	18.3	40.4	28.7	51.4	45.9	18
Kusini Unguja	57.3	29.4	34.2	55.3	43.0	82.5	68.7	11
Mjini Magharibi	42.2	18.6	26.9	48.2	30.3	89.8	58.2	39
Kaskazini Pemba	43.4	20.1	23.0	31.8	24.3	53.3	40.9	21
Kusini Pemba	28.6	8.2	17.8	23.3	16.6	58.0	28.8	17
Mother's education								
No education	26.4	11.9	12.6	18.6	18.9	41.8	29.3	801
Primary incomplete	34.2	18.6	15.9	25.4	25.7	54.2	36.2	540
Primary complete	38.9	22.4	23.6	38.0	37.0	68.0	49.5	2,121
Secondary+	52.9	38.4	36.3	56.0	53.1	91.6	65.8	704
Wealth quintile								
Lowest	26.4	11.2	12.6	19.4	21.2	42.9	29.7	1,011
Second	33.7	15.8	17.0	26.9	25.0	52.8	37.8	876
Middle	35.4	16.4	17.4	31.4	30.4	62.0	42.7	782
Fourth	45.1	29.4	29.8	45.0	44.6	82.5	58.0	794
Highest	56.4	46.5	41.8	64.3	60.2	96.4	73.5	704
Total	38.2	22.6	22.6	35.7	34.8	65.1	46.6	4,167

[1] Captures newborns who were weighed "at birth." May exclude some newborns were weighed during the 2 days after birth.

Table 9.13 Problems in accessing health care

Percentage of women age 15-49 who reported that they have serious problems in accessing health care for themselves when they are sick, by type of problem, according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Problems in accessing health care					Number of women
	Getting permission to go for treatment	Getting money for treatment	Distance to health facility	Not wanting to go alone	At least one problem accessing health care	
Age						
15-19	17.4	43.6	38.8	31.3	61.3	2,904
20-34	13.4	47.6	42.4	29.1	64.6	6,359
35-49	13.5	56.8	44.7	30.1	70.0	4,002
Number of living children						
0	15.9	40.0	36.0	29.2	57.8	3,519
1-2	13.7	48.0	41.2	28.3	64.3	4,253
3-4	14.3	54.8	44.0	30.3	69.1	2,909
5+	13.3	58.9	50.9	32.9	74.0	2,585
Marital status						
Never married	15.0	43.2	34.4	27.3	58.6	3,353
Married or living together	14.4	48.7	45.0	30.7	66.3	8,210
Divorced/separated/widowed	12.4	65.7	45.3	31.0	75.4	1,703
Employed last 12 months						
Not employed	13.4	43.3	36.2	27.3	59.7	3,033
Employed for cash	13.4	46.9	38.4	27.0	61.5	6,197
Employed not for cash	16.4	58.2	52.9	36.2	76.1	4,036
Residence						
Urban	14.8	41.9	31.9	24.0	55.7	4,811
Rural	14.0	53.8	48.2	33.2	71.1	8,455
Tanzania Mainland/Zanzibar						
Tanzania Mainland	14.6	50.0	42.9	30.2	66.0	12,862
Urban	15.1	42.3	32.4	24.1	56.0	4,675
Rural	14.4	54.3	48.9	33.6	71.6	8,187
Zanzibar	4.2	34.5	23.8	20.6	51.4	404
Unguja	5.0	30.3	24.1	25.3	50.5	293
Pemba	1.8	45.6	23.2	8.2	53.7	111
Zone						
Western	10.4	50.6	43.9	39.5	72.0	1,278
Northern	5.8	39.8	25.9	14.8	52.0	1,575
Central	23.7	64.6	48.3	30.2	73.6	1,336
Southern Highlands	8.1	50.9	41.8	18.9	62.6	807
Southern	13.6	45.1	56.4	44.7	74.6	700
South West Highlands	21.0	51.4	41.6	34.5	66.1	1,246
Lake	16.3	51.9	46.6	29.8	67.4	3,463
Eastern	14.5	45.8	42.3	33.0	64.2	2,457
Zanzibar	4.2	34.5	23.8	20.6	51.4	404
Region						
Dodoma	38.8	73.1	43.8	27.9	76.7	572
Arusha	4.8	48.0	37.1	22.6	63.9	508
Kilimanjaro	6.3	29.8	15.7	7.1	38.5	361
Tanga	6.3	39.0	23.1	13.1	50.2	706
Morogoro	11.7	55.3	51.6	46.2	69.8	636
Pwani	13.5	55.1	48.9	37.9	71.5	285
Dar es Salaam	15.8	40.1	37.2	26.7	60.5	1,536
Lindi	18.3	42.2	52.0	44.8	71.3	288
Mtwara	10.4	47.1	59.4	44.7	76.9	412
Ruvuma	3.9	63.2	50.3	16.8	73.4	360
Iringa	18.1	38.9	37.0	29.9	52.8	245
Mbeya	24.0	46.0	42.4	34.5	58.7	828
Singida	21.9	60.0	58.9	44.3	74.5	370
Tabora	4.9	46.1	45.0	27.8	67.5	737
Rukwa	16.3	61.4	32.4	30.8	79.6	288
Kigoma	17.9	56.7	42.3	55.4	78.2	542
Shinyanga	1.5	37.6	32.4	17.8	52.3	504
Kagera	10.3	49.6	61.5	40.3	79.2	612
Mwanza	25.9	49.1	45.4	25.8	59.6	859
Mara	15.8	64.5	40.9	31.0	74.9	523
Manyara	3.7	56.7	44.9	20.1	68.1	394
Njombe	3.6	43.8	32.6	9.1	55.3	203
Katavi	12.4	63.6	57.5	43.1	83.9	130
Simiyu	13.3	64.7	51.3	32.1	83.5	479
Geita	25.4	48.2	46.2	32.2	58.0	485
Kaskazini Unguja	6.1	43.5	32.6	29.8	62.7	56
Kusini Unguja	2.3	28.5	23.7	20.9	45.6	35
Mjini Magharibi	5.2	27.0	21.8	24.8	47.9	201
Kaskazini Pemba	2.2	43.9	19.2	4.9	52.3	56
Kusini Pemba	1.4	47.2	27.2	11.7	55.2	55
Education						
No education	15.2	62.5	53.2	36.3	78.0	1,946
Primary incomplete	17.2	56.6	47.5	33.2	72.3	1,559
Primary complete	14.4	51.3	43.5	30.7	67.2	6,652
Secondary+	12.2	33.7	30.4	22.3	50.6	3,109
Wealth quintile						
Lowest	15.6	62.8	60.0	37.3	79.6	2,246
Second	15.2	60.5	52.0	36.3	76.6	2,274
Middle	14.6	53.6	47.7	33.1	71.5	2,329
Fourth	12.9	47.5	34.7	26.1	62.5	2,822
Highest	13.9	33.1	27.7	22.0	48.2	3,596
Total	14.3	49.5	42.3	29.9	65.5	13,266

CHILD HEALTH 10

Key Findings

- ***Vaccination:*** Seventy-five percent of children age 12-23 months had received all basic vaccinations at the time of the survey. Vaccination coverage has remained virtually unchanged since 2010 (75%).
- ***Symptoms of acute respiratory infection (ARI):*** Four percent of children under age 5 had symptoms of an ARI in the 2 weeks before the survey. Fifty-five percent of these children were taken to a health facility or provider for advice or treatment.
- ***Fever:*** Eighteen percent of children under age 5 had a fever in the 2 weeks before the survey. Eight in ten children with fever were taken to a health facility/provider, a pharmacy, or an Accredited Drug Dispensing Outlet (ADDO) for treatment, with half of these children seen by a health provider.
- ***Diarrhoea:*** Twelve percent of children under age 5 had diarrhoea in the 2 weeks before the survey. Forty-three percent of the children with diarrhoea were seen for treatment at a health facility or provider and half received oral rehydration therapy (ORT). Eighteen percent of the children with diarrhoea were not treated.

This chapter presents information from the 2015-16 TDHS-MIS on birth weight and vaccination status for young children. The chapter also reviews the prevalence of and treatment practices for three common childhood illnesses: acute respiratory infection (ARI), fever, and diarrhoea. Because appropriate sanitary practices can help prevent and reduce the severity of diarrhoeal disease, information is provided on the disposal of children's stools. The child health information in this chapter can help identify changes in the health of Tanzanian children and can increase awareness among policy makers, programme managers, and other stakeholders about the complex health needs of children. Proper use of such data will help formulate interventions that reduce morbidity and mortality from childhood illnesses and ultimately improve the health of children in Tanzania.

10.1 BIRTH WEIGHT

A child's weight at birth is a very important indicator because birth weight is strongly associated with mortality risk during the first year and, to a lesser degree, with developmental problems in childhood and the risk of various diseases in adulthood. In the 2015-16 TDHS, birth weight was recorded by either a written record or the mother's report. The mother's assessment of the child's weight at birth was obtained because information on birth weight was not available for many children. The mother's estimate of weight is subjective, but can be a useful proxy for the child's weight at birth. Children who weigh less than 2.5 kilogrammes at birth, or are reported to be *very small* or *smaller than average,* are considered to have a higher-than-average risk of early childhood death.

Low birth weight

Percentage of births with a reported birth weight <2.5 kilogrammes regardless of gestational age.

Sample: Live births in the 5 years before the survey that have a reported birth weight, either from a written record or mother's report

Among all births, 3% of infants were reported as very small, 7% smaller than average, and 89% average or larger than average. Weight at birth was available for 64% of live births in the 5 years before the survey **(Table 10.1)**. Among the infants whose birth weight was reported, 7% weighed less than 2.5 kg at birth. However, the availability of birth weight data varied markedly by background characteristics. For example, birth weight information was available for 41% of births in the lowest wealth quintile compared with 95% of births in the highest quintile. Because variability in birth weight information may introduce some bias into any comparison of birth weights, differences in birth weight data by background characteristics should be interpreted with caution.

Trends: Birth weight information was available for a larger percentage of births in the 2015-16 TDHS-MIS (64%) compared with the 2010 TDHS and the 2004-05 TDHS when birth weights were reported for only 53% and 50% respectively. The improved availability of birth weight data may be due to the increase in facility deliveries.

One in fourteen infants was reported to have weighed less than 2.5 kilogrammes in 2010 and 2015-16, down from 14% in 1991-92. The percentage of children considered very small or smaller than average was also similar in the last two surveys (10% in 2015-16 versus 8% in 2010).

10.2 VACCINATION OF CHILDREN

Vaccination Coverage

Immunizing children against vaccine preventable diseases can greatly reduce childhood morbidity and mortality. Information on vaccination coverage was collected from the child's health card and by direct report from the mother.

All basic vaccinations coverage

Percentage of children age 12-23 months who received specific vaccines at any time before the survey (according to a vaccination card or the mother's report). To have received all basic vaccinations, a child must receive at least:

- One dose of BCG vaccine, which protects against tuberculosis
- Three doses of DPT-HepB-Hib (pentavalent), which protect against diphtheria, pertussis (whooping cough),tetanus, Hepatitis B and Haemophilus Influenza type b
- Three doses of polio vaccine, which protect against three types of wild polio virus
- One dose of measles vaccine

Sample: Living children age 12-23 months

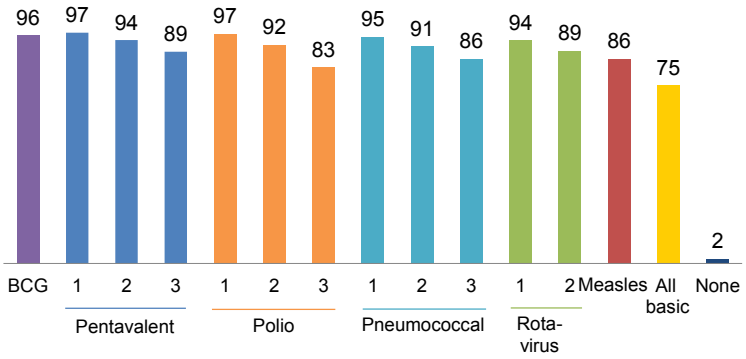
In Tanzania, more than 7 in every 10 children age 12-23 months (75%) received all basic vaccinations at some time, and 68% received these vaccinations before their first birthday **(Table 10.2)**.

In addition to the basic vaccinations, it is recommended that all children receive one dose of polio vaccine at birth, three doses of the pneumococcal vaccine, and two doses of the rotavirus vaccine before their first birthday. More than half of children age 12-23 months (52%) received all of the recommended vaccinations for their age group, and 48% received the recommended vaccinations by age 12 months.

Figure 10.1 shows the coverage for basic vaccinations among children age 12-23 months. Among the basic vaccinations, the highest coverage is seen for the first doses of both pentavalent and polio vaccines (97% each) and the lowest for the measles vaccine (86%). Although more children received first doses of the pentavalent, polio, pneumococcal, and rotavirus vaccines than the second or third doses, dropout rates are generally low **(Table 10.2)**. Ninety-seven percent of children age 12-23 months received the first pentavalent dose and 89% received the last dose. These percentages were 97% and 83% for the polio vaccine, 95% and 86% for the pneumococcal vaccine, and 94% and 89% for rotavirus vaccine.

Figure 10.1 Childhood vaccinations

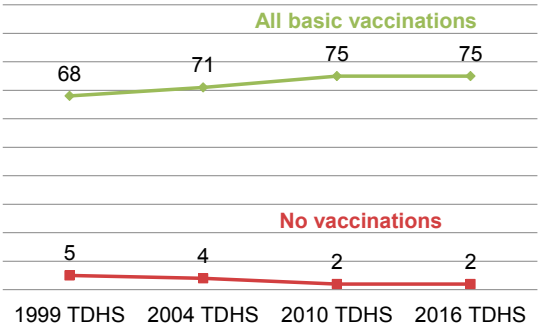
Percentage of children age 12-23 months vaccinated at any time before the survey



Trends: Tanzania has seen little change in vaccination rates among young children over the past decade. The percentage of children 12-23 months who received all basic vaccinations rose modestly from 71% to 75% between 2004-05 and 2010, and it has remained virtually unchanged over the last 5 years **(Figure 10.2)**. Over this same period, the percentage of children who received no vaccinations has been low, declining from 4% in 2004-05 to 2% in 2010, and remaining at that level in 2015-16.

Figure 10.2 Trends in childhood vaccinations

Percentage of children age 12-23 months who received all basic vaccinations at any time before the survey



Patterns by background characteristics

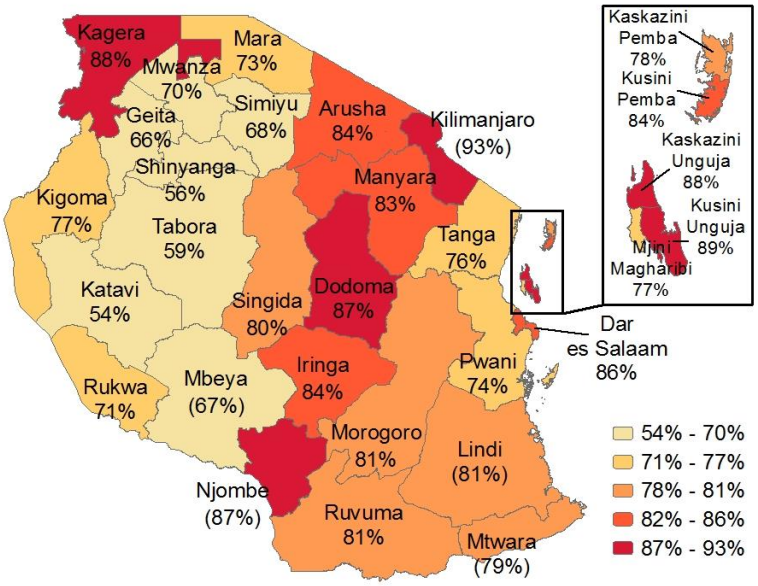
- The percentage of children age 12-23 months who received all basic vaccinations decreases with increasing birth order **(Table 10.3)**. Eight in ten first-born children received all basic vaccinations compared to 67% of sixth or higher order births.
- Vaccination coverage is higher in urban areas compared to rural areas (82% versus 73%).
- Zanzibar has higher coverage of all basic vaccines (81%) compared to Tanzania Mainland (75%).

- Vaccination coverage varies across zones. The Central, Southern Highlands and Eastern zones, with 83% of children age 12-23 months who received all basic vaccines, have the highest coverage, while the lowest coverage is in the Western zones (66%). For information on variability of vaccination coverage across regions, see **Figure 10.3 and Table 10.3**.

- Coverage of all basic vaccinations is higher among children whose mothers completed secondary or higher level of education (81%) and among children in the highest wealth quintile (83%).

Figure 10.3 **Vaccination coverage by region**

Percentage of children age 12-23 months who received all basic vaccinations at any time before the survey



Vaccination Cards

Vaccination cards are a critical tool in ensuring that children receive all recommended vaccinations on schedule. The survey found that 98% of children aged 12-23 months have had a vaccination card. However, mothers showed the TDHS-MIS interviewers vaccination cards for only 84% of children **(Table 10.4)**.

10.3 SYMPTOMS OF ACUTE RESPIRATORY INFECTION

Acute respiratory infection (ARI) is among the leading causes of morbidity and mortality in Tanzania and throughout the world. Among acute respiratory diseases, pneumonia is the most serious for young children. Early diagnosis and treatment with antibiotics can prevent a large proportion of deaths from pneumonia.

Treatment of ARI symptoms

Children with ARI symptoms for whom advice or treatment was sought from a health facility or provider. ARI symptoms consist of cough accompanied by (1) short, rapid breathing that is chest-related, and/or (2) difficult breathing that is chest-related.

Sample: Children under age 5 with symptoms of ARI in the 2 weeks before the survey

Four percent of children under age 5 were reported by their mothers as having symptoms of ARI in the 2 weeks before the survey. Among these children, 55% were taken to a health facility or provider for advice or treatment, and 40% with ARI symptoms received antibiotics **(Table 10.5)**.

Trends: The percentage of children ill with ARI symptoms who were taken to a health facility or provider for advice or treatment decreased from 71% in 2010 to 55% in 2016.

Patterns by background characteristics

- In general, the percentage of children with ARI symptoms did not vary widely by background characteristics. The largest differences were observed by wealth index. The percentage of children

reported as ill with ARI symptoms increases from 3% in the lowest to 5% in the highest wealth quintile.

- Children ill with ARI symptoms were most likely to receive treatment from a health facility or provider if they lived in urban areas (64%) or in Zanzibar (79%), or were in the highest wealth quintile (75%).

10.4 FEVER

Fever is an abnormally high body temperature, which is usually accompanied by shivering, headache, and restlessness. Fever indicates the presence of various illnesses that can include malaria, pneumonia, an ear problem, the common cold, influenza, and other infections.

Treatment of fever

Children with fever for whom advice or treatment was sought from a health facility or provider

Sample: Children under age 5 with fever in the 2 weeks before the survey

In Tanzania, 18% of children under age 5 were reported to have fever in the 2 weeks before the survey. Treatment or advice was sought from a health facility/provider, pharmacy, or accredited drug dispensing outlet (ADDO) for eight in ten of the children experiencing fever, with half of the children receiving care from a health facility or provider. One in two children with fever received anti-malarial drugs, and one in five were given antibiotics **(Table 10.6)**.

Trends: Treatment or advice was sought from a health facility or provider for children under age 5 with fever less often in 2015-16 (50%) than in 2010 (65%).

Patterns by background characteristics

- Fever was more prevalent among children age 6-35 months than those age less than 6 months or more than 35 months.
- The percentage of children with fever taken to a health facility or provider for advice or treatment varies by residence. While almost seven in every ten urban children were taken to a health facility or provider (69%), less than half of rural children (43%) received treatment or advice from a health facility or provider.
- More rural children with fever than urban children received anti-malarial drugs (53% versus 46%), while more urban children than rural children received antibiotics (43% versus 29%).
- In Tanzania Mainland, more children with fever received antimalarial drugs than antibiotics (52% against 32%) while in Zanzibar, more children with fever received antibiotics than antimalarial drugs (50% versus 2%)
- Care seeking for children with fever increased with the mother's level of education and the wealth quintile. The likelihood that a child received an antibiotic also increased with the mother's education and the wealth quintile. However, the opposite pattern was observed with anti-malarial drugs; the percentage of children with fever treated with anti-malarial drugs generally decreased with the mother's education level and the wealth quintile.

10.5 DIARRHOEAL DISEASE

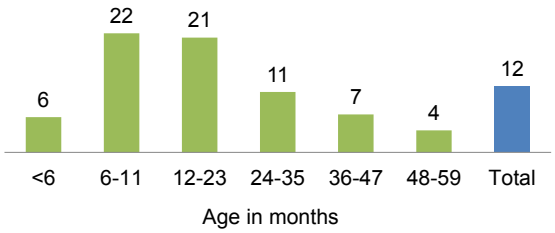
Dehydration caused by severe diarrhoea is a major cause of morbidity and mortality among young children in Tanzania. Exposure to agents that cause diarrhoeal diseases is frequently a result of contaminated water, hygienic practices in food preparation, and disposal of excreta.

10.5.1 Prevalence of Diarrhoea

In Tanzania, 12% of children under age 5 had diarrhoea in the 2 weeks before the survey **(Table 10.7.1)**.

Figure 10.4 **Diarrhoea prevalence by age**

Percentage of children under age 5 who had diarrhoea in the 2 weeks before the survey



Patterns by background characteristics

- There was a sharp increase in prevalence of diarrhoea between children age less than 6 months (6%) and those age 6-11 months (22%). This is expected because children begin to crawl and walk at age 6-11 months, and are exposed to a higher risk of infection from the environment. The introduction of other liquids and foods at the time of weaning also facilitates the spread of microbes that cause disease. After age 24 months, the prevalence of diarrhoea declines rapidly to only 4% among children age 48-59 months **(Figure 10.4)**.
- The prevalence of diarrhoea was slightly higher in urban areas (14%) compared with rural areas (11%).
- The Southern Zone had the highest prevalence of diarrhoea (16%) and lowest (8%) in the Northern Zone.
- Considering regional patterns, Kigoma and Rukwa had the highest diarrhoea prevalence (about 20% each), while Tabora had the lowest (5%).

10.5.2 Feeding Practices

To reduce dehydration and minimise the effects of diarrhoea on nutritional status, mothers are encouraged to continue normal feeding of children with diarrhoea and to increase the amount of fluids given to the child.

Appropriate feeding practices

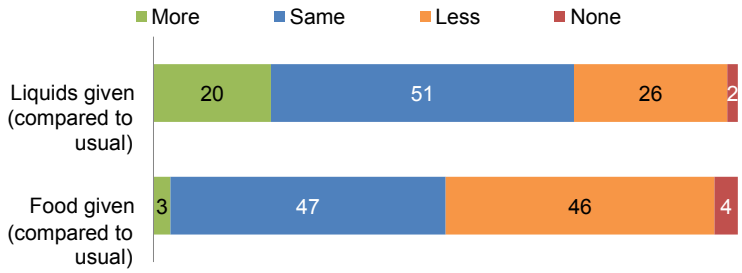
Children with diarrhoea are given more liquids than usual, and as much food or more than usual.

Sample: Children under age 5 with diarrhoea in the 2 weeks before the survey

Mothers reported in the 2015-16 TDHS-MIS that 20% of children with diarrhoea were given more liquids than usual, as recommended, and that more than half of the children (51%) received the same amount of liquids as usual **(Table 10.7.2)**. Of greater concern, mothers reported giving less or no fluid to 28% of sick children with diarrhoea **(Figure 10.5)**.

Figure 10.5 **Feeding practices during diarrhoea**

Percentage of children under age 5 with diarrhoea in the 2 weeks before the survey



Note: Due to rounding, Liquids given does not add up to 100%.

With food intake during a diarrhoea episode, 50% of children with diarrhoea were fed more food or the same amount of food as usual as recommended.

Patterns by background characteristics

- The percentage of children with diarrhoea who were given more liquids than usual was higher in urban areas than in rural areas (25% versus 18%), and in Zanzibar than in Mainland Tanzania (37% versus 20%).
- The likelihood that a child with diarrhoea received more liquids increases with increased mother's level of education and the wealth quintile.

10.5.3 Treatment of Diarrhoea

Forty-three percent of children with diarrhoea were taken to a health facility or provider for advice or treatment **(Table 10.8)**.

Oral rehydration therapy (ORT) is a simple and effective way to reduce the dehydration caused by diarrhoea. Rehydration fluids contain not only the water replacement that is required in diarrhoea or vomiting induced dehydration, but also important electrolytes that must be replaced. Zinc supplementation has been found to reduce the duration, frequency, and severity of episodes of diarrhoea.

Oral rehydration therapy

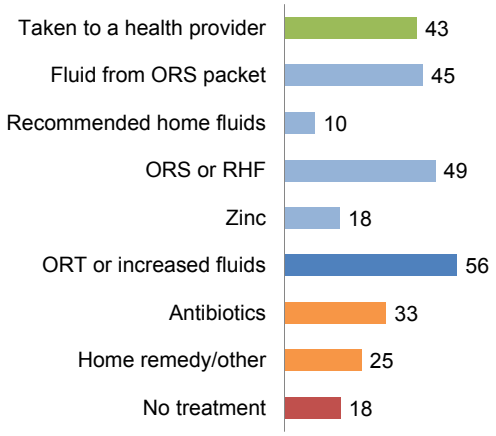
Children with diarrhoea are given a fluid made from a special packet of oral rehydration salts (ORS) or government-recommended homemade fluids (RHF).

Sample: Children under age 5 with diarrhoea in the 2 weeks before the survey

About half of children under age 5 with diarrhoea (49%) received some form of ORT, while 56% received ORT or increased liquids. Thirteen percent of children with diarrhoea received ORS and zinc, while zinc alone was given to 18% of children **(Figure 10.6 and Table 10.8)**. The table also shows that 33% of children received antibiotics, and 1% received intravenous solution. Eighteen percent of children with diarrhoea did not receive any treatment.

***Figure 10.6* Treatment of diarrhoea**

Percentage of children under age 5 with diarrhoea in the 2 weeks before the survey



Trends: The percentage of children with diarrhoea who were taken to a health facility or provider declined from 53% in 2010 to 43% in 2016. The percentage of children with diarrhoea who received ORT declined from 63% in 2010 to 56% in 2016. Children who received zinc increased from 5% in 2010 to 18% in 2016. The percentage of children who received no treatment has remained almost the same (17% in 2010 and 18% in 2016).

Patterns by background characteristics

- Urban children with diarrhoea were more likely to be taken to a health provider than rural children (50% versus 40%).
- Care seeking for children under age 5 with diarrhoea was higher in Zanzibar (57%) as compared to Tanzania Mainland (43%). In Mainland Tanzania, the percentage of children with diarrhoea taken to a health facility or provider varies from only 28% in the Western Zone to 61% in the Southern Zone.
- Care seeking generally increases with increased mother's level of education and the wealth quintile.

10.5.4 Knowledge of ORS Packets

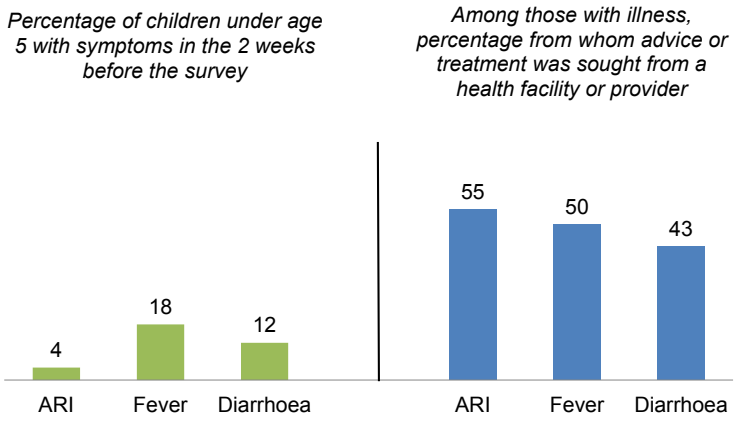
About 95% of women in Tanzania are aware of ORS packets or ORS pre-packed liquids for the treatment of diarrhoea **(Table 10.9)**.

Trends: Knowledge of ORS packets did not change between the 2010 TDHS and the 2015-16 TDHS-MIS (95% each).

Treatment of Childhood Illness

During the 2 weeks before the survey, fever was the most common illness reported among children under age 5. Children with ARI symptoms were most often taken to a health facility or provider for advice or treatment (55%) **(Figure 10.7)**. Professional advice was sought least often for children who had diarrhoea (43%), as compared to ARI and fever.

Figure 10.7 **Prevalence and treatment of childhood illnesses**



10.6 DISPOSAL OF CHILDREN'S STOOLS

The proper disposal of children's faeces is extremely important in preventing the spread of the diseases. If faeces is left uncontained, diseases may spread by direct contact or animal contact.

Safe disposal of children's stools

The child's last stools were put or rinsed into a toilet or latrine, or buried, or the child used a toilet or latrine.

Sample: Youngest child under age 5 living with the mother

Seventy-two percent of children under age 5 had their last stool disposed of safely **(Table 10.10)**.

Trends: Little change occurred in the manner in which children's stools are disposed between the 2010 TDHS and 2015-16 TDHS-MIS. In both surveys, stools were safely disposed in slightly more than seven in ten cases in the 2010 TDHS (73%) and TDHS-MIS 2015-16 (72%).

Patterns by background characteristics

- Safe disposal of children's stools increases with increasing child's age.
- Stools were disposed of safely more often when children were living in households with an improved toilet (90% shared and 82% not shared) as compared with children living in households with unimproved (67%) toilet facilities.
- Urban children had their stools more safely disposed of (83%) than rural children (68%).
- Safe disposal of children's stools increases with increased mother's education and the wealth quintile.

List of Tables

For detailed information on low birth weight, vaccinations, childhood illness, and disposal of children's stools, see the following tables:

- **Table 10.1 Child's size and weight at birth**
- **Table 10.2 Vaccinations by source of information**
- **Table 10.3 Vaccinations by background characteristics**
- **Table 10.4 Possession and observation of vaccination cards, according to background characteristics**
- **Table 10.5 Prevalence and treatment of symptoms of ARI**
- **Table 10.6 Prevalence and treatment of fever**
- **Table 10.7.1 Prevalence of diarrhoea**
- **Table 10.7.2 Feeding practices during diarrhoea**
- **Table 10.8 Diarrhoea treatment**
- **Table 10.9 Knowledge of ORS packets or pre-packaged fluids**
- **Table 10.10 Disposal of children's stools**

Table 10.1 Child's size and weight at birth

Percent distribution of live births in the 5 years preceding the survey by mother's estimate of baby's size at birth, percentage of live births in the 5 years preceding the survey that have a reported birth weight, and among live births in the 5 years before the survey with a reported birth weight, percentage less than 2.5 kg, according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Percent distribution of all live births by size of child at birth					Percentage of all births that have a reported birth weight[1]	Number of births	Births with a reported birth weight[1]	
	Very small	Smaller than average	Average or larger	Don't know/ missing	Total			Percentage less than 2.5 kg	Number of births
Mother's age at birth									
<20	4.3	9.2	85.6	1.0	100.0	67.0	1,753	9.9	1,175
20-34	2.6	6.7	89.9	0.8	100.0	63.9	6,668	6.2	4,258
35-49	3.2	7.3	88.7	0.8	100.0	58.4	1,631	6.6	953
Birth order									
1	3.6	8.4	87.3	0.7	100.0	76.8	2,496	9.4	1,916
2-3	2.4	5.9	90.8	0.9	100.0	66.8	3,433	5.3	2,294
4-5	3.1	7.6	88.4	0.9	100.0	56.9	2,122	7.1	1,208
6+	3.1	7.7	88.4	0.8	100.0	48.4	2,001	5.6	968
Mother's smoking status									
Smokes cigarettes/ tobacco	(3.6)	(8.7)	(87.7)	(0.0)	100.0	(66.5)	29	*	19
Does not smoke	3.0	7.2	89.0	0.8	100.0	63.5	10,023	6.9	6,367
Residence									
Urban	2.9	6.9	89.6	0.6	100.0	88.1	2,727	7.4	2,402
Rural	3.0	7.4	88.7	0.9	100.0	54.4	7,325	6.6	3,984
Tanzania Mainland/ Zanzibar									
Mainland	2.9	7.1	89.1	0.9	100.0	63.5	9,788	6.8	6,215
Urban	2.8	6.8	89.8	0.6	100.0	88.1	2,658	7.4	2,342
Rural	2.9	7.2	88.9	1.0	100.0	54.3	7,130	6.5	3,873
Zanzibar	5.6	12.1	82.3	0.0	100.0	64.9	264	10.0	171
Unguja	6.0	12.3	81.7	0.0	100.0	74.7	165	11.0	124
Pemba	4.8	11.8	83.4	0.0	100.0	48.5	98	7.4	48
Zone									
Western	3.2	7.4	89.2	0.3	100.0	50.1	1,225	4.0	614
Northern	3.1	7.7	88.9	0.2	100.0	66.2	935	8.9	619
Central	2.6	9.0	87.4	1.1	100.0	58.7	1,111	6.1	651
Southern Highlands	3.9	8.2	88.0	0.0	100.0	91.2	542	7.6	494
Southern	5.3	7.7	85.4	1.6	100.0	84.5	392	12.2	331
South West Highlands	2.6	3.5	89.1	4.8	100.0	58.4	974	3.2	569
Lake	2.7	7.2	90.1	0.0	100.0	51.5	3,194	6.3	1,646
Eastern	2.4	6.8	90.0	0.8	100.0	91.2	1,415	8.2	1,290
Zanzibar	5.6	12.1	82.3	0.0	100.0	64.9	264	10.0	171
Region									
Dodoma	2.7	7.8	87.4	2.1	100.0	68.8	425	7.0	292
Arusha	6.9	10.0	83.1	0.0	100.0	52.8	349	10.5	184
Kilimanjaro	1.9	4.3	93.8	0.0	100.0	94.4	169	9.5	159
Tanga	0.5	7.3	91.7	0.5	100.0	66.1	417	7.4	275
Morogoro	1.0	6.0	92.5	0.6	100.0	85.4	440	7.5	376
Pwani	3.4	6.6	86.7	3.2	100.0	84.8	203	10.6	172
Dar es Salaam	3.0	7.3	89.4	0.3	100.0	96.1	772	8.0	742
Lindi	5.6	4.4	88.6	1.4	100.0	79.8	177	11.1	141
Mtwara	5.1	10.5	82.7	1.8	100.0	88.4	215	13.0	190
Ruvuma	5.1	8.5	86.4	0.0	100.0	91.4	249	9.5	227
Iringa	3.2	9.9	86.9	0.0	100.0	92.5	162	6.0	150
Mbeya	2.3	0.8	92.9	4.0	100.0	64.3	559	2.1	360
Singida	1.0	6.7	91.5	0.8	100.0	61.6	334	5.8	206
Tabora	3.0	7.4	89.4	0.2	100.0	49.1	712	3.0	350
Rukwa	1.6	7.8	82.4	8.3	100.0	53.8	277	5.0	149
Kigoma	3.4	7.3	88.8	0.5	100.0	51.4	513	5.3	264
Shinyanga	1.9	4.1	94.1	0.0	100.0	63.8	467	6.9	298
Kagera	1.4	7.1	91.5	0.0	100.0	50.2	534	5.0	268
Mwanza	2.6	7.5	89.9	0.0	100.0	56.8	737	8.6	418
Mara	2.1	4.7	93.2	0.0	100.0	52.0	496	6.3	258
Manyara	3.9	12.6	83.5	0.0	100.0	43.7	352	4.7	154
Njombe	2.4	5.4	92.1	0.0	100.0	89.1	131	6.0	117
Katavi	5.5	6.3	87.0	1.1	100.0	43.9	139	5.4	61
Simiyu	0.6	8.8	90.6	0.0	100.0	35.9	496	4.9	178
Geita	8.1	10.6	81.0	0.2	100.0	48.5	464	3.7	225
Kaskazini Unguja	5.5	12.3	82.2	0.0	100.0	48.4	45	10.7	22
Kusini Unguja	4.4	8.4	87.1	0.0	100.0	80.3	25	8.4	20
Mjini Magharibi	6.7	13.4	79.9	0.0	100.0	85.7	95	11.7	81
Kaskazini Pemba	7.3	12.7	80.0	0.0	100.0	46.4	53	10.5	25
Kusini Pemba	1.9	10.7	87.4	0.0	100.0	50.9	45	4.1	23

(Continued…)

Table 10.1—*Continued*

Background characteristic	Percent distribution of all live births by size of child at birth					Percentage of all births that have a reported birth weight[1]	Number of births	Births with a reported birth weight[1]	
	Very small	Smaller than average	Average or larger	Don't know/ missing	Total			Percentage less than 2.5 kg	Number of births
Education									
No education	4.0	8.6	86.5	1.0	100.0	41.1	2,103	7.6	865
Primary incomplete	3.3	6.7	89.2	0.8	100.0	54.3	1,323	7.0	719
Primary complete	2.7	7.1	89.2	1.0	100.0	67.4	5,193	7.0	3,502
Secondary+	2.2	6.3	91.4	0.1	100.0	90.8	1,432	6.3	1,300
Wealth quintile									
Lowest	3.7	8.5	86.9	0.9	100.0	40.7	2,427	6.8	989
Second	2.7	7.9	88.6	0.8	100.0	51.4	2,135	6.4	1,098
Middle	2.8	6.2	89.7	1.3	100.0	62.5	1,929	7.3	1,205
Fourth	2.6	6.8	89.6	1.0	100.0	79.6	1,887	7.7	1,502
Highest	2.8	6.2	90.8	0.2	100.0	95.1	1,674	6.3	1,592
Total	3.0	7.2	89.0	0.8	100.0	63.5	10,052	6.9	6,386

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Based on either a written record or the mother's recall.

Table 10.2 Vaccinations by source of information

Percentage of children age 12-23 and children 24-35 months who received specific vaccines at any time before the survey, by source of information (vaccination card or mother's report) and percentage who received vaccines by appropriate age, Tanzania DHS-MIS 2015-16

	Age in months							
	12-23				24-35			
Vaccine	Vaccination card[1]	Mother's report	Either source	Vaccinated by appropriate age[2,3,4]	Vaccination card	Mother's report	Either source[1]	Vaccinated by appropriate age[2,3,4]
BCG	82.7	13.3	96.0	95.6	69.5	26.2	95.7	94.4
Pentavalent								
1	83.6	13.3	97.0	96.6	70.2	25.7	95.9	95.2
2	81.3	12.6	93.9	93.4	69.5	24.4	93.9	92.9
3	78.4	10.6	89.0	87.7	68.0	20.4	88.3	86.1
Polio								
0 (birth dose)	58.7	8.6	67.3	67.2	47.1	17.2	64.3	63.8
1	83.3	13.2	96.5	96.2	69.7	25.3	95.1	94.3
2	80.1	11.8	91.9	91.4	69.0	22.5	91.5	90.5
3	76.4	6.1	82.5	81.5	66.3	11.7	78.0	75.9
Pneumococcal								
1	82.4	12.8	95.3	94.9	65.0	23.2	88.2	87.4
2	79.3	12.1	91.4	90.7	63.9	21.9	85.9	84.8
3	75.6	10.5	86.1	84.5	62.2	18.9	81.1	78.9
Rotavirus								
1	81.5	12.3	93.8	93.4	63.5	22.8	86.2	85.0
2	77.7	11.7	89.4	88.4	61.8	21.0	82.8	80.6
Measles								
1	74.4	11.6	86.0	78.0	66.7	23.8	90.4	79.8
2	na	na	na	na	24.1	7.4	31.5	28.7
All basic vaccinations[5]	70.1	5.3	75.3	67.9	62.7	10.3	72.9	63.4
All age appropriate vaccinations[6]	49.5	2.6	52.1	48.1	17.4	2.2	19.6	16.5
No vaccinations	0.2	2.0	2.3	na	0.1	3.0	3.0	na
Number of children	1,797	337	2,134	2,134	1,280	537	1,817	1,817

na = Not applicable.
BCG = Bacillus Calmette Guerin.
Pentavalent = Diphtheria-Pertussis-Tetanus-HepB-Hib.
HepB = Hepatitis B.
Hib = Haemophilus Influenzae type b.
[1] Vaccination card, booklet, or other home-based record.
[2] Received by age 12 months.
[3] For children whose vaccination information is based on the mother's report, date of vaccination is not collected. The proportions of vaccinations given during the first and second years of life are assumed to be the same as for children with a written record of vaccination.
[4] Received by age 12 months for all vaccines except the second dose of the vaccine against measles, which should be received by age 18 months.
[5] BCG, three doses of Pentavalent, three doses of oral polio vaccine (excluding polio vaccine given at birth), and one dose of the vaccine against measles.
[6] For children age 12-23 months: BCG, four doses of Pentavalent, three doses of oral polio vaccine, three doses of pneumococcal vaccine, two doses of rotavirus vaccine, and one dose of a vaccine against measles. For children age 24-35 months, all of these plus a second dose of the vaccine against measles.

Table 10.3 Vaccinations by background characteristics

Percentage of children age 12-23 months and children age 24-35 months who received specific vaccines at any time before the survey (according to a vaccination card or the mother's report), percentage with all basic vaccinations, and percentage with all age appropriate vaccinations, according to background characteristics, Tanzania DHS-MIS 2015-16

	Age in months																				
	12-23																		24-35		
	BCG	Pentavalent			Polio				Pneumococcal			Rotavirus		Measles					Measles		
Background characteristic	1	1	2	3	0 (birth dose)	1	2	3	1	2	3	1	2	1	All basic vaccina-tions[2]	All age appropriate vaccina-tions[3]	No vaccinations	Number of children	2	All age appropriate vaccina-tions[4]	Number of children
Sex																					
Male	96.7	97.2	94.6	90.1	69.0	96.6	92.4	83.6	95.2	91.7	86.6	94.4	90.7	87.7	76.9	54.3	1.6	1,093	32.7	20.7	954
Female	95.3	96.6	93.2	87.8	65.4	96.3	91.3	81.4	95.3	91.1	85.6	93.1	88.1	84.2	73.7	49.9	2.9	1,041	30.3	18.4	864
Birth order																					
1	96.7	98.5	96.5	91.7	75.7	98.2	94.4	84.5	97.1	93.6	89.3	94.4	90.2	90.4	79.8	59.2	1.5	567	31.9	21.4	433
2-3	96.6	97.1	94.6	89.2	69.3	97.0	93.3	82.8	95.9	92.2	86.7	94.9	90.6	87.7	75.7	53.7	1.8	732	35.9	24.8	640
4-5	96.7	97.3	93.6	89.2	65.6	96.2	91.0	84.2	95.6	92.1	88.2	94.9	91.4	85.1	76.4	52.4	2.0	449	29.1	15.0	372
6+	93.0	94.0	89.0	84.5	53.0	93.2	86.6	77.1	91.1	85.7	77.8	89.6	83.9	77.6	66.8	38.6	4.5	387	26.0	13.1	372
Residence																					
Urban	98.5	99.0	98.7	95.0	87.1	98.6	96.2	86.6	98.7	97.8	93.7	97.1	96.6	93.3	82.2	72.0	1.0	611	38.1	29.7	471
Rural	95.0	96.1	92.0	86.6	59.3	95.6	90.2	80.9	93.9	88.8	83.0	92.5	86.6	83.1	72.6	44.2	2.8	1,523	29.2	16.1	1,346
Tanzania Mainland/ Zanzibar																					
Mainland	95.9	97.0	93.9	88.9	67.2	96.5	91.8	82.4	95.2	91.3	85.9	93.7	89.4	85.9	75.2	52.0	2.3	2,077	31.7	19.7	1,768
Urban	98.5	99.0	98.8	95.0	87.4	98.6	96.2	86.7	98.7	97.9	93.7	97.1	96.6	93.4	82.3	72.5	1.0	595	38.4	29.8	459
Rural	94.9	96.1	91.9	86.4	59.0	95.6	90.1	80.7	93.8	88.7	82.8	92.4	86.4	82.9	72.3	43.8	2.8	1,482	29.4	16.1	1,309
Zanzibar	98.6	97.0	95.5	93.4	71.0	96.9	93.8	85.6	97.0	93.8	91.8	95.7	91.9	89.4	80.8	55.9	1.0	57	25.0	17.3	49
Unguja	99.8	99.2	98.3	97.0	75.0	99.2	96.4	85.5	99.2	95.8	94.3	97.8	94.2	93.1	81.1	56.2	0.0	38	27.1	20.4	30
Pemba	96.5	92.5	90.1	86.4	63.2	92.4	88.8	85.9	92.5	90.1	87.2	91.8	87.5	82.4	80.4	55.3	2.8	19	21.8	12.5	19
Zone																					
Western	93.2	93.4	84.3	77.5	58.9	93.9	83.1	73.5	89.8	80.0	72.7	86.9	75.1	77.8	66.1	39.7	4.9	293	24.1	11.3	211
Northern	97.2	98.4	97.3	95.0	62.7	97.7	93.8	86.2	98.4	97.3	94.3	96.3	95.0	88.9	81.7	53.1	1.6	193	43.9	34.3	178
Central	97.0	98.1	96.9	96.0	65.7	97.2	95.5	90.1	97.7	95.9	94.7	97.5	95.1	90.7	83.2	55.7	1.9	245	39.3	23.3	167
Southern Highlands	99.4	99.4	99.4	96.7	80.7	98.7	96.0	91.4	98.9	98.9	96.2	97.5	94.7	90.6	83.4	66.3	0.6	120	24.6	16.3	90
Southern	98.8	99.2	95.4	89.3	93.6	98.0	93.0	85.4	99.2	95.4	89.3	96.8	93.5	89.2	79.6	75.1	0.0	86	28.4	20.8	80
South West Highlands	94.8	96.6	92.3	88.1	67.7	97.6	91.5	75.9	96.5	92.3	86.1	94.9	90.6	83.1	66.7	45.7	2.4	193	30.0	15.0	155
Lake	94.2	96.6	93.5	85.5	53.6	95.7	91.4	80.2	93.2	87.9	80.3	91.4	86.4	83.2	70.5	38.9	2.7	615	23.1	12.3	619
Eastern	98.6	97.8	97.2	93.8	91.1	97.1	95.0	86.5	97.0	96.5	92.0	97.1	96.4	91.9	83.0	76.5	1.1	332	49.0	34.9	268
Zanzibar	98.6	97.0	95.5	93.4	71.0	96.9	93.8	85.6	97.0	93.8	91.8	95.7	91.9	89.4	80.8	55.9	1.0	57	25.0	17.3	49
Region																					
Dodoma	100.0	100.0	100.0	98.6	81.1	97.2	97.2	88.5	100.0	100.0	97.2	100.0	100.0	98.4	87.0	70.9	0.0	82	(42.4)	(22.9)	62
Arusha	97.4	97.4	97.4	97.4	44.8	97.4	97.4	93.9	97.4	97.4	97.4	93.9	93.9	83.8	83.8	41.3	2.6	68	51.4	38.9	77
Kilimanjaro	(100.0)	(100.0)	(100.0)	(97.7)	(92.5)	(100.0)	(100.0)	(95.6)	(100.0)	(100.0)	(93.9)	(100.0)	(100.0)	(95.7)	(93.4)	(84.3)	(0.0)	36	(56.0)	(45.8)	25
Tanga	95.9	98.5	96.3	92.2	64.4	97.0	88.7	76.6	98.5	96.3	92.2	96.7	93.8	90.1	75.5	49.8	1.5	89	32.3	25.8	75
Morogoro	100.0	95.9	94.7	90.9	86.6	95.9	94.7	83.9	95.9	94.7	89.3	95.9	94.3	90.4	80.7	69.3	0.0	86	62.0	39.1	105
Pwani	98.1	100.0	98.1	92.1	91.7	100.0	96.3	80.4	98.2	96.3	88.8	98.3	96.4	84.3	74.2	66.2	0.0	44	(16.9)	(16.9)	31
Dar es Salaam	98.1	98.1	98.1	95.4	93.0	96.9	94.9	89.0	97.3	97.3	93.9	97.3	97.3	94.2	85.9	81.9	1.9	201	46.1	35.7	132
Lindi	(100.0)	(98.1)	(96.3)	(88.4)	(93.9)	(98.1)	(96.3)	(85.0)	(98.1)	(96.3)	(88.4)	(95.9)	(91.8)	(90.2)	(80.7)	(76.2)	(0.0)	36	(31.2)	(20.8)	37

(Continued…)

Table 10.3—*Continued*

Background characteristic	Age in months																				
	12-23																		24-35		
	BCG	Pentavalent			Polio				Pneumococcal			Rotavirus		Measles					Measles		
	1	1	2	3	0 (birth dose)	1	2	3	1	2	3	1	2	1	All basic vaccina-tions[2]	All age appropriate vaccina-tions[3]	No vaccinations	Number of children	2	All age appropriate vaccina-tions[4]	Number of children
Mtwara	(97.9)	(100.0)	(94.8)	(89.9)	(93.3)	(97.9)	(90.6)	(85.7)	(100.0)	(94.8)	(89.9)	(97.4)	(94.8)	(88.5)	(78.8)	(74.2)	(0.0)	50	(26.0)	(20.8)	43
Ruvuma	100.0	100.0	100.0	96.9	80.3	100.0	95.8	91.3	100.0	100.0	96.9	97.1	93.3	90.1	81.4	60.6	0.0	60	(23.1)	(16.8)	39
Iringa	98.0	98.0	98.0	95.8	87.0	95.8	93.8	87.8	98.0	98.0	95.8	98.0	98.0	91.9	84.0	78.6	2.0	37	(17.1)	(14.5)	25
Mbeya	(97.8)	(100.0)	(95.7)	(95.7)	(82.1)	(100.0)	(93.9)	(76.4)	(100.0)	(95.7)	(91.8)	(97.1)	(92.8)	(86.2)	(67.0)	(51.5)	(0.0)	101	(22.9)	(9.2)	80
Singida	95.9	97.2	93.4	91.9	65.9	97.2	92.6	86.6	95.9	92.0	91.2	95.9	92.0	86.2	79.5	52.9	2.8	78	22.1	10.0	57
Tabora	91.1	91.8	79.3	69.1	49.3	92.6	77.9	67.6	90.0	77.9	70.0	85.4	70.2	70.6	58.9	30.6	6.1	177	15.9	5.4	115
Rukwa	94.5	95.2	93.9	84.6	59.6	97.5	94.9	78.5	95.2	93.9	84.6	95.2	93.9	87.0	71.0	43.9	2.5	67	43.1	23.1	48
Kigoma	96.2	95.7	91.8	90.2	73.5	95.7	90.8	82.5	89.5	83.2	76.9	89.2	82.6	88.7	77.0	53.4	3.1	117	33.9	18.4	96
Shinyanga	90.9	90.9	87.9	72.0	45.7	92.0	86.9	70.3	90.9	85.2	75.0	87.1	83.1	68.6	55.5	33.7	8.0	84	30.8	12.2	82
Kagera	100.0	100.0	100.0	95.0	62.9	100.0	100.0	93.5	98.2	98.2	94.4	98.2	97.0	97.4	87.5	50.8	0.0	106	51.0	37.3	104
Mwanza	89.4	97.1	93.2	87.0	73.2	93.2	88.4	76.2	95.5	89.1	80.1	91.3	85.9	87.8	69.8	51.9	1.4	130	11.6	4.8	134
Mara	97.4	98.2	96.2	92.0	48.7	98.2	95.2	79.4	95.4	93.7	87.4	94.7	93.6	88.0	73.4	31.8	1.8	97	18.3	9.3	113
Manyara	95.1	97.1	97.1	97.1	50.6	97.1	96.6	94.8	97.1	95.4	95.4	96.6	93.2	87.2	82.8	43.7	2.9	85	56.0	39.6	48
Njombe	(100.0)	(100.0)	(100.0)	(97.5)	(71.7)	(100.0)	(100.0)	(97.5)	(97.5)	(97.5)	(95.0)	(97.5)	(92.9)	(89.9)	(87.4)	(61.6)	(0.0)	23	(33.8)	(17.3)	26
Katavi	84.1	87.3	75.0	67.7	32.5	88.6	73.6	66.9	86.6	74.3	67.7	85.9	73.1	60.9	54.1	27.6	11.4	26	27.6	18.1	27
Simiyu	96.7	97.2	94.3	83.9	45.3	97.2	93.3	84.6	91.7	87.0	76.3	88.5	79.8	73.9	68.1	34.7	2.8	98	21.0	8.5	94
Geita	91.7	95.0	88.1	80.2	38.0	93.4	84.3	75.9	85.9	73.2	67.3	87.4	77.8	79.0	65.6	24.9	3.6	100	9.9	2.1	91
Kaskazini Unguja	99.1	96.9	96.9	96.1	80.8	96.9	96.1	94.1	96.9	96.9	94.5	96.9	93.4	90.9	88.0	69.7	0.0	9	35.5	31.7	9
Kusini Unguja	100.0	100.0	98.2	96.4	70.9	100.0	96.2	89.0	100.0	98.2	96.4	100.0	96.2	97.5	89.0	65.3	0.0	5	(28.9)	(20.2)	5
Mjini Magharibi	100.0	100.0	98.9	97.6	73.6	100.0	96.6	81.1	100.0	94.8	93.7	97.6	94.1	92.9	76.5	48.8	0.0	23	21.9	14.0	16
Kaskazini Pemba	95.9	89.9	88.1	83.2	67.9	91.0	87.0	83.4	89.9	88.1	84.5	88.7	84.6	80.1	77.7	56.9	2.8	11	17.0	11.3	10
Kusini Pemba	97.2	95.7	92.5	90.4	57.4	94.2	91.0	88.9	95.7	92.5	90.4	95.7	91.2	85.2	83.6	53.3	2.8	9	27.2	13.9	9
Education																					
No education	89.9	91.7	85.5	79.2	52.0	89.4	82.5	75.4	87.6	80.4	76.8	86.7	80.1	75.9	66.8	40.4	6.6	419	23.7	12.5	384
Primary incomplete	95.6	95.4	89.0	81.7	59.5	95.3	87.1	73.8	94.3	88.0	80.2	92.6	86.1	76.8	63.3	37.9	2.0	263	28.4	12.0	250
Primary complete	97.9	98.7	97.0	92.8	69.5	98.7	95.5	86.6	97.4	94.6	88.6	95.9	92.2	89.4	79.6	54.8	1.0	1,084	31.0	19.5	934
Secondary+	97.5	98.8	97.9	94.1	83.6	98.9	95.2	84.8	98.3	97.0	93.7	96.5	94.3	94.1	81.2	68.0	1.1	368	48.6	38.5	249
Wealth quintile																					
Lowest	92.5	93.4	89.2	80.3	49.6	92.7	86.1	74.3	90.1	84.9	75.1	87.8	82.6	77.4	65.2	34.8	5.7	498	22.5	9.4	432
Second	95.3	96.4	90.0	87.4	56.5	96.4	90.3	84.6	93.6	87.0	84.8	93.1	85.3	80.1	73.0	42.5	1.7	443	28.3	15.0	395
Middle	97.0	97.3	95.0	90.6	68.1	97.3	93.0	83.3	96.4	92.8	86.4	95.5	90.1	88.6	78.5	51.5	1.7	397	34.1	22.4	379
Fourth	97.6	99.7	98.3	93.7	77.4	98.7	95.9	86.0	98.9	95.9	92.3	97.1	94.7	92.7	80.0	62.0	0.3	418	36.7	24.7	313
Highest	98.5	98.8	98.7	95.4	91.0	98.2	95.8	86.3	98.8	98.6	94.9	97.0	96.8	94.3	83.0	76.1	1.2	378	40.2	31.6	298
Total	96.0	97.0	93.9	89.0	67.3	96.5	91.9	82.5	95.3	91.4	86.1	93.8	89.4	86.0	75.3	52.1	2.3	2,134	31.5	19.6	1,817

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 10.4 Possession and observation of vaccination cards, according to background characteristics

Percentage of children age 12-23 months and children age 24-35 months who ever had a vaccination card, and percentage with a vaccination card seen, according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Children age 12-23 months			Children age 24-35 months		
	Percentage who ever had a vaccination card	Percentage with a vaccination card seen[1]	Number of children	Percentage who ever had a vaccination card	Percentage with a vaccination card seen[1]	Number of children
Sex						
Male	98.5	85.2	1,093	95.9	70.3	954
Female	97.5	83.2	1,041	96.4	70.6	864
Birth order						
1	98.8	85.2	567	98.0	70.0	433
2-3	98.5	82.7	732	96.5	67.9	640
4-5	97.9	86.4	449	96.9	70.6	372
6+	95.9	83.0	387	92.5	75.1	372
Residence						
Urban	99.6	83.2	611	99.3	69.6	471
Rural	97.4	84.6	1,523	95.0	70.8	1,346
Tanzania Mainland/ Zanzibar						
Mainland	98.0	84.2	2,077	96.1	70.4	1,768
Urban	99.6	83.2	595	99.4	69.7	459
Rural	97.3	84.5	1,482	94.9	70.6	1,309
Zanzibar	98.5	84.9	57	98.0	73.2	49
Unguja	99.2	83.0	38	97.5	70.3	30
Pemba	97.2	88.5	19	98.6	77.7	19
Zone						
Western	96.4	83.6	293	89.1	67.2	211
Northern	98.1	84.3	193	95.3	68.8	178
Central	98.1	85.5	245	98.9	76.7	167
Southern Highlands	100.0	87.6	120	99.2	77.8	90
Southern	100.0	90.0	86	95.5	79.4	80
South West Highlands	97.3	84.2	193	92.4	61.6	155
Lake	97.6	82.7	615	96.7	72.1	619
Eastern	99.0	83.6	332	100.0	65.9	268
Zanzibar	98.5	84.9	57	98.0	73.2	49
Region						
Dodoma	100.0	86.8	82	(100.0)	(81.1)	62
Arusha	94.7	81.1	68	92.3	68.4	77
Kilimanjaro	(100.0)	(92.4)	36	(100.0)	(78.0)	25
Tanga	100.0	83.7	89	96.8	66.1	75
Morogoro	98.8	75.3	86	100.0	67.4	105
Pwani	98.9	85.7	44	(100.0)	(78.3)	31
Dar es Salaam	99.1	86.7	201	100.0	61.9	132
Lindi	(100.0)	(91.0)	36	(98.1)	(75.2)	37
Mtwara	(100.0)	(89.2)	50	(93.3)	(82.9)	43
Ruvuma	100.0	85.1	60	(100.0)	(83.8)	39
Iringa	100.0	86.9	37	(97.1)	(73.1)	25
Mbeya	(100.0)	(85.7)	101	(89.5)	(61.8)	80
Singida	97.7	87.4	78	96.7	70.7	57
Tabora	95.5	78.0	177	82.4	55.4	115
Rukwa	96.8	83.9	67	97.8	60.5	48
Kigoma	97.8	92.0	117	97.2	81.5	96
Shinyanga	94.2	77.8	84	93.6	65.9	82
Kagera	100.0	84.0	106	100.0	77.0	104
Mwanza	97.2	83.4	130	96.3	74.3	134
Mara	98.2	81.0	97	96.9	70.8	113
Manyara	96.6	82.4	85	100.0	78.1	48
Njombe	(100.0)	(95.0)	23	(100.0)	(73.4)	26
Katavi	88.1	79.4	26	91.7	63.0	27
Simiyu	97.2	84.4	98	98.7	78.6	94
Geita	97.9	84.6	100	94.4	63.6	91
Kaskazini Unguja	96.9	92.7	9	100.0	83.3	9
Kusini Unguja	100.0	86.1	5	(100.0)	(83.9)	5
Mjini Magharibi	100.0	78.4	23	95.4	58.9	16
Kaskazini Pemba	97.2	85.8	11	98.6	79.9	10
Kusini Pemba	97.2	91.8	9	98.7	75.3	9
Education						
No education	94.5	80.9	419	90.7	62.8	384
Primary incomplete	97.3	80.7	263	97.3	65.9	250
Primary complete	99.2	87.2	1,084	97.1	74.4	934
Secondary+	99.0	81.6	368	99.9	71.9	249

(Continued…)

Table 10.4—*Continued*

Background characteristic	Children age 12-23 months			Children age 24-35 months		
	Percentage who ever had a vaccination card	Percentage with a vaccination card seen[1]	Number of children	Percentage who ever had a vaccination card	Percentage with a vaccination card seen[1]	Number of children
Wealth quintile						
Lowest	94.2	79.0	498	91.2	64.6	432
Second	98.8	87.7	443	95.3	69.0	395
Middle	99.2	88.1	397	97.4	76.2	379
Fourth	99.6	84.2	418	99.4	76.8	313
Highest	98.9	82.9	378	99.4	66.7	298
Total	98.0	84.2	2,134	96.1	70.4	1,817

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Vaccination card, booklet, or other home-based record.

Table 10.5 Prevalence and treatment of symptoms of ARI

Among children under age 5, the percentage who had symptoms of acute respiratory infection (ARI) in the 2 weeks before the survey and among children with symptoms of ARI, the percentage for whom advice or treatment was sought from a health facility or provider, and the percentage who received antibiotics as treatment, according to background characteristics, Tanzania DHS-MIS 2015-16

		Among children under age 5:		Among children under age 5 with symptoms of ARI:		
Background characteristic	Percentage with symptoms of ARI[1]	Number of children	Percentage for whom advice or treatment was sought from a health facility or provider[2]	Percentage for whom treatment was sought same or next day	Percentage who received antibiotics	Number of children
Age in months						
<6	4.1	1,012	(63.8)	(39.0)	(19.2)	41
6-11	5.3	999	(68.4)	(42.5)	(55.3)	53
12-23	5.2	2,134	59.1	42.1	37.4	111
24-35	3.9	1,817	47.2	44.9	45.8	70
36-47	2.1	1,791	(55.2)	(24.7)	(33.3)	37
48-59	2.5	1,768	(36.0)	(32.2)	(39.8)	44
Sex						
Male	3.8	4,806	52.4	36.9	36.8	183
Female	3.7	4,714	58.7	42.0	42.3	174
Residence						
Urban	5.1	2,541	64.4	47.2	41.2	129
Rural	3.3	6,980	50.4	34.9	38.5	228
Tanzania Mainland/ Zanzibar						
Mainland	3.7	9,268	54.7	38.9	39.1	346
Urban	5.1	2,475	63.7	46.5	40.6	126
Rural	3.2	6,794	49.6	34.5	38.2	220
Zanzibar	4.3	252	78.6	53.0	52.7	11
Unguja	4.0	158	(79.9)	(56.6)	(43.0)	6
Pemba	4.9	94	(76.9)	(48.1)	(66.0)	5
Zone						
Western	3.2	1,170	(38.6)	(37.3)	(37.7)	37
Northern	3.6	901	(72.8)	(23.6)	(60.2)	32
Central	2.0	1,065	*	*	*	21
Southern Highlands	2.6	517	*	*	*	14
Southern	2.5	372	*	*	*	9
South West Highlands	4.3	914	(39.1)	(27.3)	(17.0)	40
Lake	4.3	3,014	50.0	39.1	32.9	130
Eastern	4.8	1,315	(75.0)	(51.7)	(50.3)	63
Zanzibar	4.3	252	78.6	53.0	52.7	11
Education						
No education	3.7	2,013	44.8	20.7	35.8	74
Primary incomplete	5.0	1,241	49.9	31.5	40.8	62
Primary complete	3.2	4,901	60.1	45.1	42.0	159
Secondary+	4.5	1,365	61.8	54.8	36.1	61
Wealth quintile						
Lowest	2.9	2,321	37.0	27.8	40.6	66
Second	3.1	2,014	48.7	34.2	29.2	63
Middle	3.4	1,838	47.7	36.8	39.9	62
Fourth	4.8	1,773	62.0	44.2	38.4	85
Highest	5.1	1,575	74.9	49.7	47.4	81
Total	3.7	9,520	55.4	39.3	39.5	357

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Symptoms of ARI (cough accompanied by short, rapid breathing which was chest-related, and/or by difficult breathing which was chest-related) is considered a proxy for pneumonia.
[2] Excludes pharmacy, shop, and traditional practitioner.
[3] Includes grass, shrubs, and crop residues.

Table 10.6 Prevalence and treatment of fever

Among children under age 5, the percentage who had a fever in the 2 weeks preceding the survey; and among children with fever, the percentage for whom advice or treatment was sought from a health facility or provider, the percentage for whom advice or treatment was sought from a health facility or provider, a pharmacy or an ADDO, the percentage who took antimalarial drugs, and the percentage who received antibiotics as treatment, by background characteristics, Tanzania DHS-MIS 2015-16

	Among children under age 5:		Among children under age 5 with fever				
Background characteristic	Percentage with fever	Number of children	Percentage for whom advice or treatment was sought from a health facility or provider[1]	Percentage for whom advice or treatment was sought from a health facility, provider, pharmacy or ADDO	Percentage who took antimalarial drugs	Percentage who took antibiotic drugs	Number of children
Age in months							
<6	11.0	1,012	50.8	84.3	26.6	43.4	111
6-11	21.2	999	53.7	80.3	46.9	37.5	212
12-23	22.7	2,134	53.1	79.8	48.0	34.8	485
24-35	21.7	1,817	50.0	83.2	53.9	31.3	395
36-47	15.1	1,791	46.6	78.8	60.9	28.5	271
48-59	13.1	1,768	43.9	74.7	56.9	25.4	232
Sex							
Male	18.8	4,806	51.7	79.2	52.1	32.0	905
Female	17.0	4,714	48.1	81.1	50.0	33.3	801
Residence							
Urban	18.1	2,541	68.8	84.0	46.0	42.6	460
Rural	17.9	6,980	43.1	78.7	53.0	28.9	1,246
Tanzania Mainland/ Zanzibar							
Mainland	17.9	9,268	49.5	80.1	52.4	32.1	1,662
Urban	18.1	2,475	68.9	84.2	47.1	42.2	449
Rural	17.9	6,794	42.4	78.6	54.3	28.4	1,214
Zanzibar	17.4	252	69.0	78.7	2.4	49.5	44
Unguja	16.9	158	73.3	79.7	2.3	55.2	27
Pemba	18.3	94	62.4	77.1	2.6	40.8	17
Zone							
Western	18.5	1,170	35.4	74.3	66.2	20.5	217
Northern	13.9	901	64.9	75.3	29.4	41.9	125
Central	7.6	1,065	53.7	75.5	26.6	40.6	81
Southern Highlands	14.9	517	46.0	74.2	46.2	35.2	77
Southern	23.4	372	77.6	81.5	56.0	27.3	87
South West Highlands	15.1	914	44.7	81.2	36.5	30.0	138
Lake	23.1	3,014	38.8	81.9	56.9	31.2	695
Eastern	18.4	1,315	77.3	85.0	57.1	39.5	242
Zanzibar	17.4	252	69.0	78.7	2.4	49.5	44
Region							
Dodoma	9.7	398	*	*	*	*	38
Arusha	11.2	341	(50.9)	(72.5)	(19.9)	(39.5)	38
Kilimanjaro	17.3	162	(63.9)	(63.9)	(8.0)	(49.3)	28
Tanga	14.8	398	(74.4)	(82.6)	(45.8)	(39.9)	59
Morogoro	18.3	417	(70.9)	(87.2)	(61.6)	(40.0)	76
Pwani	15.3	191	(68.9)	(83.0)	(60.2)	(24.8)	29
Dar es Salaam	19.2	707	82.7	84.2	53.9	42.3	136
Lindi	25.5	168	76.0	78.9	61.9	26.2	43
Mtwara	21.7	204	(79.1)	(84.1)	(50.4)	(28.4)	44
Ruvuma	18.4	236	(46.8)	(79.8)	(72.4)	(30.6)	43
Iringa	11.5	156	*	*	*	*	18
Mbeya	15.1	521	(46.4)	(81.7)	(29.9)	(42.4)	79
Singida	6.9	325	(50.0)	(75.8)	(48.7)	(53.0)	23
Tabora	12.9	675	40.3	81.9	63.5	21.1	87
Rukwa	16.0	261	44.2	75.7	37.8	12.0	42
Kigoma	26.2	495	32.1	69.1	68.0	20.1	130
Shinyanga	20.8	434	44.5	89.3	59.5	34.6	90
Kagera	17.5	505	32.8	58.7	51.2	30.6	88
Mwanza	22.8	698	53.6	84.8	57.3	36.4	159
Mara	34.2	462	41.2	77.5	42.5	28.0	158
Manyara	5.8	342	*	*	*	*	20
Njombe	12.6	125	(39.0)	(67.2)	(17.6)	(34.3)	16
Katavi	13.3	132	38.6	91.6	63.2	17.0	18
Simiyu	21.4	475	24.1	90.5	63.3	35.2	102
Geita	22.2	440	26.6	89.8	76.0	20.9	98
Kaskazini Unguja	14.0	42	(67.8)	(73.1)	(6.3)	(45.5)	6
Kusini Unguja	14.9	25	(79.3)	(82.0)	(6.7)	(68.3)	4
Mjini Magharibi	18.7	91	73.9	81.5	0.0	55.8	17
Kaskazini Pemba	18.0	51	69.0	75.3	2.9	42.1	9
Kusini Pemba	18.6	44	55.2	79.0	2.2	39.3	8

(*Continued…*)

Table 10.6—*Continued*

Background characteristic	Among children under age 5:		Among children under age 5 with fever				
	Percentage with fever	Number of children	Percentage for whom advice or treatment was sought from a health facility or provider[1]	Percentage for whom advice or treatment was sought from a health facility, provider, pharmacy or ADDO	Percentage who took antimalarial drugs	Percentage who took antibiotic drugs	Number of children
Education							
No education	17.0	2,013	37.6	76.4	53.8	27.0	342
Primary incomplete	22.1	1,241	41.7	73.6	54.1	25.7	275
Primary complete	17.1	4,901	53.6	81.6	52.8	35.1	840
Secondary+	18.2	1,365	64.3	87.1	38.3	39.2	249
Wealth quintile							
Lowest	16.2	2,321	37.3	72.8	55.5	28.0	376
Second	19.5	2,014	41.0	78.4	57.4	25.8	392
Middle	17.6	1,838	52.1	83.3	51.9	32.4	323
Fourth	17.8	1,773	52.1	83.7	44.8	37.0	315
Highest	19.1	1,575	73.3	84.3	43.2	42.8	300
Total	17.9	9,520	50.0	80.1	51.1	32.6	1,706

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
ADDO = Accredited drug dispensing outlet.
[1] Excludes pharmacy and ADDO.

Table 10.7.1 Prevalence of diarrhoea

Percentage of children under age five who had diarrhoea in the two weeks preceding the survey, by background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Percentage with diarrhoea	Number of children
Age in months		
<6	6.4	1,012
6-11	21.7	999
12-23	20.9	2,134
24-35	11.0	1,817
36-47	6.9	1,791
48-59	4.0	1,768
Sex		
Male	11.7	4,806
Female	11.9	4,714
Source of drinking water[1]		
Improved	12.2	5,295
Not improved	11.3	4,225
Toilet facility[2]		
Improved, not shared	12.2	1,416
Shared[3]	15.3	1,177
Non-improved	11.1	6,928
Residence		
Urban	14.1	2,541
Rural	11.0	6,980
Tanzania Mainland/Zanzibar		
Mainland	11.8	9,268
Urban	14.2	2,475
Rural	11.0	6,794
Zanzibar	10.5	252
Unguja	10.2	158
Pemba	10.9	94
Zone		
Western	11.6	1,170
Northern	8.0	901
Central	10.2	1,065
Southern Highlands	10.1	517
Southern	16.3	372
South West Highlands	15.5	914
Lake	12.0	3,014
Eastern	12.4	1,315
Zanzibar	10.5	252
Region		
Dodoma	9.7	398
Arusha	9.2	341
Kilimanjaro	10.2	162
Tanga	6.1	398
Morogoro	8.5	417
Pwani	10.5	191
Dar es Salaam	15.2	707
Lindi	14.0	168
Mtwara	18.3	204
Ruvuma	11.7	236
Iringa	8.0	156
Mbeya	13.9	521
Singida	9.5	325
Tabora	5.2	675
Rukwa	19.5	261
Kigoma	20.3	495
Shinyanga	11.5	434
Kagera	10.8	505
Mwanza	11.7	698
Mara	16.3	462
Manyara	11.4	342
Njombe	9.8	125
Katavi	13.5	132
Simiyu	13.0	475
Geita	8.7	440
Kaskazini Unguja	13.6	42
Kusini Unguja	7.8	25
Mjini Magharibi	9.3	91
Kaskazini Pemba	12.1	51
Kusini Pemba	9.5	44

(Continued…)

Table 10.7.1—*Continued*

Background characteristic	Percentage with diarrhoea	Number of children
Education		
No education	9.2	2,013
Primary incomplete	12.5	1,241
Primary complete	11.8	4,901
Secondary+	14.8	1,365
Wealth quintile		
Lowest	8.9	2,321
Second	11.6	2,014
Middle	12.1	1,838
Fourth	13.3	1,773
Highest	14.2	1,575
Total	11.8	9,520

[1] See Table 2.1 for definition of categories
[2] See Table 2.2 for definition of categories
[3] Facilities that would be considered improved if they were not shared by two or more households

Table 10.7.2 Feeding practices during diarrhoea

Percent distribution of children under age 5 who had diarrhoea in the 2 weeks preceding the survey by amount of liquids and food offered compared with normal practice, by background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Amount of liquids given							Amount of food given								Number of children with diarrhoea
	More	Same as usual	Some-what less	Much less	None	Don't know/ missing	Total	More	Same as usual	Some-what less	Much less	None	Never gave food	Don't know/ missing	Total	
Age in months																
<6	6.9	56.5	17.4	11.0	8.1	0.0	100.0	0.0	29.5	5.5	11.9	0.0	53.1	0.0	100.0	65
6-11	16.1	51.7	23.3	8.2	0.8	0.0	100.0	2.0	44.6	34.2	17.6	0.4	1.0	0.0	100.0	217
12-23	22.4	51.2	20.4	4.8	0.5	0.6	100.0	2.7	47.8	33.0	15.1	0.4	0.5	0.4	100.0	446
24-35	21.6	47.4	20.1	6.1	4.3	0.5	100.0	5.8	52.3	26.1	14.3	0.9	0.0	0.5	100.0	200
36-47	25.2	50.9	18.7	2.9	1.3	1.1	100.0	1.7	51.0	35.0	12.3	0.0	0.0	0.0	100.0	123
48-59	14.6	59.8	20.8	2.8	1.9	0.0	100.0	3.0	44.2	34.1	18.7	0.0	0.0	0.0	100.0	71
Sex																
Male	22.9	51.1	17.8	5.0	2.7	0.5	100.0	2.6	47.2	29.9	16.4	0.5	3.1	0.4	100.0	562
Female	17.0	51.8	23.4	6.5	1.0	0.4	100.0	3.1	46.9	31.6	14.0	0.3	3.9	0.1	100.0	559
Breastfeeding status																
Breastfeeding	18.4	51.2	21.1	7.2	1.7	0.3	100.0	1.5	44.6	31.0	15.8	0.5	6.5	0.1	100.0	582
Not breastfeeding	21.6	51.7	20.0	4.2	1.9	0.6	100.0	4.4	49.7	30.4	14.5	0.4	0.3	0.4	100.0	539
Residence																
Urban	25.0	50.7	18.0	3.3	2.2	0.7	100.0	2.2	45.0	31.9	16.0	0.5	3.9	0.5	100.0	357
Rural	17.6	51.8	21.8	6.9	1.7	0.3	100.0	3.2	48.0	30.2	14.8	0.4	3.3	0.1	100.0	764
Tanzania Mainland/ Zanzibar																
Mainland	19.5	51.8	20.5	5.8	1.9	0.4	100.0	2.9	47.4	30.7	14.9	0.4	3.5	0.3	100.0	1,095
Urban	24.8	50.8	18.1	3.4	2.3	0.7	100.0	2.1	45.2	31.8	15.9	0.5	3.9	0.5	100.0	351
Rural	17.1	52.2	21.7	7.0	1.7	0.3	100.0	3.2	48.4	30.1	14.4	0.4	3.3	0.1	100.0	744
Zanzibar	37.3	37.7	22.7	1.6	0.4	0.4	100.0	2.1	34.9	32.8	27.2	0.0	3.0	0.0	100.0	26
Unguja	48.3	26.6	21.9	2.6	0.0	0.6	100.0	0.6	27.4	34.3	33.8	0.0	3.8	0.0	100.0	16
Pemba	20.0	55.0	24.0	0.0	1.0	0.0	100.0	4.3	46.7	30.5	16.9	0.0	1.7	0.0	100.0	10
Zone																
Western	25.5	45.7	20.3	3.6	4.9	0.0	100.0	4.2	40.0	34.2	17.3	0.0	4.3	0.0	100.0	136
Northern	16.9	55.8	23.7	2.2	0.0	1.4	100.0	3.5	45.6	29.4	18.4	0.0	1.7	1.4	100.0	72
Central	31.5	43.9	15.5	5.3	3.7	0.0	100.0	4.8	56.5	23.9	10.4	0.0	4.4	0.0	100.0	108
Southern Highlands	26.3	31.6	30.9	11.2	0.0	0.0	100.0	6.3	28.3	39.1	22.4	1.1	2.9	0.0	100.0	52
Southern	11.0	60.6	21.2	5.6	1.5	0.0	100.0	10.7	57.1	24.7	6.9	0.0	0.7	0.0	100.0	61
South West Highlands	17.9	36.8	26.5	16.8	0.0	1.9	100.0	1.6	34.0	34.1	28.3	0.2	1.3	0.5	100.0	141
Lake	13.0	62.3	20.8	3.1	0.8	0.0	100.0	0.7	51.6	32.1	10.7	0.5	4.4	0.0	100.0	361
Eastern	24.6	53.0	13.3	4.6	3.8	0.7	100.0	2.2	52.8	26.2	12.5	1.2	4.5	0.7	100.0	163
Zanzibar	37.3	37.7	22.7	1.6	0.4	0.4	100.0	2.1	34.9	32.8	27.2	0.0	3.0	0.0	100.0	26
Education																
No education	16.2	51.4	26.0	5.6	0.4	0.4	100.0	0.6	43.7	35.5	19.7	0.0	0.5	0.0	100.0	186
Primary incomplete	15.8	53.0	23.4	7.0	0.4	0.5	100.0	6.1	46.9	22.9	18.2	2.4	3.0	0.5	100.0	155
Primary complete	19.1	52.6	19.6	5.6	2.7	0.4	100.0	2.8	47.8	32.2	13.0	0.2	3.9	0.2	100.0	579
Secondary+	29.1	46.9	16.3	5.3	1.9	0.6	100.0	2.8	48.1	28.2	14.9	0.0	5.5	0.5	100.0	202
Wealth quintile																
Lowest	12.1	53.0	26.3	7.2	1.4	0.0	100.0	2.7	51.3	29.3	13.1	0.5	3.1	0.0	100.0	207
Second	13.7	52.8	24.3	7.2	1.5	0.5	100.0	2.7	46.4	31.9	16.3	0.0	2.7	0.0	100.0	234
Middle	21.9	53.8	16.5	5.9	1.9	0.0	100.0	3.7	47.8	29.5	14.6	0.4	4.1	0.0	100.0	222
Fourth	22.2	51.0	18.5	4.9	2.6	0.7	100.0	2.5	51.1	28.7	12.8	0.4	4.1	0.3	100.0	235
Highest	29.4	46.8	17.7	3.5	1.7	0.9	100.0	2.8	38.8	34.0	19.0	0.8	3.6	0.9	100.0	223
Total	19.9	51.4	20.6	5.7	1.8	0.4	100.0	2.9	47.1	30.7	15.2	0.4	3.5	0.3	100.0	1,122

Note: It is recommended that children should be given more liquids to drink during diarrhoea and food should not be reduced.

Table 10.8 Diarrhoea treatment

Among children under age 5 who had diarrhoea in the 2 weeks preceding the survey, percentage for whom advice or treatment was sought from a health facility or provider; percentage given fluid from an ORS packet or pre-packaged ORS fluid, recommended homemade fluids (RHF), ORS or RHF, zinc, ORS and zinc, ORS or increased fluids, oral rehydration therapy (ORT), continued feeding and ORT, and other treatments; and percentage given no treatment, according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Percentage of children with diarrhoea for whom advice or treatment was sought from a health facility or provider[1]	Fluid from ORS packet or pre-packaged ORS fluid	Recommended homemade fluids (RHF)	Either ORS or RHF	Zinc	ORS and zinc	ORS or increased fluids	ORT (ORS, RHF, or increased fluids)	Continued feeding and ORT[2]	Other treatments				Missing	No treatment	Number of children with diarrhoea
										Antibiotic drugs	Anti-motility drugs	Intra-venous solution	Home remedy/ other			
Age in months																
<6	29.2	26.2	5.6	26.2	17.6	7.0	31.3	31.3	8.9	26.4	0.0	0.0	15.0	0.0	30.0	65
6-11	44.6	45.9	7.4	50.4	19.8	15.2	53.8	57.7	46.4	34.8	2.2	0.9	21.3	0.0	17.1	217
12-23	45.4	51.0	11.9	54.6	19.5	15.3	56.3	59.4	50.3	34.3	2.8	0.5	27.8	0.2	15.2	446
24-35	42.4	45.4	11.3	52.6	15.1	13.0	54.1	60.0	50.0	34.3	2.7	0.5	25.9	0.0	16.7	200
36-47	41.8	33.5	8.8	38.9	8.1	6.9	48.1	49.6	43.2	31.1	2.5	1.2	25.5	0.0	23.2	123
48-59	41.4	37.2	4.3	38.6	20.3	14.8	48.7	50.1	36.2	27.8	6.2	2.7	28.6	2.1	17.4	71
Sex																
Male	43.5	43.4	9.6	47.6	18.2	13.9	53.2	56.4	44.9	33.2	3.5	0.8	25.0	0.5	16.7	562
Female	42.7	46.1	9.8	50.5	16.7	13.0	52.0	55.3	46.1	33.1	1.9	0.7	25.5	0.0	18.7	559
Residence																
Urban	50.3	46.0	15.6	52.7	18.1	14.8	57.6	62.0	49.7	32.1	1.5	0.8	23.9	0.3	18.0	357
Rural	39.7	44.2	6.9	47.3	17.2	12.8	50.3	53.0	43.5	33.6	3.3	0.7	25.9	0.2	17.6	764
Tanzania Mainland/ Zanzibar																
Mainland	42.8	44.6	9.8	48.9	17.1	13.1	52.3	55.6	45.5	33.3	2.7	0.8	25.1	0.2	17.7	1,095
Urban	50.5	46.1	15.6	52.7	18.0	14.7	57.5	61.9	49.7	32.0	1.4	0.8	23.8	0.3	18.1	351
Rural	39.2	43.9	7.0	47.1	16.7	12.3	49.9	52.7	43.6	33.9	3.4	0.7	25.7	0.2	17.6	744
Zanzibar	56.7	51.1	7.0	55.5	31.6	28.7	65.2	67.1	42.8	27.1	1.2	0.0	32.0	0.0	16.2	26
Unguja	60.1	55.4	9.9	62.6	38.9	35.0	75.3	78.4	45.2	36.2	1.9	0.0	35.7	0.0	10.1	16
Pemba	51.5	44.4	2.6	44.4	20.2	18.8	49.4	49.4	39.0	13.0	0.0	0.0	26.1	0.0	25.7	10
Zone																
Western	28.0	45.1	4.6	45.9	16.7	12.8	51.0	51.8	38.5	35.6	6.7	0.8	15.4	0.0	20.4	136
Northern	44.9	41.5	18.9	55.9	23.4	18.1	47.3	60.6	47.4	7.9	2.5	0.0	21.7	0.0	28.6	72
Central	48.5	38.8	5.3	41.7	13.4	9.5	54.1	56.3	49.5	52.5	2.4	1.1	17.4	0.0	16.9	108
Southern Highlands	41.2	40.7	8.3	44.7	17.2	13.6	49.5	51.1	42.8	25.5	1.7	0.0	24.0	0.0	19.7	52
Southern	60.7	52.4	6.1	54.3	13.2	9.2	55.1	56.9	54.4	29.8	4.7	0.0	8.4	0.0	25.8	61
South West Highlands	42.7	46.2	7.2	51.9	12.9	11.1	53.1	56.6	39.5	23.2	0.0	0.0	31.6	0.0	16.8	141
Lake	39.1	47.0	10.9	50.9	19.5	14.0	53.1	56.1	47.8	38.5	3.2	1.2	33.9	0.4	11.0	361
Eastern	52.4	41.0	14.5	45.3	16.9	14.3	51.9	55.0	45.6	30.9	0.9	1.2	21.3	0.7	23.6	163
Zanzibar	56.7	51.1	7.0	55.5	31.6	28.7	65.2	67.1	42.8	27.1	1.2	0.0	32.0	0.0	16.2	26

(Continued…)

Table 10.8—*Continued*

Background characteristic	Percentage of children with diarrhoea for whom advice or treatment was sought from a health facility or provider[1]	Fluid from ORS packet or pre-packaged ORS fluid	Recommended homemade fluids (RHF)	Either ORS or RHF	Zinc	ORS and zinc	ORS or increased fluids	ORT (ORS, RHF, or increased fluids)	Continued feeding and ORT[2]	Other treatments				Missing	No treatment	Number of children with diarrhoea
										Antibiotic drugs	Anti-motility drugs	Intra-venous solution	Home remedy/ other			
Education																
No education	34.8	38.9	5.6	41.5	14.7	12.1	46.8	48.5	38.3	32.7	2.7	0.8	28.6	0.0	19.6	186
Primary incomplete	34.9	44.0	5.4	45.0	15.8	11.1	50.6	51.6	38.8	26.5	4.6	0.6	31.5	0.0	16.7	155
Primary complete	44.4	46.2	10.9	51.3	16.7	12.7	53.5	57.5	47.5	32.4	3.1	0.9	25.1	0.4	17.4	579
Secondary+	53.4	46.5	13.5	52.6	23.4	18.6	57.0	61.4	51.3	41.0	0.2	0.5	17.8	0.0	17.6	202
Wealth quintile																
Lowest	28.0	39.6	3.4	40.1	13.6	10.9	44.8	45.3	36.9	32.0	4.1	1.2	24.8	0.0	25.2	207
Second	43.3	41.1	7.1	45.8	16.9	12.5	47.4	51.6	45.2	33.2	4.9	0.4	33.4	0.6	14.4	234
Middle	44.8	53.6	9.1	57.0	18.0	13.1	59.4	62.8	49.4	32.2	2.7	0.4	24.4	0.0	14.7	222
Fourth	45.2	44.0	12.0	50.2	22.9	17.9	53.1	57.0	47.2	34.2	0.0	1.3	19.3	0.0	17.5	235
Highest	53.1	45.3	16.4	51.4	15.3	12.4	57.9	62.1	47.9	34.1	2.0	0.4	24.4	0.5	17.4	223
Total	43.1	44.8	9.7	49.0	17.5	13.4	52.6	55.9	45.5	33.2	2.7	0.8	25.3	0.2	17.7	1,122

Note: ORT includes fluid prepared from oral rehydration salt (ORS) packets, pre-packaged ORS fluid, and recommended home fluids (RHF).
[1] Excludes pharmacy, shop, and traditional practitioner.
[2] Continued feeding includes children who were given more, same as usual, or somewhat less food during the diarrhoea episode.

Table 10.9 Knowledge of ORS packets or pre-packaged liquids

Percentage of women age 15-49 with a live birth in the 5 years preceding the survey who know about ORS packets or ORS pre-packaged liquids for treatment of diarrhoea by background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Percentage of women who know about ORS packets or ORS pre-packaged liquids	Number of women
Age		
15-19	88.6	606
20-24	93.8	1,708
25-34	96.0	2,982
35-49	97.1	1,782
Residence		
Urban	96.0	2,123
Rural	94.7	4,955
Tanzania Mainland/ Zanzibar		
Mainland	95.1	6,908
Urban	96.0	2,075
Rural	94.8	4,833
Zanzibar	92.7	171
Unguja	95.4	114
Pemba	87.4	57
Zone		
Western	98.0	779
Northern	91.2	699
Central	97.4	795
Southern Highlands	91.0	426
Southern	91.8	341
South West Highlands	95.9	715
Lake	96.6	2,015
Eastern	93.6	1,137
Zanzibar	92.7	171
Region		
Dodoma	97.9	328
Arusha	83.8	261
Kilimanjaro	95.3	126
Tanga	95.8	312
Morogoro	95.1	347
Pwani	88.8	156
Dar es Salaam	93.9	634
Lindi	92.4	150
Mtwara	91.3	191
Ruvuma	90.1	204
Iringa	93.7	118
Mbeya	94.0	436
Singida	98.3	225
Tabora	98.1	449
Rukwa	98.7	189
Kigoma	98.0	330
Shinyanga	99.7	300
Kagera	92.5	344
Mwanza	95.1	471
Mara	97.8	322
Manyara	95.9	242
Njombe	90.0	104
Katavi	99.4	90
Simiyu	98.4	296
Geita	97.1	282
Kaskazini Unguja	95.0	27
Kusini Unguja	97.6	18
Mjini Magharibi	95.0	69
Kaskazini Pemba	88.0	30
Kusini Pemba	86.8	26
Education		
No education	93.4	1,350
Primary incomplete	94.3	879
Primary complete	95.7	3,700
Secondary+	95.7	1,149
Wealth quintile		
Lowest	92.9	1,525
Second	94.4	1,422
Middle	96.0	1,349
Fourth	96.6	1,424
Highest	95.8	1,359
Total	95.1	7,079

ORS = Oral rehydration salts.

Table 10.10 Disposal of children's stools

Percent distribution of youngest children under age 5 living with the mother by the manner of disposal of the child's last faecal matter, and percentage of children whose stools are disposed of safely, according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Manner of disposal of children's stools							Total	Percentage of children whose stools are disposed of safely[1]	Number of children
	Child used toilet or latrine	Put/rinsed into toilet or latrine	Buried	Put/rinsed into drain or ditch	Thrown into garbage	Left in the open	Other			
Age in months										
<6	0.2	41.5	2.4	17.3	14.5	7.5	16.7	100.0	44.1	998
6-11	1.6	66.2	4.6	5.0	11.4	6.1	5.1	100.0	72.4	984
12-23	1.3	79.7	4.5	1.1	5.3	5.8	2.3	100.0	85.5	1,999
Toilet facility super[2]										
Improved, not shared	1.1	79.5	1.6	6.1	6.8	0.9	3.9	100.0	82.2	597
Shared[3]	2.0	87.4	1.0	4.0	2.6	0.8	2.2	100.0	90.4	472
Non-improved	1.0	60.8	4.9	6.5	10.6	8.3	7.9	100.0	66.8	2,912
Residence										
Urban	1.2	80.0	1.8	5.8	5.8	1.8	3.6	100.0	83.0	1,087
Rural	1.1	61.8	4.8	6.2	10.3	8.0	7.7	100.0	67.7	2,894
Tanzania Mainland/ Zanzibar										
Mainland	1.1	67.3	3.8	6.1	8.6	6.3	6.7	100.0	72.2	3,879
Urban	1.2	80.3	1.8	5.8	5.4	1.8	3.7	100.0	83.3	1,061
Rural	1.1	62.4	4.6	6.2	9.8	8.1	7.9	100.0	68.0	2,818
Zanzibar	0.4	47.9	10.9	5.6	28.4	5.1	1.7	100.0	59.3	102
Unguja	0.3	61.4	7.3	2.3	25.2	1.3	2.2	100.0	68.9	66
Pemba	0.8	23.6	17.5	11.3	34.3	11.8	0.7	100.0	41.9	36
Zone										
Western	0.0	57.3	5.1	5.2	10.7	10.8	10.8	100.0	62.5	512
Northern	0.4	68.2	3.0	8.5	8.9	6.8	4.2	100.0	71.7	381
Central	0.2	65.5	2.8	6.0	12.4	8.7	4.4	100.0	68.4	467
Southern Highlands	0.7	91.6	0.7	1.2	3.0	1.4	1.4	100.0	92.9	210
Southern	0.8	85.8	1.7	3.9	2.8	2.0	2.9	100.0	88.4	139
South West Highlands	8.1	71.8	0.9	9.5	6.1	2.6	0.9	100.0	80.9	400
Lake	0.2	58.4	7.0	4.1	10.1	8.5	11.8	100.0	65.5	1,222
Eastern	0.8	80.0	0.7	10.0	5.3	0.7	2.6	100.0	81.4	548
Zanzibar	0.4	47.9	10.9	5.6	28.4	5.1	1.7	100.0	59.3	102
Region										
Dodoma	0.0	70.4	5.5	6.9	13.5	2.9	0.8	100.0	75.8	177
Arusha	0.8	53.6	4.9	7.7	3.1	18.2	11.7	100.0	59.3	135
Kilimanjaro	0.9	90.7	1.3	4.4	2.6	0.0	0.0	100.0	92.9	65
Tanga	0.0	71.1	2.2	10.5	15.4	0.7	0.0	100.0	73.3	181
Morogoro	1.4	70.4	0.0	17.4	3.0	1.8	5.8	100.0	71.9	156
Pwani	0.6	75.3	4.4	9.0	9.0	0.0	1.7	100.0	80.4	81
Dar es Salaam	0.5	85.9	0.0	6.5	5.5	0.3	1.2	100.0	86.4	311
Lindi	0.0	81.3	4.1	4.2	3.1	4.7	2.6	100.0	85.3	59
Mtwara	1.5	89.2	0.0	3.6	2.6	0.0	3.1	100.0	90.6	80
Ruvuma	0.0	94.5	1.0	2.6	1.1	0.8	0.0	100.0	95.5	99
Iringa	2.2	89.0	0.0	0.0	6.3	2.5	0.0	100.0	91.2	65
Mbeya	14.1	74.0	0.0	5.3	2.8	3.3	0.5	100.0	88.1	227
Singida	0.0	65.1	0.0	7.4	17.7	2.0	7.8	100.0	65.1	137
Tabora	0.0	56.2	6.4	5.9	13.9	11.3	6.3	100.0	62.6	302
Rukwa	0.0	74.1	0.0	15.2	8.6	1.0	1.1	100.0	74.1	119
Kigoma	0.0	58.9	3.4	4.2	6.1	10.1	17.4	100.0	62.3	209
Shinyanga	0.0	47.1	10.2	0.4	10.8	16.0	15.5	100.0	57.3	185
Kagera	0.0	62.7	2.7	3.8	7.2	10.6	13.1	100.0	65.3	198
Mwanza	0.0	68.3	7.8	4.0	10.6	4.7	4.6	100.0	76.0	274
Mara	0.3	47.6	7.3	2.1	5.8	12.5	24.3	100.0	55.3	182
Manyara	0.5	60.2	2.1	3.7	6.3	21.6	5.6	100.0	62.8	153
Njombe	0.0	89.0	1.0	0.0	2.3	1.2	6.5	100.0	90.0	46
Katavi	0.8	57.6	7.1	14.7	14.5	2.9	2.5	100.0	65.5	53
Simiyu	0.0	65.4	2.6	5.8	11.7	4.6	9.9	100.0	68.1	196
Geita	0.8	53.6	11.3	8.3	14.0	4.7	7.2	100.0	65.7	187
Kaskazini Unguja	0.5	48.0	7.0	3.1	36.7	2.9	1.9	100.0	55.4	17
Kusini Unguja	0.9	61.5	13.6	1.2	19.1	3.7	0.0	100.0	76.0	11
Mjini Magharibi	0.0	67.1	5.6	2.3	22.0	0.0	3.0	100.0	72.7	38
Kaskazini Pemba	1.4	21.5	16.7	14.6	32.7	12.2	0.7	100.0	39.7	20
Kusini Pemba	0.0	26.2	18.3	7.5	36.1	11.3	0.7	100.0	44.5	17
Education										
No education	1.2	51.0	5.0	6.5	14.6	14.1	7.6	100.0	57.2	778
Primary incomplete	0.2	63.2	7.3	4.0	9.5	6.8	9.1	100.0	70.6	507
Primary complete	1.4	70.4	3.2	6.5	7.6	4.3	6.6	100.0	75.0	2,029
Secondary+	0.8	76.9	2.7	6.1	7.1	2.8	3.7	100.0	80.3	668
Wealth quintile										
Lowest	0.3	49.9	5.5	6.9	12.5	15.5	9.4	100.0	55.7	980
Second	1.3	64.7	5.5	5.4	9.0	6.1	7.9	100.0	71.6	842
Middle	1.8	65.6	4.2	6.5	11.3	4.3	6.3	100.0	71.6	740
Fourth	1.4	76.5	3.1	6.0	5.8	1.5	5.7	100.0	81.0	758
Highest	1.0	84.6	0.5	5.5	5.6	0.5	2.3	100.0	86.1	661
Total	1.1	66.8	4.0	6.1	9.1	6.3	6.6	100.0	71.9	3,981

[1] Children's stools are considered to be disposed of safely if the child used a toilet or latrine, if the faecal matter was put/rinsed into a toilet or latrine, or if it was buried.
[2] See Table 2.3 for definition of categories.
[3] Facilities that would be considered improved if they were not shared by two or more households.

NUTRITION OF CHILDREN AND WOMEN 11

Key Findings

- ***Nutritional status of children:*** One-third (34%) of children under age 5 are stunted (short for their age); 5% are wasted (thin for their height) and 14% are underweight (thin for their age).
- ***Breastfeeding:*** Almost all children (98%) are breastfed for some time during their life. More than half (51%) of infants are breastfed within one hour after birth. Fifty-nine percent of infants below age 6 months are exclusively breastfed.
- ***Minimum acceptable diet:*** Only 9% of children age 6-23 months are fed according to the minimum acceptable dietary standards.
- ***Anaemia:*** About three in five children age 6-59 months and 45% of women age 15-49 are anaemic.
- ***Nutritional status of women:*** One in ten women age 15-49 is underweight, while 18% are overweight and 10% are obese.
- ***Salt iodisation:*** More than eight in ten households use iodised salt for cooking.

This chapter focuses on a range of issues related to the nutrition of children under age 5 and women of reproductive age. The chapter describes the nutritional status of children, infant, and young child feeding practices. Information on micronutrient intake and supplementation among children and household salt fortification is also discussed. In addition, the chapter addresses aspects of the nutritional status of women age 15-49. The results of the anaemia testing conducted among young children and women and urine iodine testing among women also are also presented.

11.1 NUTRITIONAL STATUS OF CHILDREN

The nutritional status of children under age 5 is an important indicator of children's health. In the 2015-16 TDHS-MIS, anthropometric data on height and weight were collected to evaluate the nutritional status of young children in Tanzania. These data are useful for identifying children under age 5 who are malnourished and, thus, at increased risk of faltered growth, disease, impaired mental development, and death.

11.1.1 Measurement of Nutritional Status among Young Children

After obtaining consent from the child's parent or guardian, children under age 5 were weighed and measured for height in all of the households in the 2015-16 TDHS-MIS sample, regardless of whether their mothers were interviewed in the survey. Weight measurements were obtained with an electronic SECA 874 flat scale designed for mobile use. The scale had a double display to facilitate the accurate recording of weight and could be turned on with a toe tap. For the weighing of very young children, the mother or caretaker was weighed first. The mother or caretaker was then weighed again while holding the child. An

automatic two-in-one adjustment button allowed the mother's stored weight to be deducted, which left the baby's weight displayed on the scale. Height was measured with a Shorr board measuring board. Children younger than age 24 months or shorter than 85 cm were measured lying down on the board (recumbent length) while standing height was measured for older or taller children.

The children's height/length, weight, and age data were used to calculate three indices: height-for-age, weight-for-height, and weight-for-age. Each of these indices provides different information about growth and body composition for assessing nutritional status. As indicated below, *stunting*, or low height-for-age, is a sign of chronic undernutrition that reflects failure to receive adequate nutrition over a long period. Stunting can also be affected by recurrent and chronic illness. *Wasting*, or low weight-for-height, is a measure of acute undernutrition and represents the failure to receive adequate nutrition in the period immediately before the survey. Wasting may result from inadequate food intake or from a recent episode of illness that caused weight loss. The opposite of wasting is overweight (high weight-for-height), a measure of overnutrition. Weight-for-age is a composite index of weight-for-height and height-for-age, reflects both acute (wasting) and chronic (stunting) undernutrition, and serves as an indicator of overall undernutrition.

Stunting, or height-for-age

Height-for-age is a measure of linear growth retardation and cumulative growth deficits. Children whose height-for-age Z-score is below minus two standard deviations (-2 SD) from the median of the WHO reference population are considered short for their age (stunted), or chronically undernourished. Children whose height-for-age Z-scores are below minus three standard deviations (-3 SD) are considered severely stunted.

Sample: Children under age 5

Wasting, or weight-for-height

The weight-for-height index measures body mass in relation to body height or length and describes current nutritional status. Children whose Z-scores are below minus two standard deviations (-2 SD) from the median of the WHO reference population are considered thin (wasted), or acutely undernourished. Children whose weight-for-height Z-scores are below minus three standard deviations (-3 SD) are considered severely wasted.

Sample: Children under age 5

Underweight, or weight-for-age

Weight-for-age is a composite index of height-for-age and weight-for-height that takes into account both acute and chronic undernutrition. Children whose weight-for-age Z-scores are below minus two standard deviations (-2 SD) from the median of the reference population are classified as underweight. Children whose weight-for-age Z-scores are below minus three standard deviations (-3 SD) are considered severely underweight.

Sample: Children under age 5

Overweight in children

Children whose weight-for-height Z-scores are more than two standard deviations (+2 SD) above the median of the WHO reference population are considered overweight.

Sample: Children under age 5

The means of the Z-scores for height-for-age, weight-for-height, and weight-for-age serve as summary statistics that describe the nutritional status of the entire population of children without the use of a cutoff point. A mean Z-score of less than 0 (a negative mean value for stunting, wasting, or underweight) reflects a downward shift in the entire sample population's nutritional status relative to the WHO reference

population. The more negative the mean Z-score, the higher the prevalence of malnutrition compared to the reference population.

11.1.2 Data Collection

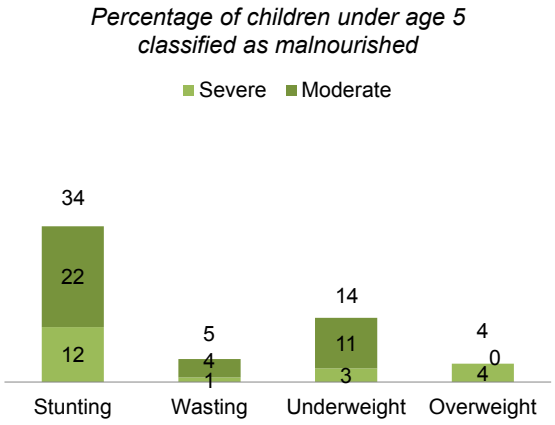
A total of 10,454 children under age 5 were eligible for height and weight measurements. Age information was missing or invalid for only a few children (0.2%), while valid height measures and weight measures were available for 98% of children. The following analysis is based on children with complete and valid anthropometric and age data.

11.1.3 Levels of Child Malnutrition

According to the 2015-16 TDHS-MIS, 34% of children under age 5 are stunted or short for their age, a sign of chronic malnutrition. Five percent of young children are wasted or too thin for their height, a sign of acute malnutrition while, at the other extreme, 4% are overweight or over nourished. Fourteen percent of children are underweight or too thin for their age **(Table 11.1 and Figure 11.1)**.

Trends: Data show that the prevalence of stunting and underweight has been decreasing in Tanzania steadily since 1996 **(Figure 11.2)**. In contrast, the prevalence of wasting has remained virtually unchanged between 1999 and 2016.

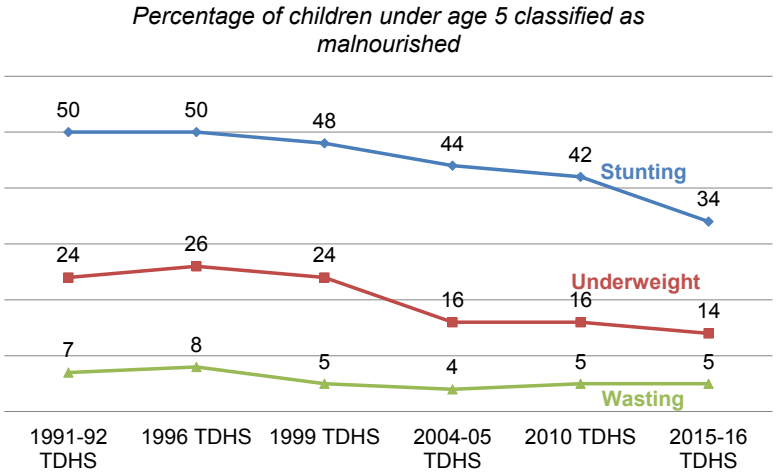
Figure 11.1 **Children's nutritional status**



Patterns by background characteristics

- Stunting increases markedly with a child's age, reaching a level of 40% or more among children age 18-47 months. One in six children age 24-35 months is severely stunted.
- Children considered very small (51%) or small (46%) at birth are more likely to be stunted than those described as being average or large (33%).

Figure 11.2 **Trends in nutritional status of children**



- Stunting is higher in Tanzania Mainland (35%) than in Zanzibar (24%). Considering zonal differences, the prevalence of stunting is very high in the Southern Highlands (45%) and South West Highlands (43%) zones.

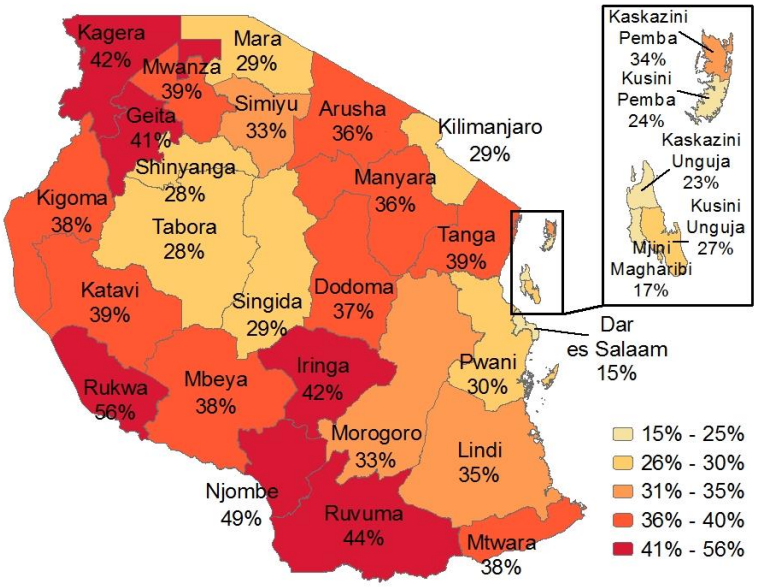
- With regional patterns, Rukwa (56%), Njombe (49%) and Ruvuma (44%) regions have the highest prevalence of stunting while the rate is lowest in Dar es Salaam region (15%). **(Figure 11.3)**

- Wasting is more common in Zanzibar than in Tanzania Mainland (7% versus 4%). The rate of wasting is very high in Kusini Pemba and Kaskazini Pemba (9% each) and Kusini Unguja (8%).

- Rates of stunting, wasting, and underweight generally decrease with increasing mother's education. All three nutritional status indicators are highest among children in the lowest wealth quintile and lowest among children in the highest wealth quintile.

Figure 11.3 **Stunting in children by region**

Percentage of children under age 5 who are stunted



11.2 Infant and Young Child Feeding Practices

Appropriate infant and young child feeding (IYCF) practices include early initiation of breastfeeding within the first hour after birth, exclusive breastfeeding in the first 6 months of life, continued breastfeeding through age 2, introduction of solid and semisolid foods at age 6 months, and gradual increases in the amount of food and frequency of feeding as the child grows older. It is also important for young children to receive a diverse diet that includes eating foods from different food groups in order to satisfy the growing micronutrient needs (WHO, 2008).

11.2.1 Initiation of Breastfeeding

Early initiation of breastfeeding is important for both the mother and the child. The first breast milk contains colostrum, which is highly nutritious and has antibodies that protect the newborn from diseases. Early initiation of breastfeeding also encourages bonding between the mother and her newborn and facilitates the production of regular breast milk. Thus, it is recommended that children be put to the breast immediately or within 1 hour after birth and that prelacteal feeding (feeding newborns anything other than breast milk before breast milk is regularly given) be discouraged.

Early breastfeeding
Initiation of breastfeeding within 1 hour of birth
Sample: Last born children who were born in the 2 years before the survey

In Tanzania, 98% of last-born children who were born in the 2 years before the survey were breastfed at some point in their life **(Table 11.2)**. More than half (51%) of the infants were breastfed within 1 hour after birth, and 93% were breastfed within 24 hours after delivery. Fourteen percent of the infants were given a prelacteal feed.

Patterns by background characteristics

- Initiation of breastfeeding within 1 hour after birth less practised in Simiyu (26%), Geita (28%) and Mara (30%) regions. Tanga (80%), Manyara (76%) and Njombe (75%) had the highest percentages of children breastfed within 1 hour after birth. Prelacteal feeding was practiced most often in Tabora (31%) and least often in Rukwa (2%).
- About six in ten children born in health facilities were breastfed within 1 hour of birth compared to only four in ten children delivered elsewhere.
- Only one in ten children born in a health facility was given a prelacteal feed compared to slightly more than two in ten children who were born outside a facility.
- Prelacteal feeding was less common among children whose mothers have at least some secondary education (11%) compared to those whose mothers have no education (19%), and among children in the highest wealth quintile (12%) compared to children in the lowest quintile (18%).

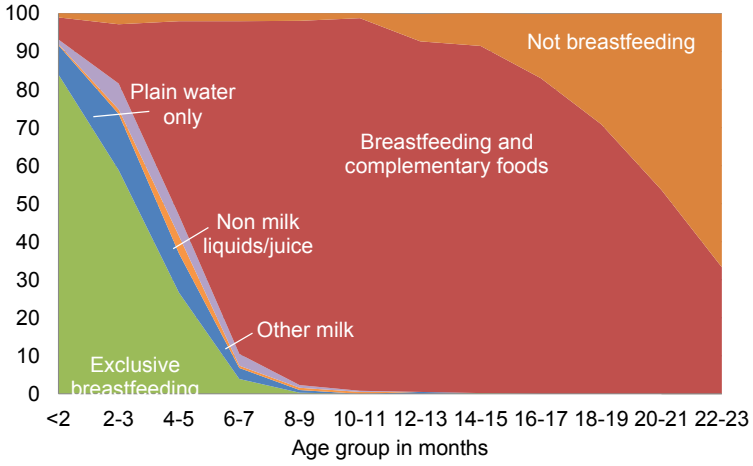
11.2.2 Exclusive Breastfeeding

It is recommended that children be exclusively breastfed in the first 6 months of their life; that is, they should be given nothing but breastmilk. Breast milk contains all of the nutrients needed by children in the first 6 months of life. Complementing breast milk before age 6 months is unnecessary and is discouraged because the likelihood of contamination and resulting risk of diarrheal disease are high. Early initiation of complementary feeding also reduces breast milk output because the production and release of breast milk is modulated by the frequency and intensity of suckling.

Fifty-nine percent of infants under 6 months are exclusively breastfed in Tanzania. Exclusive breastfeeding declines rapidly with age; only 27% of infants age 4-5 months are exclusively breastfed compared with 84% of infants age 0-1 month and 59% of infants age 2-3 months. Contrary to recommendations, some infants under age 6 months consume other liquids in addition to breastmilk, which may be plain water (11%) and other milk (4%). More than one-fifth of infants under age 6 months are fed complementary foods (22%) in addition to breast milk. Fortunately, only 3% are fed using a bottle with a nipple **(Table 11.3.1 and Figure 11.4)**.

Figure 11.4 **Breastfeeding practices by age**

Percent distribution of children under age 2, by age in months

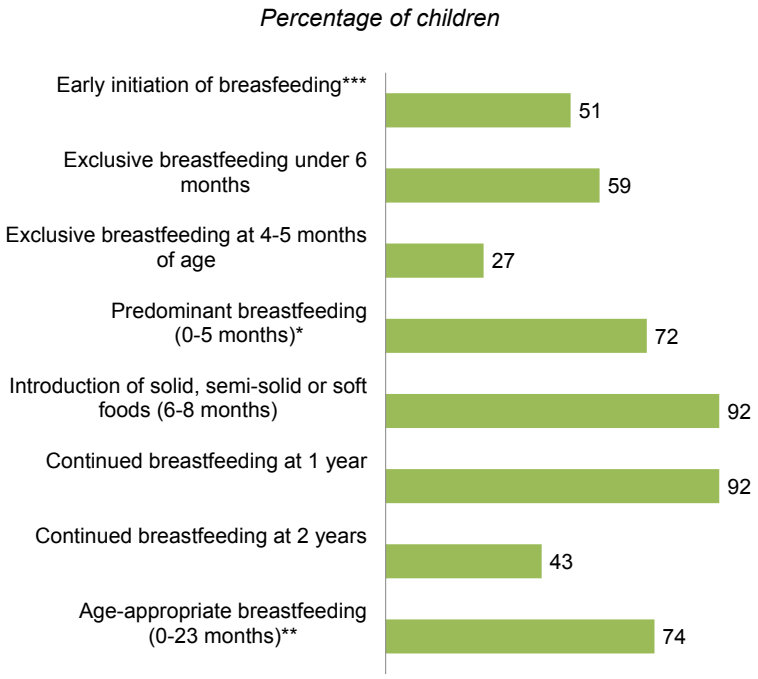


Trends: Data from DHS surveys indicate that exclusive breastfeeding among children under age 6 months has been steadily increasing, from 26% in 1991-92, to 41% in 2004-05, to 50% in 2010 and 59% in 2015-16.

Although exclusive breastfeeding during the first six months of life is important to a child's survival and well-being, it is also important that complementary foods be introduced on a timely basis since the mother's breast milk does not provide adequate nutrition for older babies. In Tanzania, the great majority of children age 6 months and older are receiving complementary food. At age 6-8 months, only 10% of babies were not being given solid or semi-solid foods.

Figure 11.5 presents a number of indicators that summarize the extent to which children under age 2 were being breastfed according to recommended infant and young child feeding practices.

Figure 11.5 **IYCF breastfeeding indicators**



* Predominant breastfeeding includes exclusive breastfeeding, breastfeeding plus plain water, and breastfeeding plus non-milk liquids/juice
** Age appropriate breastfeeding = Children age 0-5 months who are exclusively breastfed + children age 6-23 months who receive breastmilk and complementary foods
*** Early initiation of breasfeeding: Percentage of children born in the last 2 years who started

11.2.3 Median Duration of Breastfeeding

Survey findings indicate that the median duration of breastfeeding among children born in the past 3 years in Tanzania is 20 months; this means that half of children are breastfed until age 20 months **(Table 11.4)**. The median duration of exclusive breastfeeding is 3 months. The median duration of predominant breastfeeding, which includes exclusive breastfeeding and breastfeeding in combination with plain water and/or non-milk liquids, is nearly 4 months.

Trends: The median duration of exclusive breastfeeding has increased since 1991-92, from 0.7 months to 3.0 months in 2015-16.

11.2.4 Complementary Feeding

The transition from exclusive breastfeeding to family foods is referred to as complementary feeding. This is the most critical period for children because during this transition, children are most vulnerable to becoming undernourished. Complementary feeding should be *timely*, in which all infants begin receiving foods in addition to breast milk from age 6 months.

Appropriate complementary feeding for children should include a variety of foods to ensure that the requirements for nutrients are met. Fruits and vegetables rich in vitamin A should be consumed daily. Eating a range of fruits and vegetables, in addition to those rich in vitamin A, is also important. Studies have shown that plant-based complementary foods alone are insufficient to meet the needs for certain micronutrients. Therefore, it has been recommended that meat, poultry, fish, or eggs should be part of the daily diet as well or eaten as often as possible (WHO, 1998).

In the 2015-16 TDHS-MIS, women who had at least one child living with them who was born in 2013 or later were asked questions about the types of liquids and foods the child had consumed during the day or

night before the interview. If a mother had more than one child born in 2013 or later living with her, the questions were asked about the youngest child.

The types of foods and liquids received by children during the day and night before the survey depend on the child's age and breastfeeding status **(Table 11.5)**. Solid or semi-solid foods are introduced in some children's diets too early. Six percent of breastfeeding children receive some type of solid or semi-solid food during the first 2 months of life. At age 4-5 months, when children should still be exclusively breastfed, 52% of children were receiving some type of solid or semi-solid food.

In children's diets, food made from grains were by far the most commonly consumed food group, followed by fruits and vegetables rich in vitamin A. Relatively few children consumed eggs or cheese, yogurt, or other milk products. Consumption of most foods was higher among non-breastfeeding children than breastfeeding children; this reflected the fact that non-breastfed children were older on average than breastfed children.

11.2.5 Minimum Acceptable Diet

Infant and young children should be fed a minimum acceptable diet (MAD) to ensure appropriate growth and development. Without adequate diversity and meal frequency, infants and young children are vulnerable to undernutrition, especially stunting and micronutrient deficiencies, and to increased morbidity and mortality. The WHO minimum acceptable diet recommendation, which is a combination of dietary diversity and minimum meal frequency, is different for breastfed and non-breastfed children. The definition of the composite indicator of a minimum acceptable diet for all children age 6-23 months is indicated below.

Dietary diversity is a proxy for adequate micronutrient-density of foods. Minimum dietary diversity means feeding the child food from at least four out of the following seven food groups: grains, roots, and tubers; legumes and nuts; dairy products (milk yogurt, cheese); flesh foods (meat, fish, poultry, and liver/organ meat); eggs; vitamin A-rich fruits and vegetables; and other fruits and vegetables. Consumption of food from at least four food groups means that the child has a high likelihood of consuming at least one animal source of food and at least one fruit or vegetable in addition to a staple food (grains, roots, or tubers) (WHO, 2008).

The minimum meal frequency is a proxy for a child's energy requirements. For infants and young children, the indicator is based on how much energy the child needs and, if the child is breastfed, the amount of energy needs not met by breast milk. Breastfed children are considered to be consuming at the minimum meal frequency if they receive solid, semi-solid, or soft foods at least twice a day for infants age 6-8 months and at least three times a day for children age 9-23 months. Non-breastfed children ages 6-23 months are considered to be fed with a minimum meal frequency if they receive solid, semi-solid, or soft foods at least four times a day.

Minimum acceptable diet

Proportion of children age 6–23 months who receive a minimum acceptable diet (apart from breast milk). This composite indicator is calculated from the following two fractions:

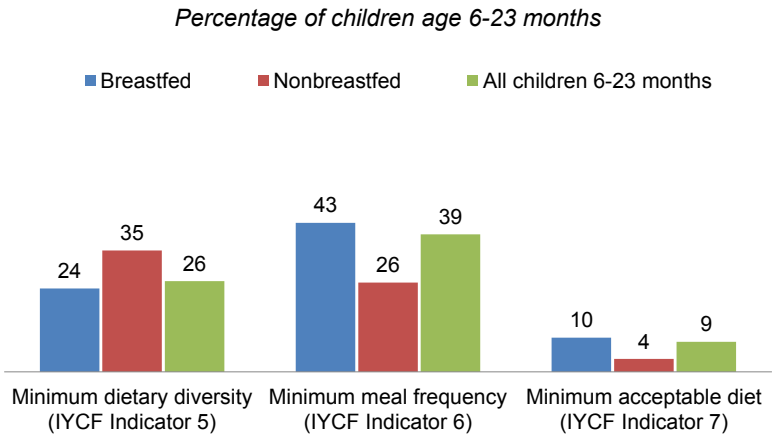
$$\frac{\text{Breastfed children age 6–23 months who had at least the minimum dietary diversity and the minimum meal frequency during the previous day}}{\text{Breastfed children age 6–23 months}}$$

and

$$\frac{\text{Non-breastfed children age 6–23 months who received at least two milk feedings and had at least the minimum dietary diversity (not including milk feeds) and the minimum meal frequency during the previous day}}{\text{Non-breastfed children age 6–23 months}}$$

The 2015-16 TDHS-MIS shows that 84% of Tanzanian children age 6-23 received breast milk, breast milk substitutes, or milk or milk products during the day or night before the interview **(Table 11.6)**. Twenty-six percent of children had an adequately diverse diet in which they were given foods from at least four food groups, while 40% had been fed the minimum recommended number of times according to their age. Only 10% of children age 6-23 months were fed in accordance with the minimum acceptable standards with respect to all three IYCF feeding practices.

Figure 11.6 **IYCF indicators on minimum acceptable diet (MAD)**



Patterns by background characteristics

- Non-breastfed children are less likely than breastfed children (10% and 4%, respectively) to be fed according to the IYCF guidelines.
- Children in urban areas (12%) are somewhat more likely to be fed according to the recommended IYCF guidelines as compared with those in rural areas (7%). The major difference in urban and rural feeding practices is in the percentage of children given foods from at least four food groups (39% and 21% respectively).
- Children in the highest wealth quintile (16%) are more than twice as likely as children in the lowest quintile (7%) to be fed according to the recommended IYCF guidelines. Much of this difference is due to the fact that children in the highest wealth quintile are given foods from at least four food groups much more often than children in the lowest quintile (49% and 15% respectively).

11.3 Anaemia Prevalence in Children

Anaemia prevalence

Any anaemia is defined as a blood haemoglobin level below 11.0 g/dl in children. In the DHS, severe anaemia is defined as <7.0g/dl; moderate anaemia is defined as 7.0-9.9 g/dl.

Sample: Children age 6-59 months

Anaemia is a condition marked by low levels of haemoglobin in the blood. Iron is a key component of haemoglobin, and iron deficiency is estimated to be responsible for half of all anaemia globally. Other causes of anaemia include malaria, hookworm and other helminths, other nutritional deficiencies, chronic infections, and genetic conditions. Anaemia is a serious concern for children because it can impair cognitive development, stunt growth, and increase morbidity from infectious diseases.

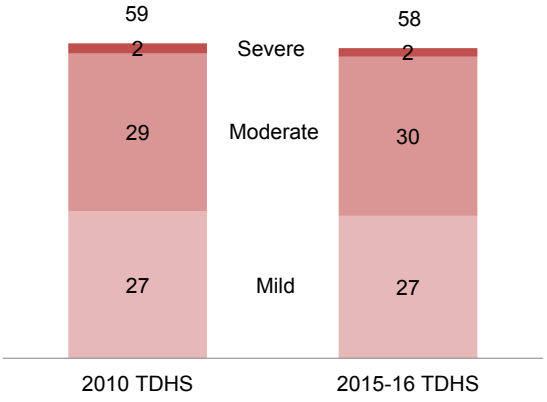
In the 2015-16 TDHS-MIS, haemoglobin testing was carried out among children age 6-59 months in the field using a capillary blood sample and the HemoCue device. The methodology is described in more detail in Chapter 1. The testing was successfully completed for 98% of the 9,409 children eligible for testing.

Overall, 58% of children age 6-59 months were anaemic with haemoglobin less than 11.0 g/dl. Twenty-seven percent of children had mild anaemia, while 30% had moderate anaemia. Only 2% were severely anaemic **(Table 11.7)**.

Trends: The prevalence of anaemia in children declined substantially between 2004-05 and 2010 (from 72% to 59%). In sharp contrast, there was only a negligible decrease in the anaemia level among children between 2010 and 2015-16 (from 59% to 58%) **(Figure 11.7)**.

***Figure 11.7* Trends in childhood anaemia**

Percentage of children age 6-59 months

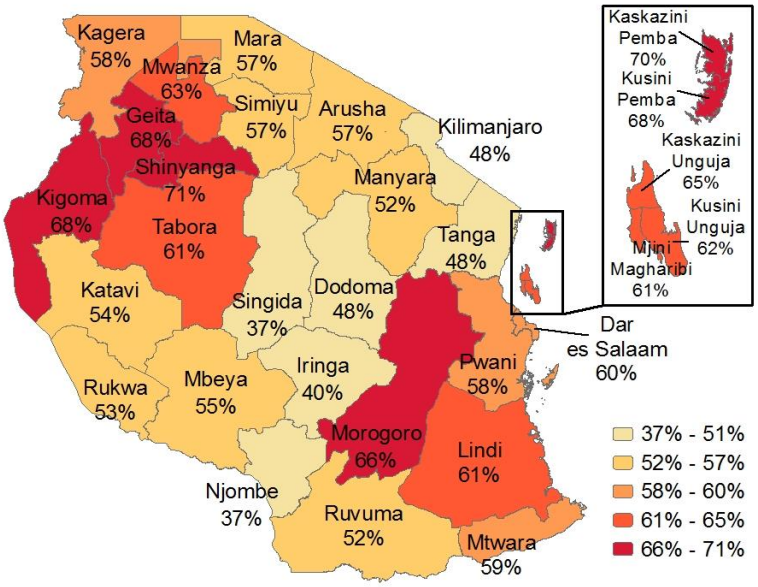


Patterns by background characteristics

- Anaemia is more prevalent among children under age 24 months than among older children, with a peak prevalence of 81% observed among children age 9-11 months.
- Anaemia prevalence varies widely by residence. The lowest anaemia rate is observed in the Southern Highlands (44%) while Zanzibar has the highest rate (65%). Regionally, the anaemia rate ranges from a low of 37% in Singida and Njombe to a high of 71% in Shinyanga **(Figure 11.8)**.
- There are marked differences in anaemia prevalence between children whose mothers have at least secondary education and those whose mothers have no education (54% versus 66%) and those from the highest and lowest wealth quintiles (50% versus 64%).

***Figure 11.8* Anaemia in children by region**

Percentage of children age 6-59 months with any anaemia



11.4 WOMEN'S NUTRITIONAL STATUS

The 2015-16 TDHS-MIS collected valid height and weight data for 99% of the interviewed women age 15-49. **Table 11.8** presents two anthropometric indices based on these data—height and Body Mass Index (BMI). Both short stature (height below 145 cm) and low BMI are risk factors for obstetric complications and poor birth outcomes. A BMI above 25 is associated with higher rates of chronic diseases and other health problems.

Body Mass Index (BMI)

BMI is calculated by dividing weight in kilogrammes by height in meters squared (kg/m^2). A BMI of less than 18.5 indicates that the respondents are too thin for their height and that they have a chronic energy deficiency. At the other end of the BMI scale, women are considered overweight if their BMI falls between 25.0 and 29.9 and are obese if their BMI is greater than or equal to 30.0.

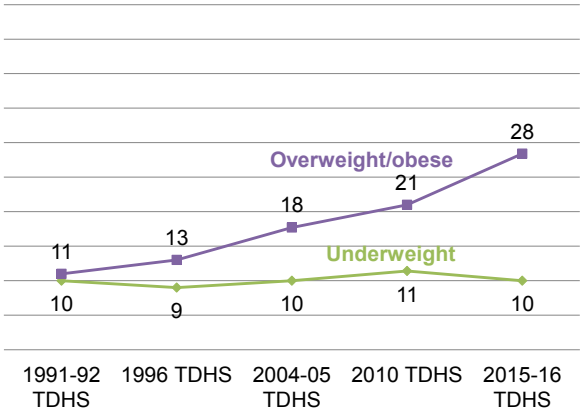
Sample: Women age 15-49 who are not pregnant and who have not had a birth in the 2 months before the survey

According to findings from the survey, 3% of women are of too short stature. Ten percent of women are thin, with 3% defined as moderately or severely thin (BMI <17). The majority (62%) of women have a BMI in the normal range, while more than a quarter are overweight (18%) or obese (10%).

Trends: The prevalence of undernutrition percentage in women remained virtually unchanged between the 2004-05 TDHS and the 2015-16 TDHS-MIS **(Figure 11.9)**. In contrast, the prevalence of overnutrition (overweight or obese) increased from 18% in 2004-05 to 28% in 2015-16.

Figure 11.9 **Trends in women's nutritional status**

Percentage of women age 15-49



Patterns by background characteristics

- Women aged 15-19 are more likely to be thin (18%) than those in other age groups. In contrast, the percentage of women who are overweight or obese increases with age, peaking at 42% among women age 40-49.
- Women are as twice as likely to be overweight if they are from urban areas (42%) than those from rural areas (21%). Women in Zanzibar are more likely to be overweight or obese than women in Tanzania Mainland (39% versus 28%). Dar es Salaam has the highest percentage of women who are overweight and obese (47%), and Simiyu and Kagera (14% each) have the lowest percentages.
- Women with secondary or higher education are more likely to be overweight or obese (34%) than those with no education (21%). The percentage of overweight or obese increases with wealth, from 12% of women in the lowest quintile to 47% in the highest quintile.

11.5 ANAEMIA PREVALENCE IN WOMEN

Anaemia prevalence

Any anaemia is defined as a blood haemoglobin level below 11.0 g/dl in pregnant women and below 12.0 g/dl in non-pregnant women. The cutoffs are adjusted for altitude for enumeration areas above 1,000 meters and for cigarette smoking.

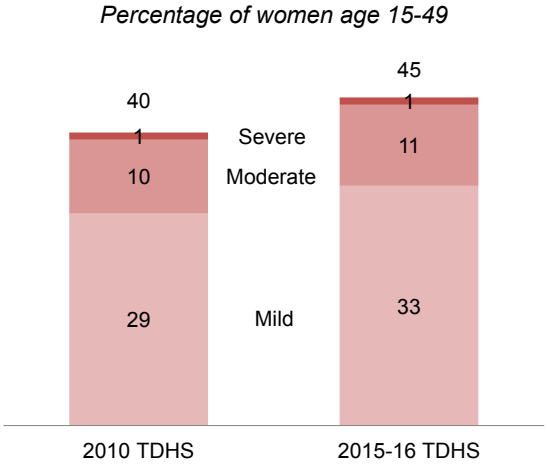
Sample: Women age 15-49

Anaemia among women was measured using similar procedures as for children age 6-59 months, by collecting and testing capillary blood from a finger prick with the HemoCue 201+ analyser. Anaemia results are available for 13,064 women, 98% of all women who were eligible for the testing.

Overall, 45% of women age 15-49 in Tanzania are anaemic **(Table 11.9)**. Thirty-three percent of women are classified as mildly anaemic, 11% as moderately anaemic, and 1% as severely anaemic.

Trends: The prevalence of any anaemia found in the 2015-16 TDHS-MIS was slightly above the rate recorded in the 2010 TDHS (40%) but still below the level at the time of 2004-05 TDHS (48%) **(Figure 11.10)**.

***Figure 11.10* Trends in anaemia status among women**



Patterns by background characteristics

- The prevalence of any anaemia is higher (57%) among pregnant women compared to both breastfeeding mothers (46%) and women who are neither pregnant nor breastfeeding (43%).
- Women in Zanzibar are more likely to be anaemic than women in Tanzania Mainland (60% versus 44%). By region, anaemia prevalence varies from a low of 25% in Mbeya to a high of 72% in Kaskazini Pemba.

11.6 PRESENCE OF IODISED SALT IN HOUSEHOLDS

Iodised salt in households

Fortification of salt with iodine is the most common method of preventing iodine deficiency.

In Tanzania, the compound used for fortification of salt with iodine is potassium iodate (KIO3). Fortified salt that contains 15 parts of iodine per million parts of salt (15+ppm) is considered to be adequate for prevention of iodine deficiency.

Sample: One third of all the households selected for the survey

Tanzania has adopted universal salt iodisation as a measure to prevent iodine deficiency disorders among children and adults. To assess the use of iodised salt in Tanzania, the 2015-16 TDHS-MIS requested all households in the survey to provide a small sample of salt which was tested in the household by the interviewer for the presence of iodine with a rapid test kit. Ninety-three percent of the 12,563 households in the 2015-16 TDHS-MIS sample provided interviewers with a sample of salt for testing. The results of the test were reported to the household and recorded on the questionnaire.

Interviewers also requested a larger sample of salt from households in the men's interview subsample for laboratory testing to determine the actual iodine content in salt. Salt was collected for testing in the laboratory from 93% of the 4,007 households in the subsample (**Table 11.11**). The salt samples from these households were sent to the Tanzania Food and Nutrition Center (TFNC) in Dar es Salaam for the laboratory analysis of the level of iodine. The results of the laboratory testing were not provided to the households.

Additional details regarding the collection and testing of salt samples are found in Chapter 1.

As expected, given the different testing procedures, the salts of the rapid and laboratory tests differ slightly. Iodine was found to be present in 81% of the samples tested in the households using the rapid kit **(Table 11.10)**.

The laboratory testing detected iodine in the samples collected from a much larger percentage of the households (96%). However, the salt was adequately iodised, and the iodine content met or exceeded the 15 ppm standard in only 61% of households, **(Table 11.12)**. In the salt samples collected from 25% of households, the iodine content was below 10 ppm.

Trends: Like the 2015-16 TDHS, the 2010 TDHS included rapid and laboratory testing to detect iodine in salt. Comparing the rapid test results, the percentage of households found to have iodised salt in 2015-16 was virtually the same as the level observed in 2010 (81% and 82%, respectively). Considering the laboratory results, the percentage of households with iodised salt increased from 90% in 2010 (NBS, 2011) to 96% in 2015-16. Households with adequately iodised (15+ ppm) salt increased from 47% in 2010 to 61% in 2015-16.

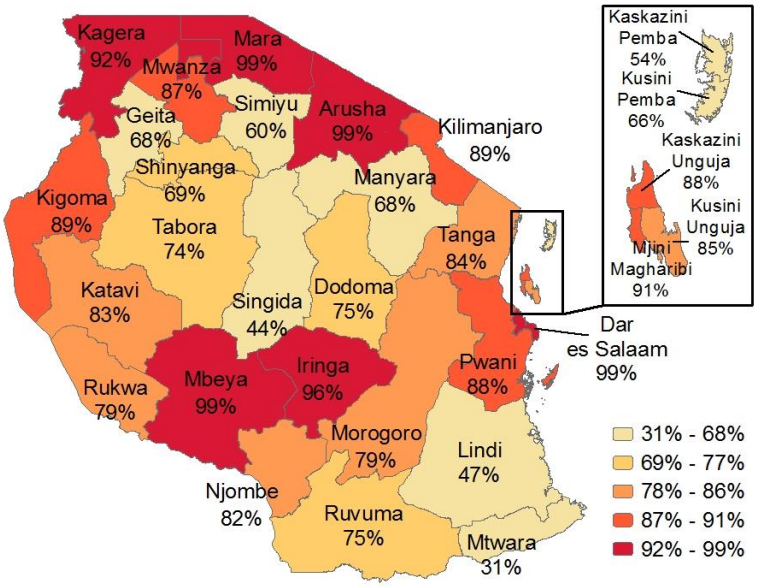
Patterns by background characteristics

- Based on the results of the rapid testing, households' use of iodised salt is higher in urban than in rural areas (94% versus 75%). The results from laboratory analysis showed that iodine levels (15+ppm) were adequate in the salt collected from 82% of urban households compared to 50% of rural households **(Table 11.10)**.

- According to the rapid test results, SouthWest Highlands (93%) and Eastern (91%) are the zones with the highest percentages of households with iodised salt, and the lowest in Southern Zone (37%) **(Table 11.12)**.

- In the laboratory test results, use of adequately iodised salt was found to be highest in Arusha (94%), Mbeya (93%), Dar es Salaam (91%) and Mara (90%) and lowest in Kaskazini Pemba (14%), Simiyu (20%), Lindi (23%) and Mtwara (27%) **(Figure 11.11)**.

Figure 11.11 **Presence of iodised salt among households in which salt was tested by region**



- The percentage of households with iodised salt (based on the rapid test results) varies by wealth quintile, from 69% of households in the two lowest quintiles to 96% of households in the highest quintile. The results from the laboratory

analysis showed that the percentage of household with adequately iodised salt varies from 41% in the lowest quintile to 86% in the highest quintile **(Table 11.10 and Table 11.12)**.

11.7 MICRONUTRIENT INTAKE AND SUPPLEMENTATION AMONG CHILDREN

Micronutrient deficiency is a major contributor to childhood morbidity and mortality. Micronutrients are available in foods and can also be provided through direct supplementation. Breastfeeding children benefits from supplements given to the mother.

The 2015-16 TDHS-MIS obtained information about the intake of three important micronutrients: vitamin A, iron, and iodine. Iron deficiency is one of the primary causes of anaemia, which has serious health consequences for both women and children. Vitamin A is an essential micronutrient for the immune system. Severe vitamin A deficiency (VAD) can cause eye damage and is the leading cause of childhood blindness. VAD also increases the severity of infections such as measles and diarrheal disease in children. Iodine is an essential micronutrient in the human body. Iodine deficiency has serious effects on body growth and mental development.

The information collected on food consumption among the youngest children under age 2 in the 2015-16 TDHS-MIS is useful in assessing the extent to which children are consuming food groups rich in two key micronutrients—vitamin A and iron—in their daily diet. Questions in the survey also allowed an assessment of the extent to which children are receiving vitamin A and iron supplements and deworming medication. Periodic deworming can help to prevent anaemia and other micronutrient deficiencies. The testing of salt used for cooking in the household provides information on the extent to which children are living in households with adequately iodised salt.

Children are much more likely to be receiving vitamin A through their diet or supplements than iron **(Table 11.13)**.

- Seventy-six percent of children age 6-23 months consumed foods rich in vitamin A in the day or night preceding the interview, while only 36% consumed iron-rich foods.
- Forty-one percent of children age 6-59 months had been given a vitamin A supplement within 6 months of the survey. Only 2% of children age 6-59 months had received an iron supplement during the week before the survey.

Other efforts to improve the micronutrient status of young children also show mixed results.

- Only 38% of children age 6-59 months received deworming medications in the 6 months before the survey.
- On the other hand, about eight in ten children live in households with iodised salt.

The 2015-16 TDHS-MIS also collected information on the utilisation of several special products that are being promoted to improve children's nutritional status. The results show that only 2% of children age 6-23 months were being given *Virutubishi* powder, a blend of vitamins and minerals that is designed to be added to children's food on a daily basis **(Table 11.13)**. Less than 1% of children age 6-35 months were given *chakula dawa,* a therapeutic food product for malnourished children, in the 7 days before the survey **(**Data not shown**)**.

Trends: The percentages of children who received vitamin A supplementation and deworming medication have changed noticeably since 2010, dropping from 61% to 41% in 2015-16 for vitamin A supplementation and from 50% to 38% for deworming medication.

Patterns by background characteristics

- Urban children are more likely than rural children to consume foods rich in vitamin A (82 % versus 73%) and iron (51% versus 31%), receive vitamin A supplements (46% versus 39%) and deworming medication (49% versus 34%), and live in a household with iodised salt (94% versus 74%).
- Micronutrient-related indicators are markedly higher for children from Zanzibar than for children from Tanzania Mainland.
- Both mother's education and household wealth are positively related to the micronutrient consumption and supplementation measures.

11.8 Micronutrient Intake among Mothers

Pregnant women should take iron supplements and avoid parasites to prevent anaemia. The 2015-16 TDHS-MIS included questions to ascertain whether women had received iron supplements and/or took de-worming medication during their most recent pregnancy that ended in a live birth in the 5 years before the survey. Only 21% of women took iron supplements or syrup for 90 days or more as recommended during their pregnancy. On the other hand, more than six in ten of these women (63%) took deworming medication **(Table 11.14)**.

The results of the household salt testing also help in assessing the extent to which women may be at risk of iodine deficiency. The great majority of women (80%) with a child born in the last 5 years live in households with iodised salt **(Table 11.14)**.

Patterns by background characteristics

- Kigoma had the lowest percentage (7%) of women who took iron during their pregnancy for 90 days or more, while Kusini Unguja, Kaskazini Unguja, and Lindi had the highest percentages (33% each).
- The use of deworming medication in pregnancy was higher among urban women (73%) than rural women (59%) and among women living in Tanzania Mainland (63%) compared to Zanzibar (51%). By region, Geita (41%) had the lowest percentage of women who took deworming drugs during their pregnancy, while Dar es Salaam had the highest percentage (80%).
- The use of deworming medication during pregnancy increased with education from 57% among women with no education to 70% among women with secondary or higher education.
- Women in the highest wealth quintile were more likely to take deworming medication (75%) than those in the lowest quintile (54%).

11.9 Urinary Iodine Concentration Among Women

Median urinary iodine concentration

Urinary iodine concentration is an indicator of nutritional iodine status. WHO considers a median urinary iodine concentration between 150-300 micrograms per litre (µg/L) as optimal (WHO, 2007).

Sample: Women age 15-49

In the subsample of households selected for interviews with men, interviewed women were asked to provide a urine sample for laboratory testing to detect the presence of iodine. Ninety-five percent of the women provided urine samples, which were sent to the Tanzania Food and Nutrition Centre (TFNC) for testing for the presence of iodine (**Table 11.15**). Additional information on the urine sample collection and testing is found in Chapter 1.

The results of the iodine testing show that 23% of women age 15-49 were found to have optimal level of iodine concentration (between 150 and 300 µg/L). One third of women had an excess concentration of iodine higher than 300 µg/L. A similar percentage of women had urinary iodine concentrations below100 µg/L which is considered low **(Table 11.16)**.

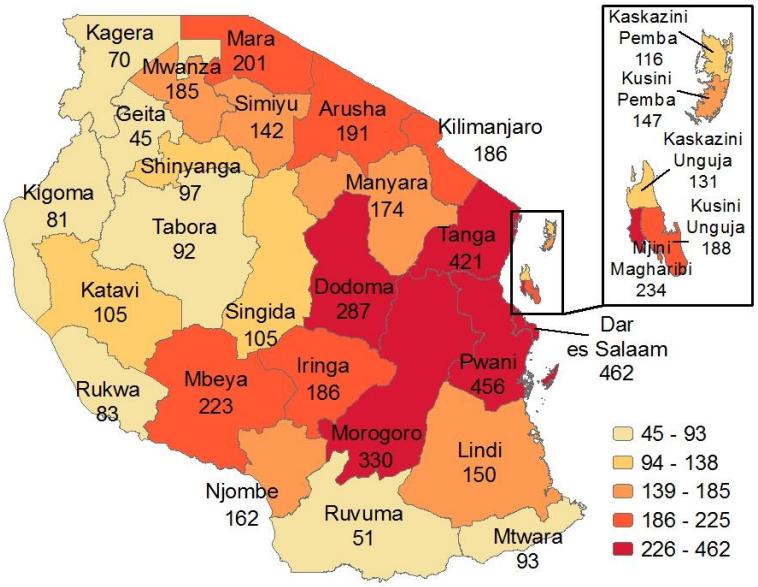
Trends: The median urinary iodine concentration (UIC) for women of reproductive age 15-49 increased from160 µg/L at the time of the 2010 TDHS to 180 µg/L in 2015-16 TDHS-MIS.

Patterns by background characteristics

- The median UIC concentration declines with increasing age, from 199.2 µg/L among women age 15-19 to 159.9 µg/L among women age 40-49.
- The median UICs among pregnant (171.4 µg/L) and breastfeeding women (122.9 µg/L) are within the recommended ranges, although the UIC for breastfeeding women is towards the lower limit (100 µg/L) of that range.
- The median UIC for women who live in urban areas is more than twice that of women in rural areas (303.9 µg/L compared with 123.4 µg/L). The median UIC in Zanzibar is only slightly higher than that in Mainland (187 µg/L versus 179.6 µg/L). Both patterns are similar to what was observed in the 2010 TDHS.
- Median urinary iodine concentration vary widely across regions in Mainland, ranging from below 100 µg/L in Geita, Ruvuma, Kagera, Kigoma, Rukwa, Tabora, Mtwara and Shinyanga to over 400 µg/L in Dar es Salaam, Pwani, and Tanga. **(Figure 11.12)**.

Figure 11.12 **Urinary iodine concentrations in women by region**

Median of iodine concentration in women age 15-49



- The median UIC for women with secondary or higher education is almost twice (218.8 µg/L) that of women with no education (114.9 µg/L).
- The median UIC increases markedly with the wealth quintile. Among women in the lowest quintile, the median UIC (96.8 ug/L) is below the level considered sufficient while the median UIC among women in the highest quintile (336.5 µg/L) exceeds the level regarded as optimal.

List of Tables

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- **Table 11.3.2 Breastfeeding status by background characteristics**
- **Table 11.4 Median duration of breastfeeding**
- **Table 11.5 Foods and liquids consumed by children in the day or night preceding the interview**
- **Table 11.6 Infant and young child feeding (IYCF) practices**
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Table 11.1 Nutritional status of children

Percentage of children under age 5 classified as malnourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height, and weight-for-age, according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Height-for-age[1]				Weight-for-height					Weight-for-age				
	Percent-age below -3 SD	Percent-age below -2 SD[2]	Mean Z-score (SD)	Number of children	Percent-age below -3 SD	Percent-age below -2 SD[2]	Percent-age above +2 SD	Mean Z-score (SD)	Number of children	Percent-age below -3 SD	Percent-age below -2 SD[2]	Percent-age above +2 SD	Mean Z-score (SD)	Number of children
Age in months														
<6	4.6	13.3	-0.5	984	4.0	9.4	11.1	0.1	961	2.1	6.4	2.2	-0.3	998
6-8	4.5	14.4	-0.6	521	1.2	4.6	5.5	0.0	521	2.3	8.7	2.5	-0.4	524
9-11	7.0	24.5	-1.1	455	2.0	9.7	4.8	-0.2	454	3.6	14.6	1.8	-0.7	457
12-17	10.7	33.0	-1.4	1,102	1.3	5.7	2.8	-0.2	1,103	3.5	14.1	1.0	-0.8	1,108
18-23	15.9	43.1	-1.8	1,035	0.7	4.8	3.5	-0.0	1,035	2.6	16.2	0.5	-0.9	1,040
24-35	16.5	44.4	-1.8	1,914	0.8	3.0	2.8	0.1	1,907	3.2	14.6	0.5	-0.9	1,917
36-47	13.5	40.0	-1.7	1,912	1.0	2.8	3.0	0.0	1,917	2.2	14.4	0.2	-1.0	1,918
48-59	10.3	33.7	-1.6	1,922	0.4	3.1	1.2	-0.2	1,913	2.8	15.1	0.2	-1.1	1,923
Sex														
Male	12.8	36.7	-1.5	4,971	1.2	5.2	3.7	-0.1	4,956	2.9	14.1	0.9	-0.9	4,989
Female	10.7	32.2	-1.4	4,875	1.1	3.8	3.6	-0.0	4,855	2.5	13.2	0.6	-0.8	4,897
Birth interval in months[3]														
First birth[4]	9.9	33.7	-1.4	2,014	1.2	4.5	4.2	-0.0	1,999	2.6	11.6	1.0	-0.8	2,022
<24	13.2	35.5	-1.5	1,139	1.8	5.4	3.3	-0.0	1,134	2.9	15.8	0.3	-0.9	1,140
24-47	13.3	36.8	-1.5	3,564	1.1	4.8	3.2	-0.1	3,553	2.9	15.5	0.8	-0.9	3,584
48+	8.7	28.9	-1.3	1,955	1.2	4.6	4.6	-0.0	1,947	2.2	11.0	1.3	-0.7	1,966
Size at birth[3]														
Very small	22.3	50.6	-1.9	230	5.8	10.2	2.6	-0.5	231	10.4	29.1	0.0	-1.5	232
Small	17.8	45.5	-1.8	605	2.3	8.2	1.7	-0.3	607	6.9	24.4	0.9	-1.2	612
Average or larger	10.5	32.7	-1.4	7,768	1.1	4.4	4.0	-0.0	7,724	2.1	12.2	0.9	-0.8	7,796
Missing	19.1	38.0	-1.6	70	0.0	3.9	2.5	-0.2	70	5.1	28.2	0.0	-1.0	72
Mother's interview status														
Interviewed	11.4	34.1	-1.4	8,672	1.3	4.8	3.8	-0.0	8,632	2.7	13.6	0.9	-0.9	8,712
Not interviewed but in household	11.9	31.2	-1.5	196	0.8	3.5	1.9	0.1	197	4.6	15.5	0.5	-0.8	198
Not interviewed and not in the household[5]	14.4	38.0	-1.6	979	0.7	2.1	3.0	0.0	981	2.9	13.8	0.0	-1.0	975
Mother's nutritional status[6]														
Thin (BMI<18.5)	12.6	40.4	-1.7	556	2.6	7.2	1.2	-0.5	557	5.1	21.8	0.0	-1.3	558
Normal (BMI 18.5-24.9)	12.2	36.0	-1.5	5,006	1.0	4.7	2.9	-0.1	5,000	2.9	15.2	0.5	-0.9	5,021
Overweight/ obese (BMI ≥ 25)	8.0	26.6	-1.2	1,744	0.6	3.5	6.1	0.2	1,734	1.2	7.5	2.1	-0.5	1,757
Residence														
Urban	7.6	24.7	-1.2	2,499	0.8	3.8	4.0	0.0	2,479	1.4	9.1	1.2	-0.6	2,507
Rural	13.1	37.8	-1.6	7,347	1.3	4.7	3.5	-0.1	7,332	3.2	15.2	0.6	-0.9	7,379
Tanzania Mainland/ Zanzibar														
Mainland	11.9	34.8	-1.5	9,418	1.2	4.4	3.7	-0.0	9,382	2.7	13.6	0.8	-0.9	9,455
Urban	7.7	25.0	-1.2	2,384	0.8	3.8	4.1	0.0	2,366	1.4	9.1	1.2	-0.6	2,392
Rural	13.3	38.1	-1.6	7,034	1.3	4.6	3.5	-0.1	7,017	3.2	15.2	0.7	-0.9	7,063
Zanzibar	7.0	23.5	-1.2	261	1.5	7.1	2.8	-0.3	260	2.9	13.8	0.2	-0.9	261
Unguja	6.0	20.0	-1.1	165	1.1	6.0	2.1	-0.4	166	3.2	12.7	0.1	-0.9	166
Pemba	8.8	29.5	-1.3	95	2.2	8.9	4.0	-0.3	94	2.4	15.7	0.4	-0.9	95
Zone														
Western	12.2	32.1	-1.5	1,175	1.2	4.6	2.7	-0.1	1,169	2.7	14.1	0.5	-0.9	1,176
Northern	13.1	36.1	-1.4	923	1.6	4.4	6.0	-0.0	916	2.1	14.0	1.9	-0.8	927
Central	9.4	34.2	-1.5	1,089	1.8	5.6	2.5	-0.2	1,086	2.7	15.6	0.2	-1.0	1,090
Southern Highlands	15.5	44.8	-1.8	525	0.9	2.6	5.0	0.2	522	2.1	12.0	0.1	-0.9	531
Southern	11.3	36.7	-1.6	389	0.2	2.3	3.4	-0.0	389	2.7	13.0	0.1	-0.9	389
South West Highlands	15.7	43.1	-1.7	924	1.1	4.7	6.7	0.1	917	3.9	15.8	1.2	-0.9	930
Lake	12.6	35.7	-1.5	3,198	1.3	4.2	3.0	-0.0	3,198	2.9	14.1	0.6	-0.9	3,211
Eastern	6.6	22.9	-1.1	1,194	0.5	5.1	2.9	0.0	1,185	2.2	8.9	1.6	-0.6	1,201
Zanzibar	7.0	23.5	-1.2	261	1.5	7.1	2.8	-0.3	260	2.9	13.8	0.2	-0.9	261

(Continued…)

Table 11.1—*Continued*

Background characteristic	Height-for-age[1]				Weight-for-height					Weight-for-age				
	Percentage below -3 SD	Percentage below -2 SD[2]	Mean Z-score (SD)	Number of children	Percentage below -3 SD	Percentage below -2 SD[2]	Percentage above +2 SD	Mean Z-score (SD)	Number of children	Percentage below -3 SD	Percentage below -2 SD[2]	Percentage above +2 SD	Mean Z-score (SD)	Number of children
Region														
Dodoma	10.9	36.5	-1.7	419	1.9	5.5	1.8	-0.2	419	1.2	17.1	0.0	-1.1	419
Arusha	12.1	36.0	-1.4	331	2.0	6.5	4.0	-0.3	325	4.5	20.1	1.5	-1.1	334
Kilimanjaro	11.3	29.0	-1.1	183	2.2	3.1	9.0	0.3	183	0.0	9.2	3.3	-0.4	184
Tanga	14.8	39.4	-1.5	429	1.0	3.4	6.5	0.0	427	1.7	12.6	1.5	-0.9	430
Morogoro	9.0	33.4	-1.5	401	0.2	6.0	2.2	-0.0	399	3.0	11.5	0.9	-0.8	403
Pwani	11.0	30.0	-1.3	200	0.4	4.3	3.4	-0.0	199	1.8	11.5	0.5	-0.8	201
Dar es Salaam	3.8	14.6	-0.8	634	0.7	4.7	3.0	0.1	628	1.9	6.4	2.3	-0.4	639
Lindi	8.4	35.2	-1.5	180	0.4	1.2	3.6	0.0	180	0.5	10.1	0.3	-0.9	180
Mtwara	13.5	37.7	-1.7	214	0.0	3.2	3.6	-0.0	214	4.5	15.2	0.0	-0.9	214
Ruvuma	14.8	44.4	-1.8	244	1.0	2.6	2.9	0.1	243	1.9	12.3	0.0	-1.0	247
Iringa	15.5	41.6	-1.8	166	0.9	3.6	8.0	0.2	166	2.5	13.8	0.4	-0.9	168
Mbeya	12.2	37.7	-1.5	538	0.5	4.7	8.2	0.1	533	3.2	12.2	2.0	-0.8	536
Singida	4.9	29.2	-1.3	349	1.0	4.7	1.8	-0.3	347	2.1	11.7	0.4	-1.0	347
Tabora	10.3	27.9	-1.4	689	1.1	3.5	3.2	0.0	686	2.4	10.1	0.5	-0.7	692
Rukwa	23.6	56.3	-2.0	263	2.2	5.3	4.8	-0.0	261	5.4	23.0	0.0	-1.2	268
Kigoma	14.8	37.9	-1.6	524	1.6	6.0	2.1	-0.3	522	3.1	19.4	0.3	-1.1	522
Shinyanga	6.9	27.7	-1.3	454	0.7	3.3	3.1	-0.0	452	2.5	12.3	1.5	-0.8	457
Kagera	15.0	41.7	-1.7	550	0.5	2.3	1.9	-0.0	552	4.5	17.4	0.0	-1.0	552
Mwanza	14.6	38.6	-1.5	779	1.4	4.3	4.9	0.0	775	2.0	14.1	0.6	-0.8	777
Mara	8.2	29.2	-1.2	487	1.5	4.1	2.5	0.0	487	1.9	10.2	0.3	-0.7	489
Manyara	12.3	36.0	-1.5	336	2.4	6.4	3.9	-0.2	336	4.8	17.0	0.3	-1.0	338
Njombe	17.4	49.4	-1.9	124	0.4	1.3	4.9	0.3	122	1.9	9.7	0.0	-0.9	124
Katavi	13.9	38.8	-1.6	133	1.2	3.4	4.7	0.1	132	3.8	15.4	0.4	-0.9	136
Simiyu	10.6	33.3	-1.4	506	0.8	5.0	1.4	-0.2	505	2.3	14.6	1.0	-0.9	509
Geita	18.6	40.5	-1.7	453	2.7	6.2	3.1	0.0	459	4.6	16.2	0.4	-0.9	459
Kaskazini Unguja	6.4	23.4	-1.2	42	0.8	6.3	1.1	-0.4	42	4.5	14.3	0.3	-1.0	42
Kusini Unguja	5.3	27.2	-1.2	27	1.8	7.9	2.5	-0.4	27	3.6	17.7	0.4	-1.0	27
Mjini Magharibi	6.0	16.5	-1.0	96	1.1	5.4	2.5	-0.3	97	2.5	10.6	0.0	-0.7	96
Kaskazini Pemba	10.9	34.1	-1.4	51	2.2	8.7	4.9	-0.2	51	3.1	17.3	0.8	-1.0	51
Kusini Pemba	6.3	23.8	-1.2	45	2.2	9.0	2.8	-0.4	44	1.6	13.8	0.0	-0.9	44
Mothers' education														
No education	13.8	39.3	-1.6	1,830	1.4	5.3	3.0	-0.1	1,823	3.4	15.5	0.8	-1.0	1,836
Primary incomplete	15.5	39.5	-1.6	1,419	1.1	4.6	2.4	-0.0	1,418	3.4	15.8	0.6	-0.9	1,430
Primary complete	11.4	33.8	-1.5	4,905	1.2	4.4	3.9	-0.0	4,880	2.7	13.8	0.7	-0.9	4,920
Secondary+	6.9	26.1	-1.2	1,525	0.8	3.8	4.7	0.0	1,521	1.3	8.8	1.4	-0.7	1,530
Wealth quintile														
Lowest	14.7	39.9	-1.6	2,432	1.4	4.9	2.6	-0.1	2,432	3.9	17.4	0.5	-1.0	2,444
Second	14.6	39.4	-1.6	2,151	1.5	4.6	3.4	-0.1	2,140	3.2	15.4	0.4	-1.0	2,156
Middle	12.6	38.7	-1.6	1,928	1.0	5.1	4.3	-0.0	1,926	3.0	15.2	0.7	-0.9	1,939
Fourth	9.2	29.7	-1.4	1,797	1.4	4.0	3.7	-0.0	1,785	1.8	10.7	0.8	-0.8	1,797
Highest	4.9	19.2	-0.9	1,539	0.5	3.3	4.7	0.1	1,529	1.1	6.8	1.9	-0.5	1,550
Total	11.7	34.4	-1.5	9,846	1.2	4.5	3.6	-0.0	9,811	2.7	13.7	0.8	-0.9	9,886

Note: Each of the indices is expressed in standard deviation units (SD) from the median of the WHO Child Growth Standards adopted in 2006.
[1] Recumbent length is measured for children under age 2, or in the few cases when the age of the child is unknown and the child is less than 85 cm; standing height is measured for all other children.
[2] Includes children who are below -3 standard deviations (SD) from the WHO Child Growth standards population median.
[3] Excludes children whose mothers were not interviewed.
[4] First-born twins (triplets, etc.) are counted as first births because they do not have a previous birth interval.
[5] Includes children whose mothers are deceased.
[6] Excludes children whose mothers were not weighed and measured, children whose mothers were not interviewed, and children whose mothers are pregnant or gave birth within the preceding 2 months. Mother's nutritional status in terms of BMI (Body Mass Index) is presented in Table 11.10.1.
[7] For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire.

Table 11.2 Initial breastfeeding

Among last-born children who were born in the 2 years preceding the survey, percentage who were ever breastfed and percentages who started breastfeeding within 1 hour and within 1 day of birth; and among last-born children born in the 2 years preceding the survey who were ever breastfed, percentage who received a prelacteal feed, according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Among last-born children born in the past 2 years:				Among last-born children born in the past 2 years who were ever breastfed:	
	Percentage ever breastfed	Percentage who started breastfeeding within 1 hour of birth	Percentage who started breastfeeding within 1 day of birth[1]	Number of last-born children	Percentage who received a prelacteal feed[2]	Number of last-born children ever breastfed
Sex						
Male	98.1	50.2	92.4	2,129	14.6	2,090
Female	98.6	52.3	93.2	2,038	13.0	2,009
Assistance at delivery						
Health professional[3]	98.4	57.3	94.3	2,686	10.1	2,642
Traditional birth attendant	98.9	58.1	95.5	341	15.8	337
Other	97.9	37.6	89.7	913	23.1	894
No one	99.3	23.1	83.5	228	18.4	226
Place of delivery						
Health facility	98.3	57.2	94.3	2,707	10.3	2,663
At home	98.3	40.0	89.9	1,399	20.5	1,376
Other	99.1	41.3	94.3	61	16.8	60
Residence						
Urban	97.6	54.3	92.5	1,155	12.0	1,127
Rural	98.6	50.0	92.9	3,013	14.5	2,971
Tanzania Mainland/ Zanzibar						
Mainland	98.4	51.3	92.8	4,061	13.6	3,996
Urban	97.6	54.6	92.5	1,128	11.7	1,101
Rural	98.7	50.0	92.9	2,933	14.3	2,895
Zanzibar	97.1	46.8	93.8	106	22.7	103
Unguja	98.7	43.5	94.6	68	24.5	67
Pemba	94.3	52.7	92.3	38	19.3	36
Zone						
Western	98.2	45.0	96.6	534	22.1	525
Northern	98.8	73.2	96.6	399	8.3	394
Central	99.4	72.1	98.2	486	12.8	483
Southern Highlands	99.1	64.4	93.9	218	10.1	216
Southern	96.5	48.1	90.1	148	9.6	143
South West Highlands	98.1	51.0	90.9	415	5.1	407
Lake	98.1	34.9	88.5	1,280	17.0	1,256
Eastern	98.4	57.0	93.2	581	11.2	571
Zanzibar	97.1	46.8	93.8	106	22.7	103
Region						
Dodoma	99.1	68.3	98.3	188	16.1	186
Arusha	97.3	63.7	96.4	141	9.4	137
Kilimanjaro	98.5	73.7	95.0	67	4.0	66
Tanga	100.0	80.0	97.3	190	9.0	190
Morogoro	99.0	63.2	95.7	165	4.0	163
Pwani	99.1	67.6	96.6	86	10.1	85
Dar es Salaam	97.9	51.1	91.0	330	15.0	323
Lindi	97.8	42.4	93.8	63	5.3	62
Mtwara	95.5	52.3	87.4	85	12.9	81
Ruvuma	98.5	63.3	93.1	101	10.4	99
Iringa	100.0	58.2	95.3	68	11.1	68
Mbeya	97.4	44.1	88.5	240	3.4	233
Singida	100.0	72.9	99.5	141	9.7	141
Tabora	98.5	39.4	96.4	318	31.3	313
Rukwa	99.1	61.7	96.2	120	2.0	119
Kigoma	97.9	53.3	96.8	217	8.6	212
Shinyanga	97.5	33.0	93.4	194	24.4	190
Kagera	99.1	55.7	99.1	203	10.0	201
Mwanza	96.3	36.3	80.5	290	12.7	279
Mara	98.3	29.8	90.4	199	13.3	195
Manyara	99.0	75.9	96.9	157	11.6	155
Njombe	99.0	75.0	93.6	50	7.9	49
Katavi	99.1	57.3	89.8	56	18.7	55
Simiyu	99.2	26.0	86.7	202	24.2	200
Geita	99.4	27.6	84.4	192	19.2	190
Kaskazini Unguja	96.2	41.9	90.6	18	19.8	17
Kusini Unguja	100.0	46.4	98.2	11	23.6	11
Mjini Magharibi	99.5	43.4	95.5	39	26.7	39
Kaskazini Pemba	92.0	45.6	89.6	21	12.2	19
Kusini Pemba	96.9	61.1	95.6	17	27.2	17

(Continued…)

Table 11.2—*Continued*

Background characteristic	Among last-born children born in the past 2 years: Percentage ever breastfed	Percentage who started breastfeeding within 1 hour of birth	Percentage who started breastfeeding within 1 day of birth[1]	Number of last-born children	Among last-born children born in the past 2 years who were ever breastfed: Percentage who received a prelacteal feed[2]	Number of last-born children ever breastfed
Mother's education						
No education	98.4	46.5	93.4	801	19.3	789
Primary incomplete	98.2	51.7	92.4	2,661	12.7	2,614
Primary complete	98.8	55.4	93.7	663	12.0	655
Secondary+	100.0	43.0	96.1	41	11.4	41
Wealth quintile						
Lowest	99.3	48.1	93.1	1,011	17.8	1,004
Second	97.9	48.1	92.1	876	13.6	858
Middle	97.8	50.0	92.8	782	12.9	765
Fourth	98.2	55.9	93.5	794	11.6	779
Highest	98.5	55.6	92.6	704	11.9	693
Total	98.4	51.2	92.8	4,167	13.8	4,099

Note: Table is based on last-born children born in the 2 years preceding the survey regardless of whether the children are living or dead at the time of interview.
[1] Includes children who started breastfeeding within 1 hour of birth.
[2] Children given something other than breast milk during the first 3 days of life.
[3] Doctor, assistant medical officer, clinical officer, assistant clinical officer, nurse/midwife, and MCH aide.

Table 11.3.1 Breastfeeding status by age

Percent distribution of youngest children age 2 who are living with their mother by breastfeeding status and the percentage currently breastfeeding; and the percentage of all children under age 2 using a bottle with a nipple, according to age in months, Tanzania DHS-MIS 2015-16

Age in months	Breastfeeding status: Not breast-feeding	Exclusively breastfed	Breast-feeding and consuming plain water only	Breast-feeding and consuming non milk liquids[1]	Breast-feeding and consuming other milk	Breast-feeding and consuming comple-mentary foods	Total	Percentage currently breast-feeding	Number of youngest children under age 2 living with their mother	Percentage using a bottle with a nipple	Number of all children under age 2
0-1	1.1	84.0	7.7	0.3	1.2	5.8	100.0	98.9	375	1.4	381
2-3	2.7	58.8	14.8	1.2	6.8	15.6	100.0	97.3	343	2.6	347
4-5	2.0	26.6	10.3	4.6	5.4	51.1	100.0	98.0	281	5.7	284
6-8	1.9	3.0	2.1	0.7	2.2	90.2	100.0	98.1	525	6.2	529
9-11	1.7	0.0	0.5	0.4	0.6	96.9	100.0	98.3	459	7.8	470
12-17	10.9	0.1	0.2	0.0	0.0	88.8	100.0	89.1	1,073	3.8	1,109
18-23	47.3	0.0	0.0	0.0	0.0	52.7	100.0	52.7	925	2.7	1,025
0-3	1.9	72.0	11.1	0.7	3.9	10.5	100.0	98.1	718	1.9	728
0-5	1.9	59.2	10.9	1.8	4.3	21.9	100.0	98.1	998	3.0	1,012
6-9	2.0	2.3	1.9	0.6	2.0	91.1	100.0	98.0	676	7.3	683
12-15	7.9	0.1	0.3	0.0	0.0	91.7	100.0	92.1	718	4.3	735
12-23	27.8	0.0	0.1	0.0	0.0	72.1	100.0	72.2	1,999	3.3	2,134
20-23	56.6	0.0	0.0	0.0	0.0	43.4	100.0	43.4	613	2.8	687

Note: Breastfeeding status refers to a "24-hour" period (yesterday and last night). Children who are classified as breastfeeding and consuming plain water only consumed no liquid or solid supplements. The categories of not breastfeeding, exclusively breastfed, breastfeeding and consuming plain water, non-milk liquids, other milk, and complementary foods (solids and semi-solids) are hierarchical and mutually exclusive, and their total percentages equal 100. Thus children who receive breast milk and non-milk liquids and who do not receive other milk and who do not receive complementary foods are classified in the non-milk liquid category although they may also receive plain water. Any children who receive complementary food are classified in that category if they are breastfeeding as well.
[1] Non-milk liquids include juice, juice drinks, clear broth, or other liquids.

Table 11.3.2 Breastfeeding status by background characteristics

Percent distribution of youngest children under age 2 two who are living with their mother by breastfeeding status and the percentage currently breastfeeding; and the percentage of all children under age 2 using a bottle with a nipple, according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristics	Breastfeeding status							Percentage currently breast-feeding	Number of youngest child under age 2 living with their mother	Percentage using a bottle with a nipple	Number of all children under age 2
	Not breast-feeding	Exclu-sively breastfed	Breast-feeding and consu-ming plain water only	Breast-feeding and consu-ming non milk liquids[1]	Breast-feeding and consu-ming other milk	Breast-feeding and consu-ming comple-mentary foods	Total				
Tanznaia Mainland/ Zanzibar											
Mainland	14.9	15.5	3.0	0.5	1.4	64.7	100.0	85.1	3,879	3.9	4,037
Urban	17.5	13.7	3.2	0.7	1.2	63.7	100.0	82.5	1,061	9.6	1,119
Rural	13.9	16.2	2.9	0.5	1.5	65.1	100.0	86.1	2,818	1.7	2,918
Zanzibar	15.0	6.0	7.9	2.3	2.2	66.7	100.0	85.0	102	11.5	107
Unguja	11.1	6.3	5.4	2.2	3.2	71.8	100.0	88.9	66	13.3	69
Pemba	21.9	5.6	12.4	2.3	0.3	57.4	100.0	78.1	36	8.4	38
Zone											
Western	15.0	17.5	1.0	0.0	1.4	65.1	100.0	85.0	512	1.0	528
Northern	9.4	14.9	3.9	0.0	3.9	67.9	100.0	90.6	381	7.3	404
Central	9.1	17.0	2.1	0.3	1.5	69.9	100.0	90.9	467	3.2	482
Southern Highlands	13.7	15.4	2.5	0.4	0.0	67.9	100.0	86.3	210	0.4	217
Southern	14.3	8.7	11.0	2.9	0.5	62.6	100.0	85.7	139	1.9	143
South West Highlands	15.8	17.1	1.6	0.0	0.2	65.3	100.0	84.2	400	3.3	407
Lake	17.4	17.4	3.5	0.6	1.6	59.5	100.0	82.6	1,222	2.1	1,288
Eastern	17.6	9.2	3.0	1.3	0.8	68.1	100.0	82.4	548	11.1	568
Zanzibar	15.0	6.0	7.9	2.3	2.2	66.7	100.0	85.0	102	11.5	107
Region											
Dodoma	4.8	17.6	1.5	0.0	0.0	76.2	100.0	95.2	177	3.4	181
Arusha	7.7	20.3	4.6	0.0	3.1	64.2	100.0	92.3	135	5.7	144
Kilimanjaro	4.7	14.6	1.5	0.0	7.8	71.5	100.0	95.3	65	8.8	70
Tanga	12.3	10.9	4.3	0.0	3.2	69.3	100.0	87.7	181	7.9	190
Morogoro	19.1	12.4	2.0	0.0	2.3	64.2	100.0	80.9	156	4.6	163
Pwani	15.7	3.3	4.1	0.0	0.0	76.8	100.0	84.3	81	2.0	84
Dar es Salaam	17.2	9.1	3.2	2.4	0.3	67.7	100.0	82.8	311	16.8	321
Lindi	14.4	5.4	12.3	0.0	1.2	66.8	100.0	85.6	59	2.4	60
Mtwara	14.3	11.1	10.1	5.1	0.0	59.4	100.0	85.7	80	1.6	83
Ruvuma	14.1	14.2	2.9	0.9	0.0	67.9	100.0	85.9	99	0.0	102
Iringa	13.9	15.3	2.4	0.0	0.0	68.3	100.0	86.1	65	1.4	69
Mbeya	16.7	17.0	1.2	0.0	0.0	65.0	100.0	83.3	227	5.6	229
Singida	13.7	18.4	2.3	0.7	1.3	63.6	100.0	86.3	137	0.6	142
Tabora	17.9	19.1	1.0	0.0	1.6	60.3	100.0	82.1	302	1.1	314
Rukwa	14.8	16.9	1.9	0.0	0.0	66.5	100.0	85.2	119	0.0	123
Kigoma	10.8	15.0	1.0	0.0	1.2	72.0	100.0	89.2	209	0.8	214
Shinyanga	13.3	22.6	4.2	0.0	0.5	59.5	100.0	86.7	185	2.5	194
Kagera	16.0	17.4	2.7	2.0	1.5	60.4	100.0	84.0	198	2.1	200
Mwanza	16.8	19.0	4.2	0.0	0.5	59.5	100.0	83.2	274	2.5	294
Mara	20.5	13.6	0.9	0.0	5.4	59.6	100.0	79.5	182	3.0	195
Manyara	10.0	15.1	2.7	0.5	3.6	68.2	100.0	90.0	153	5.4	160
Njombe	12.8	18.1	1.6	0.0	0.0	67.6	100.0	87.2	46	0.0	46
Katavi	13.9	18.0	2.7	0.0	1.4	64.1	100.0	86.1	53	0.7	55
Simiyu	17.8	13.1	3.6	0.8	1.1	63.5	100.0	82.2	196	1.0	206
Geita	20.6	18.2	4.8	0.9	1.4	54.1	100.0	79.4	187	1.3	198
Kaskazini Unguja	7.9	6.4	5.1	4.2	4.8	71.6	100.0	92.1	17	12.1	18
Kusini Unguja	6.7	9.7	5.4	1.8	0.0	76.5	100.0	93.3	11	8.6	11
Mjini Magharibi	13.8	5.3	5.5	1.4	3.4	70.6	100.0	86.2	38	15.1	40
Kaskazini Pemba	27.9	5.4	11.4	2.0	0.0	53.4	100.0	72.1	20	8.4	20
Kusini Pemba	15.0	5.9	13.6	2.8	0.7	62.1	100.0	85.0	17	8.5	18
Total	14.9	15.3	3.1	0.6	1.4	64.7	100.0	85.1	3,981	4.1	4,144

Table 11.4 Median duration of breastfeeding

Median duration of any breastfeeding, exclusive breastfeeding, and predominant breastfeeding among children born in the 3 years preceding the survey, by background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Median duration (months) of breastfeeding among children born in the past 3 years[1]		
	Any breast-feeding	Exclusive breastfeeding	Predominant breast-feeding[2]
Sex			
Male	19.6	3.0	3.7
Female	20.6	3.0	3.8
Residence			
Urban	19.3	2.5	3.5
Rural	20.3	3.2	3.8
Tanzania Mainland/ Zanzibar			
Mainland	20.0	3.0	3.8
Urban	19.3	2.6	3.5
Rural	20.2	3.2	3.8
Zanzibar	20.6	a	3.3
Unguja	21.1	a	3.2
Pemba	18.9	a	3.6
Zone			
Western	20.4	4.0	4.2
Northern	22.0	(2.5)	3.3
Central	21.9	3.6	4.2
Southern Highlands	19.7	2.8	3.4
Southern	19.7	a	(5.1)
South West Highlands	19.4	3.4	3.7
Lake	18.8	3.1	3.9
Eastern	19.7	(2.0)	3.2
Zanzibar	20.6	a	3.3
Mothers' education			
No education	20.7	2.8	3.5
Primary incomplete	20.2	(2.2)	3.7
Primary complete	20.0	3.2	3.8
Secondary+	19.2	3.1	3.8
Wealth quintile			
Lowest	20.6	3.0	3.7
Second	20.0	3.3	3.9
Middle	20.1	2.9	3.8
Fourth	19.6	3.0	3.8
Highest	19.5	2.8	3.7
Total	20.0	3.0	3.8
Mean for all children	20.1	3.9	4.6

Notes: Median and mean durations are based on the distributions at the time of the survey of the proportion of births by months since birth. Includes children living and deceased at the time of the survey. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. a = Omitted because less than 50% of children were breastfed before reaching the reference period.

[1] It is assumed that non-last-born children and last-born children not currently living with the mother are not currently breastfeeding.

[2] Either exclusively breastfed or received breast milk and plain water, and/or non-milk liquids only.

Table 11.5 Foods and liquids consumed by children in the day or night preceding the interview

Percentage of youngest children age under 2 who are living with the mother by type of foods consumed in the day or night preceding the interview, according to breastfeeding status and age, Tanzania DHS-MIS 2015-16

	Liquids			Solid or semi-solid foods										
Age in months	Infant formula	Other milk[1]	Other liquids[2]	Fortified baby foods	Food made from grains[3]	Fruits and vegetables rich in vitamin A[4]	Other fruits and vege-tables	Food made from roots and tubers	Food made from legumes and nuts	Meat, fish, poultry	Eggs	Cheese, yogurt, other milk product	Any solid or semi-solid food	Number of children under age 2
BREASTFEEDING CHILDREN														
0-1	0.3	1.8	1.2	0.7	5.0	0.5	0.0	0.5	0.0	0.5	0.0	0.1	5.8	371
2-3	0.8	7.7	5.2	0.8	14.6	0.6	0.6	0.0	0.8	0.7	0.0	0.3	16.0	333
4-5	1.0	10.1	22.7	5.8	43.6	5.3	2.2	1.8	3.1	2.4	0.0	1.1	52.1	275
6-8	1.6	17.9	27.6	10.1	75.7	39.4	10.7	15.1	25.5	15.5	3.7	6.5	91.9	516
9-11	1.8	19.7	33.0	15.1	78.2	60.4	23.3	30.8	36.9	27.2	8.2	8.6	98.5	451
12-17	0.7	16.4	38.9	11.6	86.5	72.4	22.0	28.6	40.9	36.5	9.6	8.1	99.7	956
18-23	0.7	16.2	35.9	11.6	87.4	75.0	20.7	25.8	37.9	34.2	5.5	6.7	100.0	487
6-23	1.1	17.3	34.8	11.9	82.8	63.6	19.6	25.6	36.2	29.8	7.3	7.5	97.9	2,410
Total	1.0	14.1	27.2	9.1	64.4	45.8	14.1	18.4	26.1	21.5	5.2	5.5	76.0	3,390
NONBREASTFEEDING CHILDREN														
0-1	*	*	*	*	*	*	*	*	*	*	*	*	*	4
2-3	*	*	*	*	*	*	*	*	*	*	*	*	*	9
4-5	*	*	*	*	*	*	*	*	*	*	*	*	*	6
6-8	*	*	*	*	*	*	*	*	*	*	*	*	*	10
9-11	*	*	*	*	*	*	*	*	*	*	*	*	*	8
12-17	0.4	20.5	31.4	10.7	88.9	69.8	28.3	35.9	37.4	45.2	4.3	8.5	97.0	117
18-23	0.2	17.9	44.1	11.1	86.4	77.2	21.2	31.8	40.4	42.9	8.6	9.0	98.4	438
6-23	1.2	19.3	42.3	12.0	86.1	75.2	22.9	32.7	40.3	43.3	7.9	8.9	97.8	573
Total	1.3	18.7	41.3	11.8	84.2	72.9	22.2	31.8	39.2	41.9	7.6	8.6	95.5	592

Note: Breastfeeding status and food consumed refer to a "24-hour" period (yesterday and last night).
[1] Other milk includes fresh, tinned, and powdered cow or other animal milk.
[2] Doesn't include plain water. Includes juice, juice drinks, clear broth, or other non-milk liquids.
[3] Includes fortified baby food.
[4] Includes [list fruits and vegetables included in the questionnaire such as pumpkin, red or yellow yams or squash, carrots, red sweet potatoes, dark green leafy vegetables, mangoes, papayas, and other locally grown fruits and vegetables that are rich in vitamin A].

Table 11.6 Infant and young child feeding (IYCF) practices

Percentage of youngest children age 6-23 months living with their mother who are fed according to three IYCF feeding practices based on breastfeeding status, number of food groups, and times they are fed during the day or night preceding the survey, by background characteristics, Tanzania DHS-MIS 2015-16

	Among breastfed children age 6-23 months, percentage fed:				Among non-breastfed children age 6-23 months, percentage fed:					Among all children age 6-23 months, percentage fed:				
Background characteristic	4+ food groups[1]	Minimum meal frequency[2]	Both 4+ food groups and minimum meal frequency	Number of breast-fed children 6-23 months	Milk or milk products[3]	4+ food groups[1]	Minimum meal frequency[4]	With 3 IYCF practices[5]	Number of non-breastfed children 6-23 months	Breast-milk, milk, or milk products[6]	4+ food groups[1]	Minimum meal frequency[7]	With 3 IYCF practices	Number of all children 6-23 months
Age in months														
6-8	11.3	66.0	9.3	516	*	*	*	*	10	99.9	12.0	66.3	10.0	525
9-11	24.0	35.8	8.4	451	*	*	*	*	8	99.0	24.4	36.2	8.7	459
12-17	29.9	38.0	12.1	956	18.9	36.7	35.3	6.2	117	91.1	30.7	37.7	11.5	1,073
18-23	25.6	34.7	7.0	487	12.0	33.7	23.2	2.0	438	58.4	29.4	29.2	4.6	925
Sex														
Male	23.6	43.6	9.8	1,200	13.6	36.5	26.6	2.8	306	82.4	26.2	40.2	8.4	1,506
Female	24.3	42.2	9.8	1,210	17.1	32.8	27.9	5.1	266	85.1	25.8	39.6	9.0	1,477
Residence														
Urban	36.4	37.3	13.2	627	18.3	46.2	33.2	7.8	181	81.7	38.6	36.4	12.0	808
Rural	19.6	44.9	8.6	1,783	13.8	29.5	24.4	2.1	391	84.5	21.3	41.2	7.4	2,174
Tanzania Mainland/ Zanzibar														
Mainland	24.0	42.7	9.7	2,346	15.3	34.6	27.4	3.9	558	83.7	26.0	39.8	8.6	2,904
Urban	36.6	36.6	12.9	611	18.0	46.1	33.0	7.6	178	81.5	38.7	35.8	11.7	789
Rural	19.5	44.9	8.6	1,735	14.0	29.3	24.7	2.1	381	84.5	21.3	41.3	7.4	2,116
Zanzibar	23.4	49.4	13.8	64	12.9	40.1	19.3	4.7	14	84.1	26.4	43.9	12.1	79
Unguja	27.0	56.6	18.3	45	(23.5)	(45.2)	(36.3)	(9.3)	7	89.3	29.5	53.7	17.1	52
Pemba	15.2	33.0	3.5	20	(2.0)	(34.9)	(2.0)	(0.0)	7	74.0	20.4	24.8	2.5	27
Zone														
Western	19.8	55.5	9.8	322	18.0	24.6	41.8	3.3	76	84.4	20.7	52.9	8.6	398
Northern	35.3	39.0	13.1	238	*	*	*	*	32	91.5	35.6	37.0	11.6	270
Central	19.8	36.6	5.8	306	(17.3)	(28.9)	(18.8)	(2.8)	42	89.9	20.9	34.4	5.5	349
Southern Highlands	24.1	30.6	7.5	123	(9.7)	(48.2)	(19.5)	(6.1)	28	83.2	28.6	28.5	7.2	151
Southern	21.3	40.2	10.6	84	*	*	*	*	20	81.2	22.6	35.4	8.6	104
South West Highlands	25.4	28.4	12.2	243	11.6	44.2	18.5	2.3	62	82.1	29.2	26.4	10.2	305
Lake	20.9	49.6	9.0	692	12.5	27.4	25.9	2.0	204	80.1	22.4	44.2	7.4	896
Eastern	29.6	40.0	10.9	337	20.7	50.9	35.2	11.3	94	82.7	34.2	38.9	11.0	431
Zanzibar	23.4	49.4	13.8	64	12.9	40.1	19.3	4.7	14	84.1	26.4	43.9	12.1	79
Region														
Dodoma	29.3	33.9	11.3	122	*	*	*	*	8	94.4	29.6	32.6	11.5	130
Arusha	41.9	24.8	13.4	88	*	*	*	*	10	96.5	40.7	26.0	12.0	98
Kilimanjaro	50.5	45.7	21.4	46	*	*	*	*	3	95.5	49.0	42.9	20.1	49
Tanga	23.1	48.0	9.3	104	*	*	*	*	19	85.9	26.2	43.5	7.9	123
Morogoro	8.7	51.3	6.9	88	*	*	*	*	28	75.7	19.4	43.4	5.2	117
Pwani	7.9	53.0	4.5	52	*	*	*	*	12	82.6	9.5	47.8	3.7	64
Dar es Salaam	44.7	31.4	14.4	197	(34.4)	(57.8)	(46.1)	(19.8)	54	85.9	47.5	34.6	15.5	250
Lindi	(32.8)	(65.5)	(21.5)	35	*	*	*	*	8	81.4	32.9	56.7	17.3	44
Mtwara	(12.9)	(22.0)	(2.7)	49	*	*	*	*	11	81.1	15.2	19.9	2.2	60
Ruvuma	20.2	41.4	11.8	53	*	*	*	*	13	81.6	26.1	37.2	11.0	66
Iringa	27.5	20.2	7.2	41	*	*	*	*	9	83.2	27.9	18.0	7.4	50
Mbeya	21.2	13.5	9.0	140	*	*	*	*	38	82.3	26.5	14.9	7.7	178
Singida	17.2	33.8	2.9	83	*	*	*	*	19	83.2	20.3	30.3	2.3	102
Tabora	16.3	76.5	10.8	176	(20.4)	(23.8)	(54.4)	(4.7)	53	81.5	18.0	71.3	9.4	229
Rukwa	32.8	40.9	14.8	73	(0.0)	(42.8)	(13.1)	(0.0)	17	81.4	34.7	35.7	12.1	89
Kigoma	24.1	30.3	8.7	146	*	*	*	*	23	88.2	24.4	27.9	7.5	169
Shinyanga	18.0	80.5	13.8	108	(19.4)	(25.5)	(44.4)	(3.5)	25	85.0	19.4	73.8	11.9	132
Kagera	28.4	40.6	14.4	123	*	*	*	*	32	81.1	28.6	38.1	13.0	155
Mwanza	20.0	37.3	3.7	151	*	*	*	*	41	79.4	18.6	32.8	2.9	193
Mara	17.9	50.3	6.3	98	(15.6)	(25.0)	(24.2)	(2.5)	37	76.7	19.9	43.1	5.2	135
Manyara	10.5	42.0	1.7	101	*	*	*	*	15	90.8	11.8	40.0	1.4	116
Njombe	26.3	25.4	0.0	29	*	*	*	*	6	86.1	34.1	27.0	0.0	35
Katavi	26.9	66.4	20.8	31	(8.6)	(36.7)	(23.5)	(3.6)	7	82.6	28.8	58.2	17.5	38
Simiyu	17.6	58.6	10.1	115	(23.2)	(34.6)	(33.5)	(0.0)	34	82.5	21.5	52.9	7.8	149
Geita	22.8	34.9	6.5	97	(8.6)	(38.7)	(16.7)	(0.0)	35	75.7	27.0	30.0	4.7	132
Kaskazini Unguja	18.4	43.1	5.1	11	*	*	*	*	1	90.9	17.7	39.9	4.6	13
Kusini Unguja	31.3	61.4	20.9	8	*	*	*	*	1	92.4	31.0	56.7	19.3	8
Mjini Magharibi	29.5	61.1	23.5	25	*	*	*	*	5	87.8	34.0	58.6	21.6	31
Kaskazini Pemba	13.5	32.9	1.7	9	(0.0)	(32.3)	(0.0)	(0.0)	5	66.8	19.7	22.0	1.2	14
Kusini Pemba	16.7	33.1	5.0	10	*	*	*	*	3	81.7	21.1	27.8	4.0	13

(Continued…)

Table 11.6—*Continued*

Background characteristic	Among breastfed children age 6-23 months, percentage fed: 4+ food groups[1]	Minimum meal frequency[2]	Both 4+ food groups and minimum meal frequency	Number of breast-fed children 6-23 months	Among non-breastfed children age 6-23 months, percentage fed: Milk or milk products[3]	4+ food groups[1]	Minimum meal frequency[4]	With 3 IYCF practices[5]	Number of non-breastfed children 6-23 months	Among all children age 6-23 months, percentage fed: Breast-milk, milk, or milk products[6]	4+ food groups[1]	Minimum meal frequency[7]	With 3 IYCF practices	Number of all children 6-23 months
Education														
No education	13.4	46.3	6.4	491	8.8	27.3	20.2	1.0	96	85.1	15.7	42.1	5.5	587
Primary incomplete	15.8	46.8	7.4	293	16.5	23.1	23.5	4.5	83	81.6	17.4	41.6	6.7	376
Primary complete	24.7	39.9	9.1	1,225	14.7	32.0	26.2	2.2	284	83.9	26.1	37.4	7.8	1,509
Secondary+	40.5	44.9	18.0	401	21.4	57.4	38.5	10.5	109	83.2	44.1	43.6	16.4	511
Wealth quintile														
Lowest	14.8	46.2	7.5	598	11.3	13.9	20.9	0.9	117	85.4	14.6	42.1	6.4	715
Second	15.4	43.3	6.8	511	15.5	28.6	24.7	1.6	126	83.3	18.0	39.6	5.8	637
Middle	21.1	46.3	8.7	459	10.2	34.1	23.2	0.0	102	83.7	23.5	42.1	7.1	561
Fourth	30.4	38.2	10.6	438	13.0	35.7	26.2	4.5	115	81.9	31.5	35.7	9.4	554
Highest	44.5	38.8	17.5	404	25.9	63.0	41.0	12.3	113	83.8	48.6	39.3	16.4	516
Total	23.9	42.9	9.8	2,410	15.2	34.8	27.2	3.9	573	83.7	26.0	39.9	8.7	2,983

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Food groups: a. infant formula, milk other than breast milk, cheese or yogurt or other milk products; b. foods made from grains, roots, and tubers, including porridge and fortified baby food from grains; c. vitamin A-rich fruits and vegetables (and red palm oil); d. other fruits and vegetables; e. eggs; f. meat, poultry, fish, and shellfish (and organ meats); g. legumes and nuts.

[2] For breastfed children, minimum meal frequency is receiving solid or semi-solid food at least twice a day for infants age 6-8 months and at least three times a day for children age 9-23 months.

[3] Includes two or more feedings of commercial infant formula, fresh, tinned, and powdered animal milk, and yogurt.

[4] For non-breastfed children age 6-23 months, minimum meal frequency is receiving solid or semi-solid food or milk feeds at least 4 times a day.

[5] Non-breastfed children age 6-23 months are considered to be fed with a minimum standard of three Infant and Young Child Feeding Practices if they receive other milk or milk products at least twice a day, receive the minimum meal frequency, and receive solid or semi-solid foods from at least four food groups not including the milk or milk products food group.

[6] Breastfeeding, or not breastfeeding and receiving two or more feedings of commercial infant formula, fresh, tinned and powdered animal milk, and yogurt.

[7] Children are fed the minimum recommended number of times per day according to their age and breastfeeding status as described in footnotes 2 and 4.

Table 11.7 Prevalence of anaemia in children

Percentage of children age 6-59 months classified as having anaemia, by background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Anaemia status by haemoglobin level				
	Any anaemia (<11.0 g/dl)	Mild anaemia (10.0-10.9 g/dl)	Moderate anaemia (7.0-9.9 g/dl)	Severe anaemia (< 7.0 g/dl)	Number of children age 6-59 months
Age in months					
6-8	78.1	31.8	43.6	2.6	516
9-11	80.6	28.7	47.4	4.4	457
12-17	79.0	30.3	45.7	2.9	1,105
18-23	66.9	29.8	34.9	2.2	1,037
24-35	57.1	27.8	28.1	1.2	1,917
36-47	45.2	22.7	21.4	1.1	1,921
48-59	42.8	22.9	19.2	0.7	1,924
Sex					
Male	59.5	26.2	31.4	1.9	4,471
Female	56.0	26.7	27.8	1.4	4,407
Mother's interview status					
Interviewed	58.8	26.7	30.3	1.7	7,701
Not interviewed but in household	50.9	22.3	28.7	0.0	186
Not interviewed and not in the household[1]	50.7	25.1	24.4	1.2	990
Residence					
Urban	53.5	26.1	26.3	1.0	2,229
Rural	59.2	26.6	30.7	1.8	6,648
Tanzania Mainland/ Zanzibar					
Mainland	57.4	26.2	29.5	1.7	8,495
Urban	53.2	25.9	26.2	1.1	2,128
Rural	58.8	26.2	30.6	1.9	6,366
Zanzibar	64.5	30.6	33.2	0.6	238
Unguja	61.8	29.4	31.6	0.7	151
Pemba	69.1	32.6	36.0	0.5	86
Zone					
Western	64.0	24.9	36.2	3.0	1,065
Northern	50.8	23.1	25.7	2.0	815
Central	45.5	24.8	19.8	0.9	965
Southern Highlands	44.4	25.9	18.1	0.4	470
Southern	59.4	29.2	29.3	0.9	355
South West Highlands	54.3	29.1	24.8	0.4	845
Lake	62.1	25.7	33.9	2.5	2,893
Eastern	61.2	29.0	31.6	0.6	1,085
Zanzibar	64.5	30.6	33.2	0.6	238
Region					
Dodoma	48.3	26.4	21.4	0.5	374
Arusha	57.3	20.5	34.3	2.6	296
Kilimanjaro	47.9	25.0	22.5	0.4	167
Tanga	47.7	24.7	20.7	2.2	370
Morogoro	65.7	31.3	33.6	0.8	362
Pwani	57.5	30.6	25.9	1.0	181
Dar es Salaam	59.5	27.1	32.1	0.3	575
Lindi	61.1	29.7	30.4	1.1	165
Mtwara	58.6	29.8	28.0	0.8	194
Ruvuma	51.8	27.1	24.0	0.8	213
Iringa	40.3	28.1	12.2	0.0	151
Mbeya	55.3	29.1	25.9	0.4	495
Singida	36.6	24.8	11.8	0.0	309
Tabora	60.9	27.6	30.4	2.8	616
Rukwa	53.4	29.5	23.5	0.4	237
Kigoma	68.3	22.3	43.1	2.9	484
Shinyanga	70.9	26.8	40.0	4.2	405
Kagera	58.4	27.5	30.1	0.8	508
Mwanza	62.6	24.4	35.5	2.7	698
Mara	57.2	25.9	28.6	2.7	441
Manyara	51.9	23.4	26.3	2.3	297
Njombe	36.9	20.0	16.9	0.0	112
Katavi	54.4	28.8	25.0	0.6	120
Simiyu	57.0	26.1	29.9	1.0	460
Geita	68.2	25.6	38.4	4.2	409
Kaskazini Unguja	64.8	31.5	32.7	0.6	38
Kusini Unguja	62.4	27.6	33.2	1.5	25
Mjini Magharibi	60.5	29.0	31.0	0.5	89
Kaskazini Pemba	70.2	30.2	39.2	0.7	46
Kusini Pemba	67.9	34.9	32.7	0.3	41

(Continued…)

Table 11.7—*Continued*

Background characteristic	Anaemia status by haemoglobin level				
	Any anaemia (<11.0 g/dl)	Mild anaemia (10.0-10.9 g/dl)	Moderate anaemia (7.0-9.9 g/dl)	Severe anaemia (< 7.0 g/dl)	Number of children age 6-59 months
Education[2]					
No education	65.9	26.3	36.8	2.8	1,666
Primary incomplete	59.6	24.3	33.1	2.2	1,279
Primary complete	55.0	26.4	27.2	1.4	4,417
Secondary+	54.0	27.7	25.4	0.8	1,371
Wealth quintile					
Lowest	63.7	25.3	36.2	2.1	2,171
Second	60.1	26.0	31.5	2.7	1,952
Middle	58.4	29.5	28.1	0.8	1,757
Fourth	52.6	26.8	24.5	1.3	1,597
Highest	50.1	24.6	24.6	0.9	1,400
Total	57.7	26.5	29.6	1.6	8,877

Note: Table is based on children who stayed in the household on the night before the interview and who were tested for anaemia. Prevalence of anaemia, based on haemoglobin levels, is adjusted for altitude using formulas in CDC, 1998. Haemoglobin in grammes per decilitre (g/dl).
[1] Includes children whose mothers are deceased.
[2] For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire.

Table 11.8 Nutritional status of women

Among women age 15-49, the percentage with height under 145 cm, mean Body Mass Index (BMI), and the percentage with specific BMI levels, by background characteristics, Tanzania DHS-MIS 2015-16

	Height		Body Mass Index[1]								
Background characteristic	Percent-age below 145 cm	Number of women	Mean Body Mass Index (BMI)	18.5-24.9 (Total normal)	<18.5 (Total thin)	17.0-18.4 (Mildly thin)	<17 (Moder-ately and severely thin)	≥25.0 (Total over-weight or obese)	25.0-29.9 (Over-weight)	≥30.0 (Obese)	Number of women
Age											
15-19	4.6	2,883	21.3	71.3	18.0	12.9	5.1	10.6	9.1	1.5	2,572
20-29	1.8	4,574	23.1	68.3	6.9	5.2	1.7	24.8	18.2	6.6	3,824
30-39	2.8	3,362	24.7	55.0	6.8	5.0	1.8	38.2	22.1	16.1	2,965
40-49	2.2	2,340	24.9	50.5	7.5	5.6	1.9	42.0	24.5	17.5	2,273
Residence											
Urban	2.9	4,746	25.0	51.0	7.4	5.3	2.1	41.6	23.8	17.7	4,298
Rural	2.7	8,413	22.5	68.6	10.7	8.0	2.7	20.7	15.2	5.5	7,336
Tanzania Mainland/ Zanzibar											
Mainland	2.8	12,759	23.4	62.5	9.4	6.9	2.5	28.1	18.3	9.8	11,274
Urban	2.9	4,612	25.0	51.1	7.3	5.2	2.1	41.5	23.9	17.6	4,175
Rural	2.7	8,147	22.5	69.2	10.6	7.9	2.7	20.2	15.0	5.2	7,098
Zanzibar	2.6	401	24.5	49.1	12.0	8.5	3.5	38.9	21.7	17.2	360
Unguja	2.5	290	24.9	45.9	12.5	8.7	3.8	41.6	21.7	19.8	267
Pemba	3.0	110	23.5	58.4	10.3	7.8	2.6	31.3	21.5	9.7	93
Zone											
Western	1.7	1,272	22.7	67.6	10.4	7.4	3.0	21.9	15.1	6.8	1,078
Northern	3.0	1,559	24.3	53.9	10.0	7.1	2.9	36.2	20.6	15.6	1,422
Central	1.4	1,329	22.3	63.4	15.2	11.6	3.5	21.5	17.0	4.5	1,157
Southern Highlands	6.4	805	23.3	68.1	6.9	6.1	0.7	25.1	17.2	7.9	726
Southern	7.3	700	23.4	63.2	8.4	6.5	2.0	28.4	19.9	8.5	641
South West Highlands	2.7	1,238	23.9	65.7	4.7	3.8	0.9	29.7	19.3	10.3	1,073
Lake	1.7	3,441	22.3	70.9	11.1	7.9	3.2	17.9	13.2	4.7	2,948
Eastern	2.9	2,416	25.1	50.5	6.6	4.7	1.9	43.0	25.2	17.8	2,228
Zanzibar	2.6	401	24.5	49.1	12.0	8.5	3.5	38.9	21.7	17.2	360
Region											
Dodoma	2.0	570	22.5	63.9	13.8	9.9	3.9	22.4	18.4	3.9	501
Arusha	1.5	497	23.3	55.3	13.6	10.0	3.6	31.1	20.8	10.3	454
Kilimanjaro	1.9	359	25.0	50.7	7.4	5.4	2.0	41.9	22.2	19.7	344
Tanga	4.6	702	24.6	54.5	8.7	5.8	2.9	36.8	19.6	17.2	625
Morogoro	3.0	630	24.2	60.5	3.3	2.3	1.0	36.2	24.9	11.3	577
Pwani	6.5	282	24.4	53.1	9.6	8.0	1.6	37.3	21.4	15.9	256
Dar es Salaam	2.2	1,503	25.6	45.8	7.4	5.2	2.3	46.8	26.0	20.8	1,396
Lindi	5.2	288	23.4	65.2	7.0	6.1	0.9	27.8	19.8	8.0	263
Mtwara	8.7	412	23.3	61.7	9.4	6.7	2.7	28.8	20.1	8.7	378
Ruvuma	7.1	360	22.9	71.8	7.2	6.3	0.9	21.1	15.9	5.2	327
Iringa	4.8	243	23.5	64.3	8.0	6.9	1.1	27.6	17.2	10.4	217
Mbeya	2.7	824	24.3	62.4	4.0	3.0	1.0	33.6	20.9	12.7	723
Singida	0.8	369	22.2	61.3	16.7	14.1	2.6	22.0	16.0	6.0	318
Tabora	0.3	733	23.1	64.8	10.3	7.2	3.1	24.9	15.8	9.1	604
Rukwa	3.3	284	23.1	72.7	5.3	4.6	0.6	22.0	16.5	5.5	245
Kigoma	3.7	539	22.3	71.2	10.6	7.6	3.0	18.2	14.3	3.9	475
Shinyanga	1.5	502	22.9	68.2	8.0	5.4	2.6	23.7	16.9	6.8	422
Kagera	2.3	612	21.8	72.9	13.3	10.3	3.0	13.8	11.2	2.6	544
Mwanza	1.5	852	22.7	69.7	9.1	5.9	3.2	21.2	14.6	6.6	726
Mara	0.8	516	22.2	74.3	10.4	8.3	2.2	15.3	9.8	5.5	432
Manyara	1.2	390	22.1	64.6	15.8	12.0	3.8	19.6	15.6	4.0	338
Njombe	7.0	202	23.9	65.8	4.9	4.9	0.0	29.3	19.5	9.7	182
Katavi	1.1	130	22.7	71.3	8.3	7.3	1.0	20.4	15.4	5.0	105
Simiyu	0.8	477	21.7	72.2	14.3	9.3	4.9	13.5	11.1	2.4	420
Geita	3.8	480	22.2	68.4	12.6	8.9	3.8	19.0	15.5	3.5	405
Kaskazini Unguja	2.6	56	23.8	51.2	12.6	9.7	2.9	36.2	24.3	11.9	51
Kusini Unguja	2.9	35	24.8	48.5	11.6	8.4	3.2	39.9	20.6	19.3	32
Mjini Magharibi	2.4	199	25.2	44.0	12.7	8.5	4.2	43.4	21.2	22.1	184
Kaskazini Pemba	2.4	56	23.2	59.3	12.6	9.0	3.5	28.1	18.7	9.4	46
Kusini Pemba	3.6	54	23.8	57.5	8.2	6.6	1.6	34.3	24.3	10.0	47
Education											
No education	3.0	1,926	22.6	68.9	10.0	7.2	2.8	21.2	16.3	4.9	1,652
Primary incomplete	5.0	1,546	22.4	68.6	12.0	8.5	3.4	19.5	13.3	6.2	1,335
Primary complete	2.6	6,604	23.7	61.5	8.6	6.5	2.1	30.0	19.0	10.9	5,823
Secondary+	1.8	3,082	24.0	56.4	9.8	7.1	2.7	33.8	20.8	13.0	2,824

(Continued…)

Table 11.8—*Continued*

Background characteristic	Height		Body Mass Index[1]								
	Percent-age below 145 cm	Number of women	Mean Body Mass Index (BMI)	18.5-24.9 (Total normal)	<18.5 (Total thin)	17.0-18.4 (Mildly thin)	<17 (Moder-ately and severely thin)	≥25.0 (Total over-weight or obese)	25.0-29.9 (Over-weight)	≥30.0 (Obese)	Number of women
Wealth quintile											
Lowest	2.3	2,232	21.5	74.8	13.3	9.3	4.0	11.9	10.2	1.7	1,852
Second	3.2	2,264	22.0	71.6	12.5	9.3	3.2	15.9	12.9	3.0	1,949
Middle	3.0	2,317	22.5	70.7	9.0	6.9	2.1	20.4	15.9	4.5	2,051
Fourth	2.9	2,798	23.9	58.5	8.5	6.2	2.2	33.0	21.6	11.4	2,510
Highest	2.5	3,549	25.6	46.6	6.6	4.9	1.7	46.8	25.5	21.3	3,271
Total	2.8	13,159	23.4	62.1	9.5	7.0	2.5	28.4	18.4	10.0	11,634

Note: The Body Mass Index (BMI) is expressed as the ratio of weight in kilogrammes to the square of height in meters (kg/m^2).
[1] Excludes pregnant women and women with a birth in the preceding 2 months.

Table 11.9 Prevalence of anaemia in women

Percentage of women age 15-49 with anaemia, by background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Anaemia status by haemoglobin level				Number of women
	Any (NP <12.0 g/dl/ P <11.0 g/dl)	Mild (NP 10.0-11.9 g/dl/ P 10.0-10.9 g/dl)	Moderate (NP 7.0-9.9 g/dl/ P 7.0-9.9 g/dl)	Severe (NP < 7.0 g/dl/ P < 7.0 g/dl)	
Age					
15-19	47.3	36.1	10.4	0.8	2,872
20-29	44.7	32.9	11.0	0.8	4,546
30-39	43.3	30.3	11.9	1.1	3,331
40-49	44.2	32.2	10.9	1.2	2,315
Number of children ever born					
0	46.1	34.7	10.4	0.9	3,317
1	46.6	33.5	12.0	1.1	2,123
2-3	43.2	30.4	11.7	1.0	3,347
4-5	41.8	31.4	9.6	0.7	2,142
6+	46.7	34.3	11.5	0.9	2,135
Maternity status					
Pregnant	57.1	25.3	30.6	1.2	1,119
Breastfeeding	46.1	36.1	9.4	0.7	3,468
Neither	42.7	32.5	9.2	1.0	8,477
Residence					
Urban	44.5	32.2	11.4	0.9	4,682
Rural	45.0	33.2	10.9	1.0	8,382
Tanzania Mainland/ Zanzibar					
Mainland	44.3	32.5	10.9	0.9	12,664
Urban	44.1	31.9	11.4	0.9	4,547
Rural	44.5	32.8	10.7	1.0	8,117
Zanzibar	60.1	43.0	15.6	1.5	400
Unguja	57.8	42.8	13.6	1.4	290
Pemba	66.2	43.4	20.8	2.0	110
Zone					
Western	53.7	38.8	14.0	0.9	1,274
Northern	36.1	27.2	8.2	0.7	1,540
Central	31.1	23.8	6.4	1.0	1,320
Southern Highlands	34.4	26.1	8.0	0.4	803
Southern	47.8	35.6	11.7	0.6	696
South West Highlands	28.8	25.1	3.6	0.1	1,236
Lake	52.0	36.4	14.2	1.5	3,429
Eastern	51.4	36.9	13.5	1.0	2,366
Zanzibar	60.1	43.0	15.6	1.5	400
Region					
Dodoma	29.8	23.4	5.1	1.3	569
Arusha	31.0	20.3	10.5	0.2	486
Kilimanjaro	28.2	22.9	3.5	1.8	358
Tanga	43.7	34.3	9.0	0.5	696
Morogoro	47.3	36.4	10.3	0.6	624
Pwani	51.7	35.0	14.9	1.8	277
Dar es Salaam	53.1	37.5	14.5	1.0	1,465
Lindi	48.9	38.3	10.0	0.6	287
Mtwara	47.1	33.7	12.9	0.5	408
Ruvuma	44.1	31.1	12.5	0.4	359
Iringa	27.5	22.3	4.5	0.7	242
Mbeya	25.3	23.5	1.7	0.0	823
Singida	26.5	20.7	5.4	0.4	366
Tabora	52.6	35.9	16.1	0.6	733
Rukwa	31.7	25.8	5.7	0.2	284
Kigoma	55.1	42.8	11.1	1.2	542
Shinyanga	59.8	36.4	21.4	1.9	503
Kagera	39.6	29.9	8.8	1.0	612
Mwanza	55.4	37.4	16.7	1.3	846
Mara	50.9	36.7	12.1	2.1	510
Manyara	37.4	27.3	9.1	1.0	385
Njombe	25.6	21.7	3.9	0.0	202
Katavi	44.9	33.4	11.1	0.4	130
Simiyu	54.1	41.5	11.2	1.5	477
Geita	52.8	37.3	14.3	1.2	480
Kaskazini Unguja	59.5	43.1	13.7	2.7	55
Kusini Unguja	55.3	41.5	12.4	1.4	35
Mjini Magharibi	57.8	43.0	13.8	1.0	200
Kaskazini Pemba	71.8	44.9	24.2	2.7	55
Kusini Pemba	60.6	41.9	17.4	1.4	54

(Continued…)

Table 11.9—*Continued*

Background characteristic	Anaemia status by haemoglobin level: Any (NP <12.0 g/dl/ P <11.0 g/dl)	Mild (NP 10.0-11.9 g/dl/ P 10.0-10.9 g/dl)	Moderate (NP 7.0-9.9 g/dl/ P 7.0-9.9 g/dl)	Severe (NP < 7.0 g/dl/ P < 7.0 g/dl)	Number of women
Education					
No education	51.2	36.7	13.6	1.0	1,910
Primary incomplete	48.5	32.7	14.5	1.2	1,538
Primary complete	43.5	32.2	10.4	0.9	6,579
Secondary+	41.8	31.8	9.1	0.9	3,037
Wealth quintile					
Lowest	48.5	35.3	12.5	0.7	2,225
Second	46.2	34.3	10.9	1.0	2,254
Middle	45.9	33.7	11.1	1.1	2,309
Fourth	41.2	30.2	10.1	0.9	2,781
Highest	43.7	31.8	11.0	0.9	3,495
Total	44.8	32.8	11.1	0.9	13,064

Note: Prevalence is adjusted for altitude and for smoking status if known using formulas established by CDC, 1998.
NP: Not pregnant. P: Pregnant

Table 11.10 Presence of iodised salt in household: Rapid test

Among all households, percentage with salt tested for iodine content and the percentage with no salt in the household; and among households with salt tested, the percentage with iodised salt, according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Among all households, the percentage			Among households in which salt was tested:	
	With salt tested	With no salt in the household	Number of households	Percentage with iodised salt	Number of households
Residence					
Urban	92.3	7.7	4,141	93.6	3,823
Rural	94.0	6.0	8,422	74.6	7,914
Tanzania Mainland/ Zanzibar					
Mainland	93.6	6.4	11,869	80.6	11,112
Urban	92.7	7.3	3,904	93.4	3,618
Rural	94.1	5.9	7,965	74.5	7,494
Zanzibar	91.9	8.1	311	80.0	286
Unguja	92.2	7.8	211	89.5	194
Pemba	91.3	8.7	100	60.1	92
Zone					
Western	94.5	5.5	979	80.5	925
Northern	96.3	3.7	1,472	89.7	1,418
Central	96.5	3.5	1,424	64.9	1,374
Southern Highlands	93.9	6.1	917	83.7	862
Southern	91.4	8.6	778	37.3	711
South West Highlands	91.3	8.7	1,276	92.9	1,165
Lake	96.0	4.0	2,888	81.5	2,773
Eastern	88.2	11.8	2,134	91.4	1,883
Zanzibar	91.9	8.1	311	80.0	286
Region					
Dodoma	95.8	4.2	683	74.8	654
Arusha	96.1	3.9	486	98.5	467
Kilimanjaro	94.9	5.1	431	88.5	409
Tanga	97.9	2.1	610	83.9	597
Morogoro	82.6	17.4	698	78.6	577
Pwani	86.5	13.5	317	87.6	274
Dar es Salaam	90.9	9.1	1,255	99.0	1,141
Lindi	90.6	9.4	313	46.8	283
Mtwara	91.9	8.1	485	31.1	445
Ruvuma	91.7	8.3	410	75.2	376
Iringa	94.6	5.4	301	96.4	285
Mbeya	93.0	7.0	902	98.5	839
Singida	97.4	2.6	392	44.4	381
Tabora	96.7	3.3	539	73.9	521
Rukwa	86.8	13.2	295	78.9	256
Kigoma	92.4	7.6	472	89.2	436
Shinyanga	96.4	3.6	400	69.0	386
Kagera	95.2	4.8	643	92.2	612
Mwanza	94.8	5.2	717	87.0	680
Mara	97.0	3.0	437	99.3	424
Manyara	96.3	3.7	395	68.2	380
Njombe	96.5	3.5	222	81.9	214
Katavi	91.2	8.8	110	83.0	100
Simiyu	98.0	2.0	348	59.7	341
Geita	94.9	5.1	390	67.5	370
Kaskazini Unguja	90.9	9.1	51	88.1	47
Kusini Unguja	95.4	4.6	32	85.1	31
Mjini Magharibi	91.6	8.4	130	91.1	119
Kaskazini Pemba	92.0	8.0	54	54.0	49
Kusini Pemba	90.2	9.8	49	66.2	44
Wealth quintile					
Lowest	92.6	7.4	2,107	69.3	1,951
Second	94.1	5.9	2,394	69.2	2,252
Middle	94.1	5.9	2,500	76.9	2,353
Fourth	93.4	6.6	2,687	87.4	2,509
Highest	93.0	7.0	2,874	96.0	2,672
Total	93.4	6.6	12,563	80.8	11,737

Table 11.11 Coverage of laboratory salt collection for laboratory testing

Percent distribution of households eligible to provide salt for laboratory testing by salt testing status, according to residence and region (unweighted) Tanzania DHS-MIS 2015-16

Background characteristic	Testing status			Total	Number
	Salt provided	No salt in HH	Other/ missing		
Residence					
Urban	92.2	6.8	1.0	100.0	1,157
Rural	93.9	5.4	0.7	100.0	2,850
Tanzania Mainland/ Zanzibar					
Mainland	93.9	5.2	0.9	100.0	3,450
Urban	92.6	6.3	1.1	100.0	1,040
Rural	94.4	4.8	0.8	100.0	2,410
Zanzibar	90.5	9.2	0.4	100.0	557
Unguja	90.3	9.1	0.6	100.0	351
Pemba	90.8	9.2	0.0	100.0	206
Zone					
Western	93.5	6.5	0.0	100.0	275
Northern	96.4	3.4	0.2	100.0	413
Central	97.8	2.2	0.0	100.0	409
Southern Highlands	92.4	6.1	1.5	100.0	395
Southern	92.5	6.0	1.5	100.0	267
South West Highlands	94.4	5.6	0.0	100.0	396
Lake	96.6	3.4	0.0	100.0	815
Eastern	85.6	10.4	4.0	100.0	480
Zanzibar	90.5	9.2	0.4	100.0	557
Region					
Dodoma	96.3	3.7	0.0	100.0	134
Arusha	98.5	0.8	0.8	100.0	133
Kilimanjaro	93.8	6.2	0.0	100.0	145
Tanga	97.0	3.0	0.0	100.0	135
Morogoro	83.1	10.8	6.2	100.0	130
Pwani	79.8	13.7	6.5	100.0	124
Dar es Salaam	90.3	8.4	1.3	100.0	226
Lindi	92.6	5.9	1.5	100.0	136
Mtwara	92.4	6.1	1.5	100.0	131
Ruvuma	91.3	7.2	1.4	100.0	138
Iringa	92.4	7.6	0.0	100.0	131
Mbeya	97.7	2.3	0.0	100.0	131
Singida	98.6	1.4	0.0	100.0	139
Tabora	95.6	4.4	0.0	100.0	136
Rukwa	91.4	8.6	0.0	100.0	140
Kigoma	91.4	8.6	0.0	100.0	139
Shinyanga	98.5	1.5	0.0	100.0	135
Kagera	95.8	4.2	0.0	100.0	142
Mwanza	94.7	5.3	0.0	100.0	131
Mara	100.0	0.0	0.0	100.0	141
Manyara	98.5	1.5	0.0	100.0	136
Njombe	93.7	3.2	3.2	100.0	126
Katavi	94.4	5.6	0.0	100.0	125
Simiyu	99.2	0.8	0.0	100.0	131
Geita	91.1	8.9	0.0	100.0	135
Kaskazini Unguja	90.4	9.6	0.0	100.0	104
Kusini Unguja	93.2	4.9	1.9	100.0	103
Mjini Magharibi	88.2	11.8	0.0	100.0	144
Kaskazini Pemba	95.1	4.9	0.0	100.0	102
Kusini Pemba	86.5	13.5	0.0	100.0	104
Total	93.4	5.8	0.8	100.0	4,007

Table 11.12 Household iodine levels: Laboratory testing

Percent distribution of households by iodine level in salt samples by titration methods, and the median salt iodine content according to laboratory results, by background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Result of salt at the lab				Number of households	Median of iodine concentration
	None (0 ppm)	Inadequate (<10 ppm)	Inadequate (10 to <15 ppm)	Adequate (15+ ppm)		
Residence						
Urban	0.6	9.9	7.1	82.4	1,227	36.1
Rural	5.0	32.6	12.3	50.1	2,544	16.5
Tanzania Mainland/ Zanzibar						
Mainland	3.5	24.7	10.5	61.2	3,681	27.7
Urban	0.6	9.6	7.0	82.8	1,202	36.1
Rural	5.0	32.1	12.2	50.7	2,479	17.1
Zanzibar	4.4	44.7	13.5	37.5	89	11.1
Unguja	4.2	35.6	14.3	45.9	60	13.8
Pemba	4.8	62.9	11.8	20.4	30	4.8
Zone						
Western	3.1	33.3	19.2	44.4	305	15.2
Northern	0.8	9.8	6.2	83.1	470	34.8
Central	15.3	21.6	11.9	51.2	455	17.4
Southern Highlands	2.0	31.1	7.4	59.5	274	30.1
Southern	1.7	57.7	15.2	25.4	235	8.2
South West Highlands	1.3	12.8	8.0	77.8	403	34.2
Lake	3.3	34.5	12.1	50.1	900	16.1
Eastern	0.5	12.9	7.5	79.1	639	34.5
Zanzibar	4.4	44.7	13.5	37.5	89	11.1
Region						
Dodoma	6.0	27.6	14.2	52.1	211	17.6
Arusha	1.1	3.9	1.3	93.7	152	36.2
Kilimanjaro	0.0	11.4	6.9	81.7	130	37.2
Tanga	1.2	13.5	9.8	75.5	188	34.3
Morogoro	0.7	34.0	7.2	58.1	189	25.9
Pwani	2.1	12.3	10.2	75.4	81	36.4
Dar es Salaam	0.0	2.2	7.1	90.7	370	36.6
Lindi	3.1	55.0	19.1	22.9	92	8.5
Mtwara	0.8	59.4	12.7	27.1	143	6.8
Ruvuma	0.7	51.5	10.3	37.5	120	8.9
Iringa	3.3	9.2	5.5	82.1	89	38.3
Mbeya	1.5	1.7	4.1	92.8	283	38.1
Singida	22.9	26.4	14.3	36.4	121	11.1
Tabora	5.6	40.3	19.0	35.1	166	11.6
Rukwa	0.7	44.9	18.3	36.2	87	11.4
Kigoma	0.0	24.8	19.6	55.6	138	17.5
Shinyanga	1.4	52.0	13.2	33.4	127	8.7
Kagera	0.7	28.6	12.0	58.7	198	18.0
Mwanza	2.0	36.9	13.4	47.7	214	15.0
Mara	0.0	3.4	6.7	89.9	140	36.8
Manyara	23.7	6.6	5.6	64.2	124	30.2
Njombe	2.7	23.1	4.8	69.3	65	34.1
Katavi	2.1	24.3	14.7	58.9	32	19.4
Simiyu	18.2	51.2	10.7	19.8	108	6.4
Geita	2.3	43.2	16.9	37.6	112	11.4
Kaskazini Unguja	0.0	51.9	19.3	28.8	14	8.9
Kusini Unguja	5.2	51.7	14.6	28.5	9	6.8
Mjini Magharibi	5.6	24.9	12.2	57.3	36	23.1
Kaskazini Pemba	4.1	72.1	9.8	14.0	16	4.4
Kusini Pemba	5.7	52.2	14.2	28.0	14	6.8
Wealth quintile						
Lowest	7.8	34.8	16.5	40.9	659	12.0
Second	4.6	35.2	13.2	47.0	712	15.4
Middle	4.0	34.9	10.7	50.4	742	16.9
Fourth	1.9	18.8	7.7	71.6	816	32.5
Highest	0.6	7.0	6.5	85.9	840	36.2
Total	3.6	25.2	10.6	60.6	3,770	25.9

Table 11.13 Micronutrient intake among children

Among youngest children age 6-23 months who are living with their mother, the percentages who consumed vitamin A-rich and iron-rich foods in the day or night preceding the survey, and among all children age 6-59 months, the percentages who were given vitamin A supplements in the 6 months preceding the survey, who were given iron supplements in the past 7 days, and who were given deworming medication in the 6 months preceding the survey, and among all children age 6-59 months who live in households that were tested for iodised salt, the percentage who live in households with iodised salt, by background characteristics, Tanzania DHS-MIS 2015-16

	Among youngest children age 6-23 months living with the mother:			Among all children age 6-23 months:		Among all children age 6-59 months:				Among children age 6-59 months living in households tested for iodised salt	
Background characteristic	Percentage who consumed foods rich in vitamin A in last 24 hours[1]	Percentage who consumed foods rich in iron in last 24 hours[2]	Number of children	Percentage given micronutrients powders in the past 7 days	Number of children	Percentage given iron supplements in past 7 days[3]	Percentage given vitamin A supplements in past 6 months[4]	Percentage given deworming medication in past 6 months[3],	Number of children	Percentage living in households with iodised salt[6]	Number of children
Age in months											
6-8	47.5	18.6	525	1.2	529	0.8	26.0	6.2	529	81.6	513
9-11	71.2	32.1	459	2.6	470	0.5	44.1	18.8	470	83.0	449
12-17	82.3	41.9	1,073	1.8	1,109	1.3	51.1	33.8	1,109	75.3	1,062
18-23	85.8	41.3	925	0.8	1,025	3.1	47.5	42.9	1,025	79.2	980
24-35	na	na	na	na	na	2.1	40.6	42.7	1,817	78.5	1,766
36-47	na	na	na	na	na	2.0	40.0	43.4	1,791	78.7	1,733
48-59	na	na	na	na	na	2.6	36.8	40.2	1,768	79.5	1,703
Sex											
Male	75.6	37.2	1,506	1.4	1,587	2.2	41.9	38.6	4,281	78.3	4,122
Female	75.4	35.0	1,477	1.5	1,546	1.9	40.5	36.6	4,228	79.4	4,084
Breastfeeding status											
Breastfeeding	72.8	33.7	2,410	1.6	2,446	1.5	45.3	28.3	2,591	79.4	2,485
Not breastfeeding	87.0	46.2	573	0.9	687	2.3	39.4	41.7	5,918	78.6	5,721
Mother's age at birth											
15-19	68.1	29.6	315	1.0	336	1.8	34.6	23.0	462	76.1	444
20-29	76.1	37.5	1,546	1.4	1,633	2.1	40.6	37.2	4,205	79.7	4,042
30-39	76.6	36.5	911	2.1	951	2.1	43.6	40.6	2,944	79.0	2,843
40-49	78.3	33.7	210	0.6	213	1.9	39.5	36.9	899	76.0	878
Residence											
Urban	81.6	51.2	808	3.7	867	3.1	46.4	48.8	2,261	93.6	2,197
Rural	73.3	30.5	2,174	0.7	2,266	1.6	39.3	33.5	6,248	73.5	6,009
Tanzania Mainland/ Zanzibar											
Mainland	75.3	35.2	2,904	1.5	3,049	2.0	40.9	36.9	8,281	79.0	7,988
Urban	81.4	50.5	789	3.6	845	3.1	46.1	48.4	2,201	93.6	2,139
Rural	73.1	29.5	2,116	0.6	2,204	1.6	39.0	32.8	6,080	73.6	5,850
Zanzibar	83.5	69.1	79	2.4	83	2.3	51.9	61.6	228	74.3	218
Unguja	86.3	70.1	52	2.5	55	1.0	54.7	60.2	143	88.2	138
Pemba	78.0	67.2	27	2.2	28	4.6	47.1	64.0	85	50.1	80
Zone											
Western	80.0	31.8	398	0.4	413	0.6	27.9	19.2	1,055	76.7	1,007
Northern	70.0	43.1	270	0.8	288	2.3	47.1	49.5	785	88.9	765
Central	68.0	21.2	349	0.4	364	3.2	42.2	39.2	947	64.2	918
Southern Highlands	89.2	38.6	151	1.9	155	1.8	55.0	52.4	455	82.9	435
Southern	85.7	54.6	104	1.9	109	1.3	50.0	31.0	338	41.3	328
South West Highlands	81.4	37.9	305	2.1	312	1.7	33.8	30.9	819	91.3	774
Lake	69.7	32.8	896	0.3	958	2.2	38.0	31.8	2,684	77.7	2,629
Eastern	80.4	41.9	431	5.5	451	2.4	50.6	54.0	1,197	90.3	1,132
Zanzibar	83.5	69.1	79	2.4	83	2.3	51.9	61.6	228	74.3	218
Region											
Dodoma	71.3	20.8	130	1.0	134	6.3	40.8	39.7	351	76.0	339
Arusha	59.2	37.6	98	2.2	104	3.2	53.5	50.7	301	99.6	288
Kilimanjaro	75.9	56.2	49	0.0	55	3.0	61.0	56.3	146	90.6	145
Tanga	76.3	42.2	123	0.0	130	1.1	35.5	45.4	338	78.9	333
Morogoro	67.2	13.4	117	4.3	125	2.3	51.2	49.2	378	74.9	338
Pwani	71.6	18.9	64	0.0	66	1.9	53.7	43.9	173	87.9	169
Dar es Salaam	88.8	61.1	250	7.4	261	2.6	49.5	59.5	646	99.3	625
Lindi	91.4	50.7	44	4.7	45	1.2	35.7	24.9	153	47.8	150
Mtwara	81.6	57.4	60	0.0	63	1.4	61.8	36.1	185	35.8	178
Ruvuma	93.4	34.6	66	0.0	68	1.7	50.8	49.0	203	75.2	191
Iringa	83.4	45.6	50	5.7	52	1.9	57.2	59.1	139	96.7	135
Mbeya	80.6	36.9	178	3.4	179	2.5	38.0	38.5	472	99.4	462
Singida	83.4	22.5	102	0.0	107	2.1	49.5	41.7	290	43.9	281
Tabora	84.5	28.5	229	0.6	239	0.0	17.3	13.1	601	69.1	592
Rukwa	81.9	44.5	89	0.7	93	0.5	34.7	24.1	231	77.7	201
Kigoma	73.8	36.3	169	0.0	173	1.4	41.8	27.2	455	87.6	415

(Continued…)

Table 11.13—*Continued*

Background characteristic	Among youngest children age 6-23 months living with the mother: Percentage who consumed foods rich in vitamin A in last 24 hours[1]	Among youngest children age 6-23 months living with the mother: Percentage who consumed foods rich in iron in last 24 hours[2]	Among youngest children age 6-23 months living with the mother: Number of children	Among all children age 6-23 months: Percentage given micronutrients powders in the past 7 days	Among all children age 6-23 months: Number of children	Among all children age 6-59 months: Percentage given iron supplements in past 7 days[3]	Among all children age 6-59 months: Percentage given vitamin A supplements in past 6 months[4]	Among all children age 6-59 months: Percentage given deworming medication in past 6 months[3],[5]	Among all children age 6-59 months: Number of children	Among children age 6-59 months living in households tested for iodised salt: Percentage living in households with iodised salt[6]	Among children age 6-59 months living in households tested for iodised salt: Number of children
Shinyanga	84.9	34.7	132	0.0	140	1.1	26.9	19.5	380	66.7	377
Kagera	63.4	37.1	155	0.0	158	0.6	51.1	49.4	462	88.4	450
Mwanza	71.1	35.2	193	0.0	212	6.7	47.1	39.1	616	87.6	598
Mara	63.9	37.2	135	1.8	148	1.4	41.3	34.8	415	99.6	412
Manyara	50.8	20.4	116	0.0	123	0.6	36.9	36.2	305	69.8	298
Njombe	89.4	36.0	35	0.0	35	2.0	59.7	50.1	114	79.4	109
Katavi	83.8	27.1	38	0.0	40	0.9	14.9	13.4	116	82.6	110
Simiyu	56.9	11.8	149	0.2	157	0.8	22.1	15.9	427	55.4	422
Geita	79.9	41.8	132	0.0	142	0.3	32.6	25.4	384	60.9	370
Kaskazini Unguja	77.7	60.3	13	1.2	13	1.1	43.1	57.4	38	86.8	36
Kusini Unguja	87.1	73.7	8	2.8	9	0.0	68.2	66.6	22	84.0	21
Mjini Magharibi	89.6	73.3	31	3.0	32	1.2	56.4	59.8	83	90.0	81
Kaskazini Pemba	81.4	73.8	14	4.4	14	4.5	38.7	58.1	45	40.4	42
Kusini Pemba	74.4	60.1	13	0.0	14	4.7	56.5	70.6	40	60.9	38
Mothers' education											
No education	71.6	24.3	587	0.8	617	1.9	28.1	23.5	1,821	74.0	1,758
Primary incomplete	72.0	31.8	376	0.0	389	2.2	38.2	32.7	1,109	73.3	1,050
Primary complete	75.2	35.3	1,509	1.0	1,577	2.1	44.5	40.2	4,371	79.2	4,211
Secondary+	83.9	55.1	511	4.7	549	2.1	51.6	53.8	1,208	89.6	1,188
Wealth quintile											
Lowest	67.8	23.6	715	0.6	751	1.6	30.1	24.0	2,050	71.8	1,963
Second	71.5	25.3	637	0.0	666	1.4	38.3	31.4	1,807	68.2	1,738
Middle	77.4	32.7	561	0.6	579	2.0	44.4	38.9	1,659	76.1	1,600
Fourth	79.5	44.9	554	1.3	588	2.8	48.1	42.9	1,565	86.9	1,502
Highest	85.0	60.9	516	5.6	549	2.7	49.5	57.7	1,428	96.4	1,404
Total	75.5	36.1	2,983	1.5	3,133	2.0	41.2	37.6	8,509	78.9	8,206

na = Not applicable.
[1] Includes meat (and organ meat), fish, poultry, eggs, pumpkin, red or yellow yams or squash, carrots, red sweet potatoes, dark green leafy vegetables, mango, papaya, and other locally grown fruits and vegetables that are rich in vitamin A.
[2] Includes meat (including organ meat), fish, poultry, and eggs.
[3] Based on mother's recall.
[4] Based on both mother's recall and the vaccination card (where available).
[5] Deworming for intestinal parasites is commonly done for helminthes and for schistosomiasis.
[6] Based on the results of a rapid test done in the field, which detect only the presence of iodine, not the concentration. Excludes children in households in which salt was not tested.

Table 11.14 Micronutrient intake among mothers

Among women age 15-49 with a child born in the 5 years preceding the survey, percent distribution by number of days they took iron tablets or syrup during the pregnancy of the last child, and percentage who took deworming medication during the pregnancy of the last child; and among women age 15-49 with a child born in the 5 years preceding the survey and who live in households that were tested for iodised salt, percentage who live in households with iodised salt, according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Number of days women took iron tablets or syrup during pregnancy of last birth						Percentage of women who took deworming medication during pregnancy of last birth	Number of women	Among women with a child born in the last 5 years, who live in households that were tested for iodised salt	
	None	<60	60-89	90+	Don't know/ missing	Total			Percentage living in house-holds with iodised salt[1]	Number of women
Age										
15-19	18.0	42.7	16.4	22.4	0.5	100.0	55.6	606	78.0	577
20-29	17.4	42.3	16.5	22.2	1.5	100.0	64.4	3,371	80.3	3,251
30-39	19.7	41.0	16.3	20.9	2.2	100.0	65.0	2,353	80.5	2,274
40-49	23.2	38.2	18.1	18.6	1.9	100.0	56.9	749	76.0	730
Residence										
Urban	16.9	40.7	15.7	24.9	1.9	100.0	73.4	2,123	93.7	2,063
Rural	19.7	41.8	17.0	19.9	1.6	100.0	58.6	4,955	73.7	4,769
Tanzania Mainland/ Zanzibar										
Mainland	18.8	41.6	16.5	21.4	1.7	100.0	63.4	6,908	79.8	6,668
Urban	16.6	40.6	15.7	25.2	2.0	100.0	74.1	2,075	93.8	2,016
Rural	19.8	42.0	16.9	19.8	1.6	100.0	58.7	4,833	73.7	4,651
Zanzibar	20.3	38.1	19.9	20.4	1.3	100.0	51.0	171	77.0	164
Unguja	21.6	36.6	16.3	24.0	1.5	100.0	44.2	114	88.4	110
Pemba	17.7	41.1	27.0	13.4	0.9	100.0	64.4	57	53.7	54
Zone										
Western	26.7	40.2	16.3	15.5	1.3	100.0	54.1	779	76.7	738
Northern	16.1	39.1	16.9	24.4	3.5	100.0	70.5	699	89.4	683
Central	10.5	51.1	16.7	20.6	1.1	100.0	69.6	795	65.5	772
Southern Highlands	19.6	38.4	15.7	25.0	1.4	100.0	64.3	426	82.8	410
Southern	9.6	44.5	16.1	29.6	0.2	100.0	69.8	341	40.0	332
South West Highlands	18.1	37.4	14.4	26.1	4.0	100.0	60.2	715	91.9	676
Lake	24.9	40.1	18.3	15.5	1.2	100.0	54.2	2,015	79.2	1,981
Eastern	12.9	42.8	14.9	28.0	1.4	100.0	76.8	1,137	90.9	1,076
Zanzibar	20.3	38.1	19.9	20.4	1.3	100.0	51.0	171	77.0	164
Region										
Dodoma	9.8	44.0	18.4	27.2	0.7	100.0	69.9	328	76.2	320
Arusha	19.4	41.2	18.9	18.3	2.1	100.0	69.8	261	99.6	251
Kilimanjaro	11.9	43.6	14.0	27.7	2.8	100.0	78.4	126	90.7	125
Tanga	15.1	35.6	16.5	28.0	4.9	100.0	67.8	312	80.4	307
Morogoro	8.8	45.2	16.7	28.0	1.3	100.0	70.9	347	74.9	309
Pwani	15.4	34.1	24.1	24.8	1.6	100.0	75.4	156	89.5	151
Dar es Salaam	14.5	43.6	11.6	28.9	1.4	100.0	80.3	634	99.3	616
Lindi	8.4	45.9	12.9	32.5	0.4	100.0	69.2	150	46.7	147
Mtwara	10.6	43.4	18.6	27.4	0.0	100.0	70.2	191	34.7	185
Ruvuma	20.7	42.7	13.9	21.3	1.4	100.0	57.7	204	75.3	193
Iringa	17.4	33.8	18.1	30.2	0.6	100.0	66.2	118	96.2	115
Mbeya	13.0	38.4	15.6	31.5	1.5	100.0	60.0	436	98.7	425
Singida	8.4	52.4	16.4	21.7	1.1	100.0	72.2	225	44.6	218
Tabora	27.0	33.5	17.0	21.6	0.9	100.0	57.8	449	68.9	440
Rukwa	22.6	33.9	13.2	20.0	10.3	100.0	59.8	189	79.0	166
Kigoma	26.4	49.2	15.4	7.2	1.8	100.0	49.1	330	88.2	298
Shinyanga	16.9	37.9	19.3	25.6	0.3	100.0	66.7	300	67.5	298
Kagera	13.3	57.2	16.6	12.1	0.8	100.0	74.8	344	91.2	334
Mwanza	31.9	27.5	20.9	19.3	0.3	100.0	49.2	471	87.9	463
Mara	20.7	53.9	12.9	8.8	3.7	100.0	51.2	322	99.7	318
Manyara	13.4	59.5	14.6	10.7	1.7	100.0	66.8	242	70.3	235
Njombe	19.9	35.1	16.3	26.5	2.2	100.0	75.1	104	81.8	102
Katavi	33.8	40.0	11.1	12.3	2.8	100.0	61.7	90	82.8	85
Simiyu	34.3	36.1	19.3	8.7	1.6	100.0	41.7	296	55.8	293
Geita	31.0	31.3	20.0	17.0	0.7	100.0	40.9	282	63.8	274
Kaskazini Unguja	16.9	32.3	17.0	32.9	0.9	100.0	52.0	27	88.4	26
Kusini Unguja	13.0	29.2	23.4	33.2	1.1	100.0	42.5	18	84.2	17
Mjini Magharibi	25.8	40.2	14.2	18.0	1.8	100.0	41.6	69	89.4	67
Kaskazini Pemba	16.6	42.1	23.6	17.0	0.7	100.0	66.2	30	46.5	29
Kusini Pemba	18.9	39.9	31.0	9.1	1.1	100.0	62.3	26	62.3	25
Education										
No education	24.5	38.0	19.3	17.3	1.0	100.0	57.4	1,350	74.2	1,300
Primary incomplete	20.9	43.1	14.7	19.2	2.1	100.0	59.2	879	75.4	838
Primary complete	17.4	43.4	16.4	21.0	1.7	100.0	63.8	3,700	79.7	3,566
Secondary+	15.2	38.0	15.4	29.3	2.2	100.0	70.1	1,149	89.6	1,127

(Continued…)

Table 11.14—*Continued*

Background characteristic	Number of days women took iron tablets or syrup during pregnancy of last birth						Percentage of women who took deworming medication during pregnancy of last birth	Number of women	Among women with a child born in the last five years, who live in households that were tested for iodised salt	
	None	<60	60-89	90+	Don't know/ missing	Total			Percentage living in house-holds with iodised salt[1]	Number of women
Wealth quintile										
Lowest	23.5	41.1	17.3	17.1	1.0	100.0	53.6	1,525	71.4	1,451
Second	20.2	40.9	17.3	20.0	1.6	100.0	58.9	1,422	68.2	1,368
Middle	17.2	43.4	17.1	20.7	1.5	100.0	61.2	1,349	76.1	1,308
Fourth	18.5	41.8	16.4	22.1	1.2	100.0	68.0	1,424	87.6	1,371
Highest	14.2	40.4	14.8	27.5	3.1	100.0	74.7	1,359	96.0	1,334
Total	18.8	41.5	16.6	21.4	1.7	100.0	63.1	7,079	79.7	6,832

[1] Excludes women in households where salt was not tested.

Table 11.15 Coverage of urine collection for women by residence and region for women

Percent distribution of women age 15-49 eligible for urine testing by interview status, according to residence and region (unweighted), Tanzania DHS-MIS 2015-16

Background characteristic	Interviewed			Not interviewed	Total	Number
	Urine collected	Refused to provide urine	Other/ missing			
Residence						
Urban	93.0	2.4	0.5	4.3	100.0	1,391
Rural	96.0	1.2	0.4	2.3	100.0	2,959
Tanzania Mainland/ Zanzibar						
Mainland	94.6	1.7	0.5	3.2	100.0	3,665
Urban	92.3	2.6	0.4	4.7	100.0	1,219
Rural	95.8	1.2	0.5	2.5	100.0	2,446
Zanzibar	97.2	1.2	0.4	1.1	100.0	685
Unguja	97.6	0.9	0.6	0.9	100.0	459
Pemba	96.5	1.8	0.0	1.7	100.0	226
Zone						
Western	95.8	0.6	0.0	3.7	100.0	353
Northern	92.2	2.6	0.9	4.2	100.0	424
Central	95.5	2.4	0.0	2.1	100.0	381
Southern Highlands	94.4	1.9	0.0	3.6	100.0	359
Southern	96.8	0.5	0.9	1.8	100.0	221
South West Highlands	97.2	0.5	0.5	1.8	100.0	392
Lake	96.6	0.9	0.3	2.3	100.0	1,033
Eastern	88.0	4.0	1.4	6.6	100.0	502
Zanzibar	97.2	1.2	0.4	1.1	100.0	685
Region						
Dodoma	94.0	2.6	0.0	3.5	100.0	116
Arusha	89.7	5.5	0.0	4.8	100.0	146
Kilimanjaro	91.3	1.6	1.6	5.5	100.0	127
Tanga	95.4	0.7	1.3	2.6	100.0	151
Morogoro	89.3	3.3	3.3	4.1	100.0	122
Pwani	91.3	3.5	0.9	4.4	100.0	115
Dar es Salaam	86.0	4.5	0.8	8.7	100.0	265
Lindi	95.8	0.0	1.7	2.5	100.0	118
Mtwara	98.1	1.0	0.0	1.0	100.0	103
Ruvuma	96.0	0.8	0.0	3.2	100.0	124
Iringa	96.3	0.9	0.0	2.8	100.0	107
Mbeya	96.4	0.9	0.0	2.7	100.0	112
Singida	98.4	0.0	0.0	1.6	100.0	128
Tabora	93.7	1.1	0.0	5.3	100.0	189
Rukwa	97.2	0.7	0.0	2.1	100.0	141
Kigoma	98.2	0.0	0.0	1.8	100.0	164
Shinyanga	95.8	0.6	0.0	3.6	100.0	168
Kagera	96.6	2.1	0.0	1.4	100.0	145
Mwanza	97.6	0.0	0.6	1.8	100.0	169
Mara	95.4	2.9	0.0	1.7	100.0	175
Manyara	94.2	4.4	0.0	1.4	100.0	137
Njombe	91.4	3.9	0.0	4.7	100.0	128
Katavi	97.8	0.0	1.4	0.7	100.0	139
Simiyu	97.5	0.0	1.0	1.5	100.0	204
Geita	96.5	0.0	0.0	3.5	100.0	172
Kaskazini Unguja	97.5	1.7	0.8	0.0	100.0	118
Kusini Unguja	100.0	0.0	0.0	0.0	100.0	119
Mjini Magharibi	96.4	0.9	1.0	1.9	100.0	222
Kaskazini Pemba	97.3	0.9	0.0	1.8	100.0	110
Kusini Pemba	95.7	2.6	0.0	1.7	100.0	116
Total	95.0	1.6	0.5	2.9	100.0	4,350

Table 11.16 Urinary iodine concentrations in women

Percent distribution of de facto interviewed women age 15-49 in the whole sample for whom urine analysis was done, by background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Urinary iodine				Number of women	Median of iodine concentration
	Percentage with UIC <100 ug/L	Percentage with UIC 100 to <150 ug/L	Percentage with optimal UIC 150 to 300 ug/L	Percentage with excess iodine intake >300 ug/L		
Age						
15-19	30.4	10.0	23.3	36.3	891	199.2
20-29	33.2	9.6	24.0	33.2	1,460	191.4
30-39	33.9	12.4	22.3	31.3	1,036	168.4
40-49	37.3	12.8	20.9	29.1	732	149.8
Pregnancy status						
Pregnant	35.4	9.1	29.3	26.1	361	171.4
Breastfeeding (not pregnant)	44.4	11.7	19.4	24.5	1,103	122.9
Neither	28.7	10.9	23.4	36.9	2,655	203.7
Residence						
Urban	14.6	8.6	26.6	50.2	1,490	303.9
Rural	44.2	12.3	20.8	22.7	2,629	123.4
Tanzania Mainland/ Zanzibar						
Mainland	33.8	10.9	22.5	32.9	3,994	179.6
Urban	14.6	8.5	26.1	50.8	1,447	310.8
Rural	44.7	12.2	20.4	22.7	2,547	122.0
Zanzibar	25.2	14.9	34.5	25.3	125	187.0
Unguja	20.1	13.6	36.7	29.6	90	206.2
Pemba	(38.2)	(18.4)	(29.0)	(14.4)	35	(131.1)
Zone						
Western	56.3	12.9	17.3	13.5	405	87.2
Northern	22.8	8.8	28.2	40.2	492	248.2
Central	31.3	10.8	25.0	32.9	413	184.6
Southern Highlands	50.1	9.9	21.0	19.0	254	100.7
Southern	45.3	19.6	15.8	19.4	203	118.9
South West Highlands	30.5	12.6	31.9	25.0	373	180.7
Lake	43.1	12.0	24.3	20.7	1,116	131.7
Eastern	8.8	6.6	15.0	69.6	738	433.7
Zanzibar	25.2	14.9	34.5	25.3	125	187.0
Region						
Dodoma	21.0	5.8	26.7	46.5	183	286.7
Arusha	29.4	10.2	38.2	22.2	157	190.9
Kilimanjaro	31.8	10.1	32.8	25.2	116	186.0
Tanga	13.3	7.1	18.5	61.1	219	420.6
Morogoro	16.3	13.5	16.8	53.5	201	330.2
Pwani	13.5	5.8	12.2	68.4	89	455.9
Dar es Salaam	4.6	3.7	14.8	77.0	449	461.5
Lindi	32.9	17.5	21.8	27.7	86	150.5
Mtwara	54.2	21.1	11.4	13.3	118	92.8
Ruvuma	69.6	8.5	12.1	9.8	116	51.4
Iringa	34.6	9.1	29.3	27.1	72	185.9
Mbeya	17.7	12.5	39.1	30.7	243	222.6
Singida	48.8	17.5	15.6	18.2	114	105.3
Tabora	55.3	12.2	15.8	16.7	237	92.5
Rukwa	56.8	12.5	17.1	13.5	93	82.6
Kigoma	57.7	13.8	19.4	9.0	167	80.8
Shinyanga	52.0	13.9	17.6	16.5	159	96.7
Kagera	58.8	10.3	19.7	11.2	203	69.8
Mwanza	27.4	13.0	32.9	26.7	282	184.7
Mara	18.3	13.0	40.2	28.5	163	200.8
Manyara	30.3	12.3	31.6	25.9	116	174.3
Njombe	33.0	13.3	27.6	26.1	66	162.2
Katavi	48.5	13.4	21.7	16.3	37	105.2
Simiyu	36.3	17.3	17.1	29.2	158	141.6
Geita	75.7	3.6	11.6	9.1	152	45.1
Kaskazini Unguja	33.8	20.6	31.6	14.0	17	131.4
Kusini Unguja	21.1	15.6	41.1	22.2	12	188.4
Mjini Magharibi	16.0	11.2	37.3	35.5	61	234.3
Kaskazini Pemba	42.9	18.2	26.2	12.7	18	116.0
Kusini Pemba	33.2	18.6	31.9	16.3	17	147.3
Education						
No education	45.9	13.6	21.3	19.3	587	114.9
Primary incomplete	43.4	12.0	18.1	26.5	502	131.4
Primary complete	33.7	11.2	22.7	32.4	2,107	177.3
Secondary+	24.6	11.6	24.3	39.5	371	218.8
Wealth quintile						
Lowest	51.3	11.2	21.3	16.2	748	96.8
Second	48.1	15.0	17.7	19.2	699	105.2
Middle	44.2	13.3	21.4	21.1	695	121.8
Fourth	25.8	10.9	24.9	38.4	896	223.9
Highest	11.2	7.0	26.5	55.3	1,081	336.5
Total	33.5	11.0	22.8	32.7	4,119	180.0

MALARIA 12

Key Findings

- ***Ownership of insecticide-treated nets (ITN):*** Household ownership of at least one ITN increased substantially over time, from 23% in 2004-05 to 91% in 2011-12, before declining to 66% in 2015-16.
- ***Use of ITNs:*** Use of ITNs among children under age 5 increased substantially from only 16% in 2004-05 to a high of 72% in 2011-12, before declining to 54% in 2015-16. Use of ITNs among pregnant women increased from 16% in 2004-05 to 75% in 2011-12 and then dropped to 54% in 2015-16.
- ***Intermittent preventive treatment during pregnancy (IPTp):*** Just over one-third (35%) of women with a live birth in the 2 years preceding the survey received at least two doses of SP/Fansidar for prevention of malaria in Tanzania and only 8% of these women received three or more doses.
- ***Case management of malaria in children:*** About one-third of children under age 5 with a fever (36%) had blood taken from a finger or heel for diagnostic testing. Half of children under age 5 with a fever were given antimalarial medicines and among these, nearly 9 in 10 children took an artemisinin-based combination therapy (ACT) (85%).
- ***Prevalence of low haemoglobin:*** Five percent of children age 6-59 months have low haemoglobin (<8.0 g/dl). Low haemoglobin is more common among children in the lowest wealth quintile (8%) and in younger children age 9-11 months (11%).
- ***Malaria prevalence:*** Malaria prevalence in Tanzania has risen from 9% in 2011-12 to 14% in 2015-16 according to rapid diagnostic testing (RDT) results. Malaria prevalence is highest in children from Geita, Kigoma and Kagera regions and is more or less non-existent in Arusha, Njombe, Iringa, Dodoma, Kilimanjaro, and Manyara regions in Tanzania Mainland and in all regions in Zanzibar.

According to data from routine administrative hospital records and surveys, malaria remains a major public health challenge that affects the health and welfare of Tanzanians. Over 93% of the Tanzanian population are at risk because they live in areas where transmission of malaria occurs (NMCP, 2013). Malaria is a leading cause of morbidity and mortality, especially in children under age 5 and pregnant women. Malaria prevalence varies among and within the zones and regions. It is highest in the Western, Lake, and Southern zones and lowest in the Northern, Central, and South West Highlands zones. In Zanzibar, malaria prevalence is very low in all areas. Climatic conditions remain favorable for malaria transmission throughout the country.

Malaria is caused by four species of *Plasmodium* parasites that are transmitted by multiple species of *Anopheles* mosquitoes. In Tanzania, *Plasmodium falciparum* is the most common, and causes severe malaria, which can be fatal if not recognised promptly and properly managed. Children under age 5 and pregnant women are at greatest risk of severe malaria because they have insufficient immunity against malaria. In addition, individuals from malaria-free or very low endemic areas are also likely to have low immunity and an elevated risk of severe disease if infected.

The Government of Tanzania, in collaboration with its partners, is implementing recommended preventive and curative interventions according to Malaria Strategic Plans. The new strategic plan outlines the key technical aspects (preventive and curative) and supporting strategies in the ongoing fight against malaria for the period 2015–2020 in Tanzania Mainland and for 2013/14–2017/18 in Zanzibar. The Tanzania Mainland plan focuses on sustaining the achievements of the previous phase, further reducing malaria transmission, and exploring the possibilities of moving towards the malaria pre-elimination phase by 2020. The Zanzibar Malaria Elimination Plan also aims at consolidating malaria control achievements toward pre-elimination by 2018. The 2015-16 TDHS-MIS provides an opportunity to evaluate achievements against some of the goals and objectives in these plans.

Chapter 12 presents data that are useful for assessing how well malaria control strategies are implemented, including the availability and use of mosquito nets, indoor residual spraying of dwellings with insecticides, the prophylactic use of antimalarial drugs by pregnant women, diagnostic testing for malaria, the therapeutic use of antimalarial drugs in children with fever, and the prevalence of anaemia and malaria among children under age 5.

12.1 Ownership of Insecticide-Treated Nets

Ownership of insecticide-treated nets

Households that have at least one insecticide-treated net (ITN). An ITN is defined as: (1) a factory-treated net that does not require any further treatment (long-lasting insecticidal net or LLIN) or (2) a net that has been soaked with insecticide within the past 12 months.

Sample: Households

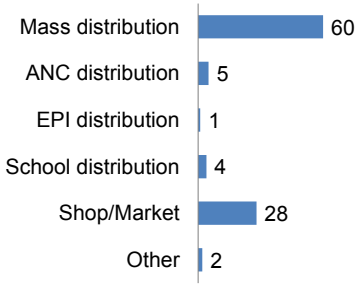
The use of insecticide treated nets (ITNs) is a primary preventive intervention designed to reduce malaria transmission in Tanzania. The objective is to ensure that by 2020 at least 85% of the population of Tanzania who live in all transmission settings and control stages have access to long-lasting insecticidal nets (LLIN) within their household.

Communities in Tanzania acquire nets though various mechanisms such as mass campaigns, private sector distribution, and continuous distribution mechanisms that maintain ITN coverage. Routine distribution of ITNs through the National Voucher Scheme began in 2004. The objective was to increase ITN coverage among the most biologically vulnerable groups to malaria, which include pregnant women and infants. The scheme ended in mid-2014. Two mass campaigns were implemented between 2009 and 2011; these included the under-five catch-up campaign from 2009 to mid-2010 and the universal coverage campaign to cover all sleeping spaces, from 2010 to mid-2011. In 2013, a pilot programme to distribute ITNs to school children commenced in three regions (Lindi, Mtwara, and Ruvuma) with a goal of maintaining levels of ITN coverage achieved through mass campaigns. In Zanzibar, three ITN mass campaigns have been implemented: one in 2005 to cover pregnant women and children under age 5; another in 2008 to cover each household with two nets; and the third in 2012 that targeted two nets per household. The public sector implements the ITN programme in the community in partnership with the private sector and nongovernmental organisations. Since the 2015-16 ITN mass campaign was implemented at the time of the 2015-16 TDHS-MIS survey, the achievements are unlikely to be fully covered by this report.

The 2015-16 ITN mass campaign was implemented nationally, except in the three regions where the school net programme was piloted, to achieve universal access of one ITN for every two people in every household. At the time of the 2015-16 TDHS-MIS, only seven regions (Kagera, Mara, Mwanza, Tabora, Katavi, Kigoma, and Simiyu) had been covered by the campaign.

Figure 12.1 Source of ITNs

Percent distribution of ITNs in interviewed households

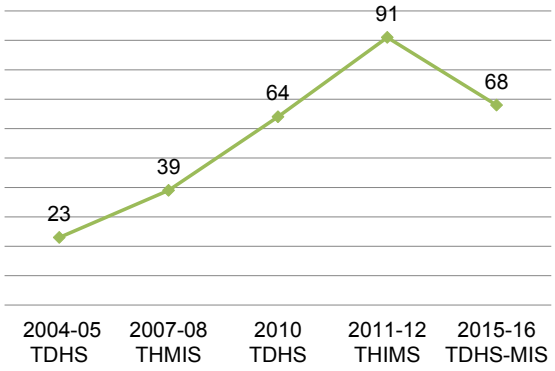


Among all households in Tanzania, 66% own at least one ITN, 39% own at least one ITN for every two persons who stayed in the household last night and on average, every household has 1.6 ITNs **(Table 12.1)**. Most of the ITNs in households are sourced from mass distribution campaigns (60%), followed by shops and markets (28%), antenatal care visits (5%), and the School Net Programme (4%) **(Table 12.2, Figure 12.1)**.

Trends: Household ownership of at least one ITN increased substantially over time from 23% in 2004-05 to 91% in 2012. In 2015-16, ITN ownership declined to 66% **(Figure 12.2)**.

Figure 12.2 Trends in household ownership of ITNs

Percentage of households owning at least one insecticide-treated net (ITN)



Patterns by background characteristics

- Households in Zanzibar are more likely to own an ITN (74%) than those in Tanzania Mainland (65%). In Tanzania Mainland, households in the Manyara Region are less likely to own an ITN (22%), while those in the Simiyu Region are most likely to own an ITN (98%). In Zanzibar, household ITN ownership ranges from 64% in Mjini Magharibi to 83% in Kusini Unguja.
- The average number of ITNs per household ranges from 0.4 nets in Manyara region to 3.8 nets in Simiyu region. The percentage of households with one ITN for every two people is highest in Kigoma region (73%) and lowest in Manyara region (8%).
- The ownership of ITNs generally increases according to wealth quintile, from 57% of households in the lowest quintile to about 68% of households in the highest quintile.
- The source of mosquito nets varies considerably by residence. Nearly three in every four ITNs (73%) in rural areas are obtained from mass distribution campaigns, as compared to slightly over one-third (35%) of those in urban areas. More than half of ITNs (54%) in urban areas are purchased from shops and markets.
- The likelihood that an ITN is obtained from a mass distribution campaign decreases substantially by wealth quintile, from 85% in the lowest quintile to 28% in the highest wealth quintile. Conversely, the percentage of ITNs obtained from shops and markets increases with increasing wealth, from 6% in the lowest quintile to 62% in the highest wealth quintile.
- In the regions of Lindi, Mtwara, and Ruvuma where school-based ITN distribution programmes were implemented, a sizeable percentage of ITNs owned by households was obtained from the School Net Programme (39%, 30%, and 40%, respectively).

12.2 INDOOR RESIDUAL SPRAYING

Vector control interventions: Indoor residual spraying (IRS) in the past 12 months and/or ownership of insecticide-treated nets (ITNs)

Percentage of households in which someone has come into the dwelling to spray the interior walls against mosquitoes (IRS) in the past 12 months

Percentage of households with at least one ITN and/or IRS in the past 12 months

Sample: Households

In Tanzania, indoor residual spraying (IRS) is a component of the integrated vector management strategy, which is central to malaria prevention. The goal of IRS is killing mosquitoes when they rest on the sprayed wall. The use of IRS has had a significant impact on the mosquito population and can lead to rapid reductions in malaria transmission and subsequent morbidity and mortality. The US President's Malaria Initiative has funded IRS in Tanzania since 2006 in Zanzibar and since 2007 in Tanzania Mainland. Since 2012, IRS has been implemented in the Lake Zone regions in Tanzania that has been targeted based on high malaria prevalence and the potential for malaria epidemics. In Zanzibar, IRS is conducted as part of a pre-elimination strategy.

Nationally, only 6% of households in Tanzania were sprayed in the 12 months before the survey; however, in areas targeted for spraying, IRS coverage was higher. Fifteen percent of households in the Lake Zone and 35% of households in Zanzibar were covered by IRS. Overall, 66% of households in Tanzania own at least one ITN and/or have received IRS in the past 12 months **(Table 12.3)**.

Trends: The percentage of households that own at least one ITN and/or have received IRS in the past 12 months has decreased from 92% in 2011-12 THMIS to 66% in 2015-16 TDHS-MIS.

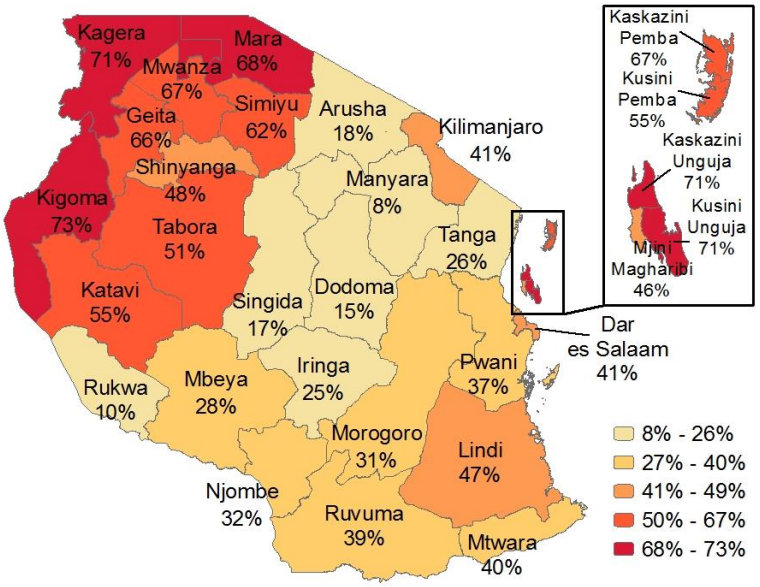
The percentage of households covered by IRS in the past 12 months has declined from 14% in 2011-12 to 6% in the 2015-16 TDHS.

Patterns by background characteristics

- IRS is more common in Zanzibar (35%) than in Tanzania Mainland (5%). In Tanzania Mainland, IRS coverage is highest in Lake Zone (15%) and in Kagera region (25%).
- The percentage of households with at least one ITN for every 2 persons and/or IRS in the past 12 months varies among regions, from 8% in Manyara region to 71% in Kagera, Kusini Unguja, and Kaskazini Unguja regions and 73% in Kigoma region **(Figure 12.3)**.

Figure 12.3 **ITN ownership by region**

Percentage of households with at least one ITN for every two persons and/or IRS in the last past 12 months



12.3 ITN Coverage, Access to an ITN, and Household Use of ITNs

Full household ITN coverage

Percentage of households with at least one ITN for every two people.

Sample: Households

Access to an ITN

Percentage of the population that could sleep under an ITN if each ITN in the household were used by up to two people.

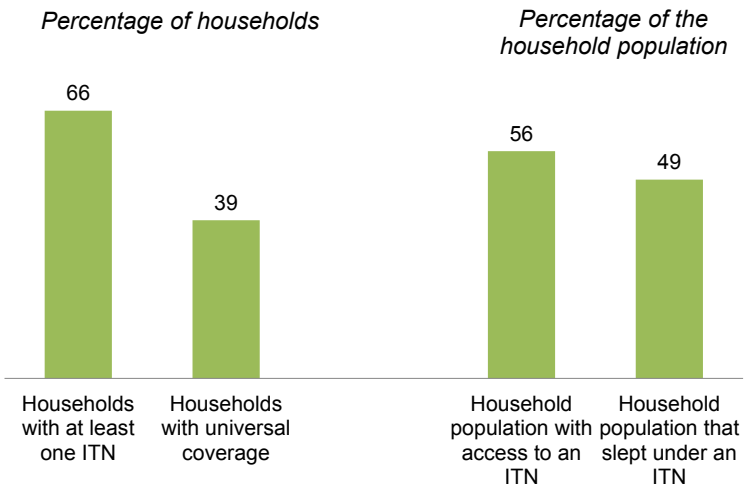
Sample: De facto household population

Use of ITNs

Percentage of population that slept under an ITN the night before the survey.

Sample: De facto household population

***Figure 12.4* Ownership of, access to, and use of ITNs**



The ITN coverage within the population can be measured by assuming that each net is shared by two people in the household. In Tanzania, 39% of households have at least one ITN for every two persons who stayed in the household the night before the survey **(Table 12.1)**. The percentage of population with access to an ITN, which is the population who could sleep under an ITN if each ITN in the household were used by up to two people, is 56% **(Table 12.4.1)**. Overall, 49% of the household population slept under an ITN the night before the survey. In households with at least one ITN, 70% of the population slept under an ITN the previous night **(Table 12.5)**. When comparing the population-level indicators presented in **Figure 12.4**, it is evident that the percentage of the population using ITNs is almost equal to the percentage with access to an ITN (49% and 56%, respectively); the ITN use to ITN access ratio is high at 88%. Conversely, 66% of households own at least one ITN, while only 39% own sufficient ITNs to fully cover all household residents.

Trends: Percentage of households with at least one ITN for every two people increased from 10% of households in 2004-05 to 56% in 2011-12, followed by a decline to 39% of households in 2015-16.

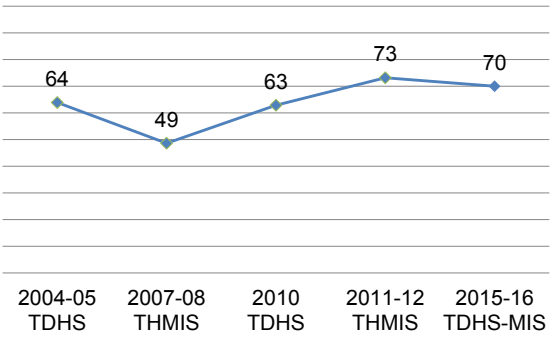
The percentage of the household population who could sleep under an ITN if each ITN in the household were used by up to two people (ITN access) has declined from 75% in 2011-12 to 56% in 2015-16.

The percentage of the household population who slept under an ITN increased from 45% in 2010, to 68% in 2011-12 and declined to 49% in 2015-16.

In households with least one ITN, the percentage of the household population who slept under an ITN the night before the survey has increased over the years from 63% in 2010, to 73% in 2011-12 and 70% in 2015-16 **(Table 12.5, Figure 12.5)**.

Figure 12.5 Trend in ITN use

Population who slept under an ITN last night among those living in a household with at least one ITN



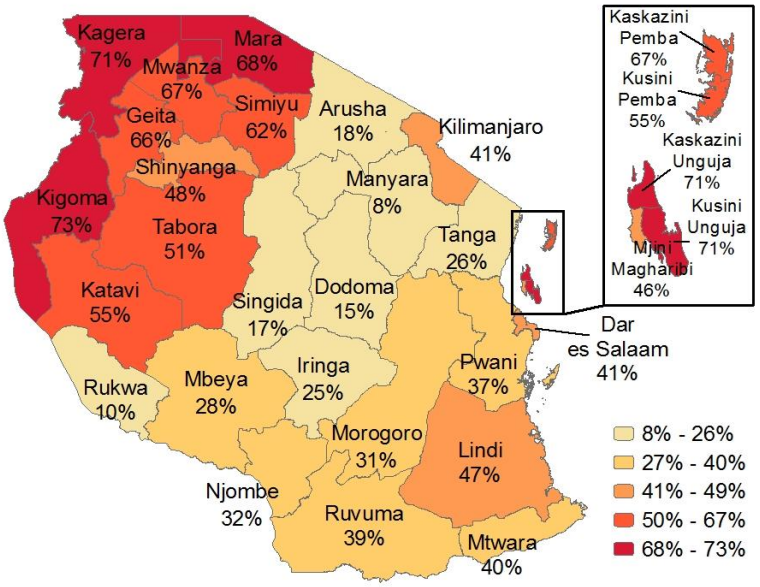
Patterns by background characteristics

- ITN coverage is highest for households in Kigoma region (73%), and is lowest in Manyara region (8%) **(Figure 12.6)** As wealth quintiles increase, the likelihood that a household has at least one ITN for every two people increases from 28% in the lowest quintile to 43% in the highest quintile **(Table 12.1)**.

- Use of ITNs the night before the survey is highest in children under age 5 (55%), those living in urban areas (54%), and in the regions of Geita (86%), Katavi (85%), and Simiyu (84%), and those in the highest wealth quintiles (53%) **(Table 12.5)**. Use of ITNs is lowest in Manyara region (13%) followed by Rukwa (15%), Dodoma, and Njombe (17%) regions.

Figure 12.6 Household possession of mosquito nets by region

Percentage of households with at least one ITN for every two persons who stayed in the household last night



- Almost 7 in 10 (69%) existing ITNs were used the night before the survey. The ITNs in urban households and those in the highest wealth quintiles are more likely to be used **(Table 12.6)**.

- The main reason reported by respondents for not using existing nets is that they are saving the net for later use (50%). Other reported reasons included: there are no mosquitoes (28%), the usual users did not sleep in the household last night (8%), it is too hot (6%), the net is too old or is torn (4%), and the net is too dirty (3%) **(Table 12.7)**.

12.4 USE OF ITNS BY CHILDREN AND PREGNANT WOMEN

Use of ITNs by children under age 5

Percentage of children under age 5 that slept under an ITN the night before the survey.

Sample: Children under age 5 who slept in the household the previous night

Use of ITNs by pregnant women

Percentage of pregnant women that slept under an ITN the night before the survey.

Sample: Pregnant women who slept in the household the previous night

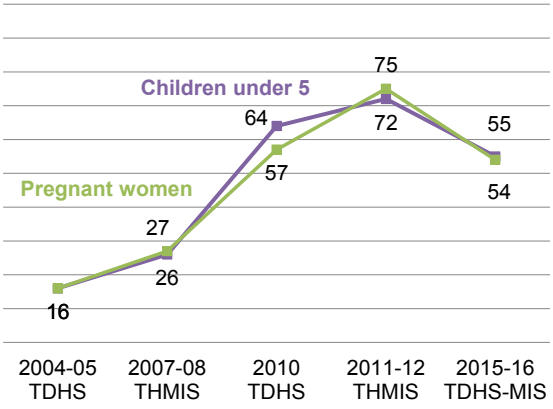
Children under age 5 and pregnant women have historically been targeted for malaria interventions because they are at highest risk of morbidity and mortality in highly endemic settings. Just over half (54%) of children under age 5 slept under an ITN the night before the survey **(Table 12.8)**. Almost the same percentage of pregnant women (54%) slept under an ITN the night before the survey **(Table 12.9)**.

As expected, ITN use is higher in households with at least one ITN. For example, 74% of children under age 5 in households with at least one ITN slept under an ITN the night before the survey **(Table 12.8)**. Similarly, 74% of pregnant women in households with at least one ITN slept under an ITN the night before the survey (**Table 12.9)**.

Trends: ITN use among children under age 5 has increased substantially over the years, from 16% in 2004-05, to 26% in 2007-08, 64% in 2010, and 72% in 2011-12. In 2015-16, ITN use declined to 55%. Similarly among pregnant women, ITN use the night before the survey increased from 16% in 2004-05, to 27% in 2007-08, 57% in 2010, and 75% in 2011-12. In 2015-16, ITN use dropped to 54% **(Figure 12.7)**.

Figure 12.7 **Trend in use of ITNs by children under age 5 and pregnant women**

Percentage of children and pregnant women using an ITN the night before the survey



Patterns by background characteristics

- In Tanzania Mainland, children in urban areas are more likely to have slept under an ITN (61%) the night before the survey than children in rural areas (52%)**.** Pregnant women in urban areas are only marginally more likely to have slept under an ITN (56%) the night before the survey than pregnant women in rural areas (53%) **(Table 12.8)**.
- Children are most likely to have slept under an ITN the night before the survey in Katavi (88%), followed by Geita (87%), and Simiyu (86%) regions. Children in Manyara are the least likely to have slept under an ITN night before the survey (17%). In Zanzibar, the likelihood of children to have slept under an ITN the night before the survey ranges from 46% in Mjini Magharibi to 65% in Kusini Pemba **(Table 12.8)**.
- The percentage of children who slept under an ITN the night before the survey generally increases with wealth, from 49% in the lowest quintile to 59% in the highest wealth quintile (**Table 12.8)**.
- The percentage of children under age 5 in households with at least one ITN who slept under an ITN generally increases with increasing wealth quintiles, from 72% to 77% in the lowest and highest quintile respectively. Likewise, the use of ITNs among pregnant women in households with at least

one ITN generally increases by wealth quintiles from 68% to 80% in the lowest and highest quintile respectively **(Tables 12.8 and Table 12.9)**.

12.5 MALARIA IN PREGNANCY

Intermittent preventive treatment (IPTp) during pregnancy

Percentage of women who took at least two doses of SP/Fansidar (IPTp2+) with at least one dose received during an antenatal care (ANC) during their last pregnancy.

Percentage of women who took at least three doses of SP/Fansidar (IPTp3+) with at least one dose received during an ANC visit during their last pregnancy.

Sample: Women age 15-49 with a live birth in the two years before the survey

In areas of high malaria transmission, by the time an individual reaches adulthood, she or he has acquired partial immunity that can protect him/her against severe disease. However, pregnant women---especially those pregnant for the first time---lose some immunity and are once again susceptible to the disease. Malaria in pregnancy is associated with adverse health outcomes for both mother and child, including anaemia and low birth weight. WHO recommends the use of sulfadoxine/pyremethamine (SP), also called Fansidar, as preventive treatment during pregnancy in countries with a high malaria burden. The original WHO recommendations were for pregnant women to receive at least two doses of SP during routine antenatal care (ANC) visits, the first dose at the beginning of the second trimester and the second dose at the beginning of the third trimester. In 2010, the WHO issued new IPTp guidelines in which pregnant women should receive one dose of SP/Fansidar at each ANC visit after the first trimester with at least one month between doses. The IPTp indicator has been revised to measure the percentage of women with a live birth in the past two years who received at least three doses of SP/Fansidar for the prevention of malaria.

In Tanzania, the national guidelines were updated in 2013/14 to include the new WHO recommendations for IPTp3+. Official IPT3+ implementation programme with the new guidelines was launched in July 2014 and was completed countrywide in July 2015.

In Tanzania, 68% of women with a live birth in the two years preceding the survey reported taking one or more doses of SP/Fansidar during an ANC visit during their pregnancy (IPTp1+); 35% reported taking two or more doses of SP/Fansidar, at least one of which was received during an ANC visit (IPTp2+), and 8% reported taking three or more doses of SP/Fansidar, at least one of which was received during an ANC visit (IPTp3+) **(Table 12.10)**.

Trends: The percentage of women with a live birth in the two years preceding the survey who received IPTp2+ and at least one dose during ANC visit increased from 21% in 2004-05 to 32% in 2011-12 and finally to 35% in 2015-16 **(Figure 12.8)**.

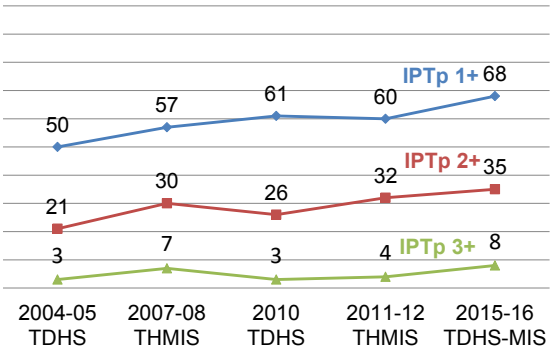
The percentage of women with a live birth in the two years preceding the survey who received IPTp3+ increased from 3% in 2004-05 to 8% in 2015-16 with some fluctuation in between those periods.

Patterns by background characteristics

- Urban women are more likely (11%) than rural women (6%) to have received IPTp3+ during their most recent pregnancy in the past two years. Similarly, pregnant women in urban areas are more likely to receive IPTp2+ (44%) than those residing in rural areas (31%).

Figure 12.8 **Trends in IPTp use by pregnant women**

Percentage of women with a live birth in the 2 years before the survey who received at least 1, 2, or 3 doses of SP/Fansidar with at least one during an ANC visit



- Women are most likely to have received IPTp2+ in Tanga, Kagera, and Njombe (49% each), and least likely in Kaskazini Unguja Region (11%). The percentage of women who received IPTp3+ varies from 1% in Kilimanjaro, Tabora, and Mjini Magharibi to 16% in Dar es Salaam region.

12.6 Case Management of Malaria in Children

Care seeking for children under age 5 with fever

Percentage of children under age 5 with a fever in the two weeks before the survey for whom advice or treatment was sought from a health provider, a health facility, or a pharmacy.

Sample: Children under age 5 with a fever in the two weeks before the survey

Diagnosis of malaria in children under 5 with fever

Percentage of children under age 5 with a fever in the two weeks before the survey who had blood taken from a finger or heel for testing. This is a proxy measure of diagnostic testing for malaria.

Sample: Children under age 5 with a fever in the two weeks before the survey

Artemisinin-based combination therapy (ACT) for children under age 5 with fever

Among children under age 5 with a fever in the two weeks before the survey who took any antimalarial drugs, the percentage who took an artemisinin-based combination therapy (ACT).

Sample: Children under age 5 with a fever in the two weeks before the survey who took any antimalarial drugs

In moderately to highly endemic areas of malaria, acute clinical disease is almost always confined to young children who suffer from high parasitic densities. The diagnosis of malaria is based on detection of parasites in the blood with a microscope or detection of malaria antigens in the blood with malaria rapid diagnostic tests (mRDT). Fever is a major manifestation of malaria in young children, although it also accompanies other illnesses. In Tanzania, artemisinin-based combination therapy (ACT) is the recommended first-line treatment for uncomplicated malaria. Children with uncomplicated malaria should receive an appropriate antimalarial drug within 24 hours of the onset of fever.

In the 2015-16 TDHS-MIS, 18% of children under age 5 were reported to have had a fever within the two weeks before the survey. For 80% of these children, advice or treatment was sought for the fever, and for 45% of them, advice or treatment was sought during the same or next day after the fever began. More than one-third of children under age 5 with fever (36%) had blood taken from a finger or heel for diagnostic testing **(Table 12.11)**. Half of children under age 5 with fever in the two weeks before the survey took any antimalarial medication **(Table 12.12.2)**; of those, 85% took an ACT and 59% took an ACT the same or next day after the onset of the fever **(Tables 12.13.1 and 12.13.2)**.

Among children under age 5 with fever in the two weeks before the survey for whom treatment was sought, the highest percentage (53%) sought advice or treatment from other sources specifically, 26% from Accredited Drug Dispensing Outlets (ADDO) and 24% from a pharmacy. Thirty-four percent sought advice or treatment from the public sector, most commonly from health centres (23%) **(Table 12.12.1)**.

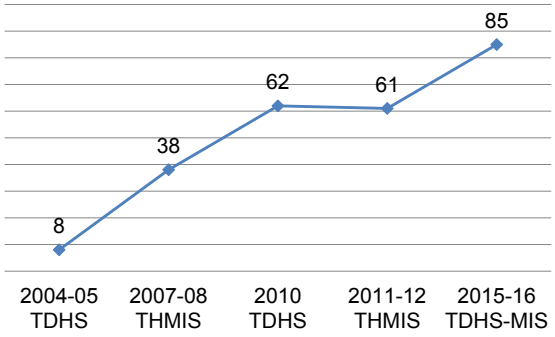
Trends: The percentage of children with fever who had blood taken from a finger or heel for testing has increased from 25% in 2011-12 to 36% in 2015-16.

Among children with fever who received antimalarial medications, the percentage who received ACTs has increased substantially from 8% in 2004-05 to 85% in 2015-16 **(Figure 12.9)**.

Patterns by background characteristics

Figure 12.9 **Trend in ACT use by children with fever**

Among children with recent fever who took an antimalarial, percentage who received ACT



- The percentage of children under age 5 reported to have had a fever in the two weeks before the survey is lowest in the Central Zone (8%) and highest in the Southern and Lake zones (23%). Children age 12-35 months have the highest prevalence of fever (22-23%) and children age 48-59 months have the lowest (13%).
- The percentage of children under age 5 with a recent fever for whom advice or treatment was sought increases with maternal education (76%-87% from least to most educated) and wealth (73%-84% from lowest to highest quintile). The percentage of children for whom advice or treatment was sought the same or next day following the onset of fever shows greater disparity by mother's education (39%-62% for least to most educated) and wealth (40%-55% for lowest to highest quintile).
- Urban children with fever in the two weeks preceding the survey are twice as likely as rural children to have blood taken from a finger or heel for testing (62% compared to 27%). Disparities by the mother's education and wealth are equally large **(Table 12.11)**.
- Among children under age 5 with fever in the two weeks preceding the survey and who were treated with an antimalarial medication, the percentage who took any ACT declined by mother's education (91% to 77% for the least to most educated) and by household wealth (91% to 74% for lowest to highest quintile) **(Table 12.13.1)**.

12.7 PREVALENCE OF LOW HAEMOGLOBIN IN CHILDREN

Prevalence of low haemoglobin in children

Percentage of children age 6-59 months who had a haemoglobin measurement of less than 8 grammes per decilitre (g/dl) of blood.

Sample: Children age 6-59 months in selected households

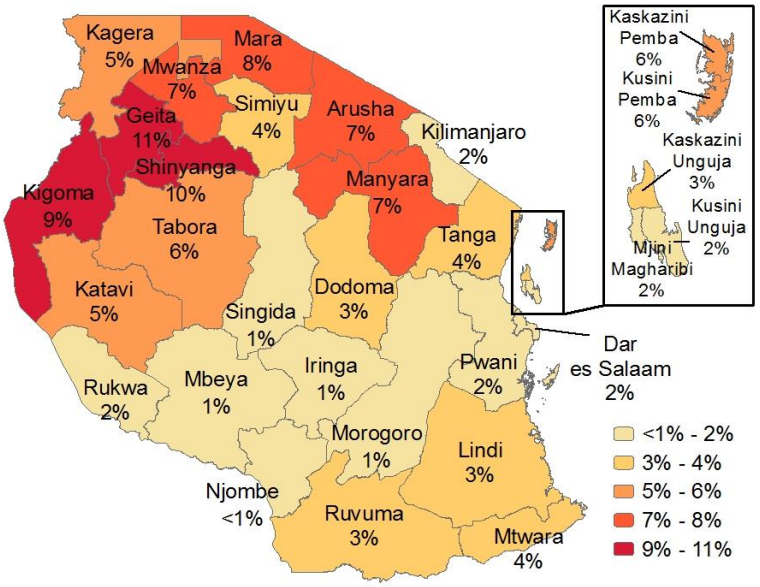
One of the objectives of the 2015-16 TDHS-MIS was to assess the prevalence of anaemia among children age 6-59 months. The chapter on nutrition presents the percentage of children who are anaemic. Children are classified as anaemic if their haemoglobin level is below 11.0 g/dl and as severely anaemic if their haemoglobin level is below 7.0 g/dl. However, poor dietary intake of iron is only one of numerous causes of anaemia; malarial infection can also cause anaemia. The cutoff of 8 g/dl is often used to classify malaria-related anaemia (Korenromp et al. 2004). Five percent of children in Tanzania have haemoglobin less than 8g/dl **(Table 12.15)**.

Trends: The percentage of children under age 5 with haemoglobin levels <8.0 g/dl has declined slightly over the years, from 11% in 2004-05, to 6% in 2011-12, and to 5% in 2015-16.

Patterns by background characteristics

- Generally, the percentage of children under age 5 with low haemoglobin decreases with increasing age.
- Low haemoglobin is most common in children from Geita (11%) region and least common in children from Njombe region (less than 1%) (**Figure 12.10**).
- The percentage of children with low haemoglobin decreases with increasing maternal education and increasing household wealth.

Figure 12.10 **Haemoglobin <8.0 g/dl in children age 6-59 months by region**



12.8 PREVALENCE OF MALARIA IN CHILDREN

Malaria prevalence in children

Percentage of children age 6-59 months classified as infected with malaria according to microscopy results.

Percentage of children age 6-59 months classified as infected with malaria according to malaria rapid diagnostic tests (mRDT).

Sample: Children age 6-59 months

In the 2015-16 TDHS-MIS, malaria testing was done with mRDT and microscopy to provide information about the extent of malaria infection among children age 6-59 months. In the field, trained nurses used SD Bioline Pf/Pan mRDT to diagnose malaria from capillary finger (or heel) prick blood samples. Children with mRDT positive results with no symptoms of severe malaria were offered a full course of treatment

according to Tanzania national malaria treatment guidelines, while parents or guardians with children who showed signs and symptoms of severe malaria were advised to visit a health facility immediately. Children who tested positive for malaria in Zanzibar were not treated due to the current procedure for malaria elimination on the island. Their parents or guardians were advised to take their children to the nearest health facility immediately.

In addition to mRDT testing, thick blood smear samples were also prepared in the field. Each blood smear was identified with a bar code label and dried in a dust-free environment, stored in slide boxes, and transported to Ifakara Health Institute Laboratory in Bagamoyo for microscopic reading that would determine the presence of *Plasmodium* infection.

The prevalence of malaria in children age 6-59 months is 14% as measured by mRDTs and 6% as measured by microscopy **(Table 12.16)**.

Trends: Malaria prevalence among children under age 5 declined substantially from 18% in 2007-08 to 9% in 2011-12 and then increased to 14% in 2015-16 according to the mRDT results.

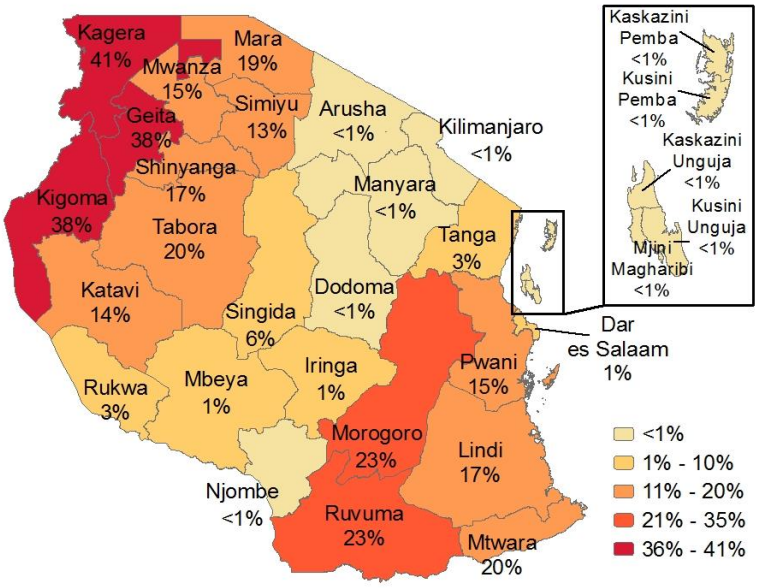
According to microscopy measurements conducted in 2011-12 and 2015-16, malaria prevalence increased from 4% to 6%. Microscopy was not conducted in the 2007-08 survey.

Patterns by background characteristics

- Malaria prevalence is higher among children living in rural areas than in urban areas (18% and 4%, respectively, based on the mRDT results).
- There is a very large variability in malaria prevalence across zones, from as high as 28% in the Western Zone and 24% in the Lake Zone, to 1% in Northern Zone, and zero prevalence in Zanzibar.
- According to mRDT results, malaria prevalence is highest in children from Kagera (41%), Geita, and Kigoma regions (38% each), and more or less non-existent in Arusha, Njombe, Dodoma, Kilimanjaro, and Manyara regions in Tanzania Mainland and in all regions in Zanzibar **(Figure 12.11)**.

Figure 12.11 Prevalence of malaria in children by region

Percentage of children age 6-59 months who tested positive for malaria by mRDT



- Malaria prevalence among children under age 5 also varies by their mothers' education status. The prevalence is highest among children whose mothers have no education or an incomplete primary education (21% and 23% respectively) and lowest among children whose mothers have at least some secondary education (4%).
- Malaria prevalence varies greatly by wealth quintile, from 23% of children from the lowest wealth quintile to only 1% of children from the highest wealth quintile**.**

List of Tables

For detailed information on malaria, see the following tables:

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- **Table 12.3 Indoor residual spraying against mosquitoes**
- **Table 12.4.1 Access to an insecticide-treated net (ITN)**
- **Table 12.4.2 Access to an insecticide-treated net (ITN) by background characteristics**
- **Table 12.5 Use of mosquito nets by persons in the household**
- **Table 12.6 Use of existing ITNs**
- **Table 12.7 Reasons for not using mosquito nets**
- **Table 12.8 Use of mosquito nets by children**
- **Table 12.9 Use of mosquito nets by pregnant women**
- **Table 12.10 Use of Intermittent Preventive Treatment (IPTp) by women during pregnancy**
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- **Table 12.14 Coverage of testing for anaemia and malaria in children**
- **Table 12.15 Haemoglobin <8.0 g/dl in children**
- **Table 12.16 Malaria prevalence among children according to a rapid diagnostic test (RDT) and microscopy**

Table 12.1 Household possession of mosquito nets

Percentage of households with at least one mosquito net (treated or untreated), insecticide-treated net (ITN), and long-lasting insecticidal net (LLIN); average number of nets, ITNs, and LLINs per household; and percentage of households with at least one net, ITN, and LLIN per two persons who stayed in the household last night, by background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Percentage of households with at least one mosquito net			Average number of nets per household			Number of households	Percentage of households with at least one net for every two persons who stayed in the household last night			Number of households with at least one person who stayed in the household last night
	Any mosquito net	Insecticide-treated mosquito net (ITN)[1]	Long-lasting insecticidal net (LLIN)	Any mosquito net	Insecticide-treated mosquito net (ITN)[1]	Long-lasting insecticidal net (LLIN)		Any mosquito net	Insecticide-treated mosquito net (ITN)[1]	Long-lasting insecticidal net (LLIN)	
Residence											
Urban	81.0	67.3	57.0	1.9	1.5	1.3	4,141	54.8	40.4	33.1	4,116
Rural	68.3	64.8	63.5	1.8	1.7	1.6	8,422	41.4	37.9	37.0	8,381
Tanzania Mainland/ Zanzibar											
Mainland	72.2	65.4	61.1	1.8	1.6	1.5	12,247	45.6	38.7	35.7	12,184
Urban	81.0	67.3	57.0	1.9	1.5	1.3	4,053	54.9	40.7	33.3	4,028
Rural	67.8	64.4	63.1	1.8	1.7	1.6	8,195	41.1	37.8	36.9	8,156
Zanzibar	82.3	73.8	70.8	2.2	1.8	1.7	316	51.6	39.7	37.3	313
Unguja	82.2	71.6	67.6	2.2	1.7	1.6	213	53.0	37.8	34.8	212
Pemba	82.4	78.4	77.5	2.1	1.9	1.9	102	48.6	43.8	42.5	102
Zone											
Western	94.4	92.2	90.9	3.1	3.0	3.0	1,010	64.7	61.3	60.1	1,008
Northern	60.3	52.7	48.0	1.2	1.0	0.9	1,526	34.3	27.4	24.6	1,518
Central	41.0	35.7	34.0	0.8	0.6	0.6	1,469	18.2	13.8	12.9	1,464
Southern Highlands	59.4	55.4	53.8	1.2	1.1	1.1	933	36.5	32.6	31.5	929
Southern	72.7	64.7	57.2	1.6	1.3	1.2	798	54.0	42.8	36.7	792
South West Highlands	53.8	49.3	48.1	1.1	1.0	0.9	1,306	31.2	26.2	25.2	1,298
Lake	93.1	90.4	87.9	2.9	2.8	2.7	2,935	62.4	58.8	56.9	2,928
Eastern	79.2	62.5	51.5	1.7	1.2	1.0	2,270	49.9	34.7	26.9	2,246
Zanzibar	82.3	73.8	70.8	2.2	1.8	1.7	316	51.6	39.7	37.3	313
Region											
Dodoma	44.8	38.8	37.4	0.8	0.6	0.6	683	21.4	15.3	14.9	679
Arusha	48.4	43.1	37.3	0.9	0.8	0.7	486	23.5	18.0	13.5	483
Kilimanjaro	68.9	63.8	61.4	1.5	1.2	1.2	431	46.4	39.5	37.7	430
Tanga	63.8	52.5	47.0	1.3	1.0	0.9	610	34.4	26.3	24.2	606
Morogoro	66.4	55.2	52.2	1.3	1.1	1.0	698	37.2	30.5	29.0	689
Pwani	79.1	64.6	60.8	1.6	1.3	1.2	317	49.6	37.2	34.0	313
Dar es Salaam	86.4	65.9	48.7	1.9	1.3	0.9	1,255	57.0	36.4	23.9	1,244
Lindi	75.7	69.9	61.5	1.7	1.5	1.2	313	57.6	47.0	39.2	310
Mtwara	70.7	61.3	54.4	1.6	1.3	1.1	485	51.6	40.1	35.1	482
Ruvuma	69.4	66.1	64.6	1.5	1.4	1.4	410	42.5	38.7	37.3	408
Iringa	52.5	45.7	43.3	1.0	0.8	0.8	301	30.8	25.0	23.9	300
Mbeya	54.6	50.4	49.5	1.1	0.9	0.9	902	32.8	27.8	26.9	895
Singida	50.7	43.9	42.5	1.1	0.9	0.9	392	21.8	17.4	16.3	391
Tabora	93.1	90.8	89.0	3.1	3.0	2.9	539	54.8	50.8	49.2	539
Rukwa	35.4	29.4	27.0	0.6	0.5	0.4	295	15.8	10.4	9.5	294
Kigoma	95.8	93.7	93.1	3.2	3.1	3.0	472	76.1	73.4	72.6	469
Shinyanga	86.0	78.7	72.7	2.5	2.3	2.2	400	54.8	48.0	43.6	400
Kagera	90.0	89.5	89.4	2.3	2.3	2.3	643	61.8	61.3	61.3	640
Mwanza	94.3	90.3	85.6	2.9	2.7	2.6	717	65.8	60.6	57.9	715
Mara	93.9	91.4	88.9	3.2	3.0	2.9	437	65.1	60.6	57.9	435
Manyara	24.7	22.3	19.8	0.4	0.4	0.3	395	9.2	7.6	6.2	395
Njombe	50.1	48.6	47.8	1.1	1.0	1.0	222	33.2	31.7	31.2	220
Katavi	97.4	94.7	93.1	2.8	2.7	2.6	110	59.4	55.5	53.6	109
Simiyu	98.0	97.6	97.5	3.8	3.7	3.6	348	64.5	61.5	60.3	346
Geita	98.0	96.4	95.8	3.1	3.0	3.0	390	60.3	58.2	57.4	390
Kaskazini Unguja	87.6	82.2	79.7	2.4	2.1	2.0	51	56.6	48.2	46.4	50
Kusini Unguja	90.4	83.3	82.4	2.4	2.1	2.1	32	65.8	55.0	53.1	32
Mjini Magharibi	78.1	64.4	59.2	2.1	1.4	1.3	130	48.4	29.5	25.8	129
Kaskazini Pemba	81.3	79.8	78.3	2.1	2.0	1.9	54	48.0	46.1	44.7	53
Kusini Pemba	83.6	76.9	76.6	2.1	1.9	1.8	49	49.4	41.3	40.0	48
Wealth quintile											
Lowest	59.3	57.1	56.6	1.7	1.6	1.6	2,107	29.0	27.9	27.8	2,104
Second	66.5	63.8	63.1	1.7	1.7	1.7	2,394	41.3	38.8	38.5	2,384
Middle	69.0	65.8	64.1	1.8	1.7	1.6	2,500	42.8	39.7	38.4	2,483
Fourth	78.9	71.1	66.1	1.8	1.6	1.5	2,687	50.6	42.1	38.9	2,668
Highest	84.1	68.0	56.6	2.1	1.6	1.3	2,874	60.0	42.8	34.0	2,858
Total	72.5	65.6	61.4	1.8	1.6	1.5	12,563	45.8	38.8	35.7	12,497

[1] An insecticide-treated net (ITN) is (1) a factory-treated net that does not require any further treatment (LLIN) or (2) a net that has been soaked with insecticide within the past 12 months.

Table 12.2 Source of mosquito nets

Percent distribution of mosquito nets by source of net, according to background characteristics, Tanzania DHS-MIS 2015-16

Background Characteristic	Mass distri-bution campaign	School net pro-gramme	ANC visit	Immu-nisation visit	Govern-ment health facility	Pharmacy/ ADDO	Shop/ market	Com-munity health worker	Religi-ous insti-tution	Other	Don't know/ missing	Total	Number of mosquito nets
Type of net													
ITN[1]	67.6	4.0	4.8	1.4	0.2	0.3	20.3	0.1	0.1	1.2	0.2	100.0	20,331
Other[2]	6.5	2.4	2.3	0.5	0.1	1.4	83.6	0.0	0.4	2.0	0.7	100.0	2,764
Residence													
Urban	35.2	2.7	3.4	1.0	0.1	1.1	54.4	0.1	0.0	1.6	0.4	100.0	7,972
Rural	73.4	4.4	5.0	1.4	0.2	0.1	13.9	0.0	0.2	1.1	0.1	100.0	15,124
Tanzania Mainland/ Zanzibar													
Mainland	60.2	3.9	4.4	1.2	0.1	0.4	28.1	0.0	0.1	1.2	0.2	100.0	22,410
Urban	34.9	2.7	3.4	1.0	0.1	1.0	54.8	0.1	0.0	1.5	0.3	100.0	7,777
Rural	73.7	4.5	4.9	1.3	0.1	0.1	13.9	0.0	0.2	1.1	0.1	100.0	14,633
Zanzibar	61.4	1.4	7.1	3.8	1.0	0.8	20.5	0.1	0.0	3.0	0.7	100.0	686
Unguja	60.2	1.9	5.8	3.3	1.4	1.1	21.6	0.1	0.0	3.7	0.8	100.0	470
Pemba	64.0	0.2	10.0	5.1	0.1	0.2	18.2	0.1	0.0	1.5	0.5	100.0	216
Zone													
Western	86.9	0.3	2.2	0.4	0.0	0.1	9.4	0.1	0.2	0.5	0.0	100.0	3,179
Northern	39.1	1.9	8.7	1.2	0.3	0.6	44.5	0.1	0.7	2.9	0.1	100.0	1,869
Central	48.3	1.4	13.5	3.2	0.1	0.3	30.2	0.0	0.8	2.1	0.2	100.0	1,136
Southern Highlands	41.0	21.8	9.1	3.1	0.5	0.5	20.4	0.0	0.0	3.3	0.3	100.0	1,155
Southern	22.7	33.8	6.0	2.5	0.1	0.1	31.9	0.1	0.0	2.3	0.3	100.0	1,297
South West Highlands	61.9	0.8	7.9	3.1	0.3	0.3	24.7	0.0	0.1	0.4	0.5	100.0	1,452
Lake	84.0	0.8	1.6	0.4	0.1	0.3	12.3	0.0	0.0	0.4	0.1	100.0	8,523
Eastern	16.6	1.0	4.3	1.2	0.0	1.2	72.7	0.1	0.1	2.1	0.5	100.0	3,798
Zanzibar	61.4	1.4	7.1	3.8	1.0	0.8	20.5	0.1	0.0	3.0	0.7	100.0	686
Region													
Dodoma	44.9	1.2	14.8	4.0	0.0	0.7	29.3	0.0	1.3	3.3	0.4	100.0	546
Arusha	28.9	2.7	13.5	2.7	1.0	0.9	44.7	0.2	0.0	5.4	0.0	100.0	448
Kilimanjaro	56.2	1.3	6.3	1.5	0.0	0.5	31.2	0.0	0.3	2.4	0.2	100.0	625
Tanga	31.3	1.8	7.9	0.1	0.2	0.5	54.8	0.2	1.4	1.8	0.0	100.0	796
Morogoro	23.8	0.1	5.0	1.6	0.0	0.6	65.4	0.0	0.3	2.7	0.5	100.0	925
Pwani	30.8	1.2	6.2	2.2	0.2	0.7	55.3	0.0	0.0	2.3	0.8	100.0	520
Dar es Salaam	10.6	1.3	3.7	0.9	0.0	1.6	79.4	0.1	0.0	1.9	0.4	100.0	2,354
Lindi	17.2	39.4	5.2	3.8	0.3	0.0	32.7	0.1	0.0	1.1	0.0	100.0	527
Mtwara	26.5	30.0	6.6	1.6	0.0	0.2	31.4	0.0	0.0	3.1	0.5	100.0	770
Ruvuma	27.3	40.3	7.3	2.3	0.8	0.2	16.1	0.0	0.0	5.5	0.3	100.0	623
Iringa	42.9	0.0	12.4	4.0	0.0	0.9	38.4	0.0	0.0	1.1	0.2	100.0	299
Mbeya	57.0	0.9	9.1	4.3	0.5	0.4	26.6	0.0	0.0	0.5	0.6	100.0	966
Singida	55.5	0.8	10.9	2.9	0.4	0.0	27.9	0.0	0.4	1.3	0.0	100.0	413
Tabora	88.2	0.1	1.6	0.0	0.0	0.1	9.8	0.0	0.0	0.3	0.0	100.0	1,666
Rukwa	40.8	1.9	13.3	1.7	0.0	0.0	40.7	0.0	0.7	0.9	0.0	100.0	176
Kigoma	85.4	0.6	2.9	0.8	0.0	0.1	8.9	0.2	0.4	0.7	0.0	100.0	1,513
Shinyanga	72.9	0.2	1.4	0.1	0.1	0.1	24.5	0.0	0.0	0.8	0.1	100.0	1,001
Kagera	93.6	1.3	1.3	0.2	0.2	0.0	1.9	0.1	0.0	1.1	0.0	100.0	1,493
Mwanza	81.7	1.2	1.5	0.4	0.0	0.8	14.3	0.1	0.0	0.0	0.1	100.0	2,088
Mara	75.6	0.5	3.4	0.7	0.4	0.0	19.0	0.0	0.0	0.1	0.4	100.0	1,392
Manyara	42.0	3.5	15.4	1.1	0.0	0.0	38.0	0.0	0.0	0.0	0.0	100.0	177
Njombe	75.3	0.2	9.8	4.3	0.2	0.7	8.7	0.0	0.0	0.4	0.3	100.0	233
Katavi	89.3	0.0	0.8	0.0	0.0	0.2	9.3	0.0	0.0	0.0	0.3	100.0	310
Simiyu	88.8	0.7	1.1	0.7	0.0	0.3	8.3	0.0	0.0	0.1	0.0	100.0	1,329
Geita	89.5	0.5	0.5	0.4	0.0	0.0	8.5	0.0	0.0	0.3	0.2	100.0	1,218
Kaskazini Unguja	69.8	1.0	10.0	4.2	1.5	0.9	9.1	0.4	0.0	2.2	0.9	100.0	122
Kusini Unguja	75.1	1.5	5.3	4.0	1.9	0.0	9.2	0.2	0.1	1.7	1.0	100.0	78
Mjini Magharibi	51.5	2.5	4.1	2.6	1.1	1.6	30.9	0.0	0.0	4.9	0.7	100.0	269
Kaskazini Pemba	70.1	0.3	9.1	4.5	0.1	0.2	13.8	0.1	0.1	1.5	0.1	100.0	111
Kusini Pemba	57.4	0.1	10.9	5.7	0.2	0.3	22.9	0.1	0.0	1.5	0.9	100.0	104
Wealth quintile													
Lowest	85.0	3.1	3.8	0.8	0.2	0.0	6.1	0.0	0.2	0.8	0.0	100.0	3,501
Second	80.3	4.6	4.9	1.0	0.1	0.0	8.0	0.0	0.1	0.7	0.1	100.0	4,184
Middle	73.0	5.1	5.4	1.6	0.1	0.2	13.0	0.0	0.3	1.2	0.1	100.0	4,409
Fourth	53.9	4.1	5.4	2.0	0.2	0.3	31.2	0.1	0.2	2.2	0.5	100.0	4,942
Highest	28.1	2.5	3.1	0.9	0.1	1.3	62.2	0.1	0.0	1.3	0.3	100.0	6,060
Total	60.3	3.8	4.5	1.3	0.2	0.4	27.9	0.1	0.1	1.3	0.2	100.0	23,095

ANC = Antenatal care.
[1] An insecticide-treated net (ITN) is (1) a factory-treated net that does not require any further treatment (LLIN) or (2) a net that has been soaked with insecticide within the past 12 months.
[2] Any net that is not an ITN.

Table 12.3 Indoor residual spraying against mosquitoes

Percentage of households in which someone has come into the dwelling to spray the interior walls against mosquitoes (IRS) in the past 12 months, the percentage of households with at least one ITN and/or IRS in the past 12 months, and the percentage of households with at least one ITN for every two persons and/or IRS in the past 12 months, by background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Percentage of households with IRS[1] in the past 12 months	Percentage of households with at least one ITN[2] and/or IRS in the past 12 months	Percentage of households with at least one ITN[2] for every two persons and/or IRS in the past 12 months	Number of households
Residence				
Urban	4.1	68.1	42.4	4,141
Rural	6.2	65.3	40.3	8,422
Tanzania Mainland/ Zanzibar				
Mainland	4.8	65.9	40.6	12,247
Urban	3.6	68.0	42.3	4,053
Rural	5.4	64.8	39.8	8,195
Zanzibar	34.8	80.6	57.2	316
Unguja	35.8	79.0	55.4	213
Pemba	32.7	84.0	61.0	102
Zone				
Western	0.3	92.2	61.2	1,010
Northern	1.1	52.8	27.6	1,526
Central	0.0	35.7	13.8	1,469
Southern Highlands	0.1	55.4	32.5	933
Southern	0.3	64.7	42.6	798
South West Highlands	0.1	49.3	26.0	1,306
Lake	14.9	91.4	64.7	2,935
Eastern	5.3	63.6	37.6	2,270
Zanzibar	34.8	80.6	57.2	316
Region				
Dodoma	0.0	38.8	15.3	683
Arusha	0.2	43.1	17.9	486
Kilimanjaro	2.6	64.3	40.6	431
Tanga	0.8	52.5	26.2	610
Morogoro	1.6	55.8	31.2	698
Pwani	0.6	64.9	37.1	317
Dar es Salaam	8.6	67.6	41.2	1,255
Lindi	0.5	69.9	46.7	313
Mtwara	0.2	61.3	39.9	485
Ruvuma	0.0	66.1	38.5	410
Iringa	0.0	45.7	24.9	301
Mbeya	0.1	50.4	27.6	902
Singida	0.2	43.9	17.4	392
Tabora	0.0	90.8	50.8	539
Rukwa	0.0	29.4	10.4	295
Kigoma	0.6	93.7	73.0	472
Shinyanga	0.0	78.7	48.0	400
Kagera	24.9	92.3	71.0	643
Mwanza	17.6	90.8	67.1	717
Mara	19.3	93.1	67.5	437
Manyara	0.0	22.3	7.6	395
Njombe	0.2	48.6	31.5	222
Katavi	0.0	94.7	55.1	110
Simiyu	2.9	97.6	61.7	348
Geita	14.9	96.4	66.3	390
Kaskazini Unguja	54.8	87.5	70.7	51
Kusini Unguja	44.9	88.7	70.7	32
Mjini Magharibi	26.0	73.2	45.7	130
Kaskazini Pemba	41.3	87.2	66.8	54
Kusini Pemba	23.4	80.4	54.5	49
Wealth quintile				
Lowest	3.9	57.3	29.7	2,107
Second	6.1	64.2	41.2	2,394
Middle	6.5	66.5	41.7	2,500
Fourth	4.8	71.5	44.1	2,687
Highest	6.1	69.2	45.7	2,874
Total	5.5	66.2	41.0	12,563

[1] Indoor residual spraying (IRS) is limited to spraying conducted by a government, private or non-governmental organisation.
[2] An insecticide-treated net (ITN) is (1) a factory-treated net that does not require any further treatment (LLIN), or (2) a net that has been soaked with insecticide within the past 12 months.

Table 12.4.1 Access to an insecticide-treated net (ITN)

Percent distribution of the de facto household population by number of ITNs the household owns, according to number of persons who stayed in the household the night before the survey, Tanzania DHS-MIS 2015-16

	Number of persons who stayed in the household the night before the survey								
Number of ITNs	1	2	3	4	5	6	7	8+	Total
0	48.6	42.1	37.6	32.3	33.5	29.8	31.0	20.3	29.6
1	36.9	31.9	27.5	19.3	13.9	11.8	7.9	6.1	13.8
2	10.8	20.5	22.8	27.8	25.1	18.4	15.5	8.8	17.5
3	2.4	4.5	8.9	14.9	18.5	24.6	20.1	15.4	16.1
4	1.3	1.0	2.2	3.8	6.1	9.7	16.9	16.4	10.0
5	0.1	0.0	0.5	1.3	1.6	3.6	4.8	14.3	6.0
6	0.0	0.0	0.4	0.5	1.1	1.4	3.4	12.7	4.8
7	0.0	0.0	0.1	0.1	0.2	0.6	0.4	6.1	2.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	1,401	2,951	5,462	7,311	8,873	8,123	6,760	18,776	59,657
Percent with access to an ITN[1],[2]	51.4	57.9	53.2	58.0	53.1	56.2	53.9	57.7	55.9

[1] An insecticide-treated net (ITN) is (1) a factory-treated net that does not require any further treatment (LLIN) or (2) a net that has been soaked with insecticide within the past 12 months.
[2] Percentage of the de facto household population who could sleep under an ITN if each ITN in the household were used by up to two people.

Table 12.4.2 Access to an insecticide-treated net (ITN) according to background characteristics

Percentage of the de facto population with access to an ITN in the household, by background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Percent with access to an ITN[1,2]
Residence	
Urban	56.4
Rural	55.6
Tanzania Mainland/Zanzibar	
Mainland	55.9
Urban	56.7
Rural	55.5
Zanzibar	56.6
Unguja	54.8
Pemba	60.2
Zone	
Western	78.7
Northern	38.3
Central	24.2
Southern Highlands	45.7
Southern	56.2
South West Highlands	37.7
Lake	78.0
Eastern	50.2
Zanzibar	56.6
Region	
Dodoma	25.7
Arusha	31.4
Kilimanjaro	51.3
Tanga	35.9
Morogoro	45.3
Pwani	50.7
Dar es Salaam	52.9
Lindi	59.5
Mtwara	54.1
Ruvuma	55.8
Iringa	35.4
Mbeya	38.1
Singida	31.1
Tabora	73.7
Rukwa	17.7
Kigoma	85.6
Shinyanga	66.6
Kagera	78.0
Mwanza	78.7
Mara	78.9
Manyara	14.7
Njombe	40.4
Katavi	78.6
Simiyu	83.4
Geita	81.5
Kaskazini Unguja	67.7
Kusini Unguja	68.6
Mjini Magharibi	46.9
Kaskazini Pemba	62.7
Kusini Pemba	57.5
Wealth quintile	
Lowest	50.3
Second	56.1
Middle	56.8
Fourth	58.6
Highest	57.6
Total	55.9

[1] Percentage of the de facto household population who could sleep under an ITN if each ITN in the household were used by up to two people

Table 12.5 Use of mosquito nets by persons in the household

Percentage of the de facto household population who slept the night before the survey under a mosquito net (treated or untreated), under an insecticide-treated net (ITN), under a long-lasting insecticidal net (LLIN), and under an ITN or in a dwelling in which the interior walls have been sprayed against mosquitoes (IRS) in the past 12 months; and among the de facto household population in households with at least one ITN, the percentage who slept under an ITN the night before the survey, by background characteristics, Tanzania DHS-MIS 2015-16

	Household population					Household population in households with at least one ITN[1]	
Background characteristic	Percentage who slept under any mosquito net last night	Percentage who slept under an ITN[1] last night	Percentage who slept under an LLIN last night	Percentage who slept under an ITN[1] last night or in a dwelling sprayed with IRS[2] in the past 12 months	Number of persons	Percentage who slept under an ITN[1] last night	Number of persons
Age							
<5	61.0	54.4	50.8	56.2	10,112	73.9	7,446
5-14	52.0	46.7	44.3	49.1	17,453	65.6	12,436
15-34	57.4	49.2	44.4	51.8	17,663	70.2	12,390
35-49	59.8	50.4	45.9	52.9	7,699	72.8	5,328
50+	51.7	44.8	42.8	47.2	6,728	68.2	4,420
	*	*	*	*	2	*	2
Sex							
Male	54.2	47.4	44.0	49.9	28,753	67.8	20,100
Female	57.9	50.5	46.9	52.8	30,904	71.3	21,923
Residence							
Urban	70.1	53.8	44.6	56.0	17,447	75.2	12,494
Rural	50.3	47.0	45.9	49.5	42,210	67.2	29,529
Tanzania Mainland/ Zanzibar							
Mainland	56.1	49.1	45.5	51.0	58,026	69.8	40,790
Urban	70.5	54.3	44.9	56.0	16,964	75.7	12,165
Rural	50.1	47.0	45.8	49.0	41,062	67.4	28,625
Zanzibar	57.1	46.6	43.5	63.8	1,631	61.7	1,232
Unguja	55.5	42.5	38.4	61.1	1,097	57.8	807
Pemba	60.4	55.1	54.0	69.4	534	69.2	426
Zone							
Western	70.1	66.7	65.4	66.7	6,248	71.3	5,849
Northern	40.9	32.7	29.1	32.9	6,560	61.5	3,488
Central	23.4	19.3	18.0	19.3	6,743	52.2	2,498
Southern Highlands	38.0	34.2	32.9	34.2	3,725	59.0	2,160
Southern	55.4	45.9	39.4	46.0	3,059	66.8	2,103
South West Highlands	33.6	30.2	29.0	30.3	5,631	58.6	2,906
Lake	73.4	69.7	67.3	74.5	16,972	75.3	15,701
Eastern	70.7	51.3	40.9	54.4	9,088	76.7	6,085
Zanzibar	57.1	46.6	43.5	63.8	1,631	61.7	1,232
Region							
Dodoma	21.3	16.7	15.9	16.7	2,860	41.3	1,160
Arusha	33.8	29.2	23.5	29.2	2,065	65.6	918
Kilimanjaro	43.8	36.1	34.1	36.9	1,642	54.4	1,090
Tanga	44.4	33.3	30.3	33.3	2,853	64.2	1,479
Morogoro	57.6	47.5	43.9	48.7	2,849	77.6	1,742
Pwani	63.8	48.1	43.8	48.4	1,270	71.0	862
Dar es Salaam	80.0	54.4	38.4	59.2	4,968	77.6	3,480
Lindi	56.1	48.2	40.7	48.3	1,217	67.5	870
Mtwara	55.0	44.4	38.6	44.5	1,842	66.3	1,234
Ruvuma	51.9	47.8	46.3	47.8	1,662	68.7	1,157
Iringa	33.5	28.0	26.2	28.0	1,182	58.1	569
Mbeya	29.4	26.4	25.3	26.4	3,633	51.0	1,879
Singida	34.6	29.7	28.6	29.7	1,963	66.5	877
Tabora	78.4	75.6	73.8	75.6	3,653	81.5	3,388
Rukwa	18.6	15.1	13.8	15.1	1,367	49.5	416
Kigoma	58.4	54.3	53.5	54.3	2,594	57.2	2,461
Shinyanga	52.8	46.8	43.4	46.8	2,352	56.2	1,960
Kagera	68.5	67.5	67.2	75.9	3,048	75.4	2,730
Mwanza	72.8	68.0	64.4	76.0	4,038	72.6	3,783
Mara	72.5	66.7	62.8	72.7	2,514	72.3	2,319
Manyara	15.1	12.6	10.4	12.6	1,920	52.5	461
Njombe	17.9	16.9	16.7	16.9	880	34.3	434
Katavi	89.7	85.2	83.6	85.2	632	88.1	611
Simiyu	86.7	83.5	82.0	84.1	2,521	85.1	2,474
Geita	87.5	85.5	84.6	88.6	2,499	87.8	2,435
Kaskazini Unguja	59.6	52.2	49.9	76.4	256	61.8	216
Kusini Unguja	58.7	51.1	49.4	69.9	154	60.4	130
Mjini Magharibi	53.2	36.9	31.6	53.4	686	55.1	460
Kaskazini Pemba	57.7	54.7	53.5	72.5	279	68.0	225
Kusini Pemba							

(Continued…)

Table 12.5—*Continued*

Background characteristic	Household population					Household population in households with at least one ITN[1]	
	Percentage who slept under any mosquito net last night	Percentage who slept under an ITN[1] last night	Percentage who slept under an LLIN last night	Percentage who slept under an ITN[1] last night or in a dwelling sprayed with IRS[2] in the past 12 months	Number of persons	Percentage who slept under an ITN[1] last night	Number of persons
Wealth quintile							
Lowest	45.5	44.1	43.7	45.3	12,013	67.6	7,847
Second	50.3	48.0	47.4	50.5	11,853	69.4	8,204
Middle	51.1	47.8	46.4	50.4	11,963	67.4	8,491
Fourth	61.0	52.4	48.4	54.6	11,854	70.0	8,870
Highest	72.6	52.8	41.6	56.2	11,974	73.4	8,610
Total	56.1	49.0	45.5	51.4	59,657	69.6	42,022

Total includes two people missing age.
[1] An insecticide-treated net (ITN) is (1) a factory-treated net that does not require any further treatment (LLIN) or (2) a net that has been soaked with insecticide within the past 12 months.
[2] Indoor residual spraying (IRS) is limited to spraying conducted by a government, private or non-governmental organisation.

Table 12.6 Use of existing ITNs

Percentage of insecticide-treated nets (ITNs) that were used by anyone the night before the survey, by background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Percentage of existing ITNs[1] used last night	Number of ITNs[1]
Residence		
Urban	77.7	6,161
Rural	65.8	14,170
Tanzania Mainland/Zanzibar		
Mainland	69.2	19,774
Urban	77.7	6,028
Rural	65.5	13,746
Zanzibar	75.3	558
Unguja	71.3	361
Pemba	82.7	197
Zone		
Western	62.3	3,053
Northern	72.3	1,522
Central	65.4	933
Southern Highlands	66.7	1,052
Southern	75.5	1,075
South West Highlands	64.7	1,269
Lake	66.5	8,125
Eastern	85.2	2,744
Zanzibar	75.3	558
Region		
Dodoma	54.0	429
Arusha	79.6	378
Kilimanjaro	59.1	538
Tanga	79.3	606
Morogoro	87.0	751
Pwani	80.4	399
Dar es Salaam	85.6	1,595
Lindi	74.1	454
Mtwara	76.5	621
Ruvuma	76.4	576
Iringa	68.2	253
Mbeya	58.4	840
Singida	74.9	352
Tabora	76.3	1,603
Rukwa	71.4	135
Kigoma	46.7	1,449
Shinyanga	54.6	921
Kagera	64.5	1,473
Mwanza	64.3	1,954
Mara	60.1	1,308
Manyara	75.4	152
Njombe	40.1	224
Katavi	79.8	294
Simiyu	75.5	1,281
Geita	79.4	1,188
Kaskazini Unguja	69.5	107
Kusini Unguja	64.4	68
Mjini Magharibi	74.8	186
Kaskazini Pemba	80.2	105
Kusini Pemba	85.7	91
Wealth quintile		
Lowest	65.8	3,412
Second	64.5	4,008
Middle	66.3	4,160
Fourth	72.6	4,286
Highest	76.4	4,465
Total	69.4	20,331

[1] An insecticide-treated net (ITN) is (1) a factory-treated net that does not require any further treatment (LLIN) or (2) a net that has been soaked with insecticide within the past 12 months.

Table 12.7 Reason for not using mosquito nets

The percentage of mosquito nets not used the night before the survey, and for those nets the reason given for not using them, by background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Percentage of nets not used the night before the survey	Total number of nets	Reasons for not using a net								
			No mosquitos	Too hot	Net too old/ torn	Net too dirty	Net not available last night/ net being washed	Usual user(s) did not sleep in the household last night	Net too small	Saving for later	Number of nets not used
Residence											
Urban	21.1	7,972	13.4	5.1	4.1	2.9	0.2	14.3	1.3	54.8	1,679
Rural	33.6	15,124	32.8	6.8	4.5	3.1	1.7	5.4	0.7	47.7	5,076
Tanzania Mainland/ Zanzibar											
Mainland	29.4	22,410	28.0	6.0	4.4	3.0	1.3	7.4	0.8	50.1	6,590
Urban	21.1	7,777	13.2	4.8	4.1	3.0	0.1	14.0	1.3	55.7	1,638
Rural	33.8	14,633	32.9	6.4	4.5	3.0	1.7	5.2	0.7	48.2	4,952
Zanzibar	24.0	686	28.4	21.8	2.8	4.1	0.6	15.6	0.5	25.8	164
Unguja	27.2	470	28.1	22.0	2.4	5.0	0.7	15.1	0.7	23.9	128
Pemba	16.9	216	29.3	20.9	4.1	1.1	0.0	17.4	0.0	32.5	36
Zone											
Western	36.6	3,179	32.5	6.6	1.1	0.8	0.0	4.0	0.0	56.9	1,165
Northern	26.7	1,869	38.7	5.1	7.5	6.9	2.3	11.3	1.0	29.3	499
Central	34.2	1,136	43.3	15.7	10.2	9.2	9.5	6.9	0.0	14.3	389
Southern Highlands	32.2	1,155	33.3	6.7	17.7	7.3	0.4	10.5	1.7	26.2	372
Southern	22.9	1,297	33.9	17.1	2.1	7.0	0.3	11.2	0.3	39.9	296
South West Highlands	35.7	1,452	40.0	5.8	12.0	3.1	4.8	11.1	0.2	24.6	518
Lake	32.7	8,523	20.9	3.1	1.4	0.7	0.4	5.0	1.5	66.0	2,787
Eastern	14.8	3,798	15.9	7.5	4.9	6.4	0.0	15.9	0.0	45.1	563
Zanzibar	24.0	686	28.4	21.8	2.8	4.1	0.6	15.6	0.5	25.8	164
Region											
Dodoma	45.6	546	54.9	22.1	11.6	8.4	0.0	5.8	0.0	12.4	249
Arusha	22.1	448	40.9	5.3	1.5	5.1	8.0	20.6	4.9	10.3	99
Kilimanjaro	38.2	625	49.6	2.4	6.4	8.7	1.6	6.1	0.0	29.5	239
Tanga	20.2	796	21.1	9.0	12.9	5.5	0.0	13.3	0.0	40.7	161
Morogoro	12.4	925	17.6	14.5	6.6	9.1	0.0	13.6	0.0	40.6	114
Pwani	19.1	520	36.4	5.8	7.9	5.8	0.0	18.2	0.0	28.7	100
Dar es Salaam	14.8	2,354	9.4	5.8	3.4	5.6	0.0	16.0	0.0	51.2	349
Lindi	24.9	527	37.6	11.7	4.0	4.7	0.6	14.6	0.0	38.6	132
Mtwara	21.4	770	30.9	21.5	0.7	8.9	0.0	8.4	0.6	41.0	165
Ruvuma	23.1	623	12.5	7.2	14.0	8.2	1.1	17.8	0.6	31.8	144
Iringa	30.5	299	27.7	4.1	19.2	10.3	0.0	6.6	2.3	33.0	91
Mbeya	42.0	966	46.9	5.4	11.3	3.3	6.1	12.3	0.0	16.2	405
Singida	24.2	413	12.6	4.6	8.2	11.7	37.0	8.9	0.0	22.9	100
Tabora	23.1	1,666	12.3	3.8	0.3	1.3	0.0	4.8	0.0	78.9	385
Rukwa	29.0	176	29.6	14.1	29.3	5.5	0.0	4.5	2.1	19.4	51
Kigoma	51.6	1,513	42.5	8.0	1.5	0.6	0.0	3.6	0.0	46.1	780
Shinyanga	42.4	1,001	55.4	2.5	0.0	0.0	1.7	3.0	0.7	42.3	424
Kagera	35.4	1,493	13.7	5.1	1.3	2.3	0.5	3.3	1.1	54.1	528
Mwanza	34.9	2,088	23.0	6.1	0.8	0.3	0.3	7.6	4.1	63.7	728
Mara	38.5	1,392	16.6	0.7	1.7	0.6	0.0	4.6	0.0	77.4	536
Manyara	22.7	177	47.7	3.8	6.8	7.7	0.0	8.6	0.0	5.0	40
Njombe	58.4	233	59.0	7.9	20.6	4.4	0.0	5.3	2.3	15.9	136
Katavi	19.9	310	3.8	1.4	2.2	0.0	0.0	9.0	0.0	84.3	62
Simiyu	24.2	1,329	4.3	0.0	4.7	0.3	0.0	5.9	1.0	84.8	322
Geita	20.5	1,218	2.1	0.3	1.3	0.0	0.0	4.5	0.0	88.9	250
Kaskazini Unguja	29.9	122	36.7	4.8	6.4	7.7	0.7	14.4	0.0	29.4	37
Kusini Unguja	35.0	78	30.0	35.0	1.0	2.9	0.0	11.1	0.0	25.8	27
Mjini Magharibi	23.8	269	22.4	26.3	0.8	4.4	1.1	17.3	1.3	19.9	64
Kaskazini Pemba	19.3	111	43.0	29.7	4.8	1.1	0.0	8.7	0.0	29.7	22
Kusini Pemba	14.3	104	9.4	8.0	3.0	1.0	0.0	30.0	0.0	36.4	15
Education											
No education	31.2	3,159	33.0	6.1	3.0	2.7	0.5	5.3	0.0	51.2	986
Primary incomplete	31.6	2,954	31.8	8.4	2.9	1.7	0.4	5.4	0.3	54.7	934
Primary complete	29.5	11,663	26.6	5.9	4.9	3.7	2.1	7.5	0.9	49.1	3,444
Secondary+	26.1	5,320	25.4	6.5	5.2	2.5	0.6	11.0	1.6	45.7	1,390
Wealth quintile											
Lowest	33.9	3,501	37.5	6.1	3.5	2.3	3.4	2.3	0.2	48.4	1,187
Second	34.8	4,184	30.5	7.5	4.8	2.1	1.2	4.5	0.1	52.6	1,455
Middle	33.1	4,409	32.8	6.8	5.1	3.5	0.9	6.1	0.9	48.0	1,458
Fourth	26.1	4,942	24.6	6.0	5.5	3.9	0.6	8.3	1.2	48.8	1,292
Highest	22.5	6,060	15.2	5.6	2.9	3.4	0.7	16.6	1.7	49.3	1,364
Total	29.2	23,095	28.0	6.4	4.4	3.0	1.3	7.6	0.8	49.5	6,754

Table 12.8 Use of mosquito nets by children

Percentage of children under age 5 who, the night before the survey, slept under a mosquito net (treated or untreated), under an insecticide-treated net (ITN), under a long-lasting insecticidal net (LLIN), and under an ITN or in a dwelling in which the interior walls have been sprayed against mosquitoes (IRS) in the past 12 months; and among children under age 5 in households with at least one ITN, the percentage who slept under an ITN the night before the survey, by background characteristics, Tanzania DHS-MIS 2015-16

	Children under age 5 in all households					Children under age 5 in households with at least one ITN[1]	
Background characteristic	Percentage who slept under any mosquito net last night	Percentage who slept under an ITN[1] last night	Percentage who slept under an LLIN last night	Percentage who slept under an ITN[1] last night or in a dwelling sprayed with IRS[2] in the past 12 months	Number of children	Percentage who slept under an ITN[1] last night	Number of children
Age in months							
<12	61.9	55.5	50.3	57.5	2,018	75.8	1,478
12-23	66.2	58.6	54.7	59.8	2,197	77.9	1,652
24-35	61.8	55.5	51.8	57.5	1,953	74.9	1,447
36-47	59.9	52.1	49.4	53.9	1,969	70.8	1,449
48-59	54.9	50.1	47.1	52.0	1,975	69.6	1,421
Sex							
Male	60.8	53.7	50.1	55.4	5,102	73.4	3,730
Female	61.3	55.2	51.5	57.1	5,010	74.4	3,716
Residence							
Urban	77.3	60.9	50.5	62.4	2,602	79.7	1,990
Rural	55.4	52.2	50.8	54.1	7,510	71.8	5,457
Tanzania Mainland/ Zanzibar							
Mainland	60.9	54.4	50.7	55.8	9,843	74.0	7,234
Urban	77.7	61.4	50.9	62.4	2,526	80.1	1,937
Rural	55.1	52.0	50.7	53.6	7,316	71.8	5,297
Zanzibar	66.7	56.4	52.2	70.7	269	71.2	213
Unguja	65.4	52.2	46.3	68.5	169	66.9	132
Pemba	68.8	63.4	62.1	74.4	99	78.4	80
Zone							
Western	70.5	67.9	66.5	67.9	1,230	71.7	1,165
Northern	46.8	36.8	31.3	36.9	970	71.5	499
Central	28.6	24.3	22.2	24.3	1,126	60.7	450
Southern Highlands	42.9	37.9	36.1	37.9	549	65.1	320
Southern	59.8	51.4	43.0	51.4	400	71.1	289
South West Highlands	37.8	34.4	33.3	34.4	965	64.1	517
Lake	76.4	73.4	70.9	77.0	3,295	78.0	3,101
Eastern	75.9	55.2	45.3	57.1	1,308	80.9	892
Zanzibar	66.7	56.4	52.2	70.7	269	71.2	213
Region							
Dodoma	25.5	20.6	18.8	20.6	424	47.2	185
Arusha	39.2	33.7	26.6	33.7	350	84.0	140
Kilimanjaro	55.1	46.5	43.1	47.0	186	63.1	137
Tanga	49.4	35.2	29.9	35.2	434	68.9	222
Morogoro	61.2	50.5	47.0	51.4	424	82.2	261
Pwani	66.9	46.9	43.9	47.4	202	73.8	129
Dar es Salaam	87.6	60.6	44.5	63.5	682	82.1	503
Lindi	57.1	51.1	43.2	51.1	184	73.3	128
Mtwara	62.1	51.8	42.8	51.8	215	69.5	160
Ruvuma	55.3	50.8	48.5	50.8	250	72.8	174
Iringa	41.3	33.0	31.2	33.0	171	65.1	87
Mbeya	32.4	29.3	28.4	29.3	554	54.0	301
Singida	40.1	35.6	33.7	35.6	356	71.2	178
Tabora	80.3	79.0	77.2	79.0	699	84.0	658
Rukwa	21.8	17.9	16.9	17.9	274	58.7	84
Kigoma	57.7	53.2	52.5	53.2	531	55.7	508
Shinyanga	54.7	50.4	46.8	50.4	462	58.0	402
Kagera	74.4	73.6	73.3	81.0	553	81.3	501
Mwanza	75.6	71.4	67.4	78.1	794	73.2	774
Mara	76.6	72.1	68.6	75.1	504	78.8	462
Manyara	20.6	17.1	14.4	17.1	347	68.1	87
Njombe	20.5	19.2	18.6	19.2	128	42.0	58
Katavi	92.0	87.6	86.2	87.6	137	90.4	133
Simiyu	88.1	86.2	84.6	86.2	514	87.6	505
Geita	88.9	87.0	85.5	88.7	467	89.0	457
Kaskazini Unguja	71.8	63.4	60.1	82.9	43	71.9	38
Kusini Unguja	62.3	56.3	53.7	71.3	28	65.1	24
Mjini Magharibi	63.5	46.2	38.2	61.3	98	64.7	70
Kaskazini Pemba	64.3	62.3	60.4	77.7	53	77.3	43
Kusini Pemba	73.9	64.7	64.0	70.6	46	79.7	38

(Continued…)

Table 12.8—*Continued*

Background characteristic	Children under age 5 in all households					Children under age 5 in households with at least one ITN[1]	
	Percentage who slept under any mosquito net last night	Percentage who slept under an ITN[1] last night	Percentage who slept under an LLIN last night	Percentage who slept under an ITN[1] last night or in a dwelling sprayed with IRS[2] in the past 12 months	Number of children	Percentage who slept under an ITN[1] last night	Number of children
Wealth quintile							
Lowest	50.4	49.1	48.6	50.1	2,483	71.8	1,700
Second	56.9	54.6	53.7	56.4	2,183	75.0	1,589
Middle	56.2	52.4	50.2	54.7	1,992	70.2	1,489
Fourth	68.5	59.5	54.8	61.3	1,851	76.3	1,443
Highest	80.5	59.1	46.1	61.6	1,602	77.2	1,226
Total	61.0	54.4	50.8	56.2	10,112	73.9	7,446

Note: Table is based on children who stayed in the household the night before the interview.
[1] An insecticide-treated net (ITN) is (1) a factory-treated net that does not require any further treatment (LLIN) or (2) a net that has been soaked with insecticide within the past 12 months.
[2] Indoor residual spraying (IRS) is limited to spraying conducted by a government, private or non-governmental organisation.

Table 12.9 Use of mosquito nets by pregnant women

Percentages of pregnant women age 15-49 who, the night before the survey, slept under a mosquito net (treated or untreated), under an insecticide-treated net (ITN), under a long-lasting insecticidal net (LLIN), and under an ITN or in a dwelling in which the interior walls have been sprayed against mosquitoes (IRS) in the past 12 months; and among pregnant women age 15-49 in households with at least one ITN, the percentage who slept under an ITN the night before the survey, by background characteristics, Tanzania DHS-MIS 2015-16

	Among pregnant women age 15-49 in all households					Among pregnant women age 15-49 in households with at least one ITN[1]	
Background characteristic	Percentage who slept under any mosquito net last night	Percentage who slept under an ITN[1] last night	Percentage who slept under an LLIN last night	Percentage who slept under an ITN[1] last night or in a dwelling sprayed with IRS[2] in the past 12 months	Number of women	Percentage who slept under an ITN[1] last night	Number of women
Residence							
Urban	72.4	55.9	48.7	57.6	333	80.8	230
Rural	56.1	53.1	52.0	54.9	789	71.9	583
Tanzania Mainland/ Zanzibar							
Mainland	60.9	54.0	51.1	55.4	1,091	74.6	790
Urban	72.8	56.5	49.2	57.7	323	81.7	224
Rural	55.8	52.9	51.9	54.5	768	71.8	566
Zanzibar	63.4	51.5	47.3	64.5	31	68.5	23
Unguja	57.5	41.4	36.1	56.0	17	57.9	12
Pemba	70.8	64.1	61.3	75.1	14	80.4	11
Zone							
Western	70.0	66.1	66.1	66.1	148	75.4	130
Northern	38.8	31.4	26.9	31.4	89	(70.0)	40
Central	35.1	31.4	29.9	31.4	132	71.1	58
Southern Highlands	45.2	35.8	35.8	35.8	56	(74.5)	27
Southern	(57.7)	(47.4)	(37.9)	(47.4)	48	(69.1)	33
South West Highlands	46.8	41.0	38.9	41.0	113	65.0	71
Lake	73.2	70.4	67.9	73.8	357	76.4	330
Eastern	75.9	54.8	48.2	57.4	148	80.1	102
Zanzibar	63.4	51.5	47.3	64.5	31	68.5	23
Education							
No education	56.1	54.3	53.6	55.1	182	73.1	135
Primary incomplete	63.8	60.3	56.8	60.9	156	77.4	121
Primary complete	60.7	53.5	51.4	55.4	578	75.4	410
Secondary+	63.7	49.9	43.3	53.2	207	70.2	147
Wealth quintile							
Lowest	49.1	48.1	47.7	50.0	264	68.4	185
Second	57.3	54.8	54.7	56.6	235	75.1	171
Middle	61.7	58.0	56.5	59.1	200	78.4	148
Fourth	62.0	56.0	51.9	56.4	210	71.7	164
Highest	77.9	54.3	44.8	57.7	213	80.3	144
Total	60.9	53.9	51.0	55.7	1,122	74.4	813

Note:

- Table is based on women who stayed in the household the night before the interview.
- Figures in parentheses are based on 25-49 unweighted cases.

[1] An insecticide-treated net (ITN) is (1) a factory-treated net that does not require any further treatment (LLIN) or (2) a net that has been soaked with insecticide within the past 12 months.

[2] Indoor residual spraying (IRS) is limited to spraying conducted by a government, private, or non-governmental organisation.

Table 12.10 Use of Intermittent Preventive Treatment (IPTp) by women during pregnancy

Percentage of women age 15-49 with a live birth in the 2 years preceding the survey who, during the pregnancy preceding the last birth, received one or more doses of SP/Fansidar at least one of which was received during an ANC visit, received two or more doses of SP/Fansidar at least one of which was received during an ANC visit, and received three or more doses of SP/Fansidar at least one of which was received during an ANC visit, according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Percentage who received one or more doses of SP/Fansidar[1]	Percentage who received two or more doses of SP/Fansidar[1]	Percentage who received three or more doses of SP/Fansidar[1]	Number of women with a live birth in the two years preceding the survey
Residence				
Urban	78.0	44.4	11.1	1,155
Rural	64.6	30.8	6.4	3,013
Tanzania Mainland/ Zanzibar				
Mainland	69.1	35.2	7.8	4,061
Urban	79.0	45.2	11.3	1,128
Rural	65.3	31.3	6.4	2,933
Zanzibar	37.9	13.0	5.5	106
Unguja	32.7	12.1	1.7	68
Pemba	47.1	14.5	12.2	38
Zone				
Western	56.8	21.3	1.8	534
Northern	78.2	41.7	2.9	399
Central	77.2	38.4	10.6	486
Southern Highlands	72.6	39.4	7.7	218
Southern	88.2	40.1	10.6	148
South West Highlands	63.1	29.3	6.8	415
Lake	63.7	33.2	7.7	1,280
Eastern	77.4	46.4	14.6	581
Zanzibar	37.9	13.0	5.5	106
Region				
Dodoma	80.1	39.5	12.4	188
Arusha	72.5	33.6	2.1	141
Kilimanjaro	91.7	37.3	1.2	67
Tanga	77.7	49.3	4.1	190
Morogoro	68.8	44.9	13.1	165
Pwani	79.2	42.8	11.4	86
Dar es Salaam	81.2	48.1	16.2	330
Lindi	91.2	40.3	7.0	63
Mtwara	85.9	39.9	13.4	85
Ruvuma	65.0	29.9	7.0	101
Iringa	81.2	47.0	9.1	68
Mbeya	63.4	27.1	6.3	240
Singida	80.5	38.2	9.9	141
Tabora	50.4	19.5	1.2	318
Rukwa	66.1	36.9	9.2	120
Kigoma	66.0	23.9	2.6	217
Shinyanga	71.4	44.2	10.4	194
Kagera	75.8	48.7	8.9	203
Mwanza	64.9	27.2	9.3	290
Mara	55.7	32.0	7.6	199
Manyara	70.7	37.3	8.9	157
Njombe	76.5	48.6	7.2	50
Katavi	55.3	22.1	3.5	56
Simiyu	64.1	30.7	4.6	202
Geita	48.8	18.6	4.9	192
Kaskazini Unguja	32.4	10.6	3.9	18
Kusini Unguja	28.5	14.4	1.9	11
Mjini Magharibi	34.0	12.1	0.6	39
Kaskazini Pemba	53.3	16.2	14.4	21
Kusini Pemba	39.9	12.5	9.7	17
Education				
No education	56.9	25.5	3.8	801
Primary incomplete	62.1	30.8	7.0	540
Primary complete	71.5	35.5	8.5	2,121
Secondary+	76.3	45.3	10.4	704
Wealth quintile				
Lowest	59.7	27.6	5.6	1,011
Second	61.5	29.7	7.4	876
Middle	72.4	33.3	6.1	782
Fourth	72.5	38.3	8.1	794
Highest	79.8	48.0	12.5	704
Total	68.3	34.6	7.7	4,167

[1] Received the specified number of doses of SP/Fansidar, at least one of which was received during an ANC visit.

Table 12.11 Prevalence, diagnosis, and prompt treatment of children with fever

Percentage of children under age 5 with fever in the two weeks preceding the survey; and among children under age 5 with fever, the percentage for whom advice or treatment was sought, the percentage who had blood taken from a finger or heel, the percentage who took any artemisinin-based combination therapy (ACT), the percentage who took ACT the same or next day following the onset of fever, the percentage who took antimalarial drugs, and the percentage who took the drugs the same or next day following the onset of fever, by background characteristics, Tanzania DHS-MIS 2015-16

	Children under age 5		Children under age 5 with fever			
Background characteristic	Percentage with fever in the two weeks preceding the survey	Number of children	Percentage for whom advice or treatment was sought[1]	Percentage for whom advice or treatment was sought the same or next day	Percentage who had blood taken from a finger or heel for testing	Number of children
Age in months						
<12	16.1	2,010	81.6	45.6	34.4	323
12-23	22.7	2,134	79.8	46.9	39.3	485
24-35	21.7	1,817	83.2	40.1	36.9	395
36-47	15.1	1,791	78.8	48.7	30.6	271
48-59	13.1	1,768	74.7	41.3	35.7	232
Sex						
Male	18.8	4,806	79.2	44.6	38.4	905
Female	17.0	4,714	81.1	44.6	33.1	801
Residence						
Urban	18.1	2,541	84.0	52.4	61.6	460
Rural	17.9	6,980	78.7	41.7	26.5	1,246
Tanzania Mainland/ Zanzibar						
Mainland	17.9	9,268	80.1	44.3	36.0	1,662
Urban	18.1	2,475	84.2	52.3	62.1	449
Rural	17.9	6,794	78.6	41.4	26.3	1,214
Zanzibar	17.4	252	78.7	54.7	34.0	44
Unguja	16.9	158	79.7	55.9	41.8	27
Pemba	18.3	94	77.1	52.7	22.1	17
Zone						
Western	18.5	1,170	74.3	43.7	21.8	217
Northern	13.9	901	75.3	35.2	43.1	125
Central	7.6	1,065	75.5	46.0	33.4	81
Southern Highlands	14.9	517	74.2	53.3	23.6	77
Southern	23.4	372	81.5	54.6	48.0	87
South West Highlands	15.1	914	81.2	44.7	23.0	138
Lake	23.1	3,014	81.9	38.2	31.3	695
Eastern	18.4	1,315	85.0	60.0	66.3	242
Zanzibar	17.4	252	78.7	54.7	34.0	44
Region						
Dodoma	9.7	398	*	*	*	38
Arusha	11.2	341	(72.5)	(34.1)	(41.8)	38
Kilimanjaro	17.3	162	(63.9)	(33.5)	(21.1)	28
Tanga	14.8	398	(82.6)	(36.6)	(54.5)	59
Morogoro	18.3	417	(87.2)	(53.6)	(35.0)	76
Pwani	15.3	191	(83.0)	(58.4)	(56.9)	29
Dar es Salaam	19.2	707	84.2	63.9	85.9	136
Lindi	25.5	168	78.9	63.2	40.8	43
Mtwara	21.7	204	(84.1)	(46.2)	(54.9)	44
Ruvuma	18.4	236	(79.8)	(61.0)	(16.8)	43
Iringa	11.5	156	*	*	*	18
Mbeya	15.1	521	(81.7)	(47.1)	(20.4)	79
Singida	6.9	325	(75.8)	(38.9)	(37.4)	23
Tabora	12.9	675	81.9	52.6	28.1	87
Rukwa	16.0	261	75.7	42.4	24.2	42
Kigoma	26.2	495	69.1	37.7	17.6	130
Shinyanga	20.8	434	89.3	60.0	30.1	90
Kagera	17.5	505	58.7	22.1	35.3	88
Mwanza	22.8	698	84.8	41.3	38.3	159
Mara	34.2	462	77.5	32.3	34.6	158
Manyara	5.8	342	*	*	*	20
Njombe	12.6	125	(67.2)	(50.6)	(30.9)	16
Katavi	13.3	132	91.6	39.3	32.0	18
Simiyu	21.4	475	90.5	30.6	23.4	102
Geita	22.2	440	89.8	45.1	20.5	98
Kaskazini Unguja	14.0	42	(73.1)	(51.9)	(29.8)	6
Kusini Unguja	14.9	25	(82.0)	(68.4)	(41.7)	4
Mjini Magharibi	18.7	91	81.5	54.7	46.0	17
Kaskazini Pemba	18.0	51	75.3	53.5	21.4	9
Kusini Pemba	18.6	44	79.0	51.8	22.9	8
Mother's education						
No education	17.0	2,013	76.4	38.6	20.0	342
Primary incomplete	22.1	1,241	73.6	33.0	31.5	275
Primary complete	17.1	4,901	81.6	45.7	38.8	840
Secondary+	18.2	1,365	87.1	61.8	53.2	249

(Continued…)

Table 12.11—*Continued*

Background characteristic	Children under age 5		Children under age 5 with fever			
	Percentage with fever in the two weeks preceding the survey	Number of children	Percentage for whom advice or treatment was sought[1]	Percentage for whom advice or treatment was sought the same or next day	Percentage who had blood taken from a finger or heel for testing	Number of children
Wealth quintile						
Lowest	16.2	2,321	72.8	39.9	25.5	376
Second	19.5	2,014	78.4	38.5	21.1	392
Middle	17.6	1,838	83.3	40.7	34.8	323
Fourth	17.8	1,773	83.7	51.9	40.4	315
Highest	19.1	1,575	84.3	54.8	64.8	300
Total	17.9	9,520	80.1	44.6	35.9	1,706

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Excludes advice or treatment from a traditional practitioner.

Table 12.12.1 Source of advice or treatment for children with fever

Percentage of children under age 5 with fever in the two weeks preceding the survey for whom advice or treatment was sought from specific sources; and among children under age 5 with fever in the two weeks preceding the survey for whom advice or treatment was sought, the percentage for whom advice or treatment was sought from specific sources, by background characteristics, Tanzania DHS-MIS 2015-16

	Percentage for whom advice or treatment was sought from each source:	
Background characteristic	Among children with fever	Among children with fever for whom advice or treatment was sought
Any public sector source	28.2	34.0
National/Zonal referral/Spec. Hospital	0.3	0.4
Regional Referral Hospital	0.4	0.3
Regional Hospital	2.7	3.4
District Hospital	5.8	6.9
Health Centre	18.5	22.5
Dispensary	0.2	0.3
Clinic	0.0	0.0
CHW	0.1	0.1
Religious/ voluntary	3.9	4.7
Referral specialised hospital	0.6	0.7
District hospital	0.4	0.5
Hospital	1.0	1.3
Dispensary	1.6	2.0
Clinic	0.2	0.2
Private sector	7.6	9.4
Specialised Hospital	0.2	0.2
Hospital	1.4	1.8
Health Centre	0.9	1.2
Dispensary	4.6	5.7
Clinic	0.4	0.5
Other	54.3	53.0
Pharmacy	24.2	25.6
ADDO	26.4	26.7
Other	3.7	0.6
Number of children	1,706	1,366

CHW = Community health worker.

Table 12.12.2 Children with fever who took antimalarial drugs

Among children under age 5 with fever, the percentage who took any antimalarial drugs, by background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Percentage who took antimalarial medicine	Number of children with fever
Age in months		
< 6	26.6	111
6-11	46.9	212
12-23	48.0	485
24-35	53.9	395
36-47	60.9	271
48-59	56.9	232
Sex		
Male	52.1	905
Female	50.0	801
Residence		
Urban	46.0	460
Rural	53.0	1,246
Tanzania Mainland/Zanzibar		
Mainland	52.4	1,662
Urban	47.1	449
Rural	54.3	1,214
Zanzibar	2.4	44
Unguja	2.3	27
Pemba	2.6	17
Zone		
Western	66.2	217
Northern	29.4	125
Central	26.6	81
Southern Highlands	46.2	77
Southern	56.0	87
South West Highlands	36.5	138
Lake	56.9	695
Eastern	57.1	242
Zanzibar	2.4	44
Region		
Dodoma	12.4	38
Arusha	19.9	38
Kilimanjaro	8.0	28
Tanga	45.8	59
Morogoro	61.6	76
Pwani	60.2	29
Dar es Salaam	53.9	136
Lindi	61.9	43
Mtwara	50.4	44
Ruvuma	72.4	43
Iringa	7.6	18
Mbeya	29.9	79
Singida	48.7	23
Tabora	63.5	87
Rukwa	37.8	42
Kigoma	68.0	130
Shinyanga	59.5	90
Kagera	51.2	88
Mwanza	57.3	159
Mara	42.5	158
Manyara	29.1	20
Njombe	17.6	16
Katavi	63.2	18
Simiyu	63.3	102
Geita	76.0	98
Kaskazini Unguja	6.3	6
Kusini Unguja	6.7	4
Mjini Magharibi	0.0	17
Kaskazini Pemba	2.9	9
Kusini Pemba	2.2	8
Mother's education		
No education	53.8	342
Primary incomplete	54.1	275
Primary complete	52.8	840
Secondary+	38.3	249
Wealth quintile		
Lowest	55.5	376
Second	57.4	392
Middle	51.9	323
Fourth	44.8	315
Highest	43.2	300
Total	51.1	1,706

Table 12.13.1 Type of antimalarial drugs used

Among children under age 5 with fever in the two weeks preceding the survey who took any antimalarial medication, the percentage who took specific antimalarial drugs, by background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Percentage of children who took:									Number of children with fever who took antimalarial drug
	Any ACT	SP/ Fansidar	Chloroquine	Amodiaquine	Quinine pills	Quinine injection	Artesunate rectal	Artesunate injection	Other anti-malarial	
Age in months										
< 6	(66.6)	(0.0)	(0.0)	(2.7)	(8.1)	(4.5)	(0.4)	(0.0)	(17.7)	30
6-11	78.5	1.4	0.0	5.2	8.5	2.5	0.0	0.9	5.4	99
12-23	81.8	0.5	0.8	2.8	3.7	2.5	0.0	0.9	8.9	233
24-35	88.9	1.9	0.0	2.4	1.7	2.1	0.0	0.6	4.0	213
36-47	89.0	0.8	0.0	6.0	4.3	1.8	0.4	1.1	0.9	165
48-59	87.7	2.3	0.0	0.0	4.6	5.5	0.0	0.0	3.8	132
Sex										
Male	87.8	1.1	0.0	1.9	3.4	2.3	0.0	0.7	5.2	471
Female	81.5	1.5	0.4	4.7	5.1	3.4	0.2	0.7	5.5	401
Residence										
Urban	78.2	2.2	0.8	2.6	4.5	2.1	0.3	1.4	8.1	212
Rural	87.0	1.0	0.0	3.4	4.0	3.0	0.0	0.5	4.4	660
Mother's education										
No education	90.6	0.7	0.0	2.8	3.9	1.5	0.1	1.2	3.3	184
Primary incomplete	88.6	1.0	0.0	3.2	1.8	1.4	0.0	0.6	3.9	149
Primary complete	82.9	1.8	0.4	3.0	4.4	3.8	0.1	0.6	6.1	444
Secondary+	77.2	0.3	0.0	4.8	6.9	2.7	0.0	0.1	7.9	95
Wealth quintile										
Lowest	91.4	0.8	0.0	3.1	2.6	2.1	0.0	1.1	2.2	208
Second	90.1	0.7	0.0	4.1	2.5	0.7	0.0	0.4	3.7	225
Middle	83.2	1.7	0.0	2.7	5.1	6.0	0.0	0.0	5.9	167
Fourth	78.8	0.5	0.0	2.5	3.8	5.7	0.5	0.9	9.2	141
Highest	74.1	3.3	1.4	3.0	8.5	0.4	0.0	1.3	8.1	130
Total	84.9	1.3	0.2	3.2	4.1	2.8	0.1	0.7	5.3	872

Note: Figures in parentheses are based on 25-49 unweighted cases.
ACT = Artemisinin-based combination therapy.

Table 12.13.2 Timing of antimalarial drugs used

Among children under age 5 with fever, the percentage who took the drugs the same or next day following the onset of fever, by background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Percentage of children who took:							Number of children with fever who took any antimalarial drug
	Any ACT	SP/ Fansidar	Chloro-quine	Amodia-quine	Quinine pills/ Quinine injection/ IV	Artesunate rectal/ Artesunate injection	Other anti-malarial	
Age in months								
< 6	(53.0)	(0.0)	(0.0)	(0.0)	(7.8)	(0.0)	(9.2)	30
6-11	57.2	1.4	0.0	2.7	8.8	0.0	2.9	99
12-23	57.8	0.5	0.8	2.8	4.1	0.0	5.4	233
24-35	53.7	1.9	0.0	1.0	2.2	0.0	2.6	213
36-47	69.9	0.8	0.0	3.2	2.9	1.1	0.9	165
48-59	56.8	0.0	0.0	0.0	5.1	0.0	0.0	132
Sex								
Male	63.1	0.5	0.0	0.7	3.7	0.0	3.4	471
Female	53.6	1.4	0.4	3.3	4.8	0.4	2.2	401
Residence								
Urban	56.9	1.5	0.8	1.8	6.4	0.8	5.1	212
Rural	59.3	0.7	0.0	1.9	3.5	0.0	2.2	660
Mother's education								
No education	63.5	0.7	0.0	1.3	3.5	0.0	1.3	184
Primary incomplete	52.8	1.0	0.0	0.9	1.9	0.0	1.3	149
Primary complete	59.1	1.1	0.4	1.9	4.3	0.4	3.4	444
Secondary+	56.9	0.3	0.0	4.2	8.8	0.1	5.8	95
Wealth quintile								
Lowest	69.7	0.8	0.0	2.4	1.7	0.0	0.8	208
Second	57.7	0.3	0.0	1.5	2.0	0.0	1.0	225
Middle	50.9	1.7	0.0	1.4	4.8	0.0	4.4	167
Fourth	63.6	0.0	0.0	1.3	7.3	0.1	5.0	141
Highest	47.5	2.2	1.4	3.0	7.9	1.3	5.3	130
Total	58.7	0.9	0.2	1.9	4.2	0.2	2.9	872

Note: Figures in parentheses are based on 25-49 unweighted cases.
ACT = Artemisinin-based combination therapy.

Table 12.14 Coverage of testing for haemoglobin level and malaria in children

Percentage of eligible children age 6-59 months who were tested for haemoglobin level and for malaria, by background characteristics (unweighted), Tanzania DHS-MIS 2015-16

Background characteristic	Percentage tested for			Number of children eligible for testing
	Haemoglobin level	Malaria with RDT	Malaria with microscopy	
Age in months				
6-8	97.3	97.3	91.1	550
9-11	97.6	96.7	91.3	492
12-17	98.1	97.7	90.9	1,183
18-23	98.1	97.9	91.3	1,080
24-35	98.4	97.6	92.1	2,041
36-47	97.4	97.2	89.0	1,994
48-59	97.3	97.0	88.5	2,069
Sex				
Male	97.8	97.2	90.6	4,702
Female	97.7	97.5	90.0	4,707
Mother's interview status				
Interviewed	98.6	98.1	91.1	8,108
Not interviewed but in household	72.4	73.2	68.9	254
Not interviewed, and not in the household[1]	97.7	97.1	89.6	1,047
Residence				
Urban	96.7	96.1	90.3	2,124
Rural	98.1	97.7	90.3	7,285
Tanzania Mainland/ Zanzibar				
Mainland	97.8	97.5	91.5	8,018
Urban	96.6	96.2	92.5	1,846
Rural	98.1	97.9	91.3	6,172
Zanzibar	97.6	96.3	83.2	1,391
Unguja	98.2	97.5	87.5	814
Pemba	96.9	94.6	77.3	577
Zone				
Western	98.5	98.5	91.9	896
Northern	96.8	96.0	91.3	721
Central	97.2	97.1	92.9	901
Southern Highlands	97.9	97.9	94.7	656
Southern	98.4	98.4	95.5	375
South West Highlands	98.0	97.8	88.5	1,006
Lake	98.7	98.4	90.6	2,665
Eastern	94.6	94.5	92.6	798
Zanzibar	97.6	96.3	83.2	1,391
Region				
Dodoma	99.1	98.7	91.4	232
Arusha	93.7	92.3	88.6	271
Kilimanjaro	98.4	97.3	94.0	184
Tanga	98.9	98.9	92.1	266
Morogoro	94.2	95.1	92.4	223
Pwani	98.2	98.7	92.9	224
Dar es Salaam	92.6	91.5	92.6	351
Lindi	97.1	97.1	95.2	210
Mtwara	100.0	100.0	95.8	165
Ruvuma	99.6	99.6	99.1	228
Iringa	97.7	97.7	93.9	214
Mbeya	97.3	96.4	79.6	225
Singida	96.7	96.7	95.9	338
Tabora	98.8	98.8	93.3	481
Rukwa	96.6	96.6	88.6	351
Kigoma	98.3	98.3	90.1	415
Shinyanga	99.1	98.9	92.4	435
Kagera	99.4	99.4	94.6	353
Mwanza	98.7	97.5	82.4	393
Mara	96.7	96.5	87.7	457
Manyara	96.4	96.4	90.9	331
Njombe	96.3	96.3	90.7	214
Katavi	99.5	99.5	93.0	430
Simiyu	99.1	99.1	93.7	574
Geita	99.3	98.9	91.6	453
Kaskazini Unguja	97.2	96.4	89.7	253
Kusini Unguja	98.8	98.4	95.3	255
Mjini Magharibi	98.4	97.7	79.1	306
Kaskazini Pemba	96.2	93.4	68.5	286
Kusini Pemba	97.6	95.9	85.9	291

(Continued…)

Table 12.14—*Continued*

Background characteristic	Percentage tested for			Number of children eligible for testing
	Haemoglobin	Malaria with RDT	Malaria with microscopy	
Mother's education				
No education	97.4	97.0	89.0	1,868
Primary incomplete	98.2	97.8	90.9	1,137
Primary complete	97.8	97.5	91.3	3,871
Secondary+	97.9	97.3	89.2	1,478
Wealth quintile				
Lowest	98.3	98.1	91.0	2,138
Second	98.7	98.5	91.0	1,937
Middle	97.2	96.6	89.3	1,882
Fourth	97.4	96.9	90.3	1,920
Highest	97.0	96.5	89.9	1,532
Total	97.8	97.4	90.3	9,409

Table 12.15 Haemoglobin <8.0 g/dl in children

Percentage of children age 6-59 months with haemoglobin lower than 8.0 g/dl, by background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Haemoglobin < 8.0 g/dl	Number of children
Age in months		
6-8	7.6	516
9-11	11.2	457
12-17	7.3	1,105
18-23	6.5	1,037
24-35	3.6	1,917
36-47	2.6	1,921
48-59	3.5	1,924
Sex		
Male	5.0	4,471
Female	4.5	4,407
Mother's interview status		
Interviewed	5.0	7,701
Not interviewed but in household	4.3	186
Not interviewed, and not in the household[1]	3.1	990
Residence		
Urban	2.9	2,229
Rural	5.4	6,648
Tanzania Mainland/ Zanzibar		
Mainland	4.8	8,639
Urban	2.9	2,162
Rural	5.5	6,477
Zanzibar	3.6	239
Unguja	2.4	152
Pemba	5.6	87
Zone		
Western	7.6	1,100
Northern	4.7	833
Central	3.5	980
Southern Highlands	1.7	476
Southern	3.4	359
South West Highlands	1.8	852
Lake	7.0	2,921
Eastern	1.8	1,118
Zanzibar	3.6	239
Region		
Dodoma	2.7	374
Arusha	6.6	296
Kilimanjaro	2.4	167
Tanga	4.3	370
Morogoro	1.1	362
Pwani	2.2	181
Dar es Salaam	2.0	575
Lindi	3.2	165
Mtwara	3.6	194
Ruvuma	2.8	213
Iringa	1.0	151
Mbeya	0.9	495
Singida	0.7	309
Tabora	6.4	616
Rukwa	2.2	237
Kigoma	9.2	484
Shinyanga	9.7	405
Kagera	4.7	508
Mwanza	6.6	698
Mara	7.5	441
Manyara	7.3	297
Njombe	0.4	112
Katavi	4.6	120
Simiyu	3.6	460
Geita	11.0	409
Kaskazini Unguja	3.4	38
Kusini Unguja	2.2	25
Mjini Magharibi	2.0	89
Kaskazini Pemba	5.6	46
Kusini Pemba	5.7	41

(Continued…)

Table 12.15—*Continued*

Background characteristic	Haemoglobin < 8.0 g/dl	Number of children
Mother's education[2]		
No education	7.8	1,730
Primary incomplete	4.4	5,074
Primary complete	3.7	1,038
Secondary+	(1.1)	45
Wealth quintile		
Lowest	7.6	2,171
Second	6.3	1,952
Middle	3.5	1,757
Fourth	2.9	1,597
Highest	2.3	1,400
Total	4.8	8,877

Note:

- Table is based on children who stayed in the household the night before the interview. Prevalence of anaemia is based on haemoglobin levels and is adjusted for altitude using CDC formulas (CDC, 1998). Haemoglobin is measured in grammes per decilitre (g/dl).
- Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Includes children whose mothers are deceased.

[2] For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire.

Table 12.16 Malaria prevalence among children according to a rapid diagnostic test (RDT) and microscopy

Percentage of children 6-59 months tested using a RDT who are positive for malaria and percentage of children age 6-59 months tested using microscopy who are positive for malaria, by background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Malaria prevalence using a RDT		Malaria prevalence using microscopy	
	Tested positive	Number of children tested	Tested positive	Number of children tested
Age in months				
6-8	8.4	517	4.3	483
9-11	8.4	454	1.3	424
12-17	10.3	1,104	4.1	1,036
18-23	12.9	1,036	5.7	973
24-35	15.7	1,899	5.6	1,816
36-47	16.1	1,916	6.3	1,774
48-59	17.9	1,921	6.9	1,756
Sex				
Male	15.2	4,450	5.6	4,172
Female	13.7	4,397	5.6	4,091
Mother's interview status				
Interviewed	13.9	7,672	5.3	7,164
Not interviewed but in household	21.2	189	8.2	181
Not interviewed, and not in the household[1]	17.3	986	7.3	918
Residence				
Urban	3.9	2,215	2.4	2,126
Rural	18.0	6,632	6.7	6,137
Tanzania Mainland/ Zanzibar				
Mainland	14.8	8,611	5.7	8,066
Urban	4.1	2,149	2.4	2,077
Rural	18.4	6,462	6.8	5,989
Zanzibar	0.0	236	0.7	197
Unguja	0.0	151	0.5	129
Pemba	0.0	85	1.1	68
Zone				
Western	27.7	1,100	9.3	1,024
Northern	1.4	827	1.4	782
Central	1.7	979	1.4	935
Southern Highlands	10.4	476	2.0	462
Southern	18.8	359	8.2	347
South West Highlands	3.1	847	2.8	737
Lake	23.5	2,909	8.9	2,676
Eastern	10.6	1,115	4.0	1,102
Zanzibar	0.0	236	0.7	197
Region				
Dodoma	0.0	373	0.5	349
Arusha	0.0	291	0.0	280
Kilimanjaro	0.0	166	0.5	159
Tanga	3.2	370	3.1	343
Morogoro	23.1	365	9.1	354
Pwani	15.3	183	5.8	172
Dar es Salaam	1.1	568	0.3	575
Lindi	17.4	165	9.3	162
Mtwara	20.0	194	7.3	185
Ruvuma	22.6	213	4.4	212
Iringa	0.5	151	0.0	145
Mbeya	0.7	490	2.4	404
Singida	5.5	309	3.0	306
Tabora	19.5	616	7.0	584
Rukwa	2.7	237	1.4	220
Kigoma	38.1	484	12.3	441
Shinyanga	16.5	404	4.3	372
Kagera	41.0	508	11.6	483
Mwanza	15.3	689	8.4	603
Mara	19.1	440	5.1	401
Manyara	0.0	297	0.8	281
Njombe	0.4	112	0.0	106
Katavi	13.5	120	6.5	113
Simiyu	13.4	460	6.0	436
Geita	38.4	407	17.7	382
Kaskazini Unguja	0.0	38	0.0	36
Kusini Unguja	0.3	25	1.5	24
Mjini Magharibi	0.0	88	0.4	70
Kaskazini Pemba	0.0	44	1.0	31
Kusini Pemba	0.0	40	1.2	37

(Continued…)

Table 12.16—*Continued*

Background characteristic	Malaria prevalence using a RDT		Malaria prevalence using microscopy	
	Tested positive	Number of children tested	Tested positive	Number of children tested
Mother's education[2]				
No education	21.0	1,726	8.8	1,610
Primary incomplete	23.3	1,030	7.3	956
Primary complete	11.6	4,028	4.5	3,761
Secondary+	3.5	1,066	1.3	1,008
Wealth quintile				
Lowest	22.6	2,164	8.0	2,015
Second	21.5	1,949	8.7	1,806
Middle	14.8	1,750	6.0	1,616
Fourth	6.1	1,593	2.1	1,492
Highest	1.0	1,391	1.0	1,333
Total	14.4	8,847	5.6	8,263

MALARIA KNOWLEDGE AND COMMUNICATION 13

Key Findings

- ***Recognition of malaria as a serious health problem***: From 2011-12 to 2015-16, the percentage of women reporting malaria as the most serious health problem in the community decreased from 66% to 57% and in men from 73% to 64%.
- ***Knowledge of malaria signs or symptoms:*** Seventy-seven percent of women and 72% of men age 15-49 reported fever as a sign or symptom of malaria in a young child.
- ***Knowledge of malaria prevention:*** Almost all women and men (98% each) who know that malaria is preventable reported that sleeping under a mosquito net was a way to avoid malaria.
- ***Exposure to malaria messages:*** Exposure to malaria messaging is high: 84% of women and 87% of men heard the malaria message 'Malaria Haikubaliki' or 'Maliza Malaria' in the past year, predominantly from the radio.
- ***Attitudes towards malaria:*** Women's responses to questions about attitudes towards malaria prevention and malaria risk suggest that the majority understand the risks and feel empowered to protect themselves and their families.

Behaviour change communication (BCC) and information, education, and communication (IEC) programmes are essential to the effective implementation of integrated malaria vector control, diagnosis, treatment, and preventive therapies. Effective communication not only promotes positive behaviour for the prevention and control of malaria, but also identifies community needs that are guided by informed choices, which eventually result in improved health conditions.

This chapter addresses the BCC component of malaria control in Tanzania. The chapter presents information on basic knowledge and awareness of malaria, malaria prevention, and malaria treatment among women and men age 15-49. The findings from the 2015-16 TDHS-MIS provide an essential platform to assess the performance of the National Malaria Control Programme's (NMCP's) BCC programmes.

13.1 Recognition of Malaria as a Serious Health Problem

Recognition of malaria as a serious health problem

Percentage of women and men who believe that malaria is the most serious health problem in the community

Sample: Women and men age 15-49

Due to the high number of deaths attributed to malaria, the Government considers malaria to be among the most serious health problems in the country. To determine respondents' awareness of the extent of the malaria problem, all women and men age 15-49 were asked during the 2015-16 TDHS-MIS, to name the

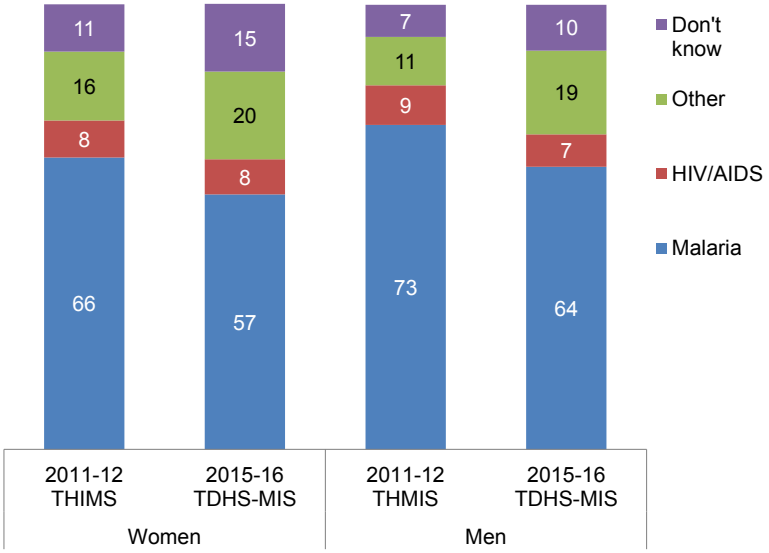
most serious health problem in the community. Fifty-seven percent of women and 64% of men reported malaria as the most serious public health problem **(Table 13.1.1, Table 13.1.2)**.

Trends: The percentage of women and men who report malaria as the most serious health problem in the community has declined between the 2011-12 THMIS and the 2015-16 TDHS-MIS from 66% to 57% among women and from 73% to 64% among men **(Figure 13.1)**.

Patterns by background characteristics

- Malaria is reported as the most serious health problem in the community by a larger percentage of women and men in Tanzania Mainland (59% and 65%, respectively) than in Zanzibar (8% and 9%, respectively).

Figure 13.1 **Trends in the percent distribution of women and men by the most serious health problem in the community**



- Among the regions, more than 80% of men in Mtwara, Ruvuma, and Tanga reported malaria as the most serious health problem in their communities as did 85% of women in Mara region. In Kigoma, Kagera, and Geita—the regions with the highest malaria prevalence (38% or greater)—fewer than 8 in every 10 residents (and only 51% of women in Geita) reported malaria as the most serious health problem.

- Overall, more men (64%) reported malaria as the most serious health problem in their communities than women (57%).

13.2 KNOWLEDGE OF MALARIA SIGNS OR SYMPTOMS

Knowledge of malaria signs or symptoms

Percentage of women and men age 15-49 who report fever as a sign or symptom of malaria in a young child

Sample: Women and men age 15-49

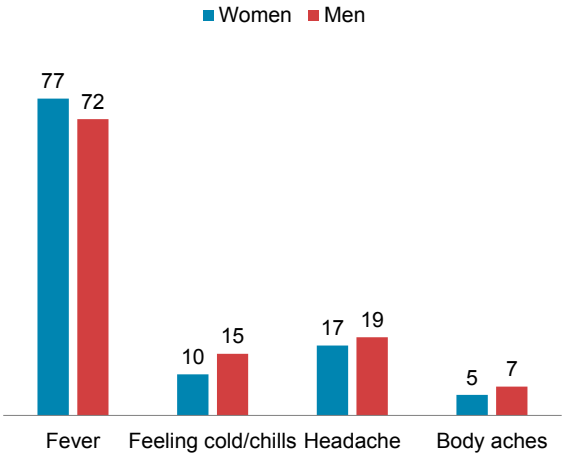
The health of children under age 5 with malaria can deteriorate rapidly leading to death if treatment is delayed. Knowledge of the signs and symptoms of malaria in children is very important to enhance early care seeking behaviour. Among a list of symptoms caused by malaria, fever is the most common symptom that should be recognized by all caretakers.

During the 2015-16 TDHS-MIS, women and men were asked to name the signs or symptoms of malaria in a young child. A high percentage of women (77%) and men (72%) cited fever as a symptom of malaria in a young child. A much lower percentage reported other symptoms of malaria including headache, feeling cold or chills, and body aches **(Table 13.2.1, Table 13.2.2, and Figure 13.2)**.

Trends: The percentage of women and men who cited fever as a symptom of malaria in a young child has not changed over the years. In the 2011-12 THMIS, the percentage was 78% among women and 70% among men, and in the 2015-16 TDHS-MIS, 77% of women and 72% of men.

Figure 13.2 **Malaria signs and symptoms in young children**

Percentage of women and men who cite specific signs and symptoms of malaria in a young child



Patterns by background characteristics

- Fever was cited most often as a sign of malaria in a young child by 90% of women in Ruvuma and 98% of men in Mara. Women in Rukwa and men in Katavi were less likely to cite fever as specific symptom of malaria (55% and 28%, respectively) **(Table 13.2.1 and Table 13.2.2)**.
- The percentage of men and women who cited fever as a sign of malaria in a young child is generally high in all wealth quintiles. The percentage increases from 64% in the lowest quintile to 83% in the highest quintile among men, and from 74% in the lowest quintile to 79% in the highest quintile among women **(Table 13.2.1 and Table 13.2.2)**.

13.3 KNOWLEDGE OF MALARIA PREVENTION

Knowledge of malaria prevention

Among women and men who know malaria can be avoided, percent who know that the primary preventive measures for malaria include using bed nets, taking preventive medication during pregnancy, or having your house sprayed with insecticide

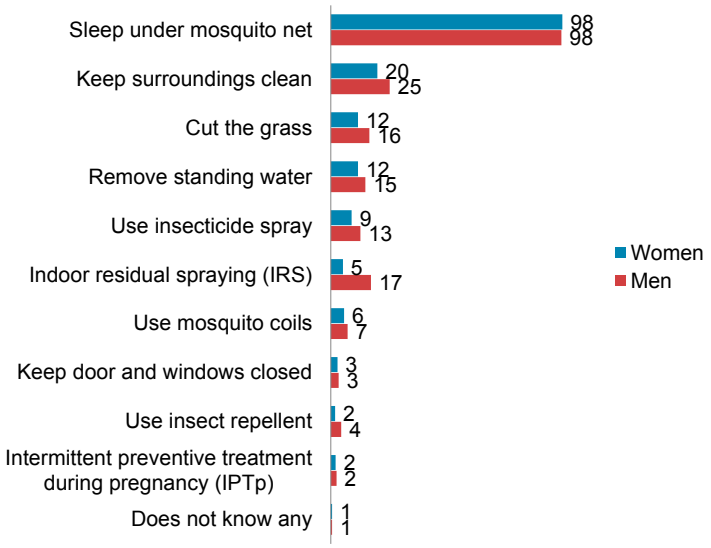
Sample: Women and men age 15-49

Knowledge is an important factor in the adoption of recommended malaria prevention behaviours. During the 2015-16 TDHS-MIS, women and men were asked if there were ways to prevent malaria, and if so, they were asked to identify them. Results are presented in **Table 13.3.1, Table 13.3.2,** and **Figure 13.3**. A high percentage of women (91%) and men (92%) know that there are ways to prevent malaria. Among the respondents who know malaria can be prevented, almost all women and men (98% of both) know that sleeping under mosquito nets is a way to prevent malaria. Other recommended prevention methods were mentioned far less frequently. Indoor residual spraying (IRS) was cited by 5% of women and 17% of men who knew malaria can be prevented; intermittent preventive treatment during pregnancy was mentioned by only 2% of both women and men. Less effective and non-effective prevention methods such as keeping surroundings clean, cutting grass, and removing standing water were common responses.

Trends: The percentage of women and men who know that there are ways to prevent malaria has remained high (over 90%) between the 2011-12 THMIS and the 2015-16 TDHS-MIS. The percentage of women and men who know that there are ways to prevent malaria and who mentioned sleeping under a mosquito net as a malaria prevention tool has remained very high (over 95%) over the same period.

Figure 13.3 Knowledge of malaria prevention

Percentage of women and men who reported specific ways to prevent malaria



Patterns by background characteristics

- Knowledge that there are ways to prevent malaria does not vary substantially among women and men by background characteristics. For example, the percentage who say there are ways to avoid malaria among men is 98% in urban areas and 89% in rural areas, and among women, 96% in urban areas and 88% in rural areas.
- The percentage of women and men who say that there are ways to prevent malaria ranges from 85% to 99% of men and from 82% and 97% of women in the lowest and highest wealth quintile respectively.
- Among those who say there are ways to avoid getting malaria, almost all men and women in urban and rural areas, among the regions and in all wealth quintiles, cited sleeping under mosquito nets as a way to prevent malaria.
- Indoor residual spraying (IRS) was mentioned more frequently by men than by women, with 24% of urban men and 13% of rural men listing this prevention method compared to 9% of urban women and 3% of rural women.

13.4 Access to Artemisinin-based Combination Therapy (ACTs) and Visits from Health Workers

Access to ACTs

Percentage of women and men age 15-49 who say that artemisinin combination therapy (ACTs) can be obtained at the nearest health facility or pharmacy.

Sample: Women and men age 15-49

Malaria messages from health workers

Percentage of women and men age 15-49 visited by a health worker or volunteer who talked about malaria.

Sample: Women and men age 15-49

Although the importance of messages about malaria prevention and malaria treatment is documented in the National Malaria Control Programme (NMCP) communication strategy, sleeping under ITNs and the benefits of IRS remain the focus of messaging about malaria prevention. Increasing awareness of the importance of a definitive diagnosis of malaria and the use of recommended ACTs as first-line treatment for malaria are also key messages. To communicate these messages, NMCP relies not only on traditional

media, such as radio, television, and printed materials, but also on direct outreach by health care workers and volunteers.

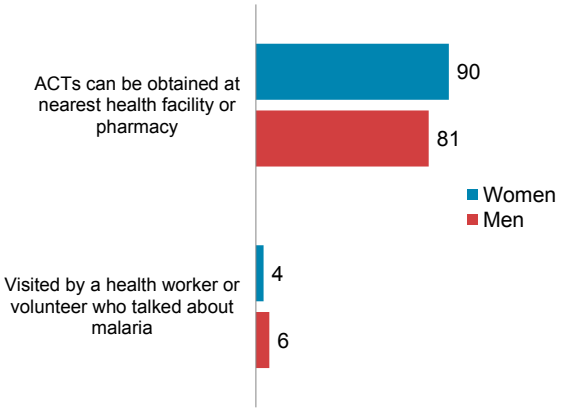
Women and men age 15-49 were asked questions about the availability of ACTs and visits from health workers. The women and men were asked whether ACTs could be obtained at their nearest health facility or pharmacy. In addition, they were asked if, in the past 6 months, they had been visited by a health worker or volunteer who talked with them about malaria.

A high percentage of women (90%) and men (81%) reported that ACTs can be obtained at the nearest health facility or pharmacy. In contrast, only 4% of women and 6% of men had been visited in the past 6 months by a health worker or volunteer who talked about malaria **(Table 13.4.1, Table 14.4.2, Figure 13.4)**.

Trends: The percentage of women and men who reported that ACTs can be obtained at the nearest health facility or pharmacy has not changed substantially in recent years, increasing slightly among women from 87% in 2011-12 to 90% in 2015-16 and decreasing slightly among men, from 83% to 81% in the same time period.

***Figure 13.4* Access to ACTs and malaria information**

Percentage of women and men who reported access to ACTs and to malaria information from a health worker



Patterns by background characteristics

- Women and men in Tanzania Mainland are much more likely to report that ACTs can be obtained at the nearest health facility or pharmacy than those in Zanzibar. **(Table 13.4.1 and Table 13.4.2)**.
- Visits by health workers who talk about malaria are not common, and were reported by less than 10% of women and men in almost all categories.

13.5 Exposure to Malaria Messages

Media exposure to malaria messages

Percentage of women and men age 15-49 who have seen or heard the malaria message 'Malaria Haikubaliki' or 'Maliza Malaria' in the past year.

Sample: Women and men age 15-49

The ability to reach the population with information and educational messages is a key element of the malaria elimination agenda. The NMCP and its partners have identified a variety of communication channels for delivery of malaria messages to the population. Communication channels include radio, television, newspaper, and a visit of a health provider to a client.

To assess coverage of communication programmes, women and men who were interviewed during the 2015-16 TDHS-MIS were asked if they had seen or heard specific messages about malaria in the year before the survey. Respondents from the Mainland were asked if they had seen or heard the phrase 'Malaria Haikubaliki' in the past year while respondents in Zanzibar were asked if they had seen or heard the phrase 'Maliza Malaria' in the past year. Respondents who had heard the relevant phrase were asked about the specific places where they had seen or heard the message.

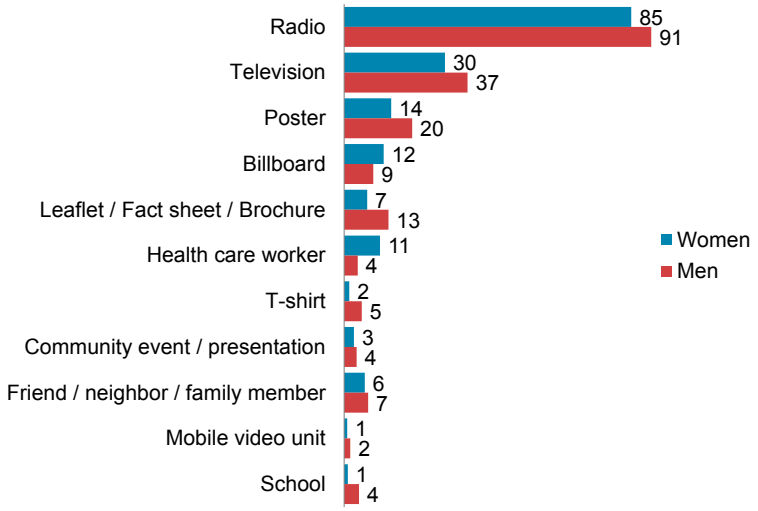
Eighty-four percent of women and 87% of men reported having seen or heard either the malaria message 'Malaria Haikubaliki' or 'Maliza Malaria' in the past year. Radio is the most cited communication channel by women (85%) and men (91%) who heard either of these messages, followed by television for both

women and men (30% and 37%, respectively) and posters (14% of women and 20% of men, respectively). The percentage of women and men who cited other communication channels ranged from 1-2% for mobile video units to 13% of men who read messages in leaflets, factsheets, or brochures **(Table 13.5.1, Table 13.5.2, and Figure 13.5)**.

Trends: In 2011-12, the percentage of women and men who reported having seen or heard the malaria message 'Malaria Haikubaliki' or 'Maliza Malaria' in the previous year was 84% among women and 93% among men. In the 2015-16 TDHS-MIS, the percentage remained unchanged among women (84%) but declined to 87% among men.

Figure 13.5 Source of malaria messages

Among women and men who heard malaria messages 'Malaria Haikubaliki' or 'Maliza Malaria' in the past year, percentage hearing them by source



Patterns by background characteristics

- The percentage of women who have seen or heard either of these two malaria messages in the past year is higher in urban than in rural areas (93% vs. 79%). Radio is the most common source of malaria messages for women and men in both urban and rural areas.

- The percentage of women and men who have seen or heard these malaria messages in the past year increases with increasing wealth from 68% of women in the lowest wealth quintile to 94% of women in the highest wealth quintile, and from 80% of men in the lowest wealth quintile to 94% of men in highest wealth quintile.

13.6 Attitudes towards Malaria

Women's attitudes towards malaria

Percentage of women age 15-49 who strongly agree with statements about malaria: 'I can protect my children from malaria'; 'I can ensure my children sleep under mosquito net every night of the year'; 'I can easily hang my children's mosquito net'; 'It is important to sleep under a net every single night'; 'Pregnant women are at high risk of getting malaria'; and 'Women should attend antenatal care early in their pregnancy.'

Sample: Women age 15-49 with a live birth in the past 5 years

The NMCP communication strategy describes best practices in communication tools, approaches, and channels. One tool is publicity that can raise and sustain the profile of malaria among Tanzanians and help raise awareness of and attitudes towards desired practices. To assess respondents' attitudes towards malaria, women age 15-49 who had one or more live births in the past 5 years were read six statements about malaria. For each, the women were asked if they strongly agreed with the statement, somewhat agreed, somewhat disagreed, or strongly disagreed. **Table 13.6** presents the percentage of women who strongly agreed with each statement, by background characteristics.

The percentages of women who strongly agree with the statements were as follows: 'I can protect my children from malaria' (85%), 'I can ensure my children sleep under a mosquito net every night of the year'

(87%), 'I can easily hang my children's mosquito nets' (91%), 'It is important to sleep under a net every single night' (94%), 'Pregnant women are at high risk of getting malaria' (93%), and 'Women should attend antenatal care early in their pregnancy' (96%).

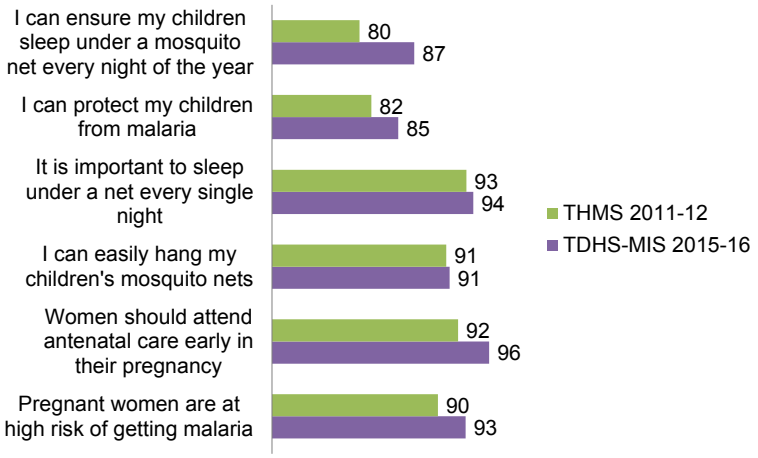
Trends: The percentage of women who strongly agreed with the statements on attitudes about malaria has increased between the 2011-12 THMIS and the 2015-16 TDHS-MIS **(Figure 13.6)**.

Patterns by background characteristics

- For each statement, the percentage of women who strongly agree is lower in rural than in urban areas, while the percentages generally increase with wealth quintile for each statement **(Table 13.6)**.

Figure 13.6 **Trends in attitudes about malaria**

Percentage of women age 15-49 who strongly agree with statements about malaria



- Among the regions, the percentage of women who strongly agree with the statements ranges from 64% in Kaskazini Pemba ('I can easily hang my children's mosquito nets') to 100% in Morogoro ('It is important to sleep under a net every single night'), Shinyanga ('I can easily hang my children's mosquito nets), and Kusini Unguja ('Women should attend antenatal care early in their pregnancy') **(Table 13.6)**.

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Table 13.1.1 Most serious health problem in community: Women

Among women age 15-49, the percent distribution of those who believe that malaria, HIV/AIDS, or other health issues is the most serious health problem in their community, by background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Most serious health problem in community				Total	Number of women
	Malaria	HIV/AIDS	Other	Don't know		
Residence						
Urban	54.9	7.2	18.5	19.4	100.0	4,811
Rural	58.6	8.2	20.3	12.9	100.0	8,455
Tanzania Mainland/Zanzibar						
Mainland	58.8	8.0	18.5	14.7	100.0	12,862
Urban	56.2	7.3	17.6	18.9	100.0	4,675
Rural	60.3	8.4	19.0	12.3	100.0	8,187
Zanzibar	8.3	3.0	57.3	31.4	100.0	404
Unguja	10.5	3.4	51.5	34.7	100.0	293
Pemba	2.8	2.0	72.5	22.7	100.0	111
Zone						
Western	72.0	8.7	11.0	8.2	100.0	1,278
Northern	56.9	5.6	24.6	12.9	100.0	1,575
Central	61.5	6.5	23.0	9.0	100.0	1,336
Southern Highlands	55.9	11.8	21.1	11.3	100.0	807
Southern	67.4	6.1	13.7	12.8	100.0	700
South West Highlands	33.3	10.5	25.5	30.6	100.0	1,246
Lake	63.7	11.1	14.8	10.4	100.0	3,463
Eastern	56.1	3.7	18.1	22.1	100.0	2,457
Zanzibar	8.3	3.0	57.3	31.4	100.0	404
Region						
Dodoma	67.7	7.6	19.1	5.6	100.0	572
Arusha	40.2	3.8	35.2	20.9	100.0	508
Kilimanjaro	48.5	9.1	34.0	8.4	100.0	361
Tanga	73.2	5.0	12.2	9.6	100.0	706
Morogoro	62.7	2.2	18.5	16.6	100.0	636
Pwani	56.4	4.7	19.4	19.5	100.0	285
Dar es Salaam	53.3	4.1	17.7	24.9	100.0	1,536
Lindi	62.8	10.0	15.7	11.4	100.0	288
Mtwara	70.6	3.3	12.3	13.8	100.0	412
Ruvuma	78.0	4.5	12.5	5.0	100.0	360
Iringa	44.3	16.3	21.7	17.7	100.0	245
Mbeya	34.2	14.4	28.3	23.1	100.0	828
Singida	58.8	7.9	20.5	12.8	100.0	370
Tabora	72.6	10.8	8.6	8.1	100.0	737
Rukwa	23.2	1.4	23.2	52.2	100.0	288
Kigoma	71.2	5.9	14.4	8.4	100.0	542
Shinyanga	64.1	15.3	15.4	5.1	100.0	504
Kagera	74.5	2.6	15.5	7.3	100.0	612
Mwanza	47.3	14.2	18.7	19.8	100.0	859
Mara	85.1	6.7	7.0	1.2	100.0	523
Manyara	54.9	3.7	31.1	10.3	100.0	394
Njombe	30.8	19.2	35.4	14.6	100.0	203
Katavi	50.4	6.1	13.1	30.4	100.0	130
Simiyu	68.9	10.7	13.5	6.9	100.0	479
Geita	50.8	17.4	15.8	16.1	100.0	485
Kaskazini Unguja	7.6	3.3	58.9	30.2	100.0	56
Kusini Unguja	9.2	5.9	55.0	29.8	100.0	35
Mjini Magharibi	11.5	3.0	48.7	36.8	100.0	201
Kaskazini Pemba	2.0	2.6	72.0	23.5	100.0	56
Kusini Pemba	3.5	1.5	73.1	21.8	100.0	55
Wealth quintile						
Lowest	58.9	8.8	18.7	13.6	100.0	2,246
Second	59.3	8.6	18.9	13.3	100.0	2,274
Middle	58.9	8.1	20.4	12.5	100.0	2,329
Fourth	59.2	8.0	19.1	13.8	100.0	2,822
Highest	52.4	6.6	20.7	20.4	100.0	3,596
Total	57.3	7.9	19.7	15.2	100.0	13,266

Table 13.1.2 Most serious health problem in community: Men

Among men age 15-49, the percent distribution of those who believe that malaria, HIV/AIDS, or other health issues is the most serious health problem in their community, by background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Most serious health problem in community				Total	Number of men
	Malaria	HIV/AIDS	Other	Don't know		
Residence						
Urban	61.9	6.5	18.5	13.1	100.0	1,251
Rural	64.4	7.8	19.0	8.8	100.0	2,263
Tanzania Mainland/Zanzibar						
Mainland	64.9	7.5	17.7	9.8	100.0	3,425
Urban	63.2	6.7	17.6	12.5	100.0	1,224
Rural	65.9	8.0	17.8	8.3	100.0	2,201
Zanzibar	9.0	0.6	60.4	30.0	100.0	89
Unguja	9.9	0.9	57.9	31.2	100.0	62
Pemba	6.8	0.0	65.9	27.3	100.0	28
Zone						
Western	71.5	10.4	8.9	9.2	100.0	322
Northern	61.4	1.1	30.3	7.1	100.0	415
Central	73.4	7.1	16.9	2.5	100.0	372
Southern Highlands	58.7	17.2	11.0	13.2	100.0	234
Southern	80.4	1.9	14.9	2.8	100.0	180
South West Highlands	40.2	12.7	28.8	18.3	100.0	308
Lake	66.5	8.2	16.4	8.8	100.0	933
Eastern	66.4	5.0	14.5	14.1	100.0	659
Zanzibar	9.0	0.6	60.4	30.0	100.0	89
Region						
Dodoma	75.0	5.8	19.2	0.0	100.0	175
Arusha	50.2	0.8	35.7	13.3	100.0	129
Kilimanjaro	41.8	0.7	47.3	10.1	100.0	110
Tanga	81.9	1.6	15.7	0.7	100.0	176
Morogoro	76.4	0.0	9.7	13.9	100.0	143
Pwani	57.7	0.0	20.4	21.9	100.0	68
Dar es Salaam	64.6	7.4	15.1	13.0	100.0	448
Lindi	71.4	0.0	23.1	5.6	100.0	66
Mtwara	85.6	3.0	10.2	1.2	100.0	115
Ruvuma	85.9	2.9	8.5	2.8	100.0	112
Iringa	43.8	25.5	12.0	18.7	100.0	71
Mbeya	45.6	13.5	24.2	16.8	100.0	202
Singida	77.1	12.4	5.4	5.1	100.0	106
Tabora	68.9	15.2	9.2	6.7	100.0	199
Rukwa	24.9	11.8	44.8	18.5	100.0	71
Kigoma	75.7	2.7	8.4	13.2	100.0	124
Shinyanga	63.8	16.7	9.7	9.8	100.0	142
Kagera	76.6	3.5	6.2	13.8	100.0	198
Mwanza	50.8	4.5	33.4	11.3	100.0	225
Mara	78.0	11.7	10.4	0.0	100.0	114
Manyara	66.1	3.7	26.0	4.2	100.0	91
Njombe	18.8	37.3	15.1	28.8	100.0	50
Katavi	40.0	10.0	23.0	27.0	100.0	35
Simiyu	64.7	14.3	18.2	2.9	100.0	136
Geita	74.2	2.6	13.5	9.6	100.0	118
Kaskazini Unguja	9.3	0.0	60.2	30.5	100.0	13
Kusini Unguja	7.1	1.1	71.1	20.6	100.0	9
Mjini Magharibi	10.8	1.2	54.4	33.7	100.0	40
Kaskazini Pemba	9.8	0.0	78.5	11.7	100.0	14
Kusini Pemba	3.5	0.0	52.5	43.9	100.0	13
Wealth quintile						
Lowest	63.4	9.5	18.9	8.2	100.0	598
Second	65.9	8.6	15.3	10.2	100.0	575
Middle	65.5	7.1	19.1	8.3	100.0	659
Fourth	62.1	6.6	20.1	11.1	100.0	764
Highest	61.8	5.9	19.7	12.6	100.0	918
Total	63.5	7.3	18.8	10.3	100.0	3,514

Table 13.2.1 Knowledge of malaria symptoms: Women

Among women age 15-49, the percentage who reported specific signs of symptoms of malaria in a young child, by background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Percentage of women who reported specific signs or symptoms of malaria in a child:												Number of women
	Fever	Feeling cold/ chills	Perspira-tion/ sweating	Head-ache	Body aches	Poor appetite	Vomiting	Diar-rhoea	Weak-ness	Cough-ing	Other	Does not know any	
Residence													
Urban	78.4	8.4	6.2	19.7	5.9	26.4	48.3	26.4	27.8	5.8	18.0	7.0	4,811
Rural	76.0	10.8	4.5	15.0	4.7	17.9	44.6	27.3	21.1	9.0	20.1	10.8	8,455
Tanzania Mainland/ Zanzibar													
Mainland	77.2	10.0	5.0	16.5	5.1	21.1	46.2	26.9	23.7	8.0	19.6	9.3	12,862
Urban	78.6	8.4	6.1	19.6	5.8	26.6	48.4	26.2	27.9	5.9	18.2	6.9	4,675
Rural	76.3	10.9	4.5	14.8	4.7	17.9	45.0	27.3	21.2	9.2	20.5	10.6	8,187
Zanzibar	68.5	8.8	7.0	21.7	7.4	17.4	37.2	29.2	19.3	4.8	9.4	14.9	404
Unguja	68.7	7.3	7.9	25.1	7.3	18.8	41.4	30.9	24.4	4.7	11.4	11.3	293
Pemba	68.2	12.8	4.9	12.8	7.4	13.8	26.3	24.7	5.7	5.1	4.2	24.3	111
Zone													
Western	81.8	17.3	2.3	17.6	7.8	18.8	41.5	27.6	30.5	7.7	25.3	7.3	1,278
Northern	83.8	17.8	4.4	22.5	5.7	25.7	47.1	25.5	22.2	5.3	12.0	7.7	1,575
Central	75.1	6.2	4.0	13.0	6.7	22.0	50.1	33.1	16.2	7.0	13.2	11.0	1,336
Southern Highlands	86.4	5.5	2.8	10.7	2.8	27.9	57.5	29.4	24.1	8.4	14.5	6.3	807
Southern	68.5	10.9	1.9	17.7	7.2	15.3	59.4	22.0	26.2	2.9	43.5	7.4	700
South West Highlands	67.1	7.4	5.4	11.7	3.1	13.5	36.6	21.2	17.2	8.4	8.3	22.1	1,246
Lake	76.1	10.3	8.2	14.5	3.4	18.1	43.7	29.9	23.6	12.5	25.3	6.7	3,463
Eastern	77.6	5.2	4.5	20.9	5.8	26.2	47.2	23.3	27.6	5.0	17.8	8.9	2,457
Zanzibar	68.5	8.8	7.0	21.7	7.4	17.4	37.2	29.2	19.3	4.8	9.4	14.9	404
Region													
Dodoma	80.3	8.1	5.1	17.9	11.6	24.3	54.1	32.5	21.3	7.9	13.4	3.9	572
Arusha	82.7	8.6	5.3	14.8	3.7	25.6	41.3	20.0	22.6	6.3	13.6	11.3	508
Kilimanjaro	87.0	14.4	7.1	34.9	7.1	33.2	55.0	23.8	22.9	6.2	9.4	4.2	361
Tanga	82.9	26.2	2.4	21.7	6.5	22.0	47.2	30.3	21.5	4.1	12.1	6.8	706
Morogoro	76.2	5.2	2.6	14.8	2.8	20.8	49.3	20.8	25.0	5.6	14.8	12.8	636
Pwani	75.7	1.3	0.9	25.5	4.8	16.8	45.9	27.7	23.6	3.9	19.4	10.6	285
Dar es Salaam	78.6	6.0	5.9	22.6	7.3	30.2	46.5	23.6	29.4	5.0	18.7	7.0	1,536
Lindi	65.1	11.3	0.3	20.5	7.5	15.0	63.6	25.8	27.8	4.4	58.7	2.2	288
Mtwara	70.9	10.5	3.0	15.7	6.9	15.5	56.4	19.4	25.1	2.0	32.8	11.0	412
Ruvuma	89.9	3.8	1.3	10.1	3.2	31.8	62.5	30.1	25.9	5.0	21.2	3.7	360
Iringa	85.9	6.3	4.2	9.6	3.0	23.6	57.8	30.0	23.3	14.5	5.3	7.3	245
Mbeya	70.6	5.6	3.3	10.3	2.0	11.9	37.2	23.0	17.1	9.2	7.8	18.1	828
Singida	66.3	6.2	3.0	12.1	4.9	16.5	50.6	39.5	14.5	4.7	9.7	18.3	370
Tabora	82.7	17.6	2.5	20.1	9.8	19.7	41.5	26.6	30.9	6.8	21.1	6.8	737
Rukwa	55.1	10.3	11.1	15.0	5.7	13.8	32.6	14.5	14.3	6.4	7.4	35.1	288
Kigoma	80.6	16.8	2.1	14.1	5.2	17.5	41.5	29.0	30.0	9.0	31.1	8.1	542
Shinyanga	83.9	9.6	2.2	17.3	8.4	21.9	47.6	27.1	31.2	9.8	23.8	2.9	504
Kagera	86.6	11.7	3.0	24.1	6.3	24.8	53.0	41.9	26.7	9.6	23.7	3.6	612
Mwanza	66.4	5.7	11.7	12.1	1.2	14.1	38.8	21.6	21.9	8.8	18.7	11.7	859
Mara	81.0	19.8	9.7	14.3	0.6	18.4	50.1	31.4	23.8	18.8	32.6	1.6	523
Manyara	75.9	3.6	3.3	6.8	1.4	23.9	43.9	28.1	10.2	7.7	16.2	14.4	394
Njombe	80.8	7.6	3.9	13.0	1.9	26.2	48.1	27.5	21.8	7.2	13.6	9.7	203
Katavi	71.3	12.1	6.6	13.6	4.8	23.4	41.1	23.8	24.8	8.1	14.1	18.9	130
Simiyu	79.2	11.2	6.1	10.5	3.9	18.8	42.5	41.5	20.4	24.7	33.6	4.8	479
Geita	63.3	6.2	15.0	8.1	1.3	12.0	30.6	19.2	17.6	6.9	24.4	13.2	485
Kaskazini Unguja	67.1	9.0	6.4	22.3	5.5	16.3	30.1	23.6	18.8	4.2	10.5	14.9	56
Kusini Unguja	66.3	4.7	4.9	21.7	5.8	14.5	42.6	33.5	18.6	5.0	12.8	13.8	35
Mjini Magharibi	69.5	7.2	8.8	26.6	8.1	20.2	44.4	32.4	27.0	4.8	11.4	9.8	201
Kaskazini Pemba	69.4	10.5	3.9	10.9	6.8	12.9	26.5	22.1	5.7	4.1	3.0	25.0	56
Kusini Pemba	67.0	15.3	5.9	14.7	8.1	14.6	26.1	27.4	5.7	6.1	5.4	23.5	55
Wealth quintile													
Lowest	74.3	11.7	4.1	12.2	3.9	16.0	40.4	25.3	18.6	9.8	21.1	12.5	2,246
Second	74.6	10.1	3.4	11.8	5.2	16.3	41.1	26.2	20.2	8.4	21.6	12.7	2,274
Middle	76.4	10.0	4.0	15.0	4.1	17.9	47.3	27.9	22.0	9.2	20.3	10.0	2,329
Fourth	78.1	10.4	7.1	20.1	5.2	21.5	48.9	28.0	25.4	8.2	18.1	6.8	2,822
Highest	79.4	8.3	5.9	21.0	6.6	28.6	49.4	27.2	28.2	5.3	17.1	7.1	3,596
Total	76.9	9.9	5.1	16.7	5.2	21.0	46.0	27.0	23.5	7.9	19.3	9.4	13,266

Table 13.2.2 Knowledge of malaria symptoms: Men

Among men age 15-49, the percentage who reported specific signs of symptoms of malaria in a young child, by background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Percentage of men who reported specific signs or symptoms of malaria in a child: Fever	Feeling cold/ chills	Perspira-tion/ sweating	Head-ache	Body aches	Poor appetite	Vomiting	Diar-rhoea	Weak-ness	Cough-ing	Other	Does not know any	Number of men
Residence													
Urban	77.7	14.9	11.8	21.2	8.6	28.2	30.5	15.2	29.4	4.9	11.5	9.6	1,251
Rural	69.4	15.6	7.5	17.3	5.5	20.3	34.5	17.5	22.9	5.0	14.6	16.9	2,263
Tanzania Mainland/ Zanzibar													
Mainland	72.7	15.3	9.1	18.6	6.6	23.3	33.3	16.6	25.2	5.0	13.8	13.8	3,425
Urban	78.0	14.8	11.9	21.1	8.6	28.4	30.6	15.1	29.1	4.9	11.8	9.3	1,224
Rural	69.7	15.6	7.6	17.2	5.4	20.4	34.8	17.5	23.0	5.0	14.9	16.3	2,201
Zanzibar	59.3	19.5	4.0	19.5	7.1	18.3	23.8	18.5	27.3	3.3	0.8	31.8	89
Unguja	69.0	23.5	4.8	24.4	9.3	22.7	26.3	19.4	35.1	3.4	0.7	21.5	62
Pemba	37.5	10.5	2.3	8.4	2.2	8.5	18.3	16.4	9.9	3.1	0.9	54.9	28
Zone													
Western	72.2	19.2	5.0	12.4	6.1	12.4	42.2	21.8	20.0	2.4	9.1	21.5	322
Northern	92.4	15.7	8.4	26.5	13.0	39.4	34.0	9.3	16.9	3.3	5.6	4.4	415
Central	66.0	11.8	11.0	18.6	3.0	23.1	28.3	17.9	26.8	4.8	11.5	11.8	372
Southern Highlands	61.8	6.1	3.6	6.2	0.7	24.6	41.5	17.9	31.7	5.0	12.3	16.6	234
Southern	85.2	23.1	9.2	19.1	9.2	32.9	50.0	16.2	32.5	1.0	31.3	0.6	180
South West Highlands	37.5	11.1	16.1	13.8	2.5	9.5	20.9	12.2	14.7	3.4	12.1	34.2	308
Lake	70.0	14.9	7.1	20.0	5.0	16.5	30.0	19.2	24.4	7.9	16.8	16.5	933
Eastern	85.1	18.6	12.2	21.3	10.3	31.4	34.3	16.1	33.6	5.0	14.9	6.5	659
Zanzibar	59.3	19.5	4.0	19.5	7.1	18.3	23.8	18.5	27.3	3.3	0.8	31.8	89
Region													
Dodoma	58.2	8.0	17.4	16.8	3.0	22.4	26.6	21.5	28.7	5.7	12.8	11.8	175
Arusha	82.8	13.8	4.1	21.4	2.3	36.6	32.4	6.8	23.4	0.8	6.7	9.6	129
Kilimanjaro	96.5	28.0	9.4	19.4	14.2	27.3	29.9	16.0	14.0	8.5	2.3	1.4	110
Tanga	96.8	9.3	10.8	34.8	20.1	49.1	37.7	6.9	13.9	2.0	6.9	2.4	176
Morogoro	77.6	15.5	2.9	19.8	3.6	26.6	54.1	21.5	37.3	1.3	27.7	12.9	143
Pwani	77.4	12.1	4.8	18.0	4.9	24.4	46.0	24.2	35.9	2.9	20.3	12.8	68
Dar es Salaam	88.7	20.6	16.3	22.3	13.3	34.0	26.2	13.2	32.2	6.6	10.0	3.4	448
Lindi	82.5	18.9	5.0	16.9	6.3	22.3	35.9	23.2	29.8	1.2	32.1	0.0	66
Mtwara	86.8	25.5	11.6	20.4	10.9	39.0	58.0	12.2	34.0	0.8	30.9	0.9	115
Ruvuma	59.2	6.2	2.3	8.2	1.5	20.6	46.1	22.2	33.8	1.9	21.8	9.8	112
Iringa	74.4	6.7	4.8	6.1	0.0	35.6	46.1	16.2	37.6	7.2	1.0	9.3	71
Mbeya	43.1	11.0	15.5	11.6	1.0	7.3	21.0	16.0	17.4	3.5	6.6	35.1	202
Singida	66.3	13.0	9.4	17.3	1.7	20.5	43.6	22.9	26.7	5.6	9.9	12.1	106
Tabora	63.6	12.5	6.7	11.5	8.1	9.1	43.5	21.6	14.3	3.0	14.3	27.7	199
Rukwa	26.5	11.7	23.1	17.8	6.5	14.9	18.2	6.6	12.0	3.5	19.1	30.3	71
Kigoma	86.1	29.9	2.1	13.7	3.0	17.6	40.1	22.2	29.0	1.5	0.6	11.4	124
Shinyanga	66.8	5.2	2.9	3.7	0.7	13.4	43.6	28.6	14.9	4.2	31.1	25.3	142
Kagera	72.7	14.2	1.2	25.2	0.7	18.2	36.6	25.1	23.6	6.3	9.9	15.1	198
Mwanza	42.6	7.3	1.7	18.9	0.9	7.3	16.1	9.3	23.0	4.8	19.6	29.1	225
Mara	97.9	34.0	31.3	28.7	13.8	27.9	26.7	13.5	32.2	12.0	13.2	0.8	114
Manyara	80.5	17.9	0.8	23.4	4.2	27.5	13.9	5.2	23.4	2.3	10.8	11.3	91
Njombe	49.7	5.2	4.6	2.0	0.0	17.9	24.3	10.6	18.9	8.8	7.0	42.3	50
Katavi	27.6	10.7	5.3	18.7	2.7	11.3	25.7	1.6	4.4	2.5	29.7	37.0	35
Simiyu	90.3	17.3	10.2	25.6	12.2	18.7	26.7	16.0	20.2	17.5	14.9	5.0	136
Geita	70.8	21.2	5.2	18.3	8.1	21.3	36.3	25.7	37.4	6.0	11.7	12.9	118
Kaskazini Unguja	63.9	36.0	1.2	31.7	5.6	12.2	22.8	23.8	25.4	4.4	1.2	25.5	13
Kusini Unguja	71.8	16.5	14.8	21.6	8.0	32.9	32.8	20.5	23.2	0.0	0.0	23.4	9
Mjini Magharibi	70.2	20.7	3.8	22.6	10.9	24.0	26.1	17.7	40.8	3.8	0.7	19.8	40
Kaskazini Pemba	40.6	8.4	0.0	6.7	3.0	11.7	19.8	16.5	12.2	3.0	0.0	53.0	14
Kusini Pemba	34.2	12.6	4.8	10.3	1.3	5.2	16.8	16.2	7.5	3.3	2.0	57.0	13
Wealth quintile													
Lowest	64.4	12.0	6.2	16.0	4.8	16.5	29.4	16.0	23.7	4.7	18.2	19.9	598
Second	65.1	15.2	6.9	16.9	5.3	15.4	33.6	17.9	17.6	5.9	14.3	21.8	575
Middle	69.7	15.5	7.1	17.0	5.4	21.2	35.1	18.7	27.3	3.6	14.5	15.2	659
Fourth	73.6	15.8	11.7	18.6	6.7	24.4	32.1	17.7	24.7	6.2	12.3	12.3	764
Highest	82.9	17.2	11.4	22.7	9.3	32.7	34.4	14.0	29.9	4.4	10.1	6.9	918
Total	72.4	15.4	9.0	18.7	6.6	23.1	33.1	16.7	25.2	4.9	13.5	14.3	3,514

Table 13.3.1 Knowledge of ways to avoid malaria: Women

Among women age 15-49, the percentage who say there are ways to avoid getting malaria, and among those, the percentage who cite specific ways of avoiding malaria, by background characteristics, Tanzania DHS-MIS 2015-16

			Among women who say there are ways to avoid getting malaria:													
Background characteristic	Percentage who say there are ways to avoid malaria	Number of women	Sleep under mosquito net	Use mosquito coils	Use insecticide spray	Indoor residual spraying (IRS)	Keep door and windows closed	Use insect repellent	Keep surroundings clean	Cut the grass	Remove standing water	Intermittent preventive treatment during pregnancy (IPTp)	House screening	Other	Does not know any	Number of women
Residence																
Urban	95.5	4,811	98.4	7.9	15.3	8.9	4.0	3.1	23.8	14.5	16.4	2.1	1.2	3.6	0.3	4,596
Rural	87.6	8,455	97.6	4.1	4.8	2.8	2.1	1.0	17.1	9.6	8.4	1.9	0.4	2.5	0.7	7,406
Tanzania Mainland/ Zanzibar																
Mainland	90.5	12,862	98.1	5.5	8.7	4.9	2.8	1.8	19.1	11.4	11.1	2.0	0.7	2.9	0.5	11,635
Urban	95.5	4,675	98.5	7.9	15.2	8.6	3.9	3.1	23.4	14.5	16.2	2.2	1.2	3.6	0.2	4,467
Rural	87.6	8,187	97.8	4.1	4.6	2.5	2.1	0.9	16.4	9.4	8.0	1.8	0.4	2.5	0.7	7,168
Zanzibar	91.1	404	93.9	7.1	13.9	13.9	5.2	2.9	38.0	15.7	23.6	1.9	1.6	2.7	1.4	368
Unguja	95.6	293	93.1	7.0	16.8	16.5	4.2	2.6	40.6	16.4	26.9	1.7	1.3	3.1	1.3	280
Pemba	79.4	111	96.3	7.5	4.7	5.7	8.6	4.0	29.6	13.7	13.2	2.3	2.5	1.5	1.5	88
Zone																
Western	90.0	1,278	99.0	5.3	7.0	4.0	3.5	1.6	17.2	11.0	11.0	1.9	0.7	1.9	0.2	1,151
Northern	90.1	1,575	98.2	16.8	8.7	6.4	3.4	3.0	24.6	16.9	15.0	1.1	0.3	1.7	0.6	1,418
Central	85.6	1,336	97.1	3.3	7.4	2.9	2.6	1.0	19.4	13.3	11.3	3.5	1.0	1.7	0.8	1,144
Southern Highlands	89.9	807	97.3	0.9	4.2	4.5	1.6	0.9	24.1	14.6	10.7	2.8	0.2	5.0	0.3	726
Southern	90.5	700	97.5	5.1	10.3	5.6	0.8	1.9	28.1	12.2	11.6	2.4	0.4	3.5	0.5	633
South West Highlands	81.3	1,246	97.6	1.1	4.0	2.1	2.3	2.2	18.8	9.0	10.0	3.0	0.2	2.0	0.7	1,013
Lake	94.3	3,463	98.8	2.8	5.7	3.2	2.7	1.0	11.1	7.5	6.4	1.5	0.4	2.7	0.5	3,264
Eastern	93.0	2,457	97.5	7.2	17.5	8.8	3.3	2.6	24.0	12.4	15.9	1.7	1.6	4.8	0.4	2,285
Zanzibar	91.1	404	93.9	7.1	13.9	13.9	5.2	2.9	38.0	15.7	23.6	1.9	1.6	2.7	1.4	368
Region																
Dodoma	88.5	572	96.4	2.7	8.3	1.5	2.4	1.3	21.3	14.6	15.5	6.1	1.2	1.0	1.0	506
Arusha	84.3	508	97.0	5.1	12.0	8.6	3.4	2.2	18.5	9.0	11.1	2.6	0.7	3.4	1.5	428
Kilimanjaro	98.2	361	98.0	11.9	10.6	5.4	5.5	1.9	29.7	27.2	26.1	1.0	0.4	1.6	0.2	355
Tanga	90.0	706	99.1	27.4	5.4	5.6	2.2	4.2	26.0	16.5	11.4	0.2	0.0	0.8	0.2	636
Morogoro	87.1	636	97.2	4.5	6.9	3.8	1.7	0.8	25.8	11.4	10.8	0.3	1.0	4.1	0.5	554
Pwani	84.7	285	95.9	2.3	8.8	4.7	5.0	1.9	28.6	10.7	11.5	2.5	2.1	3.2	1.4	241
Dar es Salaam	97.0	1,536	97.8	8.9	22.9	11.3	3.6	3.4	22.5	13.1	18.6	2.0	1.7	5.2	0.2	1,490
Lindi	90.8	288	97.0	5.0	11.8	4.6	0.1	1.4	28.5	5.3	12.4	2.5	0.5	4.5	0.0	261
Mtwara	90.3	412	97.8	5.1	9.2	6.4	1.3	2.3	27.8	17.1	11.1	2.3	0.2	2.7	0.8	372
Ruvuma	89.5	360	96.9	0.3	4.5	2.6	0.8	0.8	27.9	17.6	9.9	2.6	0.0	7.2	0.6	322
Iringa	89.7	245	99.7	1.8	3.4	7.8	2.6	1.4	21.2	11.2	11.3	1.1	0.3	0.3	0.0	219
Mbeya	85.4	828	96.8	0.5	4.1	1.2	2.2	2.5	18.5	5.3	9.5	3.1	0.2	2.6	1.0	707
Singida	89.7	370	98.3	4.3	9.8	5.4	3.5	1.0	22.6	19.0	10.7	2.0	1.3	1.1	0.2	332
Tabora	92.0	737	99.3	6.0	3.0	3.4	2.9	2.0	16.5	9.7	7.6	1.1	0.7	1.9	0.2	677
Rukwa	68.7	288	99.0	2.6	4.8	5.8	1.6	0.9	16.2	17.7	11.9	3.5	0.0	0.6	0.4	198
Kigoma	87.4	542	98.7	4.2	12.8	4.9	4.3	1.1	18.2	13.0	16.0	3.2	0.7	1.9	0.2	473
Shinyanga	98.8	504	99.6	2.7	8.4	5.8	5.0	1.3	11.3	6.8	5.7	1.5	1.2	3.3	0.2	498
Kagera	95.7	612	98.7	1.3	10.3	3.3	7.7	1.4	21.6	16.6	14.7	1.2	0.4	4.9	0.4	586
Mwanza	91.2	859	98.0	3.4	4.5	3.0	0.6	1.3	8.9	7.1	5.8	1.4	0.4	1.4	1.3	783
Mara	97.6	523	99.5	6.9	6.6	2.0	1.2	0.0	7.6	4.3	3.4	0.0	0.0	4.3	0.1	511
Manyara	77.6	394	96.9	3.3	3.2	2.6	1.8	0.5	12.7	5.0	5.0	1.0	0.5	3.4	1.1	306
Njombe	90.8	203	95.1	1.1	4.6	3.9	2.0	0.6	20.9	13.6	11.3	5.0	0.3	6.7	0.3	184
Katavi	83.3	130	99.8	2.8	1.8	1.6	4.9	2.7	25.5	17.3	10.4	0.9	0.8	0.2	0.0	108
Simiyu	92.6	479	98.9	1.1	2.1	2.3	0.6	0.8	8.6	4.5	4.7	2.9	0.0	1.7	0.0	443
Geita	91.2	485	98.8	1.0	1.2	3.1	0.8	0.7	7.6	3.8	2.3	2.1	0.0	0.9	0.5	442
Kaskazini Unguja	92.0	56	89.7	3.1	5.6	13.0	2.1	2.9	31.1	12.9	17.6	0.4	1.0	5.1	3.5	52
Kusini Unguja	93.4	35	92.5	3.9	9.4	13.4	1.8	0.4	49.1	17.2	22.9	2.2	0.8	1.5	1.0	33
Mjini Magharibi	96.9	201	94.2	8.5	21.0	18.0	5.2	2.9	41.6	17.2	30.0	2.0	1.5	2.8	0.8	195
Kaskazini Pemba	81.1	56	98.1	7.5	4.8	3.9	6.1	4.8	28.8	14.0	9.5	1.6	1.6	0.5	0.9	46
Kusini Pemba	77.7	55	94.4	7.6	4.5	7.6	11.2	3.0	30.6	13.4	17.1	3.0	3.5	2.7	2.0	43
Wealth quintile																
Lowest	81.6	2,246	98.0	3.0	3.1	1.8	1.7	0.5	10.6	4.9	3.5	1.6	0.2	2.0	0.7	1,832
Second	85.0	2,274	98.0	3.3	3.4	2.1	2.2	1.0	13.3	6.9	4.8	2.1	0.4	2.1	0.7	1,932
Middle	90.1	2,329	97.2	3.9	4.1	2.1	1.9	0.8	16.2	8.7	8.8	1.9	0.3	2.7	0.8	2,098
Fourth	94.3	2,822	97.8	5.5	7.8	4.8	2.7	1.9	22.3	13.7	13.4	2.0	0.7	2.9	0.6	2,660
Highest	96.8	3,596	98.5	9.3	18.6	10.8	4.5	3.5	28.1	17.5	19.6	2.1	1.4	4.0	0.2	3,481
Total	90.5	13,266	97.9	5.6	8.8	5.1	2.8	1.8	19.7	11.5	11.5	2.0	0.7	2.9	0.5	12,003

Table 13.3.2 Knowledge of ways to avoid malaria: Men

Among men age 15-49, the percentage who say there are ways to avoid getting malaria, and among those, the percentage who cite specific ways of avoiding malaria, by background characteristics, Tanzania DHS-MIS 2015-16

			Among men who say there are ways to avoid getting malaria:													
Background characteristic	Percentage who say there are ways to avoid malaria	Number of men	Sleep under mosquito net	Use mosquito coils	Use insecticide spray	Indoor residual spraying (IRS)	Keep door and windows closed	Use insect repellent	Keep surroundings clean	Cut the grass	Remove standing water	Intermittent preventive treatment during pregnancy (IPTp)	House screening	Other	Does not know any	Number of men
Residence																
Urban	97.5	1,251	97.9	8.9	17.5	23.9	4.1	7.0	30.4	19.1	19.2	2.7	2.5	1.6	0.2	1,220
Rural	89.4	2,263	97.2	6.0	9.4	12.8	2.9	2.9	21.5	14.6	11.9	2.2	1.4	2.7	0.6	2,023
Tanzania Mainland/ Zanzibar																
Mainland	92.2	3,425	97.5	7.2	12.4	16.4	3.4	4.5	24.6	16.5	14.7	2.4	1.8	2.4	0.4	3,158
Urban	97.5	1,224	97.9	8.9	17.4	23.5	4.1	7.1	30.3	19.3	19.1	2.7	2.6	1.6	0.2	1,193
Rural	89.2	2,201	97.3	6.1	9.4	12.2	3.0	2.9	21.2	14.8	12.0	2.2	1.3	2.8	0.5	1,964
Zanzibar	96.0	89	95.3	3.9	14.9	36.9	0.9	1.2	33.4	6.7	13.4	1.1	3.5	0.4	3.7	86
Unguja	98.8	62	95.1	4.0	16.2	46.4	0.0	0.0	32.0	6.6	17.2	1.0	4.4	0.5	4.2	61
Pemba	89.7	28	95.8	3.5	11.6	13.7	3.1	4.3	37.0	6.9	4.1	1.4	1.2	0.0	2.3	25
Zone																
Western	90.9	322	97.9	2.7	3.9	7.1	1.4	3.3	22.8	20.0	11.1	2.5	1.1	2.9	0.0	293
Northern	97.4	415	97.5	12.3	14.1	15.6	8.2	5.5	20.8	20.3	15.4	4.3	2.5	2.3	0.0	404
Central	95.0	372	98.1	7.7	4.4	11.7	0.0	2.2	25.1	14.4	10.8	0.0	0.0	2.1	0.7	354
Southern Highlands	87.0	234	95.1	2.6	5.6	4.6	4.5	1.5	28.8	14.2	23.2	4.1	1.0	2.9	1.3	203
Southern	98.3	180	98.6	15.3	43.2	33.4	3.9	8.0	31.0	18.2	13.6	1.2	1.7	0.3	0.6	177
South West Highlands	85.9	308	95.1	4.9	5.6	6.8	0.9	2.1	15.6	4.3	12.0	2.1	1.2	4.5	1.0	265
Lake	89.1	933	97.9	3.0	9.3	17.6	2.7	3.5	19.7	12.3	10.3	2.4	1.6	3.1	0.4	832
Eastern	95.5	659	98.0	11.2	20.2	25.5	4.6	8.0	34.9	24.7	22.5	2.5	3.3	0.9	0.0	630
Zanzibar	96.0	89	95.3	3.9	14.9	36.9	0.9	1.2	33.4	6.7	13.4	1.1	3.5	0.4	3.7	86
Region																
Dodoma	95.0	175	98.9	0.0	2.4	16.1	0.0	2.6	19.6	6.8	7.7	0.0	0.0	3.2	0.0	166
Arusha	94.0	129	91.7	15.3	15.5	11.1	2.7	1.9	21.3	13.9	10.2	3.2	0.9	5.2	0.0	122
Kilimanjaro	99.3	110	100.0	25.3	19.6	16.6	9.3	2.4	24.1	25.2	15.2	2.5	4.8	1.6	0.0	109
Tanga	98.7	176	100.0	2.1	9.6	18.1	11.3	9.9	18.3	21.7	19.2	6.1	2.2	0.7	0.0	173
Morogoro	83.4	143	98.1	1.8	5.7	4.3	3.5	2.7	37.3	33.2	24.9	3.6	4.7	1.5	0.0	119
Pwani	95.5	68	98.6	12.9	17.1	5.0	6.6	2.7	36.7	27.6	21.3	2.7	3.0	1.0	0.0	65
Dar es Salaam	99.4	448	97.9	13.5	24.6	34.2	4.7	10.2	34.0	22.0	22.1	2.2	2.9	0.7	0.0	446
Lindi	96.6	66	100.0	6.7	53.9	25.7	1.6	9.5	23.0	8.0	3.9	0.0	0.0	0.9	0.0	63
Mtwara	99.2	115	97.9	20.1	37.2	37.7	5.2	7.1	35.5	23.9	19.0	1.8	2.7	0.0	0.9	114
Ruvuma	84.9	112	92.3	0.0	3.5	3.6	0.0	1.0	28.3	4.3	14.4	1.0	1.0	5.3	2.0	95
Iringa	91.9	71	98.9	5.9	9.5	6.0	3.4	1.9	39.0	27.3	33.6	5.1	1.0	0.0	1.1	65
Mbeya	83.0	202	95.6	5.5	3.8	8.3	0.7	2.8	15.2	5.3	13.7	2.5	0.0	1.1	0.0	168
Singida	99.2	106	100.0	0.7	5.7	13.8	0.0	2.3	44.8	33.5	18.8	0.0	0.0	0.0	0.0	105
Tabora	87.0	199	96.6	3.0	2.6	9.2	2.4	5.6	18.9	11.1	8.4	3.4	0.0	4.9	0.0	173
Rukwa	91.1	71	93.6	4.2	12.3	4.0	1.4	0.9	18.1	3.1	10.5	0.8	4.0	12.6	3.5	65
Kigoma	97.1	124	99.8	2.1	5.8	4.1	0.0	0.0	28.5	32.8	15.0	1.1	2.8	0.0	0.0	120
Shinyanga	79.7	142	95.0	0.0	7.3	15.9	0.6	0.0	23.7	10.1	8.1	4.8	0.0	7.2	0.0	114
Kagera	96.9	198	100.0	3.9	7.7	9.5	0.8	2.9	20.6	19.7	16.9	1.7	1.8	0.0	0.0	192
Mwanza	80.9	225	96.3	2.0	4.6	3.0	0.4	1.7	10.4	9.0	3.7	0.0	0.8	5.1	1.9	182
Mara	99.3	114	100.0	0.0	14.6	37.0	14.0	11.2	28.2	9.4	17.5	6.6	2.6	0.9	0.0	113
Manyara	89.9	91	94.0	32.1	6.7	0.0	0.0	1.5	11.1	5.3	7.0	0.0	0.0	2.7	3.2	82
Njombe	84.7	50	95.3	3.3	4.0	4.9	16.2	1.7	14.0	16.3	26.9	9.3	1.2	2.2	0.0	42
Katavi	92.2	35	95.6	2.8	2.0	5.0	1.0	1.2	12.4	1.8	6.3	2.3	2.0	5.8	0.9	32
Simiyu	98.4	136	98.7	9.7	20.8	23.0	2.4	3.7	15.2	11.8	7.7	2.8	2.0	1.2	0.0	134
Geita	82.5	118	96.8	1.1	1.7	33.0	0.5	3.1	26.7	10.2	7.2	0.0	2.7	5.8	0.0	98
Kaskazini Unguja	98.2	13	91.4	2.4	9.3	40.2	0.0	0.0	26.0	3.3	13.9	1.4	1.4	2.3	8.6	13
Kusini Unguja	98.5	9	95.0	3.7	13.0	45.4	0.0	0.0	37.5	9.4	9.3	0.0	5.9	0.0	5.0	8
Mjini Magharibi	99.1	40	96.4	4.6	19.2	48.6	0.0	0.0	32.8	7.1	20.0	1.0	5.1	0.0	2.6	40
Kaskazini Pemba	93.8	14	97.6	3.0	11.8	15.5	0.0	3.7	38.6	6.2	4.6	1.4	1.3	0.0	0.0	13
Kusini Pemba	85.4	13	93.7	4.1	11.3	11.6	6.7	4.9	35.1	7.7	3.7	1.3	1.0	0.0	5.0	11
Wealth quintile																
Lowest	84.5	598	95.6	3.5	5.3	8.4	1.8	2.2	13.9	8.4	6.2	1.4	1.0	2.5	1.6	505
Second	88.2	575	96.7	4.2	7.5	12.4	2.1	2.4	13.9	11.7	7.8	2.2	1.1	3.4	0.5	507
Middle	89.5	659	97.3	5.2	10.2	11.6	4.1	3.9	25.8	16.6	15.4	2.6	0.5	3.7	0.2	590
Fourth	96.1	764	99.0	7.1	10.9	15.8	3.7	4.6	26.2	16.1	14.2	2.0	3.3	1.9	0.4	734
Highest	98.8	918	97.8	11.9	22.0	28.8	4.1	7.0	35.5	23.1	23.0	3.2	2.3	1.0	0.2	907
Total	92.3	3,514	97.5	7.1	12.5	17.0	3.3	4.4	24.9	16.3	14.6	2.4	1.8	2.3	0.5	3,243

Table 13.4.1 Access to ACTs, messages about malaria prevention and treatment, and visits from health workers: Women

Percentage of women age 15-49 who say that ACTs can be obtained at the nearest health facility or pharmacy; who have seen or heard messages about malaria prevention in the past year; who have seen or heard messages about malaria treatment in the past year; and who were visited by a health worker or volunteer who talked about malaria in the past 6 months, by background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	ACTs can be obtained at nearest health facility or pharmacy	Seen or heard messages about malaria prevention	Seen or heard messages about malaria treatment	Visited by a health worker or volunteer who talked about malaria	Number of women
Residence					
Urban	91.0	67.5	70.9	4.0	4,811
Rural	89.9	52.9	53.1	3.3	8,455
Tanzania Mainland/Zanzibar					
Mainland	91.3	58.4	59.9	3.5	12,862
Urban	92.0	67.7	71.3	4.0	4,675
Rural	91.0	53.1	53.4	3.3	8,187
Zanzibar	58.6	51.1	48.1	4.3	404
Unguja	58.5	58.1	56.2	3.7	293
Pemba	58.8	32.9	26.8	5.9	111
Zone					
Western	93.0	52.3	53.9	1.5	1,278
Northern	88.7	45.8	51.5	5.8	1,575
Central	89.1	45.9	45.9	1.2	1,336
Southern Highlands	91.7	66.8	66.6	4.6	807
Southern	97.3	53.2	65.0	3.7	700
South West Highlands	88.1	60.9	54.9	4.4	1,246
Lake	93.0	62.9	60.7	4.0	3,463
Eastern	90.7	67.8	73.9	2.9	2,457
Zanzibar	58.6	51.1	48.1	4.3	404
Region					
Dodoma	87.4	42.4	45.7	1.3	572
Arusha	82.0	52.5	57.8	0.8	508
Kilimanjaro	91.2	64.6	70.2	6.3	361
Tanga	92.3	31.4	37.5	9.2	706
Morogoro	91.6	65.9	72.7	3.9	636
Pwani	93.2	57.1	61.1	3.3	285
Dar es Salaam	89.9	70.5	76.8	2.3	1,536
Lindi	96.9	41.8	59.2	4.3	288
Mtwara	97.6	61.2	69.1	3.3	412
Ruvuma	94.8	63.8	68.2	5.0	360
Iringa	89.6	69.7	68.3	5.4	245
Mbeya	86.6	60.6	57.8	5.3	828
Singida	92.0	54.3	54.9	0.6	370
Tabora	93.1	45.8	45.8	2.0	737
Rukwa	88.3	61.8	49.8	3.5	288
Kigoma	93.0	61.1	64.9	0.9	542
Shinyanga	98.6	76.9	74.5	3.5	504
Kagera	92.8	67.1	61.3	6.4	612
Mwanza	87.5	52.0	49.2	4.0	859
Mara	98.4	74.1	75.0	2.2	523
Manyara	89.0	43.1	37.8	1.6	394
Njombe	88.8	68.7	61.7	2.8	203
Katavi	97.3	60.3	47.8	1.1	130
Simiyu	91.3	67.8	62.4	3.8	479
Geita	93.2	45.3	49.2	3.9	485
Kaskazini Unguja	53.1	46.1	44.2	5.4	56
Kusini Unguja	68.8	59.5	57.4	4.6	35
Mjini Magharibi	58.1	61.2	59.3	3.1	201
Kaskazini Pemba	61.9	30.4	26.4	3.4	56
Kusini Pemba	55.7	35.4	27.2	8.4	55
Wealth quintile					
Lowest	88.8	43.4	41.5	1.8	2,246
Second	89.7	48.1	48.7	3.1	2,274
Middle	91.9	56.4	56.8	2.8	2,329
Fourth	92.3	63.7	65.4	4.9	2,822
Highest	89.1	70.7	75.0	4.4	3,596
Total	90.3	58.2	59.6	3.6	13,266

Table 13.4.2 Access to ACTs, messages about malaria prevention and treatment, and visits from health workers: Men

Percentage of men age 15-49 who say that ACTs can be obtained at the nearest health facility or pharmacy; who have seen or heard messages about malaria prevention in the past year; who have seen or heard messages about malaria treatment in the past year; and who were visited by a health worker or volunteer who talked about malaria in the past 6 months, by background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	ACTs can be obtained at nearest health facility or pharmacy	Seen or heard messages about malaria prevention	Seen or heard messages about malaria treatment	Visited by a health worker or volunteer who talked about malaria	Number of men
Residence					
Urban	83.2	74.3	74.4	6.0	1,251
Rural	79.7	63.6	63.2	6.4	2,263
Tanzania Mainland/Zanzibar					
Mainland	81.9	67.4	67.3	6.2	3,425
Urban	84.1	74.3	74.5	6.0	1,224
Rural	80.7	63.6	63.4	6.3	2,201
Zanzibar	43.8	68.1	61.6	9.2	89
Unguja	46.9	80.7	73.9	9.9	62
Pemba	37.0	39.9	34.2	7.6	28
Zone					
Western	71.5	55.5	48.7	3.8	322
Northern	76.1	71.0	70.2	7.1	415
Central	87.6	79.5	77.5	6.0	372
Southern Highlands	88.3	66.3	74.0	6.7	234
Southern	97.5	58.5	58.3	7.4	180
South West Highlands	54.3	58.9	65.3	8.4	308
Lake	84.7	68.5	66.4	7.0	933
Eastern	89.7	69.5	71.3	4.3	659
Zanzibar	43.8	68.1	61.6	9.2	89
Region					
Dodoma	90.3	79.3	76.5	1.2	175
Arusha	65.8	67.9	69.8	14.7	129
Kilimanjaro	84.0	78.0	79.7	4.0	110
Tanga	78.8	68.9	64.5	3.5	176
Morogoro	87.7	51.4	59.9	4.5	143
Pwani	76.4	64.2	63.3	3.0	68
Dar es Salaam	92.4	76.0	76.1	4.4	448
Lindi	98.4	54.6	54.0	10.9	66
Mtwara	97.0	60.7	60.8	5.4	115
Ruvuma	96.0	55.1	60.7	6.0	112
Iringa	84.8	81.7	92.4	7.4	71
Mbeya	68.6	58.6	65.6	8.8	202
Singida	81.2	73.8	68.6	6.0	106
Tabora	77.8	35.4	34.6	4.5	199
Rukwa	21.0	58.5	65.4	11.2	71
Kigoma	61.5	87.7	71.4	2.8	124
Shinyanga	72.4	45.1	42.0	2.8	142
Kagera	78.9	93.8	83.0	15.2	198
Mwanza	88.9	47.4	47.9	4.9	225
Mara	99.4	95.8	97.8	11.4	114
Manyara	89.9	86.4	89.8	15.1	91
Njombe	76.3	69.3	77.6	7.1	50
Katavi	39.4	61.5	63.5	0.0	35
Simiyu	95.5	83.9	85.5	0.4	136
Geita	74.6	50.1	50.9	5.4	118
Kaskazini Unguja	42.9	76.6	70.3	12.9	13
Kusini Unguja	35.7	76.3	66.6	8.6	9
Mjini Magharibi	50.6	83.0	76.6	9.2	40
Kaskazini Pemba	35.0	42.6	38.8	10.7	14
Kusini Pemba	39.1	36.9	29.3	4.3	13
Wealth quintile					
Lowest	77.0	53.6	52.6	6.1	598
Second	75.3	62.4	63.0	6.6	575
Middle	83.1	61.9	62.5	6.5	659
Fourth	81.2	74.0	73.2	6.0	764
Highest	85.2	78.1	77.7	6.3	918
Total	80.9	67.4	67.2	6.3	3,514

Table 13.5.1 Media exposure to malaria messages: Women

Percentage of women age 15-49 who have seen or heard the malaria message 'Malaria Haikubaliki' or 'Maliza Malaria' in the past year, and among those who have seen or heard the malaria message, the percentage who cite specific places where they saw or heard the malaria message, by background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Percentage who have seen or heard a malaria message in the past year	Number of women	Among women who have seen or heard a malaria message in the past year, the percentage who: Radio	Billboard	Poster	T-shirt	Leaflet/ Fact sheet/ Brochure	Television	Mobile video unit	School	Health care worker	Community event/ presentation	Friend/ neighbor/ family member	Other	Don't now	Number of women
Residence																
Urban	92.9	4,811	84.6	17.1	17.7	1.9	8.1	51.8	0.8	1.0	7.7	2.5	4.4	7.5	0.0	4,470
Rural	79.1	8,455	85.1	8.2	11.3	1.2	6.0	15.0	1.0	1.1	12.5	3.2	7.3	7.6	7.5	6,689
Tanzania Mainland/ Zanzibar																
Mainland	84.6	12,862	85.5	11.8	13.7	1.3	6.4	29.6	0.9	1.0	10.6	2.9	6.1	7.7	7.0	10,877
Urban	93.3	4,675	85.2	17.2	17.5	1.8	7.7	51.9	0.8	1.0	7.7	2.5	4.4	7.6	0.0	4,363
Rural	79.6	8,187	85.7	8.1	11.2	1.0	5.5	14.7	1.0	1.0	12.6	3.2	7.3	7.7	7.0	6,514
Zanzibar	69.8	404	61.5	11.2	19.1	6.1	24.3	36.7	1.0	2.4	8.3	3.4	7.3	5.4	0.5	282
Unguja	77.4	293	63.9	10.1	19.7	5.1	21.9	40.7	0.9	2.2	8.9	3.3	7.1	5.0	0.4	226
Pemba	49.7	111	51.6	15.6	16.5	10.3	34.1	20.4	1.5	3.3	6.0	3.7	8.4	6.9	0.1	55
Zone																
Western	82.1	1,278	87.8	6.6	15.9	0.3	4.8	16.3	1.0	1.1	15.9	3.0	6.9	7.3	1.1	1,049
Northern	79.2	1,575	81.1	12.9	13.4	0.8	9.2	40.8	0.0	1.3	9.8	1.6	6.6	4.1	1.1	1,248
Central	78.1	1,336	84.5	9.3	10.9	1.4	6.7	21.3	1.2	0.5	12.4	3.3	4.8	3.1	2.3	1,044
Southern Highlands	89.8	807	90.2	6.7	10.5	0.5	6.2	25.8	0.1	1.7	5.6	2.0	3.7	8.2	0.0	725
Southern	93.4	700	90.1	10.6	8.4	1.8	6.4	20.9	3.1	1.3	12.4	4.9	18.5	9.5	0.0	654
South West Highlands	72.2	1,246	88.9	19.0	16.8	1.2	3.5	20.4	0.8	0.5	8.7	2.2	2.7	5.5	0.4	899
Lake	85.9	3,463	85.8	9.1	13.5	1.3	6.2	22.6	0.8	1.2	10.7	3.9	5.5	11.4	2.1	2,976
Eastern	92.9	2,457	82.8	17.2	15.9	2.3	6.7	49.9	1.1	0.7	9.6	2.2	5.4	7.2	0.0	2,282
Zanzibar	69.8	404	61.5	11.2	19.1	6.1	24.3	36.7	1.0	2.4	8.3	3.4	7.3	5.4	0.5	282
Region																
Dodoma	78.4	572	84.3	13.6	15.5	2.1	8.0	23.5	1.2	0.0	9.3	2.6	1.9	1.4	1.5	448
Arusha	74.6	508	79.5	13.5	16.4	0.7	9.1	44.5	0.0	1.3	13.3	1.7	2.5	6.3	1.1	379
Kilimanjaro	83.5	361	80.2	16.0	16.8	1.5	7.2	41.2	0.0	1.6	9.4	2.6	7.4	5.4	0.0	302
Tanga	80.4	706	82.6	10.9	9.5	0.4	10.4	38.2	0.0	1.2	7.6	1.0	8.9	2.0	0.0	567
Morogoro	91.6	636	82.4	9.8	9.3	0.9	4.3	31.4	1.4	0.7	14.1	4.2	9.2	6.2	0.0	582
Pwani	88.8	285	88.4	10.8	9.5	0.8	6.3	31.4	0.7	0.3	14.0	2.6	7.3	6.6	0.0	253
Dar es Salaam	94.2	1,536	82.0	21.3	19.7	3.2	7.8	60.6	1.0	0.8	7.0	1.3	3.6	7.7	0.0	1,447
Lindi	93.0	288	87.7	9.8	7.7	2.1	6.1	24.5	5.0	1.4	10.4	3.4	18.0	9.8	0.0	268
Mtwara	93.7	412	91.8	11.1	9.0	1.6	6.6	18.3	1.7	1.2	13.7	5.8	18.8	9.2	0.0	386
Ruvuma	90.0	360	89.9	3.7	9.0	0.3	6.3	24.1	0.2	1.7	5.2	3.0	5.1	8.5	0.0	324
Iringa	88.1	245	87.7	14.1	15.4	0.3	7.0	30.1	0.0	1.4	4.5	1.4	1.0	7.1	0.0	215
Mbeya	69.5	828	87.2	14.7	12.5	1.0	2.6	22.8	0.0	0.0	3.1	1.8	0.4	5.9	0.0	575
Singida	87.8	370	87.6	6.6	7.6	1.2	5.4	22.5	2.1	0.5	17.6	5.6	7.8	6.0	0.8	325
Tabora	80.1	737	90.4	7.9	15.1	0.2	4.1	17.0	0.4	0.8	6.6	0.9	6.2	4.8	0.0	590
Rukwa	76.4	288	90.4	24.9	22.2	0.8	4.4	16.1	2.0	1.1	15.6	2.9	6.0	5.5	0.0	220
Kigoma	84.8	542	84.5	5.0	16.8	0.3	5.8	15.3	1.8	1.4	27.9	5.6	7.7	10.4	1.1	459
Shinyanga	90.5	504	93.1	13.4	17.2	0.5	4.3	21.5	0.0	0.2	5.1	1.1	11.1	6.3	0.0	456
Kagera	87.7	612	84.7	6.7	16.3	1.8	8.4	21.4	1.9	0.6	22.5	6.9	2.2	10.2	1.5	537
Mwanza	86.8	859	80.1	13.9	10.4	1.1	6.3	27.0	0.3	2.0	11.7	7.7	5.9	7.9	0.0	745
Mara	86.5	523	84.9	5.1	14.8	0.5	7.5	29.4	1.6	1.0	8.9	1.9	2.8	21.4	0.0	453
Manyara	68.7	394	81.2	5.3	7.0	0.3	6.2	16.2	0.0	1.4	11.3	1.5	6.1	2.2	0.0	271
Njombe	91.7	203	93.6	3.3	7.4	1.1	5.2	23.8	0.0	2.2	7.5	0.9	4.5	8.7	0.0	186
Katavi	80.1	130	95.2	30.6	29.2	2.8	6.8	16.5	2.8	1.8	24.6	3.1	8.4	3.5	0.4	104
Simiyu	78.5	479	85.0	4.7	15.1	1.1	5.0	15.9	0.6	1.1	7.6	1.4	5.3	13.4	0.0	376
Geita	84.3	485	90.9	7.1	8.5	3.3	5.0	15.7	0.2	2.0	4.8	0.9	5.9	11.9	0.6	409
Kaskazini Unguja	68.2	56	64.4	8.6	9.4	5.4	16.3	24.1	0.6	3.0	12.9	3.3	10.3	6.6	0.1	38
Kusini Unguja	80.2	35	75.9	7.3	10.8	1.0	19.1	22.8	1.2	1.5	10.3	4.2	9.8	5.9	0.0	28
Mjini Magharibi	79.5	201	61.7	11.0	23.8	5.8	23.8	47.8	0.9	2.2	7.7	3.2	5.8	4.5	0.2	160
Kaskazini Pemba	47.6	56	45.9	17.0	20.1	2.4	23.5	21.1	1.3	2.3	7.6	6.2	7.5	8.7	0.0	27
Kusini Pemba	51.9	55	56.9	14.3	13.2	17.8	44.0	19.8	1.7	4.3	4.4	1.4	9.3	5.1	0.1	29
Wealth quintile																
Lowest	67.8	2,246	82.8	6.1	9.2	0.7	3.8	5.9	0.8	1.3	13.3	2.9	10.5	8.4	2.6	1,522
Second	75.4	2,274	85.5	6.0	8.6	0.5	5.4	7.4	1.1	0.7	13.8	3.6	7.6	7.4	1.5	1,715
Middle	85.1	2,329	87.6	6.9	11.8	1.2	4.4	14.6	1.2	0.9	12.4	3.0	7.0	8.2	1.2	1,982
Fourth	90.7	2,822	88.9	13.0	14.4	1.7	7.9	27.0	0.9	1.1	9.7	3.3	5.2	6.9	1.9	2,560
Highest	94.0	3,596	81.0	19.1	19.5	2.3	9.5	62.9	0.7	1.2	7.3	2.3	3.6	7.5	0.2	3,381
Total	84.1	13,266	84.9	11.7	13.9	1.5	6.8	29.8	0.9	1.1	10.6	2.9	6.1	7.6	7.5	11,159

Table 13.5.2 Media exposure to malaria messages: Men

Percentage of men age 15-49 who have seen or heard the malaria message 'Malaria Haikubaliki' or 'Maliza Malaria' in the past year, and among those who have seen or heard the malaria message, the percentage who cite specific places where they saw or heard the malaria message, by background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Percentage who have seen or heard a malaria message in the past year	Number of men	Among men who have seen or heard a malaria message in the past year, the percentage who:												
			Radio	Billboard	Poster	T-shirt	Leaflet/ Fact sheet/ Brochure	Television	Mobile video unit	School	Health care worker	Community event/ presentation	Friend/ neighbor/ family member	Other	Number of men
Residence															
Urban	90.6	1,251	91.3	12.0	22.4	5.6	14.7	56.0	1.9	3.1	2.3	3.6	4.8	5.2	1,134
Rural	85.5	2,263	90.5	6.7	18.7	5.0	12.2	25.1	1.8	5.3	4.9	3.7	8.4	4.2	1,936
Tanzania Mainland/ Zanzibar															
Mainland	87.6	3,425	91.5	8.5	19.3	5.2	12.6	36.7	1.9	4.5	4.0	3.7	7.2	4.6	2,999
Urban	90.7	1,224	92.0	11.9	21.7	5.6	14.2	56.3	2.0	3.1	2.3	3.7	4.8	5.2	1,110
Rural	85.8	2,201	91.2	6.4	17.8	4.9	11.7	25.1	1.8	5.4	4.9	3.8	8.6	4.3	1,889
Zanzibar	79.4	89	60.1	15.0	53.0	7.3	35.0	29.1	0.5	1.1	3.8	1.0	3.0	1.9	71
Unguja	86.0	62	64.1	15.0	52.9	4.0	33.2	26.9	0.5	0.9	0.8	1.3	2.6	1.2	53
Pemba	64.6	28	47.9	15.1	53.4	17.0	40.3	35.5	0.6	1.5	12.7	0.0	4.0	4.0	18
Zone															
Western	78.7	322	90.8	3.2	14.9	1.3	11.5	28.4	2.4	4.7	3.3	3.9	14.8	8.8	253
Northern	66.2	415	90.5	14.3	24.4	9.7	11.0	56.9	0.0	1.4	3.2	2.1	1.0	4.5	275
Central	91.7	372	92.2	5.5	18.3	0.7	9.8	34.4	0.5	1.0	5.1	8.1	7.6	2.5	341
Southern Highlands	93.7	234	87.5	10.6	20.8	2.9	18.7	37.1	3.6	0.6	3.2	3.4	1.3	1.8	219
Southern	96.4	180	97.7	13.1	17.2	7.4	16.5	48.9	3.0	5.2	3.5	12.5	3.8	4.0	174
South West Highlands	82.8	308	85.3	12.1	20.3	0.6	6.0	36.5	0.6	0.0	8.8	0.6	0.1	2.8	255
Lake	93.3	933	91.4	5.4	17.9	7.9	14.2	20.6	1.8	10.8	3.6	2.2	11.8	4.8	871
Eastern	92.6	659	94.2	10.4	21.1	5.5	12.6	51.8	3.0	2.0	2.8	3.2	6.0	5.8	610
Zanzibar	79.4	89	60.1	15.0	53.0	7.3	35.0	29.1	0.5	1.1	3.8	1.0	3.0	1.9	71
Region															
Dodoma	91.0	175	91.1	1.1	9.4	0.0	14.9	32.6	0.0	1.7	3.1	11.0	8.4	0.0	159
Arusha	92.7	129	88.5	19.7	25.1	0.8	2.6	53.4	0.0	0.0	0.0	0.9	0.9	8.2	120
Kilimanjaro	72.3	110	88.7	7.8	13.8	25.9	6.0	56.7	0.0	2.3	2.4	0.0	0.0	0.0	79
Tanga	42.8	176	95.7	12.3	34.5	6.7	29.7	62.6	0.0	2.6	9.3	6.3	2.3	3.2	75
Morogoro	79.6	143	95.2	9.6	26.8	0.0	2.9	31.1	1.3	1.5	8.3	5.2	10.4	11.1	114
Pwani	84.6	68	85.5	4.3	10.8	3.3	14.0	26.1	1.2	2.3	2.6	3.2	7.2	1.3	57
Dar es Salaam	97.9	448	95.1	11.5	20.9	7.2	14.9	60.5	3.7	2.1	1.4	2.6	4.7	5.1	439
Lindi	93.6	66	97.6	6.8	22.1	13.2	19.4	47.7	8.4	7.1	1.8	26.6	3.7	0.0	61
Mtwara	98.1	115	97.7	16.6	14.5	4.2	14.9	49.6	0.0	4.2	4.4	4.9	3.9	6.3	112
Ruvuma	91.7	112	86.6	14.8	16.7	1.0	17.2	38.6	6.1	0.0	3.3	5.0	1.5	3.4	103
Iringa	96.0	71	83.3	8.8	29.4	4.6	25.4	35.1	0.0	1.3	1.3	3.4	1.0	0.0	68
Mbeya	77.8	202	88.2	17.1	29.0	0.0	8.7	31.6	0.0	0.0	13.6	0.7	0.0	1.6	157
Singida	91.6	106	91.1	4.9	23.2	1.5	9.1	33.7	0.0	0.8	11.9	9.6	12.1	7.2	97
Tabora	71.2	199	95.8	3.7	18.1	1.8	6.6	29.0	0.9	0.0	1.0	0.9	4.4	13.8	141
Rukwa	92.1	71	78.6	3.8	6.9	1.3	1.7	43.3	2.2	0.0	0.0	0.5	0.0	5.7	66
Kigoma	90.8	124	84.5	2.6	10.8	0.6	17.6	27.5	4.2	10.5	6.2	7.8	27.9	2.6	112
Shinyanga	92.5	142	95.4	6.8	25.9	2.6	6.3	41.1	1.2	3.1	3.5	1.4	5.9	8.2	132
Kagera	94.8	198	86.0	8.2	22.5	2.4	23.8	21.0	4.9	6.6	6.2	3.2	31.3	1.4	188
Mwanza	87.1	225	88.0	6.6	15.1	3.1	7.0	21.9	0.6	3.3	5.5	2.7	9.4	6.1	196
Mara	100.0	114	100.0	5.1	18.7	27.3	20.7	17.4	2.3	27.6	0.0	2.5	2.5	3.4	114
Manyara	93.1	91	95.5	14.5	29.3	1.0	0.9	38.4	2.1	0.0	0.9	0.9	0.9	1.8	85
Njombe	95.0	50	95.3	4.0	17.0	4.5	12.5	36.6	3.1	1.1	5.6	0.0	1.1	1.0	48
Katavi	92.1	35	84.9	4.5	4.6	2.1	1.9	46.7	0.0	0.0	2.8	0.0	1.2	3.0	32
Simiyu	97.8	136	93.5	2.6	11.9	17.4	10.2	10.9	0.0	27.9	1.6	1.6	9.6	6.9	133
Geita	91.6	118	91.0	0.8	11.4	0.8	18.0	7.8	0.8	2.4	2.4	0.8	1.7	3.1	108
Kaskazini Unguja	83.5	13	55.6	21.3	53.7	1.7	16.9	18.3	2.5	1.9	0.0	1.8	0.0	1.7	11
Kusini Unguja	91.5	9	76.7	4.1	49.9	7.1	33.2	12.3	0.0	0.0	2.2	0.0	4.4	1.0	8
Mjini Magharibi	85.6	40	64.1	15.4	53.3	4.1	38.6	33.0	0.0	0.8	0.7	1.4	3.1	1.1	34
Kaskazini Pemba	61.9	14	48.1	18.9	64.5	24.8	41.1	27.5	0.0	3.0	8.1	0.0	1.6	6.7	9
Kusini Pemba	67.4	13	47.7	11.4	42.7	9.3	39.6	43.4	1.2	0.0	17.2	0.0	6.4	1.3	9
Wealth quintile															
Lowest	79.5	598	90.1	5.4	12.9	3.5	7.9	13.0	0.6	6.6	4.3	2.8	10.1	4.6	475
Second	83.7	575	92.0	3.3	14.8	2.9	9.9	18.9	1.9	5.5	5.5	3.2	10.2	3.2	481
Middle	87.4	659	92.7	7.4	17.9	4.6	11.7	26.6	2.2	6.8	5.3	4.3	9.6	4.7	576
Fourth	88.8	764	89.8	9.3	22.6	5.5	16.8	38.2	2.4	3.8	3.6	4.6	4.2	4.5	678
Highest	93.5	918	90.0	13.7	26.4	7.7	15.9	64.7	1.8	1.7	2.3	3.3	4.2	5.3	858
Total	87.4	3,514	90.8	8.6	20.1	5.2	13.1	36.5	1.8	4.4	4.0	3.7	7.1	4.6	3,070

Table 13.6 Women's attitude towards malaria

Among women age 15-49 who had one or more births in the past 5 years, the percentage who strongly agree with each of six statements about malaria, by background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	I can protect my children from malaria	I can ensure my children sleep under a mosquito net every night of the year	I can easily hang my children's mosquito nets	It is important to sleep under a net every single night	Pregnant women are at high risk of getting malaria	Women should attend antenatal care early in their pregnancy	Number of women
Residence							
Urban	88.4	90.0	93.4	96.3	95.7	97.1	2,123
Rural	83.6	85.6	90.0	92.8	91.8	95.3	4,955
Tanzania Mainland/Zanzibar							
Mainland	85.0	87.1	91.2	93.9	93.1	95.9	6,908
Urban	88.5	90.2	93.6	96.4	95.9	97.2	2,075
Rural	83.5	85.8	90.2	92.9	91.9	95.3	4,833
Zanzibar	86.0	79.1	84.8	90.7	87.8	94.0	171
Unguja	86.1	84.0	92.4	95.7	92.1	98.5	114
Pemba	85.7	69.3	69.5	80.6	79.0	85.0	57
Zone							
Western	83.1	82.7	91.6	94.3	92.1	97.3	779
Northern	77.5	82.0	82.5	86.5	86.6	95.8	699
Central	81.8	82.5	85.9	91.5	92.6	97.5	795
Southern Highlands	81.7	85.3	92.5	94.1	95.5	98.0	426
Southern	80.1	87.2	93.2	99.0	94.0	97.5	341
South West Highlands	86.1	87.7	89.5	89.0	90.3	92.9	715
Lake	88.5	90.3	93.5	95.4	93.7	93.3	2,015
Eastern	89.2	91.2	95.9	98.9	97.8	99.0	1,137
Zanzibar	86.0	79.1	84.8	90.7	87.8	94.0	171
Region							
Dodoma	88.7	90.4	90.6	92.1	94.5	97.0	328
Arusha	66.5	72.6	73.3	80.8	80.9	98.0	261
Kilimanjaro	81.8	85.2	88.1	92.5	94.2	93.3	126
Tanga	84.9	88.6	87.8	88.8	88.2	95.0	312
Morogoro	90.3	91.1	95.7	100.0	99.4	99.4	347
Pwani	91.1	89.0	93.5	96.0	93.5	95.5	156
Dar es Salaam	88.2	91.8	96.6	99.0	98.0	99.6	634
Lindi	81.3	88.5	94.0	99.4	95.1	98.7	150
Mtwara	79.1	86.2	92.5	98.6	93.2	96.6	191
Ruvuma	77.6	83.2	91.5	96.4	96.5	98.7	204
Iringa	95.8	95.0	95.7	95.6	96.8	99.4	118
Mbeya	86.8	91.3	91.7	89.9	91.1	93.2	436
Singida	85.7	86.1	90.5	97.2	96.4	97.7	225
Tabora	90.9	90.0	97.5	96.9	92.8	98.1	449
Rukwa	83.1	78.6	82.9	83.3	86.3	90.0	189
Kigoma	72.4	72.8	83.6	90.7	91.0	96.2	330
Shinyanga	98.4	98.6	100.0	99.4	99.4	99.5	300
Kagera	83.8	91.8	92.7	96.5	97.5	97.9	344
Mwanza	82.2	81.9	89.3	91.7	87.6	84.8	471
Mara	92.8	96.1	96.2	97.3	98.2	98.5	322
Manyara	68.8	68.4	75.3	85.4	86.4	98.0	242
Njombe	73.9	78.5	90.7	87.8	92.0	95.1	104
Katavi	88.8	89.7	92.9	96.6	94.6	97.4	90
Simiyu	96.6	97.0	95.6	98.1	96.5	98.1	296
Geita	80.6	79.7	89.6	91.0	85.0	84.5	282
Kaskazini Unguja	81.7	80.9	90.0	95.3	92.0	98.4	27
Kusini Unguja	89.6	85.8	93.7	96.5	96.3	100.0	18
Mjini Magharibi	86.9	84.8	93.0	95.7	91.1	98.1	69
Kaskazini Pemba	85.5	67.9	64.0	81.6	82.5	84.5	30
Kusini Pemba	86.0	70.9	75.8	79.6	75.1	85.5	26
Wealth quintile							
Lowest	80.7	83.8	86.6	88.9	88.6	94.3	1,525
Second	81.9	83.0	89.2	93.1	91.4	93.9	1,422
Middle	85.6	86.9	92.2	95.0	94.2	96.0	1,349
Fourth	88.1	89.2	93.6	95.6	94.9	96.6	1,424
Highest	89.4	92.2	94.2	97.2	96.4	98.6	1,359
Total	85.0	86.9	91.1	93.9	93.0	95.8	7,079

ADULT AND MATERNAL MORTALITY 14

Key Findings

- ***Adult mortality:*** For women and men age 15, the probability of dying before age 50 is 18% and 17%, respectively.
- ***Maternal mortality ratio:*** The maternal mortality ratio is 556 maternal deaths per 100,000 live births for the 10-year period before the survey, which is not significantly different from the estimates reported in the 2004-05 TDHS and 2010 TDHS and is consistent with the estimate from the 2012 Population and Housing Census.
- ***Lifetime risk of maternal death:*** At current levels of fertility and mortality, 1 in 33 women will die during pregnancy, at childbirth, or during the 2 months after giving birth.

This chapter presents information on adult and maternal mortality in Tanzania from the 2015-16 TDHS-MIS. The chapter describes adult and maternal mortality levels in Tanzania during the ten-year period prior to the 2015-16 TDHS-MIS and compares the levels to the results of previous TDHS surveys and the 2012 Population and Housing Census (PHC). The adult and maternal mortality indicators presented in the chapter provide a useful measure of the general health status of the population in Tanzania.

14.1 ADULT AND MATERNAL MORTALITY DATA

14.1.1 Sibling Survival History

This chapter includes results estimated from data collected in the sibling survival module (commonly referred to as the maternal mortality module) that was included in the 2015-16 TDHS-MIS Woman's Questionnaire. In the sibling survival history, each female respondent was first asked to provide the total number of her mother's live births (including the birth of the respondent). The respondent was then asked to provide a list of all brothers and sisters born to her mother, beginning with the firstborn. The respondent was then asked if each sibling was still alive at the survey date. The current age of living siblings was recorded. For deceased siblings, the age at death and number of years since death were recorded. Interviewers were instructed that, when a respondent could not provide precise information on age at death or years since death, approximate but quantitative answers were acceptable. For sisters who died at age 12 or above, three questions were used to determine if the death was maternity-related: 'Was [NAME OF SISTER] pregnant when she died?' and, if not, 'Did she die during child birth?' and, if not, 'Did she die within two months after the end of a pregnancy or a child birth?'

The information provided by respondents in the 2015-16 TDHS-MIS on the survival status of their brothers and sisters is used to estimate the mortality rates among adults age 15-49. The inclusion of questions that determine if any of the sisters' deaths were maternity-related permits the estimation of maternal mortality, a key indicator of maternal health and well-being. The term maternal mortality, used in this chapter and in previous TDHS surveys, more accurately corresponds to the term pregnancy-related mortality, which is defined in the most recent version of the International Classification of Diseases (ICD-

10). The ICD-10 definition of a pregnancy-related death is 'the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the cause of death' (WHO, 2011). The sibling survival module used in the Demographic and Health Surveys measures only the timing of death in relationship to pregnancy and childbirth and not the cause of death. Differing slightly from the ICD-10 definition, the data collected in the 2015-16 TDHS-MIS questionnaire refer to deaths within 2 months rather than 42 days after a birth. Two months were used as the reference period in order to address any memory problems among respondents.

14.1.2 Assessment of Data Quality

Estimation of mortality rates requires complete and accurate data on adult deaths, including maternal deaths. **Tables 14.1 and 14.2** present several useful indicators for assessing the completeness and quality of the sibling history data from the 2015-16 TDHS-MIS. Overall, there is little evidence of serious underreporting in the data.

- Survival status was reported for all but 26 of the 77,649 brothers and sisters reported in the sibling histories.
- Current age was reported for all but 6 of the 65,584 surviving siblings.
- Among the 12,039 deceased siblings, the age at death (AD) and years since death (YSD) were reported for all sisters and for all but 2 brothers.
- The sex ratio of the reported siblings (the ratio of brothers to sisters) is 101.7, which is only slightly lower than the expected value of 102–105. This suggests negligible under-reporting of brothers.

To address the small number of siblings with missing data, the birth order of siblings was used with other information to impute and adjust the missing data.[1]

14.1.3 Assessment of Trends in Maternal Mortality

To assess trends in maternal mortality, the 2015-16 TDHS-MIS results were compared with results of the 2004-05 and 2010 TDHS surveys and the 2012 Tanzania Population and Housing Census. Both the 2015-16 TDHS-MIS and census estimates have inherent strengths and weaknesses that complicate a comparison of the results.

The interviewers who participated in the 2015-16 TDHS-MIS were extensively trained and supervised, which contributes to confidence in the quality of the data. However, because adult and especially maternal deaths are relatively rare events, estimates from the TDHS surveys are calculated for a 10-year period prior to the survey to ensure a sufficiently large number of deaths that can generate a reasonably robust mortality estimate. Thus, maternal mortality estimates from TDHS surveys reflect the situation over an extended period prior to the survey dates and may not accurately reflect the situation at the time of the survey. This may be a problem if the maternal mortality rate is dropping rapidly in the period immediately before a survey. In addition, despite the lengthy period, maternal mortality estimates are subject to large sampling errors and can be relevant at the national level and not for geographic sub-regions.

[1] The imputation procedure was based on the assumption that the reported birth ordering of siblings in the history was correct. The first step was to calculate birth dates for each living sibling with a reported age and each dead sibling with complete information on age at death and years since death. For a sibling missing these data, a birth date was imputed within the range defined by the birth dates of the bracketing siblings. In the case of living siblings, an age was then calculated from the imputed birth date. For the dead siblings with either age at death or years since death reported, the information was combined with the birth date to produce the missing information. If both pieces of information were missing, the distribution of the ages at death for siblings for whom years since death were not reported but age at death was reported was used as a basis for imputing the age at death.

In the 2012 Population and Housing Census, an attempt was made to collect information on maternal mortality. Households were asked about deaths in the household in the 12 months before the census including the sex, age at death, and cause of death of any deceased members. With deaths of women age 12-49, the census respondent was asked if the woman died during pregnancy, childbirth, or in the 6 weeks after childbirth. The census maternal mortality estimate has the advantages that it is current and not subject to sampling errors. However, the census was a large-scale data collection effort in which it was not possible to train and supervise interviewers as intensively as it was in the smaller, more focused TDHS surveys. Thus, non-sampling error with mistakes in the implementation of the data collection is likely to have a greater effect on the accuracy of the maternal death data in the census than in the TDHS surveys.

14.2 Direct Estimates of Adult Mortality

Adult mortality rate

Adult mortality rate is the number of adult deaths per 1,000 population age 15-49. Adult mortality rates by 5-year age groups are calculated as follows: the number of deaths to respondent's siblings in each age group is divided by the number of person-years of exposure to the risk of dying in that age group during a specified period prior to the survey. The number of deaths is the number of siblings (brothers or sisters) reported as having died within the specified period. The person-years of exposure in each age group are calculated for both surviving and dead siblings based on their current age (living siblings) or age at death and years since death (dead siblings).

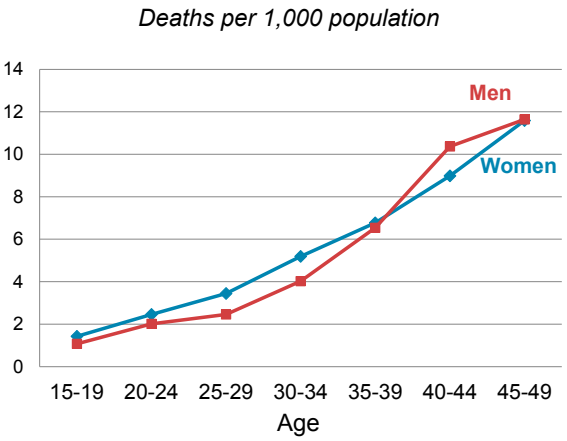
Probability of dying between exact ages 15 and 50 (35q15).

An additional summary indicator, 35q15, shows the probability of a 15-year-old woman or man dying before age 50, if they experienced the current age-specific death rates.

Sample: Siblings (both living and dead) who were age 15-49 in the 10-year period preceding the survey by sex and 5-year age groups.

The reported ages at death and years since death of the respondents' brothers and sisters are used to obtain direct estimates of adult mortality for women and men age 15-49 for the 10 years before the 2015-16 TDHS-MIS **(Table 14.3 and Figure 14.1)**. This 10-year period (from late 2005 to late 2015) was chosen as a compromise between the desire for the most recent data and the need to minimise the level of sampling error. Nevertheless, because the numbers of deaths on which the rates are based are not very large (952 female deaths and 868 male deaths), the age-specific rates are still subject to considerable sampling variation.

Figure 14.1 **Adult mortality rates by age**

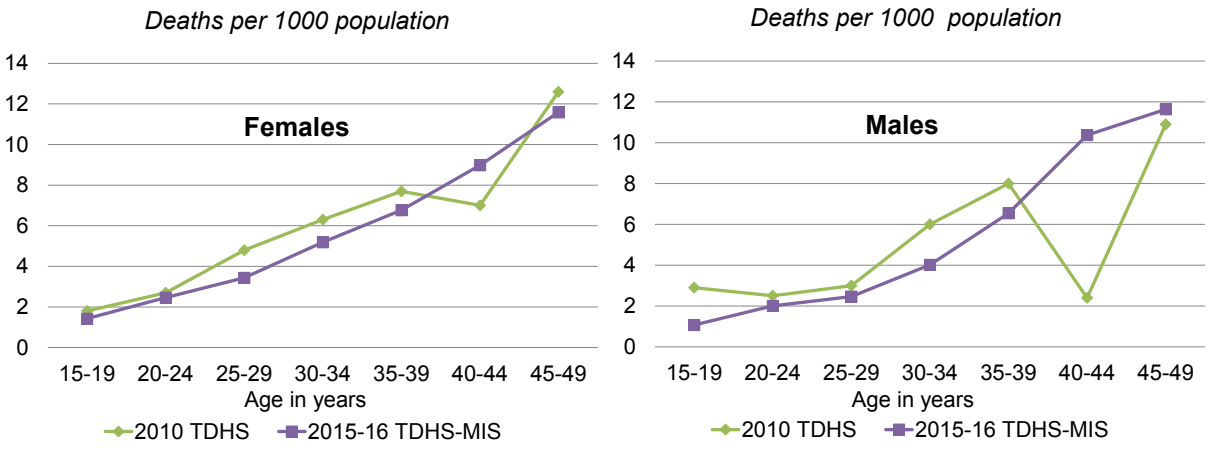


- Overall, adult mortality is slightly higher among women (4.6 deaths per 1,000 population) than among men (4.3 deaths per 1,000 population).
- Mortality levels rise rapidly with age, peaking at 11.6 deaths per 1,000 population among both women and men age 45-49.
- Mortality rates are markedly higher among women than men in the younger age groups between ages 15 and 34, the prime childbearing period during which women are most at risk of pregnancy-related deaths.

- With the adult mortality rates found in the 2015-16 TDHS-MIS, the probability of dying between exact ages 15 and 50 is 181 per 1,000 among women and 174 per 1,000 among men **(Table 14.4)**.

Trends: Adult mortality has declined since the 2010 TDHS. The rate decreased from 5.1 deaths to 4.6 deaths per 1,000 population among women and from 5.0 deaths to 4.3 deaths per 1,000 population among men. **Figure 14.2**, which compares the age-specific mortality rates for women and men from the two surveys, shows that the mortality declined for women and men in almost all age groups.

Figure 14.2 **Trends in adult mortality**



14.3 DIRECT ESTIMATES OF MATERNAL MORTALITY

Maternal mortality rate

Maternal mortality rate is the number of maternal deaths per 1,000 women age 15-49. Maternal mortality rates by 5-year age groups are calculated by dividing the number of maternal deaths to female siblings of respondents in each age group by the total person-years of exposure of the sisters to the risk of dying in that age group during the 10 years prior to the survey. The number of deaths is the number of sisters reported as having died during pregnancy or delivery, or in the 2 months following the delivery in the specified period by their age group at the time of death. The person-years of exposure in each age group are calculated for both surviving and dead sisters based on their reported current age (living sisters) or age at death and years since death (dead sisters).

Sample: Sisters (both living and dead) age 15-49 in the specified period, by sex and 5-year age groups

Maternal mortality ratio

Maternal mortality ratio is the number of maternal deaths per 100,000 live births. The maternal mortality ratio is calculated by dividing the age-standardised maternal mortality rate for women age 15-49 for the specified period by the general fertility rate (GFR) for the same time period.

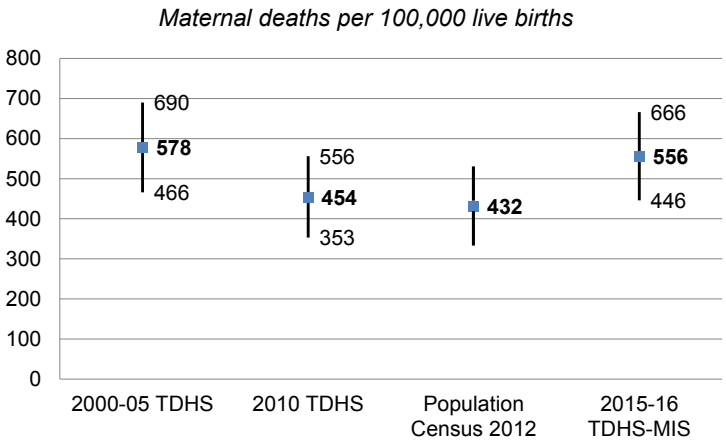
Maternal deaths are a subset of all female deaths, and are defined as any deaths that occur during pregnancy or childbirth, or within 2 months after the birth or termination of a pregnancy. Estimates of maternal mortality are therefore based solely on the timing of the death in relationship to the pregnancy. Two methods are generally used to estimate maternal mortality in developing countries: the indirect sisterhood method (Graham et al. 1989) and a direct variant of the sisterhood method (Rutenberg and Sullivan 1991; Stanton et al. 1997). In this report, the direct estimation procedure is applied.

Age-specific estimates of maternal mortality from reported survivorship of sisters are shown in **Table 14.5** for the 10-year period before the 2015-16 TDHS-MIS. Some caution should be taken in interpreting these rates because of the small number of events on which they are based; 200 maternal deaths were reported among women of all ages, which represented only 21% of all female deaths.

- The maternal mortality rate among women age 15-49 is 0.94 deaths per 1,000 woman-years of exposure.
- The maternal mortality rate is highest among women in their 40s (1.6 deaths per 1,000 woman-years of exposure) and lowest among women age 15-19 (0.3 deaths 1,000 woman-years of exposure).
- The percentage of female deaths that are maternal related follows a generally plausible pattern, with the highest proportion in 20-29 age groups, which are the peak childbearing years.
- The maternal mortality ratio (MMR) is estimated at 556 deaths per 100,000 live births during the 10-year period before the survey. In other words, for every 1,000 live births in Tanzania during the 10 years before the 2015-16 TDHS-MIS, between 5 and 6 women died during pregnancy, child birth, or within 2 months of childbirth.
- The lifetime risk of maternal death (0.030) indicates that, at the maternal mortality rates during the 10-year period before 2015-16 TDHS-MIS, 3% of women would die during pregnancy, child birth, or within 2 months of childbirth over their lifetime.

Trends: The estimated MMR in the 2015-16 TDHS-MIS of 556 is lower than that recorded in the 2004-05 TDHS (578), but is higher than the ratios reported in the 2010 TDHS (454) and in the 2012 Population and Housing Census (432). As **Figure 14.3** shows, the confidence intervals surrounding the MMRs are large and overlap in the three Demographic and Health Surveys (2004-05, 2010, and 2015-16). This indicates that they are not significantly different from one another. The 2012 estimate from the Population and Housing Census is also consistent with the level identified in the TDHS surveys. Thus, there is no evidence to conclude that the MMR has changed substantially over the last decade.

Figure 14.3 **Trends in maternal mortality ratios with confidence intervals**



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- **Table 14.1 Completeness of information on siblings**
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- **Table 14.3 Adult mortality rates**
- **Table 14.4 Adult mortality probabilities**
- **Table 14.5 Maternal mortality**

Table 14.1 Completeness of information on siblings

Completeness of data on survival status of sisters and brothers reported by interviewed women, age of living siblings and age at death (AD) and years since death (YSD) of dead siblings (unweighted), Tanzania DHS-MIS 2015-16

	Sisters		Brothers		All siblings	
	Number	Percent	Number	Percent	Number	Percent
All siblings	38,613	100.0	39,036	100.0	77,649	100.0
Living	32,837	85.0	32,747	83.9	65,584	84.5
Dead	5,764	14.9	6,275	16.1	12,039	15.5
Survival status unknown	12	0.0	14	0.0	26	0.0
Living siblings	32,837	100.0	32,747	100.0	65,584	100.0
Age reported	32,835	100.0	32,743	100.0	65,578	100.0
Age missing	2	0.0	4	0.0	6	0.0
Dead siblings	5,764	100.0	6,275	100.0	12,039	100.0
AD and YSD reported	5,764	100.0	6,271	99.9	12,035	100.0
Missing only AD	nc	0.0	2	0.0	2	0.0
Missing only YSD	nc	0.0	1	0.0	1	0.0
Missing AD and YSD	nc	0.0	1	0.0	1	0.0

nc = No cases

Table 14.2 Sibship size and sex ratio of siblings

Mean sibship size and sex ratio of siblings at birth, Tanzania DHS-MIS 2015-16

Age of respondents	Mean sibship size[1]	Sex ratio of siblings at birth[2]
15-19	6.1	101.0
20-24	6.4	99.9
25-29	6.7	101.8
30-34	6.7	105.0
35-39	7.2	100.1
40-44	7.0	103.1
45-49	7.2	102.9
Total	6.6	101.7

[1] Includes the respondent.
[2] Excludes the respondent.

Table 14.3 Adult mortality rates

Direct estimates of female and male mortality rates for the 10 years preceding the survey, by five-year age groups, Tanzania DHS-MIS 2015-16

Age	Deaths	Exposure years	Mortality rates[1]
FEMALE			
15-19	61	42,486	1.43
20-24	111	45,230	2.46
25-29	144	41,721	3.44
30-34	182	35,047	5.19
35-39	178	26,357	6.77
40-44	157	17,434	8.98
45-49	120	10,345	11.59
15-49	952	218,620	4.64[a]
MALE			
15-19	46	42,812	1.07
20-24	92	45,558	2.01
25-29	105	42,715	2.46
30-34	147	36,555	4.02
35-39	181	27,621	6.54
40-44	183	17,641	10.37
45-49	115	9,864	11.64
15-49	868	222,766	4.29[a]

[1] Expressed per 1,000 population.
[a] Age-adjusted rate.

Table 14.4 Adult mortality probabilities

The probability of dying between the ages of 15 and 50 for women and men for the 10 years preceding the survey, Tanzania DHS-MIS 2015-16

	Female	Male
Survey	$_{35}q_{15}$[1]	$_{35}q_{15}$[1]
TDHS-MIS 2015-16	181	174
TDHS 2010	196	195
TDHS 2004-05	236	242

[1] The probability of dying between exact ages 15 and 50, expressed per 1,000 person at age 15.

Table 14.5 Maternal mortality

Direct estimates of maternal mortality rates for the 10 years preceding the survey, by five-year age groups, Tanzania DHS-MIS 2015-16

Age	Percentage of female deaths that are maternal	Maternal deaths	Exposure years	Maternal mortality rate[1]
15-19	18.5	11	42,486	0.26
20-24	31.5	35	45,230	0.77
25-29	30.1	43	41,721	1.04
30-34	16.2	29	35,047	0.84
35-39	20.3	36	26,357	1.38
40-44	18.3	29	17,434	1.64
45-49	13.4	16	10,345	1.56
15-49	21.0	200	218,620	0.94

General fertility rate (GFR)[2] 168[a]
Maternal mortality ratio (MMR)[3] 556 (446 – 666)
Lifetime risk of maternal death[4] 0.030
CI = Confidence interval
[1] Expressed per 1,000 woman-years of exposure.
[2] Expressed per 1,000 women age 15-49.
[3] Expressed per 100,000 live births; calculated as the age-adjusted maternal mortality rate times 100 divided by the age-adjusted general fertility rate.
[4] Calculated as $1-(1-MMR)^{TFR}$ where TFR represents the total fertility rate for the 10 years preceding the survey.
[a] Age-adjusted rate.

WOMEN'S EMPOWERMENT 15

Key Findings

- ***Employment and cash earnings:*** More than 8 in 10 (84%) currently married women and virtually all currently married men report being employed. Women are much less likely than men to receive cash earnings for the work they do (56% and 89%, respectively). Among couples in which women earn cash, two-thirds of women say they earn less than their husbands.
- ***Women's control over cash earnings:*** Thirty-six percent of currently married women who receive cash earnings say they decide for themselves how their earnings are used, while 55% make these decisions jointly with their husbands.
- ***Decisions on the use of men's cash earnings:*** Married women are somewhat less likely than married men to say that decisions about how the man's cash earnings are used are made jointly (54% versus 65%).
- ***Ownership of assets:*** Thirty-eight percent of women own a house, and 34% own land. A slightly higher percentage of men own a house or land (41% and 37%, respectively).
- ***Participation in decision making:*** Thirty-five percent of currently married women report making decisions, either alone or jointly with their husbands, about all of the following: their own health care, major household purchases, and visits to their families and relatives.
- ***Attitude towards wife beating:*** Fifty-eight percent of women and 40% of men believe that a husband is justified in beating his wife in at least one of five specified circumstances.

This chapter explores aspects of women's empowerment, including employment status, earnings, control over earnings, and magnitude of earnings relative to those of their partners. In addition, responses to specific questions are used to define two different indicators of women's empowerment: women's participation in household decision making and women's attitudes towards wife beating.

15.1 MARRIED WOMEN'S AND MEN'S EMPLOYMENT

Employment

Respondents are considered to be employed if they have done any work other than their housework in the 12-months period before the survey.

Sample: Currently married women and men age 15-49

Earning cash for employment

Respondents are asked if they are paid for their labour in cash or in-kind. Those who receive payment in cash only or in cash and in-kind are considered to earn cash for their employment.

Sample: Currently married women and men age 15-49 employed in the 12-months period before the survey

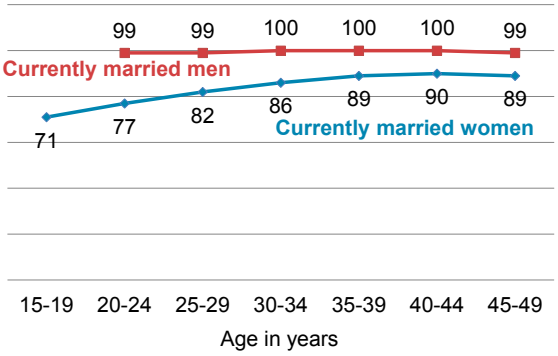
More than 8 in 10 currently married women age 15-49 and virtually all currently married men age 15-49 reported being employed in the 12 months before the survey **(Table 15.1)**.

Men are much more likely than women to be paid in cash for their work (89% and 56%, respectively). However, not all married women and men receive earnings for the work they do; about 4 in 10 women but only 1 in 10 men are not paid for their work.

Trends: The percentage of employed married women was 89% in the 2010 TDHS and declined slightly to 84% in the 2015-16 TDHS-MIS. The percentage of married women receiving cash earnings increased from 27% in 2004-05 to 45% in 2010 and 56% in 2015-16, while the percentage of women who were not paid for their work declined from 65% in 2004-05 to 53% in 2010 and 42% in 2015-16.

Figure 15.1 **Employment by age among currently married women and men**

Percentage of currently married women and men who were employed at any time in the12 months before the survey



Patterns by background characteristics

- Among currently married women, the percentage of employed women increases with age, from 71% in the 15-19 age group to about 90% in the 35-39, 40-44, and 45-49 age groups **(Figure 15.1)**.
- More than 6 in 10 married women age 15-19 and about half of married women age 20-24 are not paid for the work they do, as compared with older women (41%).

15.2 CONTROL OVER WOMEN'S EARNINGS

Control over one's own cash earnings

Respondents are considered to have control over their own earnings if they participate in decisions alone or jointly with their husbands about how their own earnings will be used.

Sample: Currently married women age 15-49 who received cash earnings for employment during the 12 months before the survey

To assess women's autonomy, currently married women who earned cash for their work in the 12 months before the survey were asked to mention the main decision maker with regard to the use of their earnings.

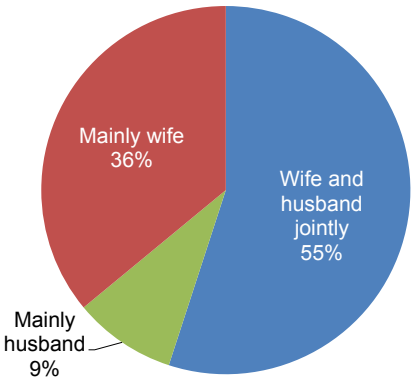
Women gain direct access to economic resources when they are paid for work in cash and have autonomy to make decisions about how to spend this earned cash.

More than half of currently married women (55%) report that decisions about how their cash earnings are used are usually made jointly with their husbands. However, more than one third (36%) say they make these decisions by themselves. Less than 10% of women report that their husbands alone decide how their earnings are used **(Table 15.2.1, Figure 15.2)**.

The magnitude of a woman's earnings relative to her husband's earnings may affect the degree of control she has over her earnings. In couples in which women earn cash, 67% of women report that they earn less than their husbands and 9% report earning more.

***Figure 15.2* Control over women's earnings**

Percent distribution of currently married women with cash earnings in the last 12 months before the survey



Patterns by background characteristics

- Currently married women in urban areas (43%) are more likely than those in rural areas (31%) to make independent decisions on the use of their earnings.
- Women in Zanzibar (77%) are more likely to make decisions themselves on how their earnings are spent than women living on the Mainland (35%).
- The control husbands have over their wives' earnings varies widely by region. The percentage of women whose husbands mainly make decisions on the use of their cash earnings is highest in Lindi (28%) and lowest in Kaskazini Pemba and Kusini Pemba, where no married women report that their husbands mainly make decisions about how their earnings are used.
- Women with a secondary education or higher are more likely to independently control their cash earnings (44%) than women with no education (31%).
- The percentage of married women who make independent decisions on how their cash earnings will be used increases steadily with increasing household wealth, from 24% among women in the lowest quintile to 43% among those in the highest quintile.

15.3 Control over Men's Earnings

Among married men age 15-49 who receive cash earnings, 65% report that they usually decide jointly with their wives how to spend the earnings **(Table 15.2.2)**. Only 33% of men mainly decide themselves how to spend their earnings.

Married women are somewhat less likely than their husbands to report that decisions about the husband's earnings are made jointly; 54% report that these decisions are made together with the husband, while 41% report that it is mainly the husband who makes decisions about how his earnings are spent.

For information on how the magnitude of women's earnings relative to their husband's earnings is related to women's control over their own earnings and over those of their husbands, see **Table 15.3**.

15.4 Women's and Men's Ownership of Assets

Ownership of a house or land

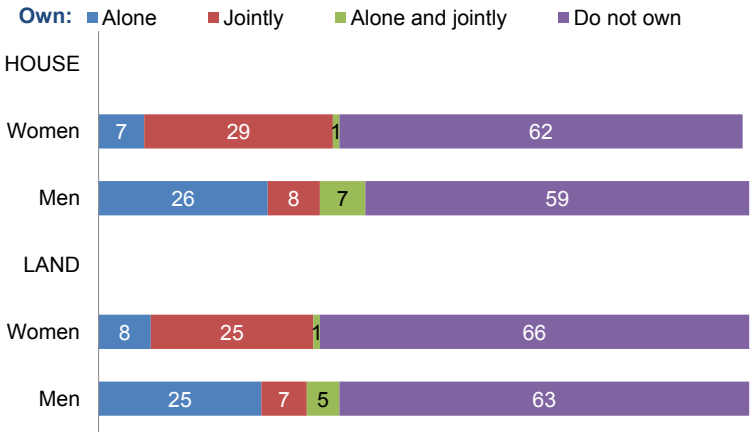
Respondents who own a house or land, whether alone or jointly with someone else.

Sample: Women and men age 15-49

Thirty-eight percent of women own a house, either alone or jointly with someone. Similarly, 34% of women report that they own land, either alone or jointly. Joint ownership of these assets is more common among women than sole ownership; only 9% of women own a house or land alone **(Table 15.4.1, Figure 15.3)**.

***Figure 15.3* Ownership of assets**

Percent distribution of women and men age 15-49 by house and land ownership



Men age 15-49 are slightly more likely to own a house (41%) or land (37%), either alone or jointly, than women (38% and 34%, respectively). Unlike women, men are more likely to be sole than joint owners of either asset; 33% of men own a house alone, and 30% own land alone **(Table 15.4.2)**.

Patterns by background characteristics

- House and land ownership, either alone or jointly, increases with age among women. While 9% of women age 15-19 own a house and 10% own land, 68% of women age 45-49 own a house and 59% own land. Similar patterns are also observed among men.
- Women's and men's ownership of a house and land, either alone or jointly, is more common in rural areas than in urban areas. For instance, 47% of rural women and only 23% of urban women own a house, and 44% of rural women and 16% of urban women own land.
- Women's and men's ownership of both a house and land, either alone or jointly, is higher on the Mainland than in Zanzibar. Among women, 39% of those living on the Mainland own a house and 35% own land, while 11% of women in Zanzibar own a house and 9% own land.
- Women and men with secondary or higher education and those in the highest wealth quintile are less likely to own a house or land, either alone or jointly, than those who are less educated or poorer. While 21% of women in the highest wealth quintile own a house and 15% own land, 56% of women in the lowest wealth quintile own a house and 53% own land.

Over three-quarters of women and men who own a house say that they do not have a title or deed for the house. Among those who have titles or deeds, women are less likely than men to have their names on the deed **(Tables 15.5.1 and 15.5.2)**. The situation is similar regarding titles/deeds for land ownership **(Tables 15.6.1 and 15.6.2)**.

15.5. Ownership and Use of Bank Accounts and Mobile Phones

Ownership of a bank account and a mobile phone are reflections of autonomy and financial independence. Women and men interviewed in the 2015-16 TDHS-MIS were asked if they used an account in a bank or

other financial institution and whether they owned a mobile phone. Those who owned phones were also asked if they used the phone for financial transactions.

Over one-quarter of women use a bank account and more than half own a mobile phone. Seven in 10 women who have a phone say they use it for financial transactions **(Table 15.7.1)**. Forty-three percent of men use a bank account and 69% own a mobile phone. Seventy-seven percent of those with phones say they use them for financial transactions **(Table 15.7.2)**.

Patterns by background characteristics

- Use of a bank account and ownership of a mobile phone are both higher among urban women and men and among those with more education and those in the higher wealth quintiles.
- Use of a bank account is more prevalent among women in Mainland Tanzania (29%) than in Zanzibar (16%), the reverse is true for ownership of a mobile phone. Similar patterns can be observed among men.
- Mobile phone ownership varies widely by region, being lowest in Rukwa (26% of women and 48% of men) and highest in Dar es Salaam (85% for women and 89% for men).

15.6 Women's Participation in Decision Making

Participation in major household decisions

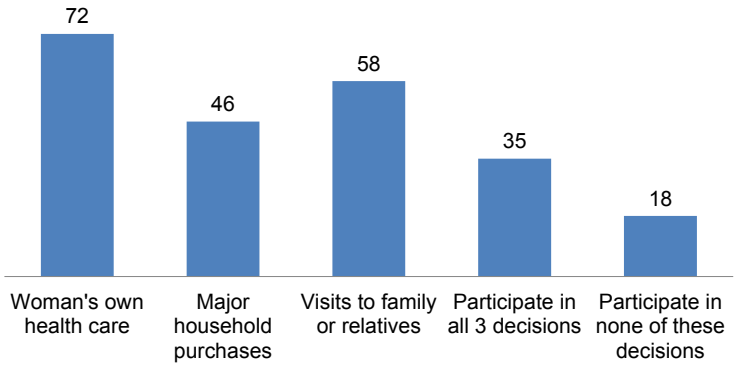
Women are considered to participate in household decisions if they make decisions alone or jointly with their husbands in all three of the following areas: (1) the woman's own health care, (2) major household purchases, and (3) visits to the woman's family or relatives.

Sample: Currently married women age 15-49

The 2015-16 TDHS-MIS sought information from currently married women on their participation in three types of household decisions: their own health care, major household purchases, and visits to their family or relatives **(Table 15.8)**. About 7 in 10 women (72%) participate in decisions on their own health, less than half (46%) participate in decisions on major household purchases, and about 6 in 10 (58%) participate in decisions to visit their families and relatives. Thirty-five percent of women participate in all three decisions, while 18% do not participate in any of the three decisions **(Table 15.9.1, Figure 15.4)**.

Figure 15.4 **Women's participation in decision making**

Percentage of currently married women age 15-49 participating in select decisions



Patterns by background characteristics

- Participation in all three decisions increases with age, rising from 24% among women age 15-19 to 45% among women age 40-44.

- Urban women are more likely to participate in all three decisions than rural women (40% and 33%, respectively).
- By employment status, women employed for cash are much more likely to participate in all three decisions (45%) than women who are not employed (27%) or those employed but not for cash (26%).
- Women's participation in decision making increases with increasing education and wealth. Twenty-seven percent of women with no education participate in all three decisions, as compared with 45% of women with secondary or higher education. Similarly, 43% of women in the wealthiest households participate in all three decisions, compared with 28% in the poorest households.

The 2015-16 TDHS-MIS also collected information from currently married men on their participation in two types of household decisions: their own health care and making major household purchases. Information on men's participation in decision making is shown in **Table 15.8** and **Table 15.9.2**.

15.7 ATTITUDES TOWARDS WIFE BEATING

Attitudes towards wife beating

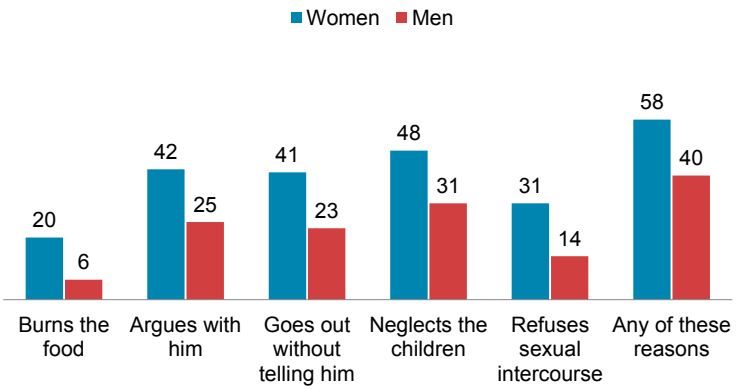
Respondents were asked if they agreed that a husband is justified in hitting or beating his wife under each of the following five circumstances: she burns the food, she argues with him, she goes out without telling him, she neglects the children, and she refuses to have sex with him. If respondents answered "yes" in at least one circumstance, they were considered to have attitudes justifying wife beating.

Sample: Women and men age 15-49

In Tanzania, 58% of women believe that a husband is justified in beating his wife in at least one of the five specified circumstances **(Table 15.10.1)**. The comparable figure among men is 40% **(Table 15.10.2, Figure 15.5)**. For each of the specified reasons that respondents were asked about, men were less likely to agree that wife beating was justified.

***Figure 15.5* Attitudes towards wife beating**

Percentage of women and men age 15-49 who agree that a husband is justified in beating his wife for specific reasons



Trends: Tolerance of wife beating appears to have remained comparatively stable since 2004-05. The percentage of women who agree that wife beating is justified in at least one of the five specified circumstances decreased from 60% in the 2004-05 TDHS to 54% in the 2010 TDHS but then increased to 58% in the 2015-16 TDHS-MIS. Similar trends are observed for men.

Patterns by background characteristics

- Tolerance of wife beating is slightly lower among never-married women than among ever-married women; only 53% of women who have never been married agree that wife beating is justified in at

least one of the five specified circumstances, as compared with 60% of married women and 58% of divorced, separated, or widowed women.

- Wife beating is more acceptable in rural areas than urban areas; 62% of women and 41% of men in rural areas agree that wife beating is justified in at least one of the five specified circumstances, compared with 51% of women and 37% of men in urban areas.

- Acceptance of wife beating is lowest among women and men with secondary or higher education and those in the highest wealth quintile. For example, more than 6 in 10 women with primary education or no education agree that wife beating is justified in at least one of the five specified circumstances, compared with 43% of women with secondary or higher education. Similarly, 70% of women in the lowest wealth quintile and 45% of those in the highest wealth quintile agree that wife beating is justified in at least one of the specified circumstances.

For additional information on indicators of women's empowerment and on variations in selected health indicators by women's empowerment, see **Tables 15.11, 15.12, 15.13, 15.14,** and **15.15**.

List of Tables

For detailed information on women's empowerment and demographic and health outcomes, see the following tables:

- **Table 15.1 Employment and cash earnings of currently married women and men**
- **Table 15.2.1 Control over women's cash earnings and relative magnitude of women's cash earnings**
- **Table 15.2.2 Control over men's cash earnings**
- **Table 15.3 Women's control over their own earnings and over those of their husbands**
- **Table 15.4.1 Ownership of assets: Women**
- **Table 15.4.2 Ownership of assets: Men**
- **Table 15.5.1 Ownership of title or deed for house: Women**
- **Table 15.5.2 Ownership of title or deed for house: Men**
- **Table 15.6.1 Ownership of title or deed for land: Women**
- **Table 15.6.2 Ownership of title or deed for land: Men**
- **Table 15.7.1 Ownership and use of bank accounts and mobile phones: Women**
- **Table 15.7.2 Ownership and use of bank accounts and mobile phones: Men**
- **Table 15.8 Participation in decision making**
- **Table 15.9.1 Women's participation in decision making by background characteristics**
- **Table 15.9.2 Men's participation in decision making by background characteristics**
- **Table 15.10.1 Attitude toward wife beating: Women**
- **Table 15.10.2 Attitude toward wife beating: Men**
- **Table 15.11 Indicators of women's empowerment**
- **Table 15.12 Current use of contraception by women's empowerment**
- **Table 15.13 Ideal number of children and unmet need for family planning by women's empowerment**
- **Table 15.14 Reproductive health care by women's empowerment**
- **Table 15.15 Early childhood mortality rates by indicators of women's empowerment**

Table 15.1 Employment and cash earnings of currently married women and men

Percentage of currently married women and men age 15-49 who were employed at any time in the past 12 months and the percent distribution of currently married women and men employed in the past 12 months by type of earnings, according to age, Tanzania DHS-MIS 2015-16

Age	Among currently married respondents:		Percent distribution of currently married respondents employed in the past 12 months, by type of earnings					
	Percentage employed in past 12 months	Number of respondents	Cash only	Cash and in-kind	In-kind only	Not paid	Total	Number of respondents
				WOMEN				
15-19	71.0	668	30.1	7.6	0.5	61.8	100.0	474
20-24	77.0	1,479	43.4	7.8	1.1	47.7	100.0	1,138
25-29	81.5	1,616	50.3	8.7	1.3	39.6	100.0	1,317
30-34	86.0	1,378	53.1	8.0	0.9	37.9	100.0	1,186
35-39	89.4	1,308	51.1	8.1	0.7	40.1	100.0	1,169
40-44	89.6	1,033	50.4	8.6	1.1	40.0	100.0	926
45-49	89.3	728	46.1	9.5	3.7	40.7	100.0	650
Total	83.6	8,210	48.0	8.3	1.2	42.4	100.0	6,860
				MEN				
15-19	*	14	*	*	*	*	*	14
20-24	99.4	165	68.5	18.0	0.6	12.8	100.0	164
25-29	99.2	323	75.4	10.5	0.0	14.1	100.0	320
30-34	100.0	339	77.3	12.8	0.8	9.1	100.0	339
35-39	99.6	398	78.9	12.5	0.4	8.2	100.0	396
40-44	99.9	302	72.0	14.8	0.3	12.8	100.0	302
45-49	99.0	283	81.1	11.1	1.2	6.2	100.0	281
Total	99.5	1,825	76.3	12.8	0.5	10.3	100.0	1,816

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 15.2.1 Control over women's cash earnings and relative magnitude of women's cash earnings

Percent distribution of currently married women age 15-49 who received cash earnings for employment in the 12 months preceding the survey by person who decides how wife's cash earnings are used and by whether she earned more or less than her husband, according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Person who decides how the wife's cash earnings are used:				Wife's cash earnings compared with husband's cash earnings:						
	Mainly wife	Wife and husband jointly	Mainly husband	Total	More	Less	About the same	Husband has no earnings	Don't know	Total	Number of women
Age											
15-19	15.9	69.7	14.4	100.0	3.8	69.2	25.3	0.0	1.8	100.0	179
20-24	34.8	53.8	11.3	100.0	8.1	68.8	20.6	0.8	1.6	100.0	583
25-29	34.2	58.5	7.3	100.0	4.3	76.0	17.3	0.5	1.9	100.0	778
30-34	34.6	54.7	10.7	100.0	9.8	68.9	18.6	0.5	2.2	100.0	726
35-39	41.7	52.2	6.1	100.0	13.2	61.8	20.0	1.7	3.2	100.0	692
40-44	37.7	55.3	6.9	100.0	10.6	62.8	22.2	2.2	2.2	100.0	546
45-49	42.1	50.6	7.3	100.0	12.5	57.2	22.5	4.3	3.5	100.0	362
Number of living children											
0	35.4	54.1	10.5	100.0	9.5	67.4	19.9	0.4	2.8	100.0	282
1-2	36.4	54.7	8.8	100.0	8.5	71.5	17.5	0.9	1.6	100.0	1,456
3-4	35.9	56.7	7.3	100.0	9.0	67.5	19.2	1.2	3.1	100.0	1,182
5+	36.0	54.6	9.4	100.0	10.2	59.8	25.2	2.5	2.3	100.0	945
Residence											
Urban	43.2	52.9	3.9	100.0	10.6	72.9	13.5	1.1	1.9	100.0	1,605
Rural	31.0	57.0	12.0	100.0	8.1	63.0	24.7	1.5	2.6	100.0	2,260
Tanzania Mainland/ Zanzibar											
Mainland	34.7	56.5	8.9	100.0	9.1	66.9	20.5	1.4	2.1	100.0	3,736
Urban	42.2	53.8	4.0	100.0	10.7	72.7	13.7	1.1	1.8	100.0	1,562
Rural	29.3	58.4	12.3	100.0	8.0	62.7	25.3	1.6	2.3	100.0	2,174
Zanzibar	77.3	21.1	1.6	100.0	9.8	72.8	8.5	0.2	8.8	100.0	129
Unguja	83.5	14.3	2.1	100.0	11.3	71.9	5.8	0.3	10.8	100.0	99
Pemba	56.8	43.2	0.0	100.0	5.0	75.7	17.1	0.0	2.1	100.0	30
Zone											
Western	39.4	43.3	17.3	100.0	8.6	72.9	15.7	2.2	0.5	100.0	254
Northern	47.5	46.5	6.1	100.0	9.2	72.0	15.7	1.3	1.7	100.0	444
Central	28.7	66.6	4.8	100.0	12.0	57.4	26.3	1.8	2.6	100.0	390
Southern Highlands	21.3	69.9	8.7	100.0	9.1	60.9	27.1	1.0	1.9	100.0	279
Southern	23.9	56.5	19.5	100.0	8.8	66.6	19.8	3.2	1.6	100.0	163
South West Highlands	19.4	69.7	11.0	100.0	6.7	57.3	31.3	0.0	4.8	100.0	481
Lake	37.4	50.5	12.1	100.0	9.8	69.9	18.0	0.9	1.5	100.0	833
Eastern	41.5	55.0	3.6	100.0	8.6	71.3	16.3	2.0	1.8	100.0	892
Zanzibar	77.3	21.1	1.6	100.0	9.8	72.8	8.5	0.2	8.8	100.0	129
Region											
Dodoma	26.5	71.3	2.2	100.0	16.2	50.8	27.1	1.7	4.3	100.0	189
Arusha	44.2	47.6	8.1	100.0	10.0	77.1	7.4	2.1	3.4	100.0	162
Kilimanjaro	39.6	57.7	2.7	100.0	6.8	68.3	23.2	0.0	1.7	100.0	129
Tanga	57.5	35.8	6.7	100.0	10.5	69.7	18.1	1.7	0.0	100.0	153
Morogoro	29.0	63.7	7.3	100.0	2.9	60.1	33.2	3.8	0.0	100.0	232
Pwani	40.3	52.4	7.3	100.0	7.2	69.0	16.7	0.0	7.0	100.0	106
Dar es Salaam	46.9	51.8	1.3	100.0	11.3	76.4	9.1	1.6	1.6	100.0	554
Lindi	25.8	46.0	28.2	100.0	17.1	56.1	24.4	1.6	0.8	100.0	65
Mtwara	22.7	63.6	13.7	100.0	3.2	73.7	16.7	4.2	2.2	100.0	98
Ruvuma	22.5	59.8	17.7	100.0	13.3	58.2	26.5	0.9	1.0	100.0	96
Iringa	21.7	73.8	4.5	100.0	8.4	56.5	31.1	1.5	2.5	100.0	92
Mbeya	21.8	71.2	7.0	100.0	7.8	54.0	32.0	0.0	6.2	100.0	326
Singida	27.2	62.7	10.1	100.0	8.8	59.6	28.4	2.7	0.5	100.0	111
Tabora	33.3	42.9	23.8	100.0	8.1	70.7	19.7	0.8	0.7	100.0	173
Rukwa	13.8	70.6	15.6	100.0	5.1	65.8	27.2	0.0	1.9	100.0	105
Kigoma	52.4	44.1	3.5	100.0	9.8	77.7	7.3	5.2	0.0	100.0	81
Shinyanga	30.2	51.9	18.0	100.0	4.2	76.7	18.4	0.7	0.0	100.0	174
Kagera	37.7	47.9	14.4	100.0	18.4	69.3	10.2	1.0	1.1	100.0	141
Mwanza	52.4	36.3	11.4	100.0	11.9	61.9	24.5	0.0	1.7	100.0	191
Mara	20.8	70.0	9.1	100.0	7.5	78.8	11.3	0.0	2.3	100.0	120
Manyara	34.9	61.5	3.6	100.0	7.2	68.3	21.9	0.8	1.8	100.0	91
Njombe	19.7	76.8	3.5	100.0	5.4	68.1	23.5	0.6	2.3	100.0	91
Katavi	15.6	57.5	26.9	100.0	2.9	60.7	35.1	0.0	1.3	100.0	50
Simiyu	27.8	57.6	14.6	100.0	10.5	71.0	12.1	3.7	2.8	100.0	71
Geita	44.8	50.8	4.4	100.0	6.8	64.4	25.3	1.5	1.9	100.0	135
Kaskazini Unguja	82.4	13.8	3.8	100.0	10.9	81.1	1.9	0.9	5.2	100.0	19
Kusini Unguja	93.0	5.8	0.6	100.0	4.7	81.5	3.2	0.6	9.9	100.0	15
Mjini Magharibi	81.5	16.5	1.9	100.0	12.9	66.9	7.6	0.0	12.6	100.0	64
Kaskazini Pemba	50.7	49.3	0.0	100.0	7.1	80.7	12.2	0.0	0.0	100.0	19
Kusini Pemba	67.4	32.6	0.0	100.0	1.3	66.9	25.8	0.0	5.9	100.0	11

(Continued…)

Table 15.2.1—*Continued*

Background characteristic	Person who decides how the wife's cash earnings are used: Mainly wife	Wife and husband jointly	Mainly husband	Total	Wife's cash earnings compared with husband's cash earnings: More	Less	About the same	Husband has no earnings	Don't know	Total	Number of women
Education											
No education	31.0	53.5	15.5	100.0	7.7	58.6	26.0	3.2	4.5	100.0	528
Primary incomplete	34.7	50.5	14.8	100.0	8.9	69.8	18.9	0.5	1.9	100.0	373
Primary complete	34.7	57.4	7.9	100.0	8.8	66.8	21.4	1.1	2.0	100.0	2,153
Secondary+	43.7	53.0	3.3	100.0	11.1	72.3	13.2	1.2	2.1	100.0	811
Wealth quintile											
Lowest	24.1	54.8	21.1	100.0	6.4	61.3	27.8	1.4	3.0	100.0	479
Second	27.2	58.9	13.9	100.0	9.4	58.4	27.6	2.7	1.8	100.0	562
Middle	32.7	58.3	9.0	100.0	7.1	62.5	27.0	1.1	2.2	100.0	644
Fourth	40.1	54.6	5.3	100.0	9.0	71.9	16.0	0.6	2.5	100.0	904
Highest	43.4	52.8	3.7	100.0	11.2	72.0	13.2	1.3	2.3	100.0	1,276
Total	36.1	55.3	8.6	100.0	9.1	67.1	20.1	1.3	2.3	100.0	3,864

Table 15.2.2 Control over men's cash earnings

Percent distributions of currently married men age 15-49 who receive cash earnings and of currently married women age 15-49 whose husbands receive cash earnings, by person who decides how husband's cash earnings are used, according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Men						Women					
	Mainly wife	Husband and wife jointly	Mainly husband	Other	Total	Number of men	Mainly wife	Husband and wife jointly	Mainly husband	Other	Total	Number of women
Age												
15-19	*	*	*	*	100.0	12	4.6	49.4	45.5	0.5	100.0	665
20-24	0.9	48.8	50.2	0.0	100.0	142	4.1	55.5	40.2	0.2	100.0	1,472
25-29	2.4	64.2	33.4	0.0	100.0	275	4.0	54.0	41.8	0.1	100.0	1,611
30-34	1.6	66.2	32.2	0.0	100.0	306	4.9	57.3	37.8	0.1	100.0	1,371
35-39	2.4	64.0	33.6	0.0	100.0	362	5.4	52.2	42.4	0.0	100.0	1,294
40-44	1.7	68.0	30.3	0.0	100.0	262	6.1	54.6	39.2	0.1	100.0	1,021
45-49	3.0	68.7	28.2	0.0	100.0	258	6.8	54.2	39.1	0.0	100.0	710
Number of living children												
0	2.0	57.9	39.0	1.0	100.0	129	5.1	55.5	39.3	0.2	100.0	664
1-2	2.8	63.9	33.2	0.0	100.0	589	5.0	56.7	38.2	0.2	100.0	2,975
3-4	1.7	66.5	31.8	0.0	100.0	464	5.4	53.6	40.9	0.1	100.0	2,369
5+	1.5	65.6	32.9	0.0	100.0	436	4.4	51.2	44.3	0.1	100.0	2,137
Residence												
Urban	2.3	64.2	33.6	0.0	100.0	591	6.7	58.4	34.9	0.0	100.0	2,516
Rural	2.0	64.9	33.0	0.1	100.0	1,027	4.2	52.4	43.2	0.2	100.0	5,629
Tanzania Mainland/ Zanzibar												
Mainland	2.1	65.6	32.2	0.1	100.0	1,582	5.0	54.5	40.4	0.1	100.0	7,926
Urban	2.3	65.1	32.6	0.0	100.0	579	6.8	58.7	34.5	0.0	100.0	2,449
Rural	2.0	65.9	32.0	0.1	100.0	1,003	4.1	52.7	43.0	0.2	100.0	5,477
Zanzibar	1.0	22.6	76.4	0.0	100.0	37	4.6	44.7	50.7	0.0	100.0	219
Unguja	1.3	13.4	85.3	0.0	100.0	26	4.1	36.8	59.1	0.0	100.0	150
Pemba	0.0	45.0	55.0	0.0	100.0	11	5.6	61.8	32.5	0.0	100.0	69
Zone												
Western	2.8	63.7	32.5	0.9	100.0	147	3.2	42.3	53.7	0.8	100.0	872
Northern	0.0	79.4	20.6	0.0	100.0	190	7.5	45.6	46.8	0.1	100.0	897
Central	0.4	91.7	8.0	0.0	100.0	196	3.7	63.3	33.0	0.0	100.0	876
Southern Highlands	1.2	78.3	20.5	0.0	100.0	116	3.6	62.3	34.1	0.0	100.0	499
Southern	6.5	28.9	64.6	0.0	100.0	106	7.6	55.1	37.3	0.0	100.0	446
South West Highlands	2.0	69.9	28.1	0.0	100.0	112	6.7	62.3	30.8	0.1	100.0	765
Lake	2.1	52.1	45.8	0.0	100.0	378	2.7	48.9	48.4	0.1	100.0	2,182
Eastern	3.0	64.3	32.7	0.0	100.0	336	7.5	64.1	28.4	0.0	100.0	1,388
Zanzibar	1.0	22.6	76.4	0.0	100.0	37	4.6	44.7	50.7	0.0	100.0	219
Region												
Dodoma	0.0	100.0	0.0	0.0	100.0	89	3.4	73.3	23.3	0.0	100.0	377
Arusha	(0.0)	(74.1)	(25.9)	(0.0)	100.0	61	6.0	44.3	49.3	0.3	100.0	319
Kilimanjaro	(0.0)	(79.3)	(20.7)	(0.0)	100.0	48	6.6	62.8	30.7	0.0	100.0	195
Tanga	0.0	83.5	16.5	0.0	100.0	81	9.1	37.8	53.1	0.0	100.0	383
Morogoro	(0.0)	(69.6)	(30.4)	(0.0)	100.0	82	8.4	67.0	24.6	0.0	100.0	391
Pwani	(7.6)	(55.8)	(36.6)	(0.0)	100.0	31	9.6	56.8	33.5	0.0	100.0	183
Dar es Salaam	3.4	63.6	33.0	0.0	100.0	223	6.6	64.3	29.1	0.0	100.0	815
Lindi	4.2	24.3	71.5	0.0	100.0	42	11.4	49.2	39.4	0.0	100.0	190
Mtwara	8.1	31.9	60.0	0.0	100.0	64	4.8	59.5	35.7	0.0	100.0	256
Ruvuma	2.4	75.3	22.2	0.0	100.0	58	2.8	58.1	39.1	0.0	100.0	225
Iringa	(0.0)	(91.2)	(8.8)	(0.0)	100.0	30	5.2	70.3	24.5	0.0	100.0	141
Mbeya	(2.5)	(76.8)	(20.7)	(0.0)	100.0	88	6.4	66.8	26.8	0.0	100.0	490
Singida	1.5	92.9	5.5	0.0	100.0	49	2.5	63.7	33.9	0.0	100.0	240
Tabora	5.0	66.5	26.8	1.6	100.0	83	3.5	38.5	56.9	1.1	100.0	512
Rukwa	(0.0)	(39.9)	(60.1)	(0.0)	100.0	17	8.3	57.7	33.6	0.4	100.0	183
Kigoma	0.0	60.1	39.9	0.0	100.0	64	2.7	47.8	49.2	0.4	100.0	360
Shinyanga	4.1	58.2	37.7	0.0	100.0	79	5.1	54.0	40.9	0.0	100.0	341
Kagera	1.2	41.9	57.0	0.0	100.0	94	0.9	52.7	46.3	0.0	100.0	417
Mwanza	0.0	58.8	41.2	0.0	100.0	104	2.9	33.4	63.7	0.0	100.0	465
Mara	(0.0)	(90.7)	(9.3)	(0.0)	100.0	22	1.8	63.1	35.1	0.0	100.0	340
Manyara	0.0	77.8	22.2	0.0	100.0	58	5.3	48.5	46.2	0.0	100.0	259
Njombe	0.0	70.3	29.7	0.0	100.0	28	3.2	60.8	36.1	0.0	100.0	133
Katavi	*	*	*	*	100.0	6	5.3	47.4	47.0	0.4	100.0	92
Simiyu	(10.6)	(26.4)	(63.0)	(0.0)	100.0	19	2.0	60.3	37.4	0.2	100.0	309
Geita	2.7	42.9	54.5	0.0	100.0	60	3.4	34.4	62.0	0.3	100.0	310
Kaskazini Unguja	(3.9)	(8.9)	(87.2)	(0.0)	100.0	6	4.8	33.4	61.8	0.0	100.0	35
Kusini Unguja	(3.3)	(11.1)	(85.6)	(0.0)	100.0	4	4.4	27.4	68.2	0.0	100.0	20
Mjini Magharibi	0.0	15.5	84.5	0.0	100.0	16	3.8	40.0	56.2	0.0	100.0	96
Kaskazini Pemba	(0.0)	(63.4)	(36.6)	(0.0)	100.0	6	5.1	64.2	30.7	0.0	100.0	37
Kusini Pemba	(0.0)	(24.5)	(75.5)	(0.0)	100.0	5	6.2	59.1	34.7	0.0	100.0	32
Education												
No education	1.2	59.1	38.8	0.8	100.0	160	4.0	44.2	51.3	0.5	100.0	1,541
Primary incomplete	2.2	51.6	46.2	0.0	100.0	200	5.2	42.6	52.0	0.2	100.0	967
Primary complete	2.2	66.6	31.2	0.0	100.0	914	5.2	57.4	37.4	0.0	100.0	4,414
Secondary+	2.0	69.7	28.3	0.0	100.0	344	4.9	65.0	30.2	0.0	100.0	1,223

(Continued…)

Table 15.2.2—*Continued*

Background characteristic	Men						Women					
	Mainly wife	Husband and wife jointly	Mainly husband	Other	Total	Number of men	Mainly wife	Husband and wife jointly	Mainly husband	Other	Total	Number of women
Wealth quintile												
Lowest	1.7	60.0	38.3	0.0	100.0	281	3.4	45.2	51.0	0.5	100.0	1,659
Second	3.3	59.5	36.7	0.5	100.0	266	4.8	49.8	45.2	0.2	100.0	1,503
Middle	2.3	66.2	31.4	0.0	100.0	303	3.9	55.7	40.4	0.0	100.0	1,530
Fourth	1.2	67.3	31.5	0.0	100.0	353	5.6	58.0	36.4	0.0	100.0	1,636
Highest	2.1	67.7	30.2	0.0	100.0	416	6.8	61.6	31.5	0.0	100.0	1,816
Total	2.1	64.6	33.2	0.1	100.0	1,618	4.9	54.3	40.7	0.1	100.0	8,145

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 15.3 Women's control over their own earnings and over those of their husbands

Percent distribution of currently married women age 15-49 with cash earnings in the last 12 months by person who decides how the wife's cash earnings are used and percent distribution of currently married women age 15-49 whose husbands have cash earnings by person who decides how the husband's cash earnings are used, according to the relation between wife's and husband's cash earnings, Tanzania DHS-MIS 2015-16

Women's earnings relative to husband's earnings	Person who decides how the wife's cash earnings are used:					Person who decides how husband's cash earnings are used:					
	Mainly wife	Wife and husband jointly	Mainly husband	Total	Number of women	Mainly wife	Wife and husband jointly	Mainly husband	Other	Total	Number of women
More than husband	46.2	47.7	6.1	100.0	353	14.1	51.0	34.9	0.0	100.0	353
Less than husband	40.9	49.9	9.2	100.0	2,593	6.1	56.3	37.6	0.1	100.0	2,593
Same as husband	10.6	81.9	7.5	100.0	776	1.7	82.7	15.6	0.0	100.0	776
Husband has no cash earnings or did not work	(72.8)	(25.2)	(2.0)	100.0	52	na	na	na	na	na	0
Woman worked but has no cash earnings	na	na	na	na	0	3.4	48.2	48.1	0.3	100.0	2,984
Woman did not work	na	na	na	na	0	5.4	50.0	44.6	0.0	100.0	1,348
Total[1]	36.1	55.3	8.6	100.0	3,864	4.9	54.3	40.7	0.1	100.0	8,145

Note: Figures in parentheses are based on 25-49 unweighted cases.
na = Not applicable
[1] Includes cases where a woman does not know whether she earned more or less than her husband

Table 15.4.1 Ownership of assets: Women

Percent distribution of women age 15-49 by ownership of housing and land, according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Percentage who own a house: Alone	Jointly	Alone and jointly	Percentage who do not own a house	Total	Percentage who own land: Alone	Jointly	Alone and jointly	Percentage who do not own land	Total	Number of women
Age											
15-19	0.8	7.4	0.4	91.5	100.0	2.3	7.3	0.5	90.0	100.0	2,904
20-24	2.2	21.9	1.0	74.9	100.0	4.4	19.6	0.9	75.1	100.0	2,483
25-29	4.5	31.3	1.7	62.5	100.0	5.9	26.4	1.3	66.4	100.0	2,125
30-34	8.6	40.0	1.6	49.8	100.0	8.2	34.3	0.9	56.6	100.0	1,752
35-39	12.4	41.8	2.2	43.5	100.0	12.6	34.0	1.5	52.0	100.0	1,641
40-44	18.4	44.3	1.5	35.9	100.0	16.4	34.8	1.2	47.6	100.0	1,364
45-49	20.6	45.2	2.4	31.9	100.0	20.4	36.1	2.1	41.4	100.0	997
Residence											
Urban	5.5	16.3	1.0	77.3	100.0	5.6	10.3	0.3	83.8	100.0	4,811
Rural	8.5	36.4	1.6	53.5	100.0	9.6	32.6	1.4	56.4	100.0	8,455
Tanzania Mainland/ Zanzibar											
Mainland	7.4	29.9	1.4	61.3	100.0	8.2	25.2	1.1	65.5	100.0	12,862
Urban	5.4	16.6	1.0	77.0	100.0	5.6	10.5	0.4	83.5	100.0	4,675
Rural	8.6	37.5	1.6	52.3	100.0	9.7	33.5	1.5	55.2	100.0	8,187
Zanzibar	5.8	4.2	0.6	89.4	100.0	5.1	3.4	0.0	91.6	100.0	404
Unguja	6.9	4.7	0.7	87.7	100.0	6.3	3.9	0.0	89.7	100.0	293
Pemba	3.0	2.7	0.3	94.0	100.0	1.8	1.8	0.0	96.3	100.0	111
Zone											
Western	4.1	37.7	2.3	55.8	100.0	5.3	33.7	1.8	59.2	100.0	1,278
Northern	5.0	23.4	4.0	67.6	100.0	4.1	16.3	3.2	76.4	100.0	1,575
Central	8.3	42.5	0.4	48.8	100.0	8.3	37.9	0.6	53.2	100.0	1,336
Southern Highlands	7.4	40.3	3.8	48.5	100.0	9.4	39.9	3.0	47.7	100.0	807
Southern	12.7	33.8	0.1	53.3	100.0	17.1	31.7	0.2	51.0	100.0	700
South West Highlands	15.3	25.0	2.2	57.6	100.0	17.8	20.9	1.5	59.8	100.0	1,246
Lake	7.2	32.7	0.5	59.7	100.0	6.4	28.2	0.4	65.0	100.0	3,463
Eastern	5.2	17.2	0.2	77.4	100.0	7.2	10.7	0.0	82.1	100.0	2,457
Zanzibar	5.8	4.2	0.6	89.4	100.0	5.1	3.4	0.0	91.6	100.0	404
Region											
Dodoma	10.5	47.3	1.0	41.3	100.0	9.9	46.5	1.1	42.5	100.0	572
Arusha	6.1	33.3	0.2	60.4	100.0	3.9	22.1	0.0	74.0	100.0	508
Kilimanjaro	4.8	19.6	0.9	74.7	100.0	4.4	14.9	0.7	79.9	100.0	361
Tanga	4.4	18.2	8.2	69.2	100.0	4.0	12.8	6.8	76.4	100.0	706
Morogoro	5.6	24.6	0.3	69.4	100.0	9.3	18.6	0.0	72.1	100.0	636
Pwani	6.4	19.5	0.0	74.0	100.0	10.4	14.9	0.2	74.5	100.0	285
Dar es Salaam	4.8	13.7	0.1	81.4	100.0	5.8	6.6	0.0	87.6	100.0	1,536
Lindi	12.8	35.1	0.0	52.0	100.0	16.1	35.4	0.5	48.0	100.0	288
Mtwara	12.7	32.8	0.3	54.3	100.0	17.8	29.2	0.0	53.1	100.0	412
Ruvuma	5.9	45.1	2.0	47.1	100.0	9.0	48.3	2.3	40.3	100.0	360
Iringa	9.2	23.7	7.4	59.7	100.0	9.3	18.2	6.2	66.3	100.0	245
Mbeya	20.3	22.4	2.2	55.1	100.0	24.3	16.3	0.5	58.9	100.0	828
Singida	6.1	38.4	0.0	55.5	100.0	8.0	35.9	0.6	55.6	100.0	370
Tabora	4.0	36.2	3.9	55.8	100.0	5.6	34.1	3.1	57.2	100.0	737
Rukwa	6.1	29.0	2.2	62.8	100.0	5.4	30.3	4.0	60.3	100.0	288
Kigoma	4.3	39.8	0.2	55.8	100.0	4.8	33.2	0.0	62.1	100.0	542
Shinyanga	5.6	37.6	1.0	55.8	100.0	5.8	32.8	0.7	60.7	100.0	504
Kagera	5.6	49.3	0.0	45.1	100.0	9.5	47.9	0.0	42.6	100.0	612
Mwanza	5.8	16.7	0.4	77.1	100.0	4.3	13.8	0.2	81.7	100.0	859
Mara	13.9	39.6	0.0	46.5	100.0	9.4	30.9	0.5	59.2	100.0	523
Manyara	7.2	39.3	0.0	53.5	100.0	6.3	27.2	0.0	66.5	100.0	394
Njombe	8.0	51.7	2.7	37.6	100.0	10.2	51.1	0.3	38.4	100.0	203
Katavi	3.6	32.3	1.7	62.4	100.0	3.7	29.8	2.1	64.4	100.0	130
Simiyu	8.3	35.0	1.0	55.7	100.0	6.0	29.3	0.2	64.6	100.0	479
Geita	4.7	25.3	0.8	69.2	100.0	4.2	20.3	0.8	74.7	100.0	485
Kaskazini Unguja	3.8	3.2	0.8	92.3	100.0	4.6	4.5	0.0	90.9	100.0	56
Kusini Unguja	8.2	3.3	1.3	87.1	100.0	12.2	3.9	0.0	83.9	100.0	35
Mjini Magharibi	7.5	5.4	0.6	86.5	100.0	5.8	3.8	0.0	90.4	100.0	201
Kaskazini Pemba	4.1	3.4	0.6	92.0	100.0	1.6	2.0	0.0	96.4	100.0	56
Kusini Pemba	1.9	2.0	0.0	96.1	100.0	2.1	1.7	0.0	96.3	100.0	55
Education											
No education	9.4	43.6	2.1	45.0	100.0	8.4	38.0	2.3	51.3	100.0	1,946
Primary incomplete	7.9	29.7	1.5	60.9	100.0	7.5	26.8	1.3	64.4	100.0	1,559
Primary complete	8.4	32.7	1.5	57.5	100.0	9.6	27.6	1.0	61.8	100.0	6,652
Secondary+	3.8	12.1	0.6	83.5	100.0	5.2	8.2	0.3	86.3	100.0	3,109
Wealth quintile											
Lowest	9.6	44.4	1.6	44.4	100.0	9.7	41.3	1.8	47.2	100.0	2,246
Second	9.8	38.2	1.8	50.2	100.0	11.1	33.8	1.5	53.6	100.0	2,274
Middle	8.0	34.8	1.3	55.9	100.0	9.0	30.9	1.5	58.7	100.0	2,329
Fourth	6.4	23.0	1.3	69.3	100.0	6.8	18.4	0.8	74.0	100.0	2,822
Highest	5.0	14.9	1.0	79.1	100.0	5.8	8.8	0.3	85.1	100.0	3,596
Total	7.4	29.1	1.4	62.1	100.0	8.1	24.5	1.0	66.3	100.0	13,266

Table 15.4.2 Ownership of assets: Men

Percent distribution of men age 15-49 by ownership of housing and land, according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Percentage who own a house: Alone	Jointly	Alone and jointly	Percentage who do not own a house	Total	Percentage who own land: Alone	Jointly	Alone and jointly	Percentage who do not own land	Total	Number of men
Age											
15-19	2.7	0.9	0.2	96.2	100.0	5.8	1.0	0.2	93.0	100.0	932
20-24	14.1	3.2	1.1	81.6	100.0	15.9	2.8	1.4	79.8	100.0	576
25-29	30.1	6.7	6.7	56.5	100.0	32.2	6.8	3.2	57.9	100.0	482
30-34	31.4	12.9	8.9	46.7	100.0	30.5	13.1	6.7	49.7	100.0	410
35-39	47.4	11.0	12.3	29.3	100.0	39.3	10.9	7.4	42.5	100.0	466
40-44	44.2	16.6	21.5	17.8	100.0	39.7	16.6	12.3	31.4	100.0	334
45-49	48.3	19.0	16.4	16.3	100.0	43.8	12.5	11.7	32.0	100.0	314
Residence											
Urban	15.4	7.5	3.9	73.3	100.0	16.0	5.4	2.2	76.4	100.0	1,251
Rural	31.3	8.1	9.3	51.3	100.0	30.0	8.4	6.0	55.5	100.0	2,263
Tanzania Mainland/ Zanzibar											
Mainland	25.5	8.1	7.5	58.9	100.0	25.3	7.4	4.8	62.4	100.0	3,425
Urban	15.0	7.7	3.9	73.4	100.0	16.0	5.5	2.3	76.2	100.0	1,224
Rural	31.3	8.3	9.5	50.8	100.0	30.5	8.6	6.2	54.7	100.0	2,201
Zanzibar	30.7	1.1	0.0	68.2	100.0	12.1	2.9	0.0	85.0	100.0	89
Unguja	32.5	1.2	0.0	66.3	100.0	13.0	3.2	0.0	83.9	100.0	62
Pemba	26.7	0.9	0.0	72.4	100.0	10.2	2.3	0.0	87.5	100.0	28
Zone											
Western	24.4	8.2	11.4	56.0	100.0	27.3	7.0	10.4	55.3	100.0	322
Northern	24.7	6.4	8.0	60.9	100.0	25.6	3.9	5.9	64.6	100.0	415
Central	44.5	2.9	0.6	52.0	100.0	43.5	3.4	0.2	52.9	100.0	372
Southern Highlands	24.2	12.4	13.9	49.5	100.0	25.4	11.4	14.0	49.2	100.0	234
Southern	29.0	7.3	12.6	51.1	100.0	27.8	14.8	12.8	44.6	100.0	180
South West Highlands	24.6	17.9	6.6	50.9	100.0	27.4	15.6	4.9	52.0	100.0	308
Lake	24.2	5.6	9.2	61.1	100.0	23.4	5.7	3.1	67.7	100.0	933
Eastern	17.5	9.7	3.7	69.0	100.0	15.1	7.4	0.9	76.7	100.0	659
Zanzibar	30.7	1.1	0.0	68.2	100.0	12.1	2.9	0.0	85.0	100.0	89
Region											
Dodoma	49.3	0.6	0.0	50.1	100.0	49.6	1.3	0.0	49.1	100.0	175
Arusha	26.7	8.6	4.8	59.9	100.0	25.8	6.2	0.0	68.0	100.0	129
Kilimanjaro	20.7	3.7	17.2	58.4	100.0	16.9	3.3	11.7	68.1	100.0	110
Tanga	25.8	6.4	4.6	63.2	100.0	30.8	2.6	6.7	59.9	100.0	176
Morogoro	34.5	12.6	5.8	47.0	100.0	28.9	8.1	0.0	63.0	100.0	143
Pwani	27.6	9.6	10.9	51.9	100.0	24.7	15.3	4.4	55.7	100.0	68
Dar es Salaam	10.6	8.8	1.9	78.6	100.0	9.2	5.9	0.6	84.2	100.0	448
Lindi	21.4	3.2	25.3	50.1	100.0	15.3	14.0	29.9	40.8	100.0	66
Mtwara	33.4	9.7	5.3	51.6	100.0	34.9	15.3	2.9	46.9	100.0	115
Ruvuma	37.6	12.6	5.9	43.9	100.0	37.1	13.8	7.5	41.5	100.0	112
Iringa	9.8	5.9	21.1	63.2	100.0	11.3	3.7	19.0	66.0	100.0	71
Mbeya	31.1	17.8	4.2	46.8	100.0	34.1	13.6	4.3	48.0	100.0	202
Singida	40.1	4.9	0.0	55.0	100.0	47.6	5.4	0.0	47.0	100.0	106
Tabora	22.1	6.9	13.7	57.3	100.0	23.7	5.5	13.7	57.1	100.0	199
Rukwa	14.9	24.4	4.1	56.6	100.0	17.9	25.9	1.2	55.0	100.0	71
Kigoma	28.0	10.3	7.8	53.9	100.0	33.1	9.6	5.0	52.3	100.0	124
Shinyanga	11.6	2.5	22.1	63.8	100.0	10.2	3.0	10.6	76.2	100.0	142
Kagera	39.4	3.6	1.6	55.4	100.0	47.5	4.8	1.6	46.1	100.0	198
Mwanza	21.7	13.4	5.0	59.9	100.0	15.5	9.9	1.1	73.6	100.0	225
Mara	21.2	2.8	21.3	54.7	100.0	26.9	4.8	3.9	64.3	100.0	114
Manyara	40.3	5.0	2.5	52.2	100.0	27.1	5.1	0.9	67.0	100.0	91
Njombe	14.8	21.1	21.6	42.5	100.0	18.9	16.9	21.7	42.6	100.0	50
Katavi	6.7	5.2	25.4	62.8	100.0	8.2	6.0	16.2	69.6	100.0	35
Simiyu	13.7	1.0	9.3	76.0	100.0	16.6	1.8	2.2	79.4	100.0	136
Geita	33.4	5.9	2.2	58.5	100.0	18.6	8.2	0.9	72.3	100.0	118
Kaskazini Unguja	41.5	2.2	0.0	56.3	100.0	11.1	1.1	0.0	87.8	100.0	13
Kusini Unguja	40.3	2.7	0.0	57.0	100.0	13.8	5.3	0.0	80.9	100.0	9
Mjini Magharibi	27.8	0.5	0.0	71.7	100.0	13.4	3.4	0.0	83.2	100.0	40
Kaskazini Pemba	28.4	1.7	0.0	69.9	100.0	9.3	1.7	0.0	89.0	100.0	14
Kusini Pemba	24.8	0.0	0.0	75.2	100.0	11.2	3.0	0.0	85.9	100.0	13
Education											
No education	42.2	8.9	9.1	39.7	100.0	37.5	7.2	6.9	48.3	100.0	283
Primary incomplete	24.7	7.5	5.7	62.0	100.0	25.9	6.1	3.7	64.3	100.0	568
Primary complete	30.2	9.7	9.9	50.2	100.0	29.1	9.3	6.2	55.4	100.0	1,673
Secondary+	13.7	4.9	3.3	78.1	100.0	14.0	4.7	2.1	79.2	100.0	990
Wealth quintile											
Lowest	37.1	10.2	7.8	44.9	100.0	31.1	8.3	6.3	54.3	100.0	598
Second	35.1	8.7	9.8	46.5	100.0	36.0	8.4	5.8	49.8	100.0	575
Middle	29.6	8.8	9.9	51.7	100.0	27.8	10.1	5.3	56.8	100.0	659
Fourth	21.1	6.1	6.2	66.7	100.0	24.1	6.8	4.4	64.6	100.0	764
Highest	13.2	6.9	4.6	75.3	100.0	12.9	4.5	2.7	79.9	100.0	918
Total	25.6	7.9	7.3	59.1	100.0	25.0	7.3	4.7	63.0	100.0	3,514

Table 15.5.1 Ownership of title or deed for house: Women

Among women age 15-49 who own a house, percent distribution by whether the house owned has a title or deed and whether or not the woman's name appears on the title or deed, according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	House has a title or deed and:		Does not have a title/deed	Don't know/ missing[1]	Total	Number of women who own a house[2]
	Woman's name is on title/deed	Woman's name is not on title/deed				
Age						
15-19	1.6	3.0	92.3	3.0	100.0	246
20-24	3.0	7.7	87.1	2.1	100.0	622
25-29	5.4	10.3	82.6	1.7	100.0	796
30-34	8.7	14.8	74.9	1.6	100.0	879
35-39	8.9	14.2	75.6	1.4	100.0	927
40-44	10.5	12.8	76.2	0.6	100.0	875
45-49	9.5	12.2	77.8	0.5	100.0	679
Residence						
Urban	19.0	30.7	49.0	1.3	100.0	1,092
Rural	4.4	6.6	87.6	1.4	100.0	3,932
Tanzania Mainland/Zanzibar						
Mainland	7.3	11.8	79.5	1.4	100.0	4,981
Urban	18.6	31.0	49.2	1.2	100.0	1,076
Rural	4.2	6.6	87.8	1.4	100.0	3,905
Zanzibar	32.9	6.8	55.5	4.7	100.0	43
Unguja	36.4	6.8	52.5	4.3	100.0	36
Pemba	(14.1)	(6.8)	(72.0)	(7.1)	(100.0)	7
Zone						
Western	6.2	10.4	81.1	2.2	100.0	565
Northern	5.8	19.0	74.2	1.0	100.0	510
Central	3.3	10.1	85.9	0.6	100.0	684
Southern Highlands	6.9	12.9	79.7	0.5	100.0	416
Southern	6.4	11.0	81.7	0.9	100.0	327
South West Highlands	4.8	5.9	86.0	3.3	100.0	528
Lake	6.4	5.5	86.7	1.4	100.0	1,397
Eastern	20.6	30.3	48.5	0.7	100.0	555
Zanzibar	32.9	6.8	55.5	4.7	100.0	43
Region						
Dodoma	2.9	9.7	87.4	0.0	100.0	336
Arusha	9.6	13.9	74.8	1.7	100.0	201
Kilimanjaro	5.8	12.9	80.4	0.8	100.0	91
Tanga	2.3	26.2	71.1	0.5	100.0	218
Morogoro	11.1	22.7	66.1	0.0	100.0	195
Pwani	20.7	15.8	63.5	0.0	100.0	74
Dar es Salaam	26.9	39.1	32.6	1.4	100.0	286
Lindi	3.5	8.5	86.7	1.3	100.0	138
Mtwara	8.6	12.8	78.1	0.5	100.0	188
Ruvuma	6.4	14.9	78.2	0.5	100.0	190
Iringa	13.6	9.9	75.5	1.0	100.0	98
Mbeya	4.8	6.5	85.0	3.7	100.0	372
Singida	3.1	10.4	84.3	2.2	100.0	165
Tabora	6.6	6.7	82.9	3.8	100.0	325
Rukwa	4.9	4.7	87.9	2.6	100.0	107
Kigoma	5.8	15.5	78.7	0.0	100.0	240
Shinyanga	7.5	11.3	76.5	4.7	100.0	223
Kagera	2.5	5.0	92.1	0.4	100.0	336
Mwanza	20.9	4.4	73.9	0.8	100.0	197
Mara	3.7	3.5	92.8	0.0	100.0	280
Manyara	4.1	10.7	84.8	0.3	100.0	184
Njombe	2.4	12.2	85.4	0.0	100.0	127
Katavi	4.3	3.7	89.8	2.2	100.0	49
Simiyu	2.7	3.5	93.2	0.6	100.0	212
Geita	4.8	5.8	86.6	2.8	100.0	149
Kaskazini Unguja	(17.7)	(0.0)	(79.5)	(2.8)	(100.0)	4
Kusini Unguja	(22.8)	(6.5)	(63.4)	(7.3)	(100.0)	5
Mjini Magharibi	41.7	8.0	46.3	4.0	100.0	27
Kaskazini Pemba	(11.0)	(6.0)	(75.7)	(7.3)	(100.0)	5
Kusini Pemba	*	*	*	*	*	2
Education						
No education	4.0	5.2	89.8	1.1	100.0	1,070
Primary incomplete	5.8	6.1	86.8	1.2	100.0	610
Primary complete	7.2	13.0	78.3	1.5	100.0	2,829
Secondary+	19.0	25.7	53.8	1.4	100.0	514
Wealth quintile						
Lowest	2.2	2.7	93.7	1.4	100.0	1,248
Second	3.9	4.0	90.5	1.6	100.0	1,132
Middle	5.4	8.5	84.9	1.2	100.0	1,026
Fourth	10.5	16.1	71.9	1.5	100.0	867
Highest	21.5	38.2	39.2	1.1	100.0	751
Total	7.6	11.8	79.3	1.4	100.0	5,024

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Includes women whose house has a title/deed, but they do not know if their name is on it (or this information is missing), and women who do not know if the house has a title/deed (or this information is missing)
[2] Includes sole, joint, or sole and joint ownership

Table 15.5.2 Ownership of title or deed for house: Men

Among men age 15-49 who own a house, percent distribution by whether the house owned has a title or deed and whether or not the man's name appears on the title or deed, according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	House has a title or deed and: Man's name is on title/deed	House has a title or deed and: Man's name is not on title/deed	Does not have a title/deed	Don't know/ missing[1]	Total	Number of men who own a house[2]
Age						
15-19	(17.9)	(0.3)	(81.8)	(0.0)	(100.0)	35
20-24	22.6	1.5	74.8	1.1	100.0	106
25-29	14.5	1.9	83.6	0.0	100.0	210
30-34	21.3	1.7	76.7	0.4	100.0	218
35-39	24.1	3.5	72.5	0.0	100.0	329
40-44	23.3	1.5	75.2	0.0	100.0	274
45-49	21.7	3.0	74.9	0.4	100.0	263
Residence						
Urban	36.7	5.0	58.2	0.0	100.0	335
Rural	16.7	1.5	81.5	0.3	100.0	1,102
Tanzania Mainland/Zanzibar						
Mainland	21.5	2.0	76.3	0.2	100.0	1,408
Urban	37.3	4.4	58.3	0.0	100.0	326
Rural	16.7	1.3	81.7	0.3	100.0	1,082
Zanzibar	15.6	15.7	68.7	0.0	100.0	28
Unguja	16.2	21.4	62.4	0.0	100.0	21
Pemba	(13.9)	(0.0)	(86.1)	(0.0)	(100.0)	8
Zone						
Western	7.4	3.0	88.8	0.9	100.0	142
Northern	19.7	4.0	76.3	0.0	100.0	162
Central	13.3	0.5	86.2	0.0	100.0	179
Southern Highlands	8.9	4.6	86.5	0.0	100.0	118
Southern	26.0	2.4	71.5	0.0	100.0	88
South West Highlands	12.3	0.0	87.7	0.0	100.0	151
Lake	29.2	1.4	69.2	0.2	100.0	363
Eastern	38.4	2.1	59.0	0.5	100.0	204
Zanzibar	15.6	15.7	68.7	0.0	100.0	28
Education						
No education	13.6	0.7	85.0	0.7	100.0	171
Primary incomplete	22.9	1.9	74.8	0.4	100.0	216
Primary complete	20.4	2.0	77.5	0.1	100.0	833
Secondary+	30.0	5.0	65.1	0.0	100.0	217
Wealth quintile						
Lowest	20.7	1.1	77.6	0.6	100.0	329
Second	11.4	1.7	86.9	0.0	100.0	308
Middle	20.5	1.7	77.8	0.0	100.0	318
Fourth	21.1	0.8	77.8	0.4	100.0	255
Highest	37.6	7.4	55.0	0.0	100.0	227
Total	21.4	2.3	76.1	0.2	100.0	1,436

Note: Figures in parentheses are based on 25-49 unweighted cases.
[1] Includes men whose house has a title/deed, but they do not know if their name is on it (or this information is missing), and men who do not know if the house has a deed/title (or this information is missing)
[2] Includes sole, joint, or sole and joint ownership

Table 15.6.1 Ownership of title or deed for land: Women

Among women age 15-49 who own land, percent distribution by whether the land owned has a title or deed and whether or not the woman's name appears on the title or deed, according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Land has a title or deed and: Woman's name is on title/deed	Woman's name is not on title/deed	Does not have a title/deed	Don't know/ missing[1]	Total	Number of women who own land[2]
Age						
15-19	9.6	4.6	84.0	1.8	100.0	292
20-24	5.4	4.3	89.5	0.8	100.0	619
25-29	5.8	7.2	86.1	0.9	100.0	713
30-34	9.5	9.5	79.6	1.4	100.0	761
35-39	8.9	6.3	84.2	0.7	100.0	788
40-44	6.9	5.6	86.4	1.1	100.0	715
45-49	8.3	5.5	85.4	0.9	100.0	584
Residence						
Urban	24.6	15.0	59.4	1.0	100.0	781
Rural	4.1	4.6	90.3	1.0	100.0	3,690
Tanzania Mainland/Zanzibar						
Mainland	7.4	6.4	85.2	1.0	100.0	4,437
Urban	24.2	15.1	59.7	0.9	100.0	771
Rural	3.9	4.5	90.6	1.0	100.0	3,666
Zanzibar	35.2	8.6	49.4	6.7	100.0	34
Unguja	36.4	8.6	47.4	7.6	100.0	30
Pemba	(26.5)	(9.0)	(64.6)	(0.0)	(100.0)	4
Zone						
Western	3.2	5.5	89.6	1.8	100.0	521
Northern	5.2	8.6	85.0	1.2	100.0	371
Central	1.5	7.5	90.8	0.3	100.0	625
Southern Highlands	5.8	8.2	85.2	0.8	100.0	423
Southern	8.1	6.6	84.1	1.2	100.0	343
South West Highlands	5.1	2.3	91.3	1.3	100.0	501
Lake	5.8	4.2	89.2	0.8	100.0	1,212
Eastern	31.0	12.7	55.2	1.0	100.0	441
Zanzibar	35.2	8.6	49.4	6.7	100.0	34
Region						
Dodoma	1.2	6.0	92.8	0.0	100.0	329
Arusha	6.6	10.1	80.7	2.6	100.0	132
Kilimanjaro	11.1	4.1	83.5	1.4	100.0	73
Tanga	1.5	9.4	89.1	0.0	100.0	166
Morogoro	17.2	8.4	74.5	0.0	100.0	177
Pwani	14.2	5.6	76.8	3.3	100.0	73
Dar es Salaam	50.4	19.5	29.1	1.1	100.0	190
Lindi	6.1	5.9	85.3	2.8	100.0	150
Mtwara	9.8	7.1	83.2	0.0	100.0	193
Ruvuma	4.8	11.8	83.0	0.5	100.0	215
Iringa	13.2	5.5	78.7	2.7	100.0	83
Mbeya	6.3	2.6	90.1	1.1	100.0	341
Singida	1.7	7.8	89.4	1.1	100.0	164
Tabora	3.6	4.2	90.6	1.7	100.0	316
Rukwa	2.8	2.0	93.4	1.8	100.0	114
Kigoma	2.5	7.5	88.1	1.9	100.0	205
Shinyanga	3.8	5.7	85.9	4.6	100.0	198
Kagera	5.2	5.0	89.8	0.0	100.0	351
Mwanza	18.4	4.5	77.1	0.0	100.0	157
Mara	1.8	3.8	94.4	0.0	100.0	213
Manyara	1.9	10.5	87.5	0.0	100.0	132
Njombe	2.6	3.9	93.5	0.0	100.0	125
Katavi	2.3	0.4	94.9	2.4	100.0	46
Simiyu	0.8	1.7	97.2	0.4	100.0	170
Geita	9.0	2.9	88.2	0.0	100.0	123
Kaskazini Unguja	(3.2)	(7.0)	(84.5)	(5.3)	(100.0)	5
Kusini Unguja	25.9	4.0	62.4	7.6	100.0	6
Mjini Magharibi	48.4	10.3	33.1	8.2	100.0	19
Kaskazini Pemba	*	*	*	*	*	2
Kusini Pemba	*	*	*	*	*	2
Education						
No education	2.7	2.1	94.1	1.1	100.0	947
Primary incomplete	5.5	5.3	87.9	1.2	100.0	556
Primary complete	6.2	7.5	85.4	1.0	100.0	2,541
Secondary+	30.2	10.8	58.0	1.0	100.0	427
Wealth quintile						
Lowest	2.0	2.0	95.1	0.9	100.0	1,186
Second	3.3	4.2	91.8	0.7	100.0	1,055
Middle	4.6	4.7	89.2	1.5	100.0	961
Fourth	8.6	9.9	80.6	0.9	100.0	732
Highest	32.9	18.7	47.0	1.3	100.0	536
Total	7.7	6.4	84.9	1.0	100.0	4,471

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Includes women whose land has a title/deed, but they do not know if their name is on it (or this information is missing), and women who do not know if the land has a deed/title (or this information is missing)
[2] Includes sole, joint, or sole and joint ownership

Table 15.6.2 Ownership of title or deed for land: Men

Among men age 15-49 who own land, percent distribution by whether the land owned has a title or deed and whether or not the man's name appears on the title or deed, according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Land has a title or deed and: Man's name is on title/deed	Man's name is not on title/deed	Does not have a title/deed	Don't know/ missing[1]	Total	Number of men who own land[2]
Age						
15-19	10.3	4.6	82.1	3.0	100.0	65
20-24	13.7	0.9	82.8	2.6	100.0	116
25-29	15.0	2.8	81.8	0.3	100.0	203
30-34	18.0	1.9	80.2	0.0	100.0	206
35-39	14.6	2.6	82.7	0.1	100.0	268
40-44	21.2	2.4	75.9	0.5	100.0	229
45-49	18.0	1.0	81.1	0.0	100.0	214
Residence						
Urban	24.5	3.6	71.2	0.7	100.0	295
Rural	14.3	1.8	83.5	0.5	100.0	1,006
Tanzania Mainland/Zanzibar						
Mainland	16.6	2.1	80.8	0.5	100.0	1,288
Urban	24.5	3.4	71.5	0.6	100.0	291
Rural	14.2	1.7	83.6	0.5	100.0	997
Zanzibar	21.0	9.3	66.4	3.3	100.0	13
Unguja	19.4	9.8	67.6	3.2	100.0	10
Pemba	*	*	*	*	*	3
Zone						
Western	6.0	0.9	91.5	1.7	100.0	144
Northern	15.7	0.6	83.7	0.0	100.0	147
Central	15.5	0.9	83.6	0.0	100.0	175
Southern Highlands	7.0	6.8	86.1	0.0	100.0	119
Southern	17.3	0.0	82.2	0.6	100.0	100
South West Highlands	7.8	4.3	87.9	0.0	100.0	148
Lake	22.5	3.0	73.9	0.6	100.0	301
Eastern	32.1	0.0	66.7	1.2	100.0	154
Zanzibar	21.0	9.3	66.4	3.3	100.0	13
Education						
No education	13.3	0.0	85.9	0.8	100.0	146
Primary incomplete	13.9	1.6	83.4	1.2	100.0	203
Primary complete	15.6	3.0	81.0	0.4	100.0	746
Secondary+	25.3	1.4	73.2	0.1	100.0	206
Wealth quintile						
Lowest	17.5	2.0	80.1	0.4	100.0	274
Second	8.2	1.4	89.7	0.6	100.0	288
Middle	17.6	2.7	79.3	0.4	100.0	285
Fourth	17.7	3.1	79.0	0.2	100.0	270
Highest	25.3	1.5	72.1	1.2	100.0	184
Total	16.6	2.2	80.7	0.5	100.0	1,301

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Includes men whose land has a title/deed, but they do not know if their name is on it (or this information is missing), and men who do not know if the land has a deed/title (or this information is missing)

[2] Includes sole, joint, or sole and joint ownership

Table 15.7.1 Ownership and use of bank accounts and mobile phones: Women

Percentage of women age 15-49 who use an account in a bank or other financial institution and percentage who own a mobile phone, and among women who own a mobile phone, percentage who use it for financial transactions, according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Use a bank account	Own a mobile phone	Number of women	Use mobile phone for financial transactions	Number of women who own a mobile phone
Age					
15-19	14.2	28.9	2,904	68.1	839
20-24	31.4	55.9	2,483	76.2	1,389
25-29	33.2	59.3	2,125	71.7	1,261
30-34	32.8	60.0	1,752	70.4	1,051
35-39	33.7	61.5	1,641	69.0	1,009
40-44	31.9	59.5	1,364	67.8	812
45-49	26.9	56.3	997	63.7	561
Residence					
Urban	47.0	74.1	4,811	81.4	3,564
Rural	17.4	39.7	8,455	58.8	3,358
Tanzania Mainland/Zanzibar					
Mainland	28.5	51.8	12,862	71.9	6,660
Urban	47.6	74.0	4,675	82.6	3,459
Rural	17.6	39.1	8,187	60.4	3,200
Zanzibar	15.6	65.0	404	33.0	262
Unguja	19.2	70.2	293	36.3	205
Pemba	5.9	51.3	111	21.4	57
Zone					
Western	18.1	36.7	1,278	59.0	470
Northern	25.9	68.6	1,575	70.3	1,081
Central	22.2	43.5	1,336	59.0	581
Southern Highlands	31.9	53.8	807	73.3	434
Southern	28.6	51.7	700	70.1	362
South West Highlands	20.2	44.0	1,246	74.4	548
Lake	24.4	39.7	3,463	69.2	1,374
Eastern	48.0	73.7	2,457	81.8	1,810
Zanzibar	15.6	65.0	404	33.0	262
Region					
Dodoma	20.1	38.8	572	62.8	222
Arusha	29.2	71.0	508	71.3	360
Kilimanjaro	22.1	74.8	361	73.3	270
Tanga	25.5	63.8	706	67.6	450
Morogoro	24.7	51.3	636	72.5	326
Pwani	32.7	62.2	285	76.8	177
Dar es Salaam	60.4	85.0	1,536	84.8	1,306
Lindi	25.2	50.5	288	73.2	145
Mtwara	31.0	52.6	412	68.0	217
Ruvuma	26.8	46.1	360	71.3	166
Iringa	34.4	58.4	245	81.7	143
Mbeya	22.6	51.7	828	75.3	428
Singida	27.0	45.1	370	65.8	167
Tabora	18.1	36.9	737	57.5	272
Rukwa	15.6	25.9	288	75.7	75
Kigoma	18.1	36.5	542	61.1	198
Shinyanga	26.4	41.6	504	64.4	210
Kagera	21.9	41.9	612	56.8	256
Mwanza	30.7	41.8	859	86.4	359
Mara	27.2	44.6	523	69.3	233
Manyara	20.7	48.8	394	48.6	192
Njombe	37.7	61.7	203	66.6	125
Katavi	15.1	34.7	130	63.5	45
Simiyu	13.0	32.9	479	51.1	157
Geita	22.5	32.6	485	74.6	158
Kaskazini Unguja	2.9	51.2	56	10.2	29
Kusini Unguja	7.9	62.1	35	19.8	22
Mjini Magharibi	25.8	76.9	201	43.5	155
Kaskazini Pemba	6.3	53.7	56	20.5	30
Kusini Pemba	5.4	48.8	55	22.3	27
Education					
No education	9.4	28.6	1,946	47.4	557
Primary incomplete	14.4	35.9	1,559	54.7	559
Primary complete	28.3	54.5	6,652	69.3	3,622
Secondary+	46.4	70.2	3,109	82.3	2,183
Wealth quintile					
Lowest	7.5	21.7	2,246	44.8	487
Second	11.2	29.8	2,274	50.9	679
Middle	18.9	44.7	2,329	58.9	1,040
Fourth	34.3	63.3	2,822	72.6	1,786
Highest	52.9	81.5	3,596	82.1	2,931
Total	28.1	52.2	13,266	70.5	6,922

Table 15.7.2 Ownership and use of bank accounts and mobile phones: Men

Percentage of men age 15-49 who use an account in a bank or other financial institution and percentage who own a mobile phone, and among men who own a mobile phone, percentage who use it for financial transactions, according to background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Use a bank account	Own a mobile phone	Number of men	Use mobile phone for financial transactions	Number of men who own a mobile phone
Age					
15-19	21.9	40.5	932	68.4	378
20-24	44.8	73.3	576	76.8	422
25-29	51.4	78.9	482	80.1	380
30-34	55.0	83.6	410	82.2	343
35-39	56.6	84.5	466	79.1	394
40-44	48.5	81.4	334	77.6	272
45-49	50.0	73.4	314	75.5	231
Residence					
Urban	64.1	82.0	1,251	88.1	1,025
Rural	31.7	61.6	2,263	69.0	1,394
Tanzania Mainland/Zanzibar					
Mainland	43.6	68.5	3,425	78.4	2,345
Urban	64.6	81.9	1,224	89.1	1,002
Rural	31.9	61.0	2,201	70.5	1,343
Zanzibar	29.5	83.1	89	35.1	74
Unguja	31.1	84.2	62	36.9	52
Pemba	26.1	80.7	28	30.9	22
Zone					
Western	31.8	56.5	322	66.1	182
Northern	49.4	77.1	415	83.2	320
Central	35.6	61.6	372	59.8	229
Southern Highlands	52.4	72.6	234	80.6	170
Southern	53.2	69.2	180	81.7	125
South West Highlands	44.8	61.4	308	75.5	189
Lake	29.1	62.4	933	81.9	582
Eastern	64.2	83.0	659	83.5	547
Zanzibar	29.5	83.1	89	35.1	74
Region					
Dodoma	36.8	58.4	175	63.1	102
Arusha	36.3	74.0	129	75.4	96
Kilimanjaro	50.7	80.6	110	87.6	88
Tanga	58.3	77.3	176	85.9	136
Morogoro	27.4	68.2	143	69.4	98
Pwani	42.3	76.7	68	60.6	52
Dar es Salaam	79.3	88.7	448	89.9	398
Lindi	57.7	76.6	66	76.7	50
Mtwara	50.7	65.0	115	85.1	75
Ruvuma	46.4	73.3	112	74.1	82
Iringa	59.0	71.8	71	84.3	51
Mbeya	50.1	66.9	202	76.6	135
Singida	37.7	64.7	106	65.2	69
Tabora	22.0	55.8	199	53.9	111
Rukwa	31.5	48.0	71	71.7	34
Kigoma	47.6	57.6	124	85.3	71
Shinyanga	32.1	66.3	142	69.6	95
Kagera	36.5	58.8	198	68.8	116
Mwanza	39.8	63.2	225	91.9	142
Mara	5.9	68.2	114	100.0	78
Manyara	31.0	63.9	91	47.9	58
Njombe	56.5	71.9	50	90.2	36
Katavi	40.8	56.7	35	75.0	20
Simiyu	9.7	60.2	136	87.5	82
Geita	37.2	58.9	118	72.9	70
Kaskazini Unguja	11.6	76.0	13	13.3	10
Kusini Unguja	19.0	82.8	9	25.5	7
Mjini Magharibi	40.2	87.2	40	46.1	35
Kaskazini Pemba	20.8	87.5	14	24.8	12
Kusini Pemba	31.6	73.6	13	38.6	10
Education					
No education	20.3	49.5	283	55.4	140
Primary incomplete	23.2	46.8	568	66.2	266
Primary complete	43.0	73.8	1,673	75.7	1,234
Secondary+	61.6	78.7	990	86.9	779
Wealth quintile					
Lowest	17.9	45.9	598	62.5	274
Second	27.4	58.3	575	64.6	335
Middle	32.8	65.6	659	68.8	433
Fourth	50.3	77.1	764	81.2	589
Highest	71.1	85.8	918	89.1	787
Total	43.2	68.8	3,514	77.1	2,419

Table 15.8 Participation in decision making

Percent distribution of currently married women and currently married men age 15-49 by person who usually makes decisions about various issues, Tanzania DHS-MIS 2015-16

Decision	Mainly wife	Wife and husband jointly	Mainly husband	Someone else	Other	Total	Number of respondents
			WOMEN				
Own health care	15.7	56.4	27.5	0.4	0.0	100.0	8,210
Major household purchases	7.6	38.4	52.4	1.3	0.3	100.0	8,210
Visits to her family or relatives	12.5	45.9	40.8	0.6	0.1	100.0	8,210
			MEN				
Own health care	2.9	52.1	44.7	0.3	0.0	100.0	1,825
Major household purchases	5.0	54.6	39.5	0.8	0.1	100.0	1,825

Table 15.9.1 Women's participation in decision making by background characteristics

Percentage of currently married women age 15-49 who usually make specific decisions either by themselves or jointly with their husband, by background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Specific decisions			All three decisions	None of the three decisions	Number of women
	Woman's own health care	Making major household purchases	Visits to her family or relatives			
Age						
15-19	61.9	31.4	46.4	24.3	27.3	668
20-24	69.6	39.8	51.7	29.2	21.4	1,479
25-29	73.4	44.8	58.7	34.7	16.9	1,616
30-34	72.6	47.8	58.0	36.1	18.1	1,378
35-39	73.9	49.0	61.9	36.6	15.3	1,308
40-44	75.0	55.3	66.2	44.6	15.0	1,033
45-49	74.9	53.0	65.9	41.5	13.1	728
Employment (last 12 months)						
Not employed	64.2	37.4	52.8	26.6	22.7	1,350
Employed for cash	78.7	57.5	68.1	45.2	11.1	3,864
Employed not for cash	67.0	35.1	48.5	26.3	24.6	2,996
Number of living children						
0	64.0	40.1	48.9	26.8	23.3	668
1-2	73.3	45.7	58.3	36.0	17.1	2,990
3-4	73.2	47.6	59.5	36.6	17.7	2,384
5+	71.7	46.5	60.3	35.3	17.6	2,168
Residence						
Urban	76.2	53.6	64.4	39.8	12.6	2,535
Rural	70.2	42.6	55.7	33.2	20.3	5,675
Tanzania Mainland/Zanzibar						
Mainland	72.2	46.3	58.1	35.4	18.0	7,990
Urban	76.5	54.2	64.5	40.2	12.4	2,468
Rural	70.2	42.8	55.3	33.3	20.5	5,523
Zanzibar	68.8	35.9	68.6	27.7	14.6	220
Unguja	61.6	32.9	61.8	23.0	18.3	151
Pemba	84.5	42.4	83.5	38.1	6.5	69
Zone						
Western	68.0	35.6	46.2	25.7	22.2	879
Northern	71.3	37.9	54.1	28.0	21.5	906
Central	80.4	57.4	62.7	44.8	11.9	886
Southern Highlands	83.2	60.9	76.9	51.9	7.1	503
Southern	64.1	36.5	43.2	23.6	25.7	452
South West Highlands	66.0	57.6	76.0	51.4	16.8	765
Lake	68.3	33.7	51.2	25.2	23.6	2,192
Eastern	78.2	62.8	64.7	45.7	10.2	1,407
Zanzibar	68.8	35.9	68.6	27.7	14.6	220
Region						
Dodoma	84.5	77.9	72.9	61.0	7.3	383
Arusha	63.1	29.5	44.5	22.8	31.8	325
Kilimanjaro	85.7	54.2	70.4	43.2	7.8	195
Tanga	71.0	36.8	53.8	24.6	19.8	385
Morogoro	79.1	69.1	63.5	53.4	13.1	399
Pwani	75.1	59.2	56.8	38.4	13.6	184
Dar es Salaam	78.5	60.6	67.0	43.5	8.1	824
Lindi	57.5	27.9	41.3	16.7	30.1	191
Mtwara	69.0	42.7	44.6	28.7	22.5	261
Ruvuma	83.5	55.3	73.0	46.5	8.4	226
Iringa	74.5	60.4	79.9	55.6	10.3	143
Mbeya	66.1	59.8	82.6	54.9	14.5	490
Singida	76.5	58.9	64.8	48.3	14.3	243
Tabora	66.2	40.1	51.7	31.6	22.9	514
Rukwa	70.8	58.2	66.3	48.1	18.2	183
Kigoma	70.5	29.3	38.4	17.3	21.2	365
Shinyanga	77.5	47.6	67.7	39.1	12.0	344
Kagera	75.8	36.2	40.3	24.5	18.3	418
Mwanza	55.7	27.9	50.3	21.2	34.8	465
Mara	70.9	23.7	44.8	15.9	22.2	340
Manyara	77.9	25.9	45.6	17.6	16.6	260
Njombe	91.8	70.7	80.4	57.1	1.5	134
Katavi	56.1	44.6	60.2	39.5	26.4	92
Simiyu	79.0	31.8	57.5	23.5	16.6	312
Geita	53.1	36.6	49.2	28.7	35.4	313
Kaskazini Unguja	63.4	26.7	58.5	19.1	18.3	35
Kusini Unguja	57.0	30.1	58.3	21.0	20.4	20
Mjini Magharibi	61.9	35.8	63.7	24.8	17.9	96
Kaskazini Pemba	83.5	41.7	84.7	36.5	4.7	37
Kusini Pemba	85.7	43.2	82.2	40.0	8.7	32

(Continued…)

Table 15.9.1—*Continued*

Background characteristic	Specific decisions			All three decisions	None of the three decisions	Number of women
	Woman's own health care	Making major household purchases	Visits to her family or relatives			
Education						
No education	61.3	36.6	49.2	26.9	28.0	1,559
Primary incomplete	65.4	37.6	53.4	28.8	22.8	971
Primary complete	74.6	48.6	59.6	36.8	15.6	4,445
Secondary+	82.0	55.1	69.8	45.0	9.5	1,235
Wealth quintile						
Lowest	63.9	36.2	48.8	27.8	26.5	1,670
Second	69.4	42.3	55.5	33.2	21.0	1,523
Middle	72.8	43.2	57.6	33.2	18.0	1,541
Fourth	73.9	50.2	62.3	37.6	14.4	1,642
Highest	79.5	56.7	66.8	43.2	10.6	1,835
Total	72.1	46.0	58.4	35.2	17.9	8,210

Table 15.9.2 Men's participation in decision making by background characteristics

Percentage of currently married men age 15-49 who usually make specific decisions either alone or jointly with their wife, by background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Specific decisions		Both decisions	Neither of the two decisions	Number of men
	Man's own health	Making major household purchases			
Age					
15-19	*	*	*	*	14
20-24	95.0	91.4	88.1	1.7	165
25-29	96.0	94.1	91.7	1.6	323
30-34	98.3	94.0	92.7	0.5	339
35-39	96.3	93.9	92.1	1.9	398
40-44	97.7	96.4	94.9	0.8	302
45-49	96.9	93.8	91.6	0.9	283
Employment (last 12 months)					
Not employed	*	*	*	*	8
Employed for cash	97.3	94.3	92.7	1.1	1,618
Employed not for cash	91.8	91.9	86.8	3.1	196
Number of living children					
0	98.3	92.0	92.0	1.7	144
1-2	95.8	92.9	90.5	1.8	639
3-4	96.8	94.4	92.6	1.5	520
5+	97.4	95.7	93.5	0.4	521
Residence					
Urban	96.2	93.7	91.7	1.8	605
Rural	97.0	94.2	92.3	1.0	1,219
Tanzania Mainland/Zanzibar					
Mainland	96.7	94.3	92.3	1.3	1,788
Urban	96.2	94.1	92.1	1.9	593
Rural	97.0	94.4	92.4	1.0	1,194
Zanzibar	99.0	81.9	81.1	0.3	37
Unguja	98.6	75.8	74.8	0.4	26
Pemba	100.0	96.0	96.0	0.0	11
Zone					
Western	91.2	95.1	88.7	2.4	166
Northern	98.5	93.1	92.0	0.4	210
Central	100.0	99.1	99.1	0.0	200
Southern Highlands	94.9	94.7	91.5	1.9	118
Southern	95.2	95.1	93.6	3.3	108
South West Highlands	96.8	95.3	92.6	0.6	163
Lake	97.7	92.0	90.5	0.8	482
Eastern	96.0	94.1	92.5	2.4	340
Zanzibar	99.0	81.9	81.1	0.3	37
Region					
Dodoma	100.0	100.0	100.0	0.0	89
Arusha	100.0	95.1	95.1	0.0	73
Kilimanjaro	(97.2)	(93.8)	(92.5)	(1.6)	52
Tanga	98.0	91.0	89.0	0.0	85
Morogoro	(97.7)	(95.4)	(95.4)	(2.3)	84
Pwani	(97.1)	(94.7)	(91.7)	(0.0)	33
Dar es Salaam	95.2	93.6	91.6	2.8	223
Lindi	100.0	95.8	95.8	0.0	42
Mtwara	92.2	94.6	92.2	5.4	66
Ruvuma	94.3	95.2	90.7	1.2	59
Iringa	(97.9)	(96.0)	(93.9)	(0.0)	30
Mbeya	(97.3)	(93.4)	(90.7)	(0.0)	102
Singida	100.0	97.8	97.8	0.0	50
Tabora	86.5	93.1	83.6	4.0	102
Rukwa	100.0	100.0	100.0	0.0	41
Kigoma	98.6	98.4	96.9	0.0	64
Shinyanga	97.2	98.8	96.0	0.0	81
Kagera	100.0	98.5	98.5	0.0	95
Mwanza	98.2	98.9	97.1	0.0	112
Mara	95.6	90.5	88.3	2.2	69
Manyara	100.0	98.8	98.8	0.0	61
Njombe	92.8	92.4	90.5	5.3	28
Katavi	87.5	95.4	87.5	4.6	20
Simiyu	96.8	90.1	89.5	2.7	60
Geita	97.4	65.7	64.1	1.0	66
Kaskazini Unguja	(95.3)	(98.6)	(93.9)	(0.0)	6
Kusini Unguja	(97.5)	(40.3)	(40.3)	(2.5)	4
Mjini Magharibi	100.0	75.9	75.9	0.0	16
Kaskazini Pemba	(100.0)	(97.5)	(97.5)	(0.0)	6
Kusini Pemba	(100.0)	(94.3)	(94.3)	(0.0)	5

(Continued…)

Table 15.9.2—*Continued*

Background characteristic	Specific decisions: Man's own health	Specific decisions: Making major household purchases	Both decisions	Neither of the two decisions	Number of men
Education					
No education	92.8	92.3	88.7	3.6	187
Primary incomplete	97.9	93.9	92.6	0.8	243
Primary complete	97.1	94.9	93.0	0.9	1,038
Secondary+	97.0	92.5	90.8	1.4	357
Wealth quintile					
Lowest	97.1	94.8	93.4	1.4	365
Second	95.7	91.6	88.6	1.2	321
Middle	97.2	96.6	94.6	0.8	343
Fourth	96.7	95.6	93.3	1.0	376
Highest	97.0	91.7	90.6	1.9	420
Total	96.8	94.0	92.1	1.3	1,825

Notes: Total includes 1 man for whom information on employment is missing. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 15.10.1 Attitude toward wife beating: Women

Percentage of all women age 15-49 who agree that a husband is justified in hitting or beating his wife for specific reasons, by background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Burns the food	Argues with him	Goes out without telling him	Neglects the children	Refuses to have sexual intercourse with him	Percentage who agree with at least one specified reason	Number of women
Age							
15-19	20.2	42.0	39.9	47.0	26.0	59.1	2,904
20-24	18.2	42.2	40.9	49.5	28.0	59.8	2,483
25-29	19.8	40.1	40.7	46.8	30.4	56.2	2,125
30-34	19.8	41.2	39.9	47.0	32.3	55.6	1,752
35-39	19.8	41.8	41.1	47.8	32.7	57.8	1,641
40-44	24.0	44.0	42.9	47.9	34.9	57.8	1,364
45-49	21.7	44.3	43.1	50.4	36.8	59.6	997
Employment (last 12 months)							
Not employed	16.4	38.3	37.1	44.1	25.2	54.0	3,028
Employed for cash	16.9	37.2	36.2	44.4	26.6	53.3	6,197
Employed not for cash	27.9	51.9	50.9	56.0	40.3	68.3	4,036
Number of living children							
0	17.2	37.4	35.7	43.5	23.4	54.7	3,519
1-2	18.0	41.1	38.9	46.8	28.0	57.0	4,253
3-4	22.0	42.9	43.2	49.3	33.6	58.3	2,909
5+	25.7	48.7	48.6	54.1	40.7	64.0	2,585
Marital status							
Never married	16.2	35.5	33.9	41.8	21.0	52.9	3,353
Married or living together	21.6	44.7	44.0	50.1	33.8	60.2	8,210
Divorced/separated/widowed	21.3	41.8	39.9	49.1	32.9	57.8	1,703
Residence							
Urban	12.8	34.1	32.2	41.2	21.2	50.8	4,811
Rural	24.3	46.5	45.8	51.7	35.7	62.1	8,455
Tanzania Mainland/Zanzibar							
Mainland	20.6	42.6	41.4	48.6	30.9	58.7	12,862
Urban	13.1	34.5	32.5	41.8	21.4	51.4	4,675
Rural	25.0	47.2	46.4	52.4	36.3	62.9	8,187
Zanzibar	5.0	22.2	25.7	25.7	17.2	36.0	404
Unguja	5.3	24.4	28.4	28.7	19.2	40.8	293
Pemba	4.2	16.5	18.5	18.0	11.9	23.5	111
Zone							
Western	22.7	51.6	48.8	58.7	43.2	70.4	1,278
Northern	18.0	42.5	38.0	48.9	28.6	57.1	1,575
Central	31.4	51.7	52.0	58.4	43.9	64.5	1,336
Southern Highlands	14.3	32.8	28.2	34.4	21.8	43.3	807
Southern	20.9	43.0	41.4	44.1	33.0	58.5	700
South West Highlands	19.0	34.6	29.2	33.1	25.2	43.8	1,246
Lake	25.3	49.0	50.2	55.5	32.8	67.6	3,463
Eastern	11.8	31.2	32.0	41.8	21.4	50.9	2,457
Zanzibar	5.0	22.2	25.7	25.7	17.2	36.0	404
Region							
Dodoma	34.7	53.0	50.8	58.9	43.7	65.4	572
Arusha	14.5	52.3	43.8	56.7	29.3	68.8	508
Kilimanjaro	10.2	28.5	20.8	33.0	15.9	39.1	361
Tanga	24.4	42.6	42.6	51.4	34.5	57.9	706
Morogoro	18.0	35.6	39.2	46.3	28.5	54.3	636
Pwani	19.8	42.8	44.3	51.6	35.7	62.5	285
Dar es Salaam	7.7	27.2	26.7	38.1	15.9	47.3	1,536
Lindi	26.8	49.6	48.2	51.4	37.4	64.5	288
Mtwara	16.7	38.4	36.7	39.0	29.9	54.3	412
Ruvuma	16.9	41.7	38.2	45.3	28.4	53.8	360
Iringa	9.3	21.2	16.8	17.2	10.7	26.0	245
Mbeya	15.0	27.2	22.5	24.0	18.0	33.7	828
Singida	41.4	54.5	50.2	58.9	49.0	63.6	370
Tabora	20.3	51.8	48.5	58.1	39.5	66.5	737
Rukwa	25.0	47.1	38.7	49.0	37.6	63.2	288
Kigoma	25.9	51.3	49.1	59.5	48.3	75.7	542
Shinyanga	16.3	48.2	41.3	51.2	36.7	64.1	504
Kagera	29.2	44.8	46.7	52.0	31.1	68.2	612
Mwanza	19.0	42.4	41.5	43.7	23.4	53.2	859
Mara	41.2	66.6	70.2	80.1	52.0	88.7	523
Manyara	17.3	47.4	55.3	57.0	39.4	64.0	394
Njombe	15.8	31.1	24.3	35.8	23.6	45.4	203
Katavi	31.0	53.8	50.8	56.2	43.6	64.4	130
Simiyu	24.9	48.7	63.7	66.7	28.2	78.9	479
Geita	23.8	48.0	44.2	47.7	31.4	62.0	485
Kaskazini Unguja	7.7	32.4	38.0	34.9	28.1	52.1	56
Kusini Unguja	5.4	25.6	32.5	30.0	20.0	43.8	35
Mjini Magharibi	4.6	22.0	25.0	26.7	16.6	37.1	201
Kaskazini Pemba	4.5	18.3	21.0	21.5	13.3	26.2	56
Kusini Pemba	3.8	14.6	15.9	14.4	10.4	20.8	55

(Continued…)

Table 15.10.1—*Continued*

Background characteristic	Burns the food	Argues with him	Goes out without telling him	Neglects the children	Refuses to have sexual intercourse with him	Percentage who agree with at least one specified reason	Number of women
Education							
No education	29.3	51.1	51.3	55.4	41.9	65.0	1,946
Primary incomplete	27.7	51.3	51.1	57.3	39.2	67.7	1,559
Primary complete	21.5	44.3	42.9	49.8	32.9	61.0	6,652
Secondary+	7.8	26.6	24.9	34.4	13.7	42.7	3,109
Wealth quintile							
Lowest	30.1	54.8	54.4	59.6	42.8	69.8	2,246
Second	25.8	45.3	47.8	51.8	36.9	61.9	2,274
Middle	25.6	49.0	47.3	53.8	38.0	64.9	2,329
Fourth	17.0	41.2	38.7	45.7	27.1	56.4	2,822
Highest	9.3	28.0	25.7	36.0	16.5	45.1	3,596
Total	20.2	42.0	40.9	47.9	30.5	58.0	13,266

Note: Total includes 3 women for whom information on employment is missing.

Table 15.10.2 Attitude toward wife beating: Men

Percentage of all men age 15-49 who agree that a husband is justified in hitting or beating his wife for specific reasons, by background characteristics, Tanzania DHS-MIS 2015-16

Background characteristic	Burns the food	Argues with him	Goes out without telling him	Neglects the children	Refuses to have sexual intercourse with him	Percentage who agree with at least one specified reason	Number of men
Age							
15-19	11.1	32.8	29.0	39.1	18.2	49.6	932
20-24	6.1	27.1	23.5	35.8	14.8	44.9	576
25-29	3.7	22.0	17.3	28.1	12.1	37.9	482
30-34	3.7	15.8	18.3	21.5	7.7	29.6	410
35-39	4.5	19.6	21.9	27.9	12.4	34.4	466
40-44	4.9	19.2	19.7	23.1	10.1	30.8	334
45-49	4.8	23.0	21.4	25.1	15.2	33.2	314
Employment (last 12 months)							
Not employed	5.6	22.7	20.8	31.9	9.5	40.7	388
Employed for cash	6.1	24.2	21.4	29.3	13.5	37.6	2,679
Employed not for cash	9.0	27.0	32.2	38.6	18.8	51.0	434
Number of living children							
0	8.8	28.8	24.8	35.4	15.6	45.2	1,600
1-2	3.6	20.3	19.2	27.2	11.7	35.3	805
3-4	4.2	19.8	21.6	27.2	11.9	34.1	570
5+	5.8	22.8	23.0	25.9	13.6	35.5	539
Marital status							
Never married	8.9	29.3	24.9	35.3	16.2	45.7	1,510
Married or living together	4.6	19.9	20.2	25.9	11.6	33.5	1,825
Divorced/separated/widowed	3.4	30.5	29.8	41.3	16.1	50.3	180
Residence							
Urban	4.4	21.6	19.3	28.0	10.0	37.3	1,251
Rural	7.5	26.1	24.6	32.3	15.9	40.9	2,263
Tanzania Mainland/Zanzibar							
Mainland	6.5	24.6	22.9	30.9	13.8	39.7	3,425
Urban	4.4	21.5	19.4	27.9	9.9	37.2	1,224
Rural	7.7	26.4	24.8	32.6	16.0	41.1	2,201
Zanzibar	1.8	18.8	17.1	23.4	12.0	35.5	89
Unguja	1.8	16.3	10.7	19.9	9.1	30.3	62
Pemba	1.9	24.2	31.4	31.4	18.4	47.3	28
Zone							
Western	7.1	30.2	20.8	30.3	12.7	42.5	322
Northern	5.1	20.8	19.4	26.7	10.2	35.0	415
Central	17.1	37.2	33.3	44.2	23.2	49.8	372
Southern Highlands	5.1	23.9	18.4	33.4	13.8	41.0	234
Southern	2.5	9.1	11.5	16.5	7.1	21.8	180
South West Highlands	8.1	30.9	20.9	35.1	22.2	46.1	308
Lake	7.1	25.3	29.6	33.8	14.4	43.4	933
Eastern	1.3	17.9	16.4	23.3	8.5	32.0	659
Zanzibar	1.8	18.8	17.1	23.4	12.0	35.5	89
Region							
Dodoma	17.9	44.7	38.9	52.4	25.0	55.9	175
Arusha	11.2	19.7	22.4	32.7	11.1	38.8	129
Kilimanjaro	1.1	23.4	17.4	29.5	11.7	37.1	110
Tanga	3.1	19.9	18.5	20.5	8.7	30.9	176
Morogoro	1.0	22.6	20.0	27.9	9.3	37.2	143
Pwani	1.3	17.5	14.6	22.3	8.9	26.8	68
Dar es Salaam	1.4	16.5	15.5	22.0	8.2	31.2	448
Lindi	2.9	9.0	7.6	14.7	6.7	24.2	66
Mtwara	2.3	9.1	13.7	17.6	7.3	20.5	115
Ruvuma	7.9	32.0	28.3	45.8	20.8	53.2	112
Iringa	4.4	15.3	9.4	23.2	10.3	32.8	71
Mbeya	9.8	39.9	26.2	43.5	25.5	54.3	202
Singida	19.0	41.8	34.4	49.7	25.9	61.6	106
Tabora	8.7	28.0	22.0	31.2	13.7	41.9	199
Rukwa	6.3	18.4	13.6	24.3	20.8	39.6	71
Kigoma	4.4	33.8	18.8	28.9	11.1	43.4	124
Shinyanga	2.6	21.6	16.6	26.5	8.0	38.3	142
Kagera	12.5	26.2	29.2	33.5	12.4	43.0	198
Mwanza	9.1	32.1	31.7	34.4	13.3	41.5	225
Mara	6.2	15.6	51.3	49.2	17.4	63.0	114
Manyara	13.3	17.6	21.1	22.0	16.6	24.4	91
Njombe	0.0	17.9	9.2	20.3	3.1	25.3	50
Katavi	1.6	4.3	5.1	9.0	5.9	12.3	35
Simiyu	5.8	26.7	33.1	35.2	24.6	44.1	136
Geita	1.8	22.8	16.7	25.7	12.8	33.9	118
Kaskazini Unguja	3.2	10.2	15.9	15.9	6.7	23.5	13
Kusini Unguja	0.0	7.6	7.9	18.7	3.3	22.8	9
Mjini Magharibi	1.7	20.3	9.6	21.5	11.1	34.2	40
Kaskazini Pemba	2.1	26.9	36.2	32.1	22.7	55.1	14
Kusini Pemba	1.7	21.4	26.3	30.6	13.9	39.0	13

(Continued…)

Table 15.10.2—*Continued*

Background characteristic	Burns the food	Argues with him	Goes out without telling him	Neglects the children	Refuses to have sexual intercourse with him	Percentage who agree with at least one specified reason	Number of men
Education							
No education	8.8	24.3	20.6	30.9	13.7	38.9	283
Primary incomplete	8.3	29.4	28.8	35.8	18.8	46.9	568
Primary complete	6.3	26.7	25.4	32.1	15.6	41.2	1,673
Secondary+	4.8	18.0	15.3	25.5	7.8	33.1	990
Wealth quintile							
Lowest	14.7	33.1	31.0	38.1	22.0	47.0	598
Second	4.8	25.6	26.4	31.1	15.1	42.6	575
Middle	6.4	23.5	21.5	30.1	15.1	38.1	659
Fourth	6.2	25.9	25.3	34.8	14.3	42.6	764
Highest	2.2	17.7	13.8	22.7	6.2	31.7	918
Total	6.4	24.5	22.7	30.7	13.8	39.6	3,514

Note: Total includes 8 men for whom information on employment is missing.

Table 15.11 Indicators of women's empowerment

Percentage of currently married women age 15-49 who participate in all decision making and percentage who disagree with all of the reasons justifying wife beating, according to value on each of the indicators of women's empowerment, Tanzania DHS-MIS 2015-16

Empowerment indicator	Percentage who participate in all decision making	Percentage who disagree with all reasons justifying wife beating	Number of women
Number of decisions in which women participate[1]			
0	na	27.8	1,470
1-2	na	34.9	3,847
3	na	52.5	2,893
Number of reasons for which wife beating is justified[2]			
0	46.4	na	3,269
1-2	31.1	na	1,693
3-4	25.3	na	1,945
5	27.2	na	1,303

na = Not applicable
[1] See Table 15.9.1 for the list of decisions.
[2] See Table 15.10.1 for the list of reasons.

Table 15.12 Current use of contraception by women's empowerment

Percent distribution of currently married women age 15-49 by current contraceptive method, according to selected indicators of women's status, Tanzania DHS-MIS 2015-16

			Modern methods							
Empowerment indicator	Any method	Any modern method[1]	Female sterili-sation	Male sterili-sation	Temporary modern female methods[2]	Male condom	Any traditional method	Not currently using	Total	Number of women
Number of decisions in which women participate[3]										
0	28.5	24.5	2.6	0.1	20.5	1.2	4.0	71.5	100.0	1,470
1-2	36.9	31.2	3.3	0.0	26.0	1.9	5.7	63.1	100.0	3,847
3	45.4	36.9	3.8	0.1	29.4	3.6	8.5	54.6	100.0	2,893
Number of reasons for which wife beating is justified[4]										
0	41.9	33.6	3.6	0.0	26.6	3.4	8.3	58.1	100.0	3,269
1-2	37.2	31.6	3.0	0.1	26.2	2.2	5.7	62.8	100.0	1,693
3-4	35.1	29.9	3.5	0.1	24.7	1.6	5.2	64.9	100.0	1,945
5	35.7	31.6	3.1	0.0	27.4	1.1	4.1	64.3	100.0	1,303
Total	38.4	32.0	3.4	0.1	26.2	2.4	6.4	61.6	100.0	8,210

Note: If more than one method is used, only the most effective method is considered in this tabulation.
[1] Female sterilisation, male sterilisation, pill, IUD, injectables, implants, male condom, female condom, emergency contraception, standard days method, lactational amenorrhoea method, and other modern methods
[2] Pill, IUD, injectables, implants, female condom, emergency contraception, standard days method, lactational amenorrhoea method, and other modern methods
[3] See Table 15.9.1 for the list of decisions.
[4] See Table 15.10.1 for the list of reasons.

Table 15.13 Ideal number of children and unmet need for family planning by women's empowerment

Mean ideal number of children for women age 15-49 and percentage of currently married women age 15-49 with an unmet need for family planning, by indicators of women's empowerment, Tanzania DHS-MIS 2015-16

Empowerment indicator	Mean ideal number of children[1]	Number of women	Percentage of currently married women with an unmet need for family planning[2]			Number of currently married women
			For spacing	For limiting	Total	
Number of decisions in which women participate[3]						
0	5.5	1,385	19.5	4.9	24.4	1,470
1-2	5.2	3,668	16.5	6.5	23.0	3,847
3	5.0	2,777	12.3	7.6	19.8	2,893
Number of reasons for which wife beating is justified[4]						
0	4.5	5,349	13.5	7.3	20.8	3,269
1-2	4.6	2,783	17.1	6.2	23.3	1,693
3-4	5.1	2,835	18.5	5.7	24.2	1,945
5	5.2	1,763	14.3	6.6	20.8	1,303
Total	4.7	12,731	15.5	6.6	22.1	8,210

[1] Mean excludes respondents who gave non-numeric responses.
[2] Figures for unmet need correspond to the revised definition described in Bradley et al. 2012.
[3] Restricted to currently married women. See Table 15.9.1 for the list of decisions.
[4] See Table 15.10.1 for the list of reasons.

Table 15.14 Reproductive health care by women's empowerment

Percentage of women age 15-49 with a live birth in the five years preceding the survey who received antenatal care, delivery assistance, and postnatal care from health personnel for the most recent birth, according to indicators of women's empowerment, Tanzania DHS-MIS 2015-16

Empowerment indicator	Percentage receiving antenatal care from a skilled provider[1]	Percentage receiving delivery care from a skilled provider[1]	Percentage with a postnatal checkup in the first two days after birth[2]	Number of women with a child born in the last five years
Number of decisions in which women participate[3]				
0	96.8	55.6	27.5	1,060
1-2	98.0	65.1	34.4	2,721
3	98.6	72.9	42.7	1,906
Number of reasons for which wife beating is justified[4]				
0	98.3	72.5	39.8	2,816
1-2	98.0	69.4	36.3	1,468
3-4	97.5	63.5	33.9	1,687
5	97.8	56.8	29.4	1,109
Total	98.0	67.3	36.1	7,079

[1] "Skilled provider" includes doctor/assistant medical officer, clinical officer, assistant clinical officer, nurse/midwife, or mother and child health aide (MCH).
[2] Includes women who received a postnatal checkup from a doctor/assistant medical officer, clinical officer, assistant clinical officer, nurse/midwife, or MCH aide in the first two days after the birth. Includes women who gave birth in a health facility and those who did not give birth in a health facility.
[3] Restricted to currently married women. See Table 15.9.1 for the list of decisions.
[4] See Table 15.10.1 for the list of reasons.

Table 15.15 Early childhood mortality rates by indicators of women's empowerment

Infant, child, and under-5 mortality rates for the 10-year period preceding the survey, by indicators of women's empowerment, Tanzania DHS-MIS 2015-16

Empowerment indicator	Infant mortality (${}_1q_0$)	Child mortality (${}_4q_1$)	Under-5 mortality (${}_5q_0$)
Number of decisions in which women participate[1]			
0	47	29	74
1-2	46	24	69
3	51	26	76
Number of reasons for which wife beating is justified[2]			
0	53	27	79
1-2	46	29	74
3-4	53	25	77
5	52	32	83

[1] Restricted to currently married women. See Table 15.9.1 for the list of decisions.
[2] See Table 15.10.1 for the list of reasons.

FEMALE GENITAL CUTTING 16

Key Findings

- ***Prevalence of female genital cutting/mutilation (FGC/M) among women:*** Ten percent of women age 15-49 have been circumcised, a decline from 18% in the 1996 TDHS. FGC/M prevalence in rural areas is more than double that in urban areas. The highest percentages of circumcised women are in Manyara and Dodoma regions (58% and 47%, respectively).
- ***Aspects of female circumcision:*** Eighty-one percent of circumcised women reported that some flesh was removed from their genitals, and 7% were infibulated. Eighty-six percent of women's circumcisions were performed by traditional agents.
- ***Age at circumcision:*** Thirty-five percent of circumcised women age 15-49 were circumcised before age 1 and 28% were circumcised at age 13 or older.
- ***Prevalence among girls age 0-14:*** According to their mothers, less than 1% of girls age 0-14 are circumcised. Girls are more likely to be circumcised if their mothers were circumcised.
- ***Opinions about FGC/M:*** Among the 86% of women who have heard of FGC/M, 95% believe that the practice is not required by their religion and that the practice should not be continued.

This chapter explores female genital cutting or mutilation (FGC/M), also known as female circumcision. FGC/M involves cutting some part of the clitoris or labia for non-therapeutic reasons, usually as part of a rite of passage into adolescence. The practice is widely acknowledged as a violation of children and women's rights, and it has the potential to cause serious medical complications. The Tanzanian Special Provision Act, a 1998 amendment to the penal code, specifically prohibits FGC/M (National Legislative Bodies, 1998). However, while the practice has been outlawed for almost two decades, it is still prevalent in many areas in Tanzania. FGC/M is considered compulsory in some communities, but in others it is optional.

The 2015-16 TDHS-MIS is the fourth DHS survey to collect information on FGC/M in Tanzania. In the 2015-16 TDHS-MIS, all female respondents age 15-49 were asked if they knew about female circumcision. Respondents who had ever heard of female circumcision were asked additional questions, including whether they were circumcised and, if so, their age at circumcision, the type of circumcision, and the person who performed the procedure. They were also asked questions regarding the circumcision status of their daughters age 0-14 and about their attitudes towards the practice.

16.1 KNOWLEDGE OF FGC/M

Knowledge

Female respondents were asked if they had ever heard of female circumcision.

Sample: Women age 15-49

Although the Government of Tanzania officially discourages the tradition of FGC/M, it is still performed in some parts of the country. The government, in collaboration with various stakeholders, is committed to eradicating female genital mutilation or cutting by creating awareness of the practice and its negative consequences.

Overall, 86% of women age 15-49 in Tanzania have heard about female circumcision (**Table 16.1**).

Trends: FGC/M awareness has increased only slightly since the 2010 TDHS, which reported that 82% of women were aware of the practice.

Patterns by background characteristics

- Ninety-five percent of women in urban areas have heard about female circumcision, as compared with 81% of women in rural areas.
- Knowledge of FGC/M is similar in both Zanzibar and Tanzania Mainland (87% and 86%, respectively).
- Knowledge of the practice is highest in the Northern (98%), Central (97%), and Eastern zones (96%) but lowest in the South West Highlands Zone (67%).
- Women's knowledge of FGC/M increases steadily with increasing education, from 71% among women with no education to 97% among those with secondary or higher education. The relationship with household wealth is also positive, with FGC/M awareness increasing from 75% among women in the lowest quintile to 97% among those in the highest quintile.

16.2 PREVALENCE OF AND AGE AT CIRCUMCISION AMONG WOMEN

To assess FGC/M prevalence, women age 15-49 were asked if they had ever been circumcised. Circumcised women were further asked about the type of circumcision, their age at the time they were circumcised, and the person who performed the circumcision.

16.2.1 Prevalence and Type of FGC/M

Prevalence of FGC/M

Female respondents were asked whether they had ever been circumcised.

Sample: Women age 15-49

Type of and age at circumcision

Women who were circumcised were asked about:

- the type of circumcision (cut, no flesh removed; cut, flesh removed; sewn closed [infibulation]) and
- age at circumcision .

Sample: Women age 15-49 who reported having been circumcised

One in 10 women in Tanzania have been circumcised **(Table 16.2)**. The most common type of circumcision involved cutting and removal of flesh, with 81% of circumcised women reporting this type of circumcision. Seven percent of circumcised women reported that their genital area had been sewn closed (infibulated) **(Figure 16.1)**. Infibulation is the type of FG/M that is of greatest concern because of the possible harm to health (Yoder, 2013). The majority of circumcised women (86%) reported that a traditional practitioner had performed the circumcision (data not shown in table).

Trends: The prevalence of FGC/M in Tanzania has decreased over the past two decades, dropping from 18% among women age 15-49 in the 1996 TDHS to 10% in the 2015-16 TDHS-MIS **(Figure 16.2)**. The decline is particularly notable among younger women: FGC/M prevalence among women age 15-29 fell by more than half between 1996 and 2015. Although the decrease in FGC/M prevalence among younger age cohorts may be the result of an actual decline in the practice, it also may reflect, at least in part, underreporting of the practice given that it has been prohibited by law since 1998.

Patterns by background characteristics

- The prevalence of circumcision increases with age, from 5% among women age 15-19 to 19% among women age 45-49 **(Figure 16.3)**.
- Women in rural areas (13%) are more than twice as likely to be circumcised as women in urban areas (5%).
- Close to half of women in the Central Zone and more than one fifth of women in the Northern Zone are circumcised, while the FGC/M rate is 6% or less in other zones.

Figure 16.1 Type of FGC/M

Percentage of circumcised women age 15-49

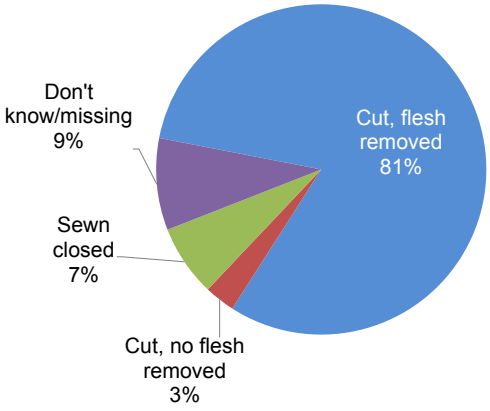


Figure 16.2 Trends in FGC/M

Percentage of women age 15-49 who are circumcised

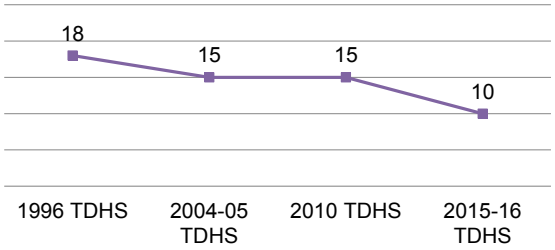
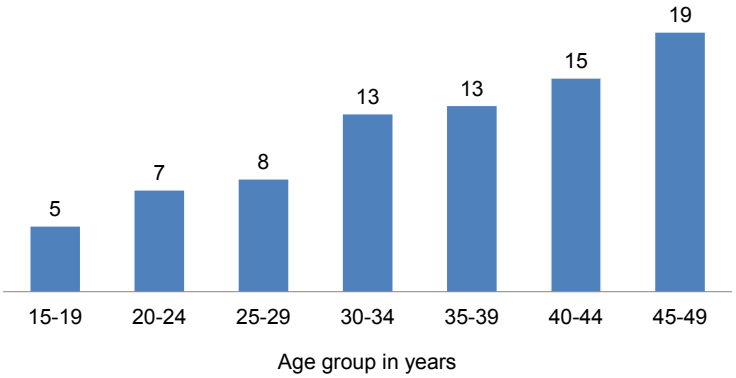


Figure 16.3 FGC/M by age

Percentage of women age 15-49 who are circumcised



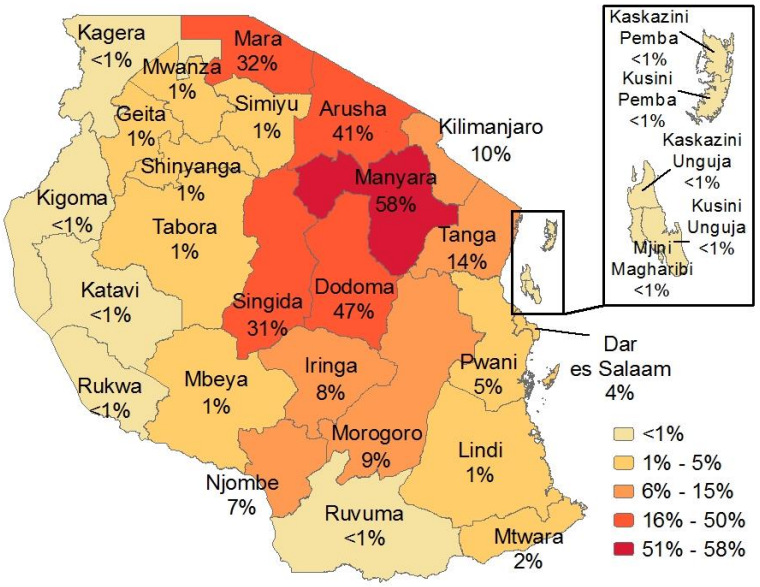
- At the regional level, Manyara has the highest FGC/M prevalence (58%), followed by Dodoma (47%) and Arusha (41%). **(Figure 16.4)**.

16.2.2 Age at Circumcision

In Tanzania, female circumcision is performed throughout childhood. However, women were most likely to report that they were circumcised when they were babies or after they reached puberty. **Table 16.3** shows that more than one-third of women age 15-49 who reported being circumcised (35%) were less than age 1 when the circumcision was performed, while 28% were circumcised at age 13 or older.

***Figure 16.4* Prevalence of FGC/M by region**

Percentage of women age 15-49 who are circumcised



Trends: Between the 2004-05 TDHS and the 2015-16 TDHS-MIS, the proportion of circumcised women age 15-24 who were circumcised at age 13 or older increased from 25% to 36%, suggesting that the age at which girls are being circumcised is increasing.

Patterns by background characteristics

- Women in the Central Zone were more likely to be circumcised before puberty than women in other zones, with over half (52%) circumcised before their first birthday.
- In the Southern Highlands Zone, 2% of women were under age 1 when they were circumcised, while 63% were circumcised at age 13 or older.

16.3 Prevalence of and Age at Circumcision for Girls Age 0-14

Information on the circumcision status of women age 15-49 reflects the outcomes of circumcision practices over a nearly 50-year period before the survey. To obtain insights into the extent to which young girls are continuing to be circumcised, women interviewed in the 2015-16 TDHS-MIS who had daughters were asked if any of their daughters born in 2000 or later had been circumcised.

Prevalence of FGC/M among girls age 0-14

Women were asked about the circumcision status of their living daughters, age 0-14.

Sample: Girls age 0-14

Overall, according to mothers' reports, less than 1% of girls age 0-14 were circumcised **(Table 16.4)**. Almost all circumcised girls have mothers who are also circumcised (data not shown). It is worth noting that, the low prevalence rate among young girls has to be interpreted with caution since it represents the current rather than the final FGC/M status for this age group. As mentioned above, more than one-quarter of women age 15-49 were circumcised at age 13 or older, so it is still possible that a significant number of girls age 0-14 may yet be circumcised. Some women also may have been reluctant to report that their daughters were circumcised because the practice is outlawed.

16.4 OPINIONS ABOUT FGC/M

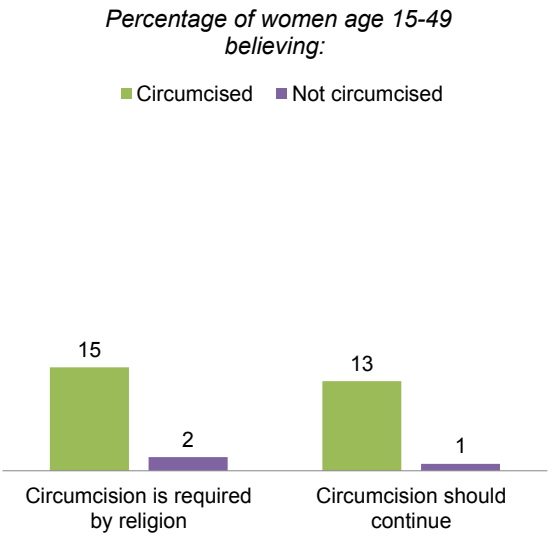
Women who had heard about FGC/M were asked their opinion on whether or not their religion requires female circumcision and whether the practice should be continued. Eight in 10 circumcised women (82%) believe that FGC/M is not required by their religion **(Table 16.5)**. Eighty-four percent believe that the practice should not be continued **(Table 16.6)**.

Trends: Overall, the percentage of women who believe that female circumcision should not be continued has increased from 91% to 95% since the 2004-05 TDHS.

Patterns by background characteristics

- Women who are circumcised are much more likely to believe that FGC/M is required by their religion (15%) than uncircumcised women (2%). The same pattern is observed with regard to women's opinion about continuation of the practice; 13% of circumcised women think FGC/M should be continued, as compared with 1% of uncircumcised women **(Figure 16.5)**.
- By region, Manyara region has the highest percentages of women who believe that FGC/M is required by their religion and that FGC/M should continue (15% and 12%, respectively).
- The percentages of women who believe that FGC/M is required by their religion and who want the practice to continue are highest among those with no education (6% and 9%, respectively) and those in the lowest wealth quintile (5% and 8%, respectively).

Figure 16.5 **Attitudes about FGC/M by circumcision status**



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- **Table 16.5 Opinion of women about whether circumcision is required by religion**
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Table 16.1 Knowledge of female circumcision

Percentage of women age 15-49 who have heard of female circumcision, according to background characteristics, Tanzania 2015-16

Background characteristic	Have heard of female circumcision	Number of women
Age		
15-19	82.1	2,904
20-24	88.3	2,483
25-29	88.2	2,125
30-34	87.0	1,752
35-39	85.6	1,641
40-44	85.3	1,364
45-49	87.6	997
Residence		
Urban	95.1	4,811
Rural	80.9	8,455
Tanzania Mainland/Zanzibar		
Mainland	86.0	12,862
Urban	95.1	4,675
Rural	80.8	8,187
Zanzibar	86.8	404
Unguja	92.2	293
Pemba	72.6	111
Zone		
Western	68.0	1,278
Northern	97.7	1,575
Central	96.6	1,336
Southern Highlands	86.1	807
Southern	86.5	700
South West Highlands	67.2	1,246
Lake	82.8	3,463
Eastern	96.1	2,457
Zanzibar	86.8	404
Region		
Dodoma	96.9	572
Arusha	98.0	508
Kilimanjaro	98.9	361
Tanga	97.0	706
Morogoro	95.0	636
Pwani	91.8	285
Dar es Salaam	97.3	1,536
Lindi	84.5	288
Mtwara	87.9	412
Ruvuma	82.0	360
Iringa	89.3	245
Mbeya	75.4	828
Singida	94.4	370
Tabora	78.7	737
Rukwa	50.3	288
Kigoma	53.5	542
Shinyanga	86.2	504
Kagera	69.9	612
Mwanza	83.7	859
Mara	99.3	523
Manyara	98.3	394
Njombe	89.6	203
Katavi	52.1	130
Simiyu	84.3	479
Geita	75.0	485
Kaskazini Unguja	86.2	56
Kusini Unguja	94.6	35
Mjini Magharibi	93.5	201
Kaskazini Pemba	70.0	56
Kusini Pemba	75.2	55
Education		
No education	71.3	1,946
Primary incomplete	75.7	1,559
Primary complete	87.7	6,652
Secondary+	97.0	3,109
Wealth quintile		
Lowest	75.1	2,246
Second	75.6	2,274
Middle	82.3	2,329
Fourth	92.6	2,822
Highest	96.9	3,596
Tanzania	86.1	13,266

Table 16.2 Prevalence of female circumcision

Percentage of women age 15-49 who have been circumcised, and percent distribution of circumcised women by type of circumcision, according to background characteristics, Tanzania 2015-16

Background characteristic	Percentage of women circumcised	Number of women	Type of circumcision				Total	Number of circumcised women
			Cut, no flesh removed	Cut, flesh removed	Sewn closed	Don't know/ missing		
Age								
15-19	4.7	2,904	3.9	77.8	6.7	11.6	100.0	136
20-24	7.3	2,483	3.1	79.5	6.0	11.4	100.0	181
25-29	8.1	2,125	4.9	79.5	6.7	9.0	100.0	171
30-34	12.8	1,752	2.1	82.5	4.9	10.5	100.0	225
35-39	13.4	1,641	2.1	87.5	4.2	6.3	100.0	220
40-44	15.4	1,364	4.4	76.0	8.6	11.0	100.0	210
45-49	18.7	997	2.7	83.1	9.4	4.8	100.0	186
Residence								
Urban	5.3	4,811	1.9	77.1	9.8	11.2	100.0	257
Rural	12.7	8,455	3.6	82.0	5.8	8.6	100.0	1,073
Tanzania Mainland/ Zanzibar								
Mainland	10.3	12,862	3.2	81.1	6.6	9.1	100.0	1,329
Urban	5.5	4,675	1.9	77.1	9.8	11.2	100.0	257
Rural	13.1	8,187	3.6	82.0	5.8	8.6	100.0	1,072
Zanzibar	0.1	404	*	*	*	*	100.0	0
Unguja	0.1	293	*	*	*	*	100.0	0
Pemba	0.0	111	*	*	*	*	0.0	0
Zone								
Western	0.5	1,278	*	*	*	*	100.0	6
Northern	21.7	1,575	3.5	82.3	3.0	11.1	100.0	341
Central	45.6	1,336	1.5	80.7	7.1	10.6	100.0	609
Southern Highlands	4.1	807	0.0	95.3	4.7	0.0	100.0	33
Southern	1.1	700	*	*	*	*	100.0	8
South West Highlands	0.6	1,246	*	*	*	*	100.0	7
Lake	5.4	3,463	6.5	86.1	4.7	2.7	100.0	187
Eastern	5.6	2,457	5.0	71.2	14.8	8.9	100.0	138
Zanzibar	0.1	404	*	*	*	*	100.0	0
Region								
Dodoma	46.7	572	1.8	77.1	12.2	8.9	100.0	267
Arusha	41.0	508	3.6	82.7	0.5	13.1	100.0	208
Kilimanjaro	10.1	361	(2.7)	(82.4)	(8.2)	(6.6)	100.0	36
Tanga	13.7	706	3.6	81.3	6.4	8.7	100.0	97
Morogoro	9.1	636	(12.0)	(72.8)	(15.3)	(0.0)	100.0	58
Pwani	5.3	285	*	*	*	*	100.0	15
Dar Es Salaam	4.2	1,536	(0.0)	(66.0)	(17.9)	(16.0)	100.0	65
Lindi	0.5	288	*	*	*	*	100.0	2
Mtwara	1.6	412	*	*	*	*	100.0	6
Ruvuma	0.0	360	*	*	*	*	0.0	0
Iringa	7.5	245	(0.0)	(100.0)	(0.0)	(0.0)	100.0	18
Mbeya	0.7	828	*	*	*	*	100.0	6
Singida	30.9	370	3.4	71.7	7.2	17.7	100.0	114
Tabora	0.6	737	*	*	*	*	100.0	4
Rukwa	0.4	288	*	*	*	*	100.0	1
Kigoma	0.3	542	*	*	*	*	100.0	2
Shinyanga	0.7	504	*	*	*	*	100.0	3
Kagera	0.0	612	*	*	*	*	0.0	0
Mwanza	1.1	859	*	*	*	*	100.0	10
Mara	32.0	523	6.4	87.4	3.4	2.8	100.0	167
Manyara	57.7	394	0.4	89.4	1.1	9.1	100.0	227
Njombe	7.2	203	(0.0)	(89.4)	(10.6)	(0.0)	100.0	15
Katavi	0.2	130	*	*	*	*	100.0	0
Simiyu	0.7	479	*	*	*	*	100.0	3
Geita	0.7	485	*	*	*	*	100.0	3
Kaskazini Unguja	0.0	56	*	*	*	*	0.0	0
Kusini Unguja	0.3	35	*	*	*	*	100.0	0
Mjini Magharibi	0.1	201	*	*	*	*	100.0	0
Kaskazini Pemba	0.0	56	*	*	*	*	0.0	0
Kusini Pemba	0.0	55	*	*	*	*	0.0	0
Tanzania	10.0	13,266	3.2	81.1	6.6	9.1	100.0	1,329

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 16.3 Age at circumcision

Percent distribution of circumcised women age 15-49 by age at circumcision, according to background characteristics, Tanzania 2015-16

Background characteristic	Age at circumcision								Total	Number of circumcised women
	<1	1-4	5-6	7-8	9-10	11-12	13+	Don't know/missing		
Age										
15-19	21.4	2.4	4.4	4.6	16.1	14.8	36.2	0.0	100.0	136
20-24	34.2	4.8	5.5	6.4	5.6	5.8	36.1	1.4	100.0	181
25-29	43.0	0.8	5.4	7.9	7.2	9.5	25.4	0.6	100.0	171
30-34	36.9	4.4	4.0	5.3	14.7	9.1	22.1	3.5	100.0	225
35-39	33.8	1.2	3.6	14.1	9.0	5.9	31.2	1.2	100.0	220
40-44	39.6	1.1	7.1	5.2	11.7	11.5	20.9	3.0	100.0	210
45-49	34.9	1.5	6.5	7.8	12.3	10.1	24.9	2.1	100.0	186
Residence										
Urban	34.9	2.5	8.9	13.3	10.1	6.5	20.8	3.0	100.0	257
Rural	35.5	2.3	4.3	6.1	11.1	9.9	29.2	1.6	100.0	1,073
Tanzania Mainland/ Zanzibar										
Urban	35.4	2.3	5.2	7.5	10.9	9.3	27.6	1.8	100.0	1,329
Rural	34.9	2.5	8.9	13.3	10.1	6.5	20.8	3.0	100.0	257
Zanzibar	35.5	2.3	4.3	6.1	11.1	9.9	29.2	1.6	100.0	1,072
Unguja	*	*	*	*	*	*	*	*	100.0	0
Pemba	*	*	*	*	*	*	*	*	100.0	0
Zone										
Western	*	*	*	*	*	*	*	*	100.0	6
Northern	33.0	0.9	3.7	3.5	7.8	8.5	39.5	3.0	100.0	341
Central	51.5	3.9	7.2	9.9	12.2	5.5	8.7	1.2	100.0	609
Southern Highlands	1.5	0.0	2.0	8.4	9.1	10.1	62.7	6.2	100.0	33
Southern	*	*	*	*	*	*	*	*	100.0	8
South West Highlands	*	*	*	*	*	*	*	*	100.0	7
Lake	2.9	0.0	1.2	2.5	10.3	24.3	58.2	0.4	100.0	187
Eastern	24.1	3.2	6.3	12.6	15.3	6.6	28.8	3.0	100.0	138
Zanzibar	*	*	*	*	*	*	*	*	100.0	0
Total	35.4	2.3	5.2	7.5	10.9	9.3	27.6	1.8	100.0	1,329

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 16.4 Prevalence of circumcision and age at circumcision: girls age 0-14

Percent distribution of girls age 0-14 by age at circumcision, and percentage of girls circumcised according to current age, Tanzania 2015-16

Current age of girls	Age at circumcision				Percentage not circumcised	Total	Number of girls	Percentage circumcised
	<1	1-4	5-9	10-14				
0-4	0.0	0.2	na	na	99.8	100.0	4,680	0.2
5-9	0.0	0.2	0.1	na	99.7	100.0	3,971	0.3
10-14	0.1	0.1	0.2	0.2	99.4	100.0	3,145	0.6
Total	0.1	0.2	0.1	0.1	99.6	100.0	11,795	0.4

Note: The circumcision status of girls is reported by their mothers.
na = Not applicable due to censoring

Table 16.5 Opinions of women about whether circumcision is required by religion

Percent distribution of women age 15-49 who have heard of female circumcision by opinion on whether their religion requires female circumcision, according to background characteristics, Tanzania 2015-16

Background characteristic	Required	Not required	Don't know/missing	Total	Number of women who have heard of female circumcision
Female circumcision status					
Circumcised	15.3	81.8	2.9	100.0	1,329
Not circumcised	1.5	96.8	1.7	100.0	10,087
Age					
15-19	2.8	94.6	2.6	100.0	2,384
20-24	2.9	95.3	1.8	100.0	2,193
25-29	3.4	95.0	1.6	100.0	1,874
30-34	3.4	95.6	1.0	100.0	1,524
35-39	2.9	95.2	1.8	100.0	1,405
40-44	3.0	95.1	1.8	100.0	1,164
45-49	3.4	95.1	1.5	100.0	873
Residence					
Urban	1.6	97.0	1.4	100.0	4,575
Rural	4.1	93.8	2.1	100.0	6,842
Tanzania Mainland/ Zanzibar					
Urban	3.2	95.0	1.9	100.0	11,066
Rural	1.7	96.9	1.4	100.0	4,448
Zanzibar	4.2	93.6	2.2	100.0	6,618
Unguja	0.5	98.9	0.6	100.0	351
Pemba	0.5	98.7	0.8	100.0	270
Urban	0.2	99.8	0.0	100.0	81
Zone					
Western	1.1	97.6	1.4	100.0	870
Northern	5.8	92.8	1.4	100.0	1,539
Central	8.6	88.0	3.4	100.0	1,291
Southern Highlands	3.7	94.1	2.2	100.0	695
Southern	1.5	95.9	2.5	100.0	605
South West Highlands	3.1	93.9	3.0	100.0	836
Lake	1.4	96.9	1.7	100.0	2,868
Eastern	1.8	97.1	1.0	100.0	2,360
Zanzibar	0.5	98.9	0.6	100.0	351
Region					
Dodoma	8.6	88.5	2.8	100.0	554
Arusha	9.6	87.9	2.5	100.0	497
Kilimanjaro	1.6	97.9	0.5	100.0	357
Tanga	5.1	93.7	1.1	100.0	685
Morogoro	1.5	97.8	0.6	100.0	604
Pwani	1.8	97.6	0.6	100.0	261
Dar Es Salaam	2.0	96.7	1.3	100.0	1,494
Lindi	1.1	98.1	0.8	100.0	243
Mtwara	1.8	94.5	3.7	100.0	362
Ruvuma	2.7	95.2	2.1	100.0	295
Iringa	4.7	93.4	1.9	100.0	218
Mbeya	3.7	93.3	2.9	100.0	624
Singida	1.3	93.9	4.8	100.0	349
Tabora	0.6	98.1	1.3	100.0	580
Rukwa	1.6	94.5	3.9	100.0	145
Kigoma	2.1	96.5	1.4	100.0	290
Shinyanga	0.4	98.0	1.7	100.0	434
Kagera	0.3	99.1	0.7	100.0	428
Mwanza	0.3	97.8	1.9	100.0	719
Mara	4.5	94.8	0.7	100.0	520
Manyara	15.0	82.1	2.8	100.0	388
Njombe	4.2	93.2	2.6	100.0	182
Katavi	0.3	98.3	1.4	100.0	68
Simiyu	0.8	96.9	2.3	100.0	403
Geita	2.0	94.6	3.4	100.0	364
Kaskazini Unguja	0.4	99.4	0.3	100.0	48
Kusini Unguja	0.4	99.2	0.4	100.0	34
Mjini Magharibi	0.6	98.4	1.0	100.0	188
Kaskazini Pemba	0.5	99.5	0.0	100.0	40
Kusini Pemba	0.0	100.0	0.0	100.0	41
Education					
No education	5.9	90.5	3.5	100.0	1,388
Primary incomplete	3.7	94.3	2.0	100.0	1,181
Primary complete	3.2	95.0	1.8	100.0	5,833
Secondary+	1.4	97.7	1.0	100.0	3,014
Wealth quintile					
Lowest	4.9	92.2	2.9	100.0	1,687
Second	4.0	92.9	3.1	100.0	1,718
Middle	3.9	94.1	2.0	100.0	1,915
Fourth	2.8	96.0	1.2	100.0	2,612
Highest	1.6	97.4	1.1	100.0	3,484
Total 15-49	3.1	95.1	1.8	100.0	11,416

Table 16.6 Opinions of women about whether the practice of circumcision should continue

Percent distribution of women age 15-49 who have heard of female circumcision by their opinion on whether the practice of circumcision should be continued, according to background characteristics, Tanzania 2015-16

Background characteristic	Continued	Not continued	Depends	Don't know	Total	Number of women who have heard of female circumcision
Female circumcision status						
Circumcised	13.2	84.4	1.1	1.3	100.0	1,329
Not circumcised	1.3	96.4	0.8	1.5	100.0	10,087
Age						
15-19	2.6	95.4	0.5	1.5	100.0	2,384
20-24	3.0	94.9	0.8	1.2	100.0	2,193
25-29	2.5	95.0	0.7	1.9	100.0	1,874
30-34	3.1	94.4	1.2	1.4	100.0	1,524
35-39	2.2	95.2	1.1	1.4	100.0	1,405
40-44	2.3	95.3	0.7	1.7	100.0	1,164
45-49	3.2	94.5	1.2	1.1	100.0	873
Residence						
Urban	0.9	97.7	0.6	0.8	100.0	4,575
Rural	3.9	93.2	1.0	1.9	100.0	6,842
Tanzania Mainland/ Zanzibar						
Urban	2.8	94.9	0.8	1.5	100.0	11,066
Rural	0.9	97.7	0.6	0.8	100.0	4,448
Zanzibar	4.0	93.0	1.0	2.0	100.0	6,618
Unguja	0.2	99.5	0.1	0.1	100.0	351
Pemba	0.3	99.4	0.2	0.1	100.0	270
Urban	0.1	99.7	0.0	0.2	100.0	81
Zone						
Western	2.1	95.4	1.3	1.3	100.0	870
Northern	5.3	93.1	1.3	0.4	100.0	1,539
Central	5.3	92.0	0.8	2.0	100.0	1,291
Southern Highlands	3.2	92.0	2.9	1.9	100.0	695
Southern	1.0	98.0	0.4	0.5	100.0	605
South West Highlands	2.9	90.8	0.2	6.0	100.0	836
Lake	2.2	96.0	0.6	1.2	100.0	2,868
Eastern	0.9	97.6	0.5	1.0	100.0	2,360
Zanzibar	0.2	99.5	0.1	0.1	100.0	351
Region						
Dodoma	2.7	95.1	0.6	1.6	100.0	554
Arusha	10.9	87.7	1.0	0.4	100.0	497
Kilimanjaro	0.7	99.0	0.0	0.3	100.0	357
Tanga	3.7	93.9	2.1	0.3	100.0	685
Morogoro	1.4	96.8	0.2	1.5	100.0	604
Pwani	0.6	98.2	0.0	1.3	100.0	261
Dar Es Salaam	0.8	97.8	0.7	0.8	100.0	1,494
Lindi	0.5	98.4	0.7	0.4	100.0	243
Mtwara	1.4	97.8	0.3	0.6	100.0	362
Ruvuma	1.6	92.6	4.1	1.7	100.0	295
Iringa	3.6	93.6	0.7	2.1	100.0	218
Mbeya	3.3	89.6	0.0	7.1	100.0	624
Singida	1.8	95.5	0.8	2.0	100.0	349
Tabora	2.2	95.3	1.9	0.5	100.0	580
Rukwa	2.0	94.2	0.4	3.4	100.0	145
Kigoma	1.8	95.4	0.0	2.8	100.0	290
Shinyanga	2.5	96.4	0.8	0.4	100.0	434
Kagera	0.6	97.3	0.3	1.8	100.0	428
Mwanza	1.2	97.3	0.8	0.8	100.0	719
Mara	3.7	96.3	0.0	0.0	100.0	520
Manyara	12.2	84.3	1.0	2.4	100.0	388
Njombe	5.3	89.0	3.5	2.2	100.0	182
Katavi	1.5	94.8	2.1	1.6	100.0	68
Simiyu	2.4	95.4	0.7	1.6	100.0	403
Geita	3.5	91.5	1.1	4.0	100.0	364
Kaskazini Unguja	0.2	99.8	0.0	0.0	100.0	48
Kusini Unguja	0.0	100.0	0.0	0.0	100.0	34
Mjini Magharibi	0.3	99.2	0.3	0.2	100.0	188
Kaskazini Pemba	0.0	100.0	0.0	0.0	100.0	40
Kusini Pemba	0.3	99.4	0.0	0.3	100.0	41
Education						
No education	8.5	87.4	1.7	2.4	100.0	1,388
Primary incomplete	2.8	94.4	1.2	1.6	100.0	1,181
Primary complete	2.4	95.0	0.8	1.9	100.0	5,833
Secondary+	0.6	98.8	0.3	0.3	100.0	3,014
Wealth quintile						
Lowest	7.7	87.4	1.8	3.1	100.0	1,687
Second	3.8	93.2	0.9	2.1	100.0	1,718
Middle	2.6	95.0	0.7	1.7	100.0	1,915
Fourth	1.4	97.0	0.4	1.2	100.0	2,612
Highest	0.7	98.1	0.7	0.5	100.0	3,484
Total 15-49	2.7	95.0	0.8	1.5	100.0	11,416

DOMESTIC VIOLENCE 17

Key Findings

- ***Experience of violence from anyone:*** Forty percent of women age 15-49 have ever experienced physical violence, and 17% have ever experienced sexual violence. Although experience of violence is higher among married women, particularly formerly married women, 16% of never-married women have also ever experienced physical violence and 9% have ever experienced sexual violence.
- ***Marital control:*** Nearly three quarters of ever-married women experienced marital control by their husbands/partners, including 29% whose husband/partner demonstrated at least three of the five specified behaviours.
- ***Spousal violence:*** Half of all ever-married women have ever experienced spousal violence, most commonly physical violence (39%) and emotional violence (36%); 14% have experienced sexual violence.
- ***Change over time:*** There has been no change in women's experience of either physical violence or emotional violence since the 2010 TDHS. As it was in the 2010 TDHS, spousal violence is much higher in the Mainland than in Zanzibar.
- ***Injuries due to spousal violence:*** Seven in 10 ever-married women who experienced spousal violence suffered injuries, usually cuts, bruises, or aches; notably, however, 15% also reported deep wounds, broken bones or teeth, and other serious injuries.
- ***Help seeking:*** More than half of women (54%) who have experienced physical or sexual violence have sought help. While most women seek help from their families, 9% have sought help from the police.

Domestic violence is a violation of basic human rights and has documented adverse health, demographic, and economic consequences for women, children, and societies. Women bear the brunt of domestic violence, including the associated health and psychological burdens. Furthermore, women may be socialised to accept, tolerate, or even rationalise domestic violence. The 2015-16 TDHS-MIS included an optional module of questions on women's experience of domestic violence. In accordance with the World Health Organization's guidelines on the ethical collection of information on domestic violence (WHO, 2001), only one eligible woman per household was randomly selected for this module, and the module was not administered if privacy could not be obtained. In total, 9,322 women were eligible for domestic violence questions. Only 2% of women eligible for the domestic violence module could not be successfully interviewed.

17.1 Measurement of Violence

In the 2015-16 TDHS-MIS, information was obtained from never-married women on their experience of violence committed by anyone and from ever-married women on their experience of violence committed by their current and former husbands/partners and by anyone else. Specifically, violence committed by the current husband/partner among currently married women and by the most recent husband/partner among formerly married women was measured by asking all ever-married women if their husbands/partners ever did the following to them:

Physical spousal violence: push you, shake you, or throw something at you; slap you; twist your arm or pull your hair; punch you with his fist or with something that could hurt you; kick you, drag you, or beat you up; try to choke you or burn you on purpose; threaten or attack you with a knife, gun, or any other weapon

Sexual spousal violence: physically force you to have sexual intercourse with him even when you did not want to; physically force you to perform any other sexual acts you did not want to; force you with threats or in any other way to perform sexual acts you did not want to

Emotional spousal violence: say or do something to humiliate you in front of others; threaten to hurt or harm you or someone close to you; insult you or make you feel bad about yourself

In addition, information was obtained from all women (married and unmarried) about physical violence committed by anyone (other than a current or most recent husband/partner) since they were age 15 by asking if anyone had hit, slapped, kicked, or done something else to hurt them physically. Similarly, information was collected from all women about experiences of sexual violence committed by anyone (other than a current or most recent husband/partner) at any time in their life, as a child or as an adult, by asking if they were forced in any way to have sexual intercourse or perform any other sexual acts when they did not want to.

17.2 Experience of Physical Violence from Anyone

Physical violence by anyone

Percentage of women who have experienced any physical violence (committed by a spouse or anyone else) since age 15 and in the 12 months preceding the survey.

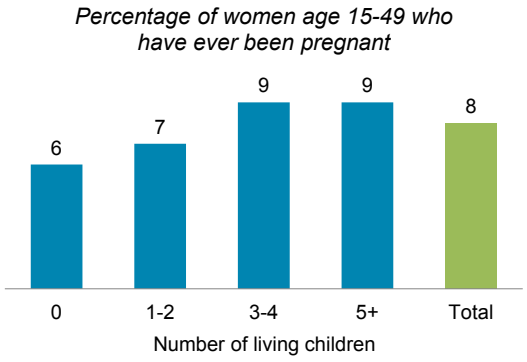
Sample: Women age 15-49

17.2.1 Prevalence of Physical Violence

Forty percent of women age 15-49 have experienced one or more acts of physical violence since age 15; 22% experienced physical violence in the past 12 months**.** A larger percentage of women reported experiencing physical violence "sometimes" in the past year (17%) than "often" (6%) in the past year **(Table 17.1)**.

Overall, 8% of women who have ever been pregnant have experienced physical violence during pregnancy **(Table 17.2 and Figure 17.1)**.

***Figure 17.1* Violence during pregnancy by number of living children**



Trends: The percentage of women who have experienced physical violence since age 15 has not changed in Tanzania Mainland since the 2010 TDHS; but it has increased from 10% to 14% in Zanzibar.

Patterns by background characteristics

- The proportion of women who have experienced physical violence since age 15 ranges from 6% in Kusini Pemba region and 8% in Kaskazini Pemba region to 60% in Shinyanga and 61% in Mara. By zone, violence is more common in the Lake and Western zones than in other zones.
- Sixteen percent of never-married women have experienced physical violence since age 15, as compared with 63% of divorced, separated, or widowed women and 44% of currently married women.
- The likelihood of experiencing physical violence generally increases with age and number of living children. About 50% of women with five or more children have ever experienced physical violence, compared with 21% of women with no children.
- Experience of physical violence declines sharply with increasing wealth and education.

17.2.2 Perpetrators of Physical Violence

Ever-married women who have experienced physical violence since age 15 most commonly report husbands/partners as perpetrators of the violence **(Table 17.3)**. Sixty-three percent of ever-married women who had ever experienced physical violence reported their current/most recent husbands/partners as the perpetrator, and 37% reported former husbands/partners as the perpetrator.

Never-married women who have ever experienced physical violence since age 15 most commonly report the perpetrator to be a teacher (23%) or a relative. Between 13% and 15% of never-married women report the violence to be perpetrated by one or more of the following: sibling, mother/stepmother, other relative, or father/stepfather.

17.3 Experience of Sexual Violence

Sexual violence

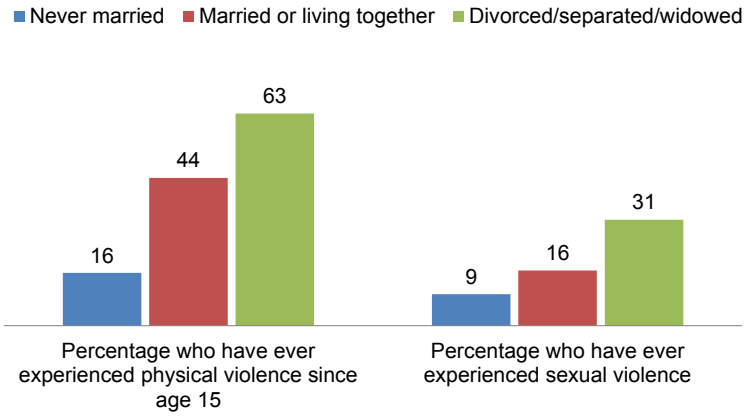
Percentage of women who have experienced any form of sexual violence (committed by a spouse or anyone else) ever and in the 12 months preceding the survey.

Sample: Women age 15-49

17.3.1 Prevalence of Sexual Violence

Seventeen percent of women age 15-49 have ever experienced sexual violence and 9% have experienced sexual violence in the past 12 months **(Table 17.4)**. Seven percent of women age 18 or older experienced sexual violence before age 18, and 2% of all women age 15-49 experienced sexual violence before age 15 **(Table 17.5)**.

Figure 17.2 **Women's experience of physical or sexual violence by marital status**



Patterns by background characteristics

- The proportion of women ever experienced sexual violence is highest in the Western (22%) and Lake (21%) zones and lowest in Zanzibar (9%) and the Northern Zone (11%).

- Experience of sexual violence is more common among currently married women (16%) and women who are divorced, separated, or widowed (31%); nonetheless, almost 1 in 10 never-married women (9%) also report to have experienced sexual violence **(Figure 17.2)**.

17.3.2 Perpetrators of Sexual Violence

The findings from the 2015-16 TDHS-MIS show that sexual violence is frequently committed by persons with whom the woman has a close personal relationship **(Table 17.6)**. Forty-eight percent of ever-married women who experienced sexual violence reported their current/most recent husbands/partners as the perpetrators, while 40% reported their former husbands/partners as perpetrators. Forty-two percent of never-married women who experienced sexual violence reported current/former boyfriends as perpetrators and nearly one third (31%) reported friends/acquaintances as perpetrators; 7% reported strangers as perpetrators.

17.4 Experience of Different Forms of Violence

Physical violence and sexual violence may not occur in isolation; rather, women may experience a combination of different forms of violence. Overall, 44% of women age 15-49 have ever experienced either physical or sexual violence **(Table 17.7)**. Twenty-seven percent of women experienced physical violence only, while 4% of women experienced sexual violence only. Thirteen percent of women experienced both physical and sexual violence.

17.5 Marital Control

Marital control

Percentage of women whose current husbands/partners (if currently married) or most recent husbands/partners (if formerly married) demonstrate at least one of the following sets of controlling behaviors: is jealous or angry if she talks to other men; frequently accuses her of being unfaithful; does not permit her to meet her female friends; tries to limit her contact with her family; and insists on knowing where she is at all times.
Sample: Ever-married women age 15-49

Nearly three fourths of ever-married women experienced some degree of marital control **(Table 17.8)**. Twenty-nine percent of women experienced three or more types of marital controlling behaviours by their husbands/partners. The most common controlling behaviours women experienced from their husbands/partners were jealousy or anger if they talked to other men (60%) and insisting on knowing where they are at all times (57%).

Trends: Women's reports of marital control behaviours by husbands/partners generally declined in the period between the 2010 TDHS and the 2015-16 TDHS-MIS. The proportion of women reporting that their husbands/partners display at least three controlling behaviours fell from 35% in 2010 TDHS to 29% in 2015-16 TDHS-MIS, while the percentage of women whose husbands did not display any controlling behaviours increased slightly from 23% to 26% during the same period.

Patterns by background characteristics

- Experience of at least three forms of marital control behaviour is higher among women on the Mainland (30%) than in Zanzibar (18%). By region, experience of three or more types of marital control behaviours varies greatly, from 40% in Mara to 9% in Kusini Pemba.

- Rural women are more likely not to experience any of the controlling behaviours (29%) than urban women (20%).

- Women with secondary or higher education are more likely to experience marital control behaviours (79%) than women with no education (69%). Experience of marital control behaviours also tends to increase with increasing wealth. Similar marital control patterns by education and wealth were seen in the 2010 TDHS.

- Women who are afraid of their husbands/partners are more likely to experience marital control than women who are never afraid of their husbands/partners. Fifty-three percent of women who are afraid of their husband/partner most of the time reported experiencing at least three forms of controlling behaviours, as compared with 18% of women who are never afraid of their husbands/partners.

17.6 SPOUSAL VIOLENCE

Spousal violence

Percentage of women who have experienced any of the specified acts of physical, sexual, or emotional violence perpetrated by their current husband/partner (if currently married) or most recent husbands/partners (if formerly married), ever and in the 12 months preceding the survey.

Sample: Ever-married women age 15-49

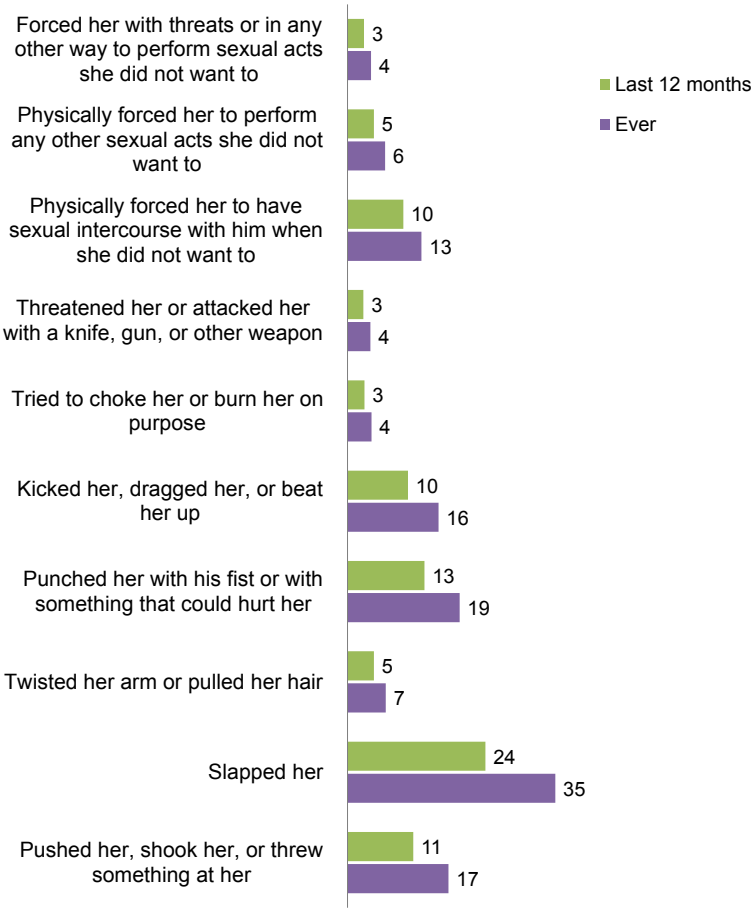
Fifty percent of all ever-married women reported to have ever experienced physical, sexual, or emotional violence **(Table 17.9)**. Thirty-eight percent experienced spousal violence in the past 12 months either sometimes (24%) or often (13%).

Thirty-nine percent of women experienced physical violence. Slapping was the most common act of physical violence, reported by 35% of ever-married women. Four percent of women have been choked or burned on purpose by their spouse and have been threatened or attacked with a knife, gun, or other weapon (**Figure 17.3**).

Fourteen percent of ever-married women have experienced one or more acts of sexual violence, the most common being physically forced to have sexual intercourse by their spouse when they did not want to. Thirty-six percent of women reported to have ever experienced emotional violence; 34% reported that their husbands/partners had insulted them or made them feel bad about themselves.

Figure 17.3 Types of spousal violence

Percentage of ever-married women age 15-49 who have ever experienced specfic acts of violence by their husband/partner



Among women who have been married more than once, spousal violence could have been perpetrated by an earlier husband/partner. To capture the totality of women's experience of spousal physical or sexual violence, ever-married women were also asked about physical and sexual violence committed by their former husbands/partners. Overall, 46% of ever-married women have experienced physical or sexual violence by any husband/partner, and 30% experienced such violence in the 12 months preceding the survey **(Tables 17.9 and 17.10)**.

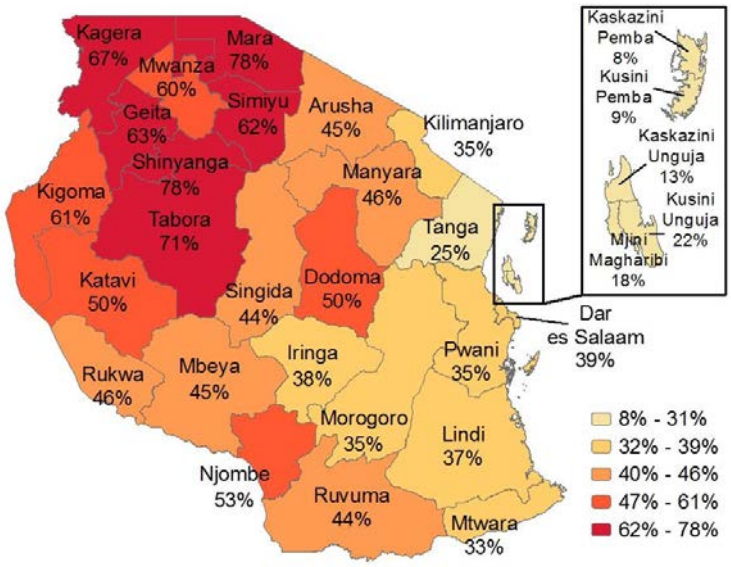
Trends: The prevalence of spousal physical violence and emotional violence did not change in the period between the 2010 TDHS and the 2015-16 TDHS-MIS: in both surveys, 39% of ever-married women had experienced spousal physical violence, and 36% had experienced spousal emotional violence. However, experience of both spousal physical and emotional violence in the 12 months preceding each survey declined over this period by 6 percentage for spousal physical violence (from 33% to 27%) and 4 percentage for spousal emotional violence (from 32% to 28%). The estimate for sexual violence cannot be compared between the two surveys because some of the acts included to measure sexual violence were not the same.

Patterns by background characteristics

- Experience of spousal violence varies from 78% in both Mara and Shinyanga regions to 8% in Kaskazini Pemba and 9% in Kusini Pemba and is lower in urban areas (45%) than in rural areas (52%) **(Table 17.11)**. Compared to Zanzibar (15%), spousal violence is much higher in Tanzania Mainland (50%). (**Figure 17.4**)

Figure 17.4 Spousal violence by region

Percentage of ever-married women age 15-49 who have ever experienced physical, sexual, or emotional violence committed by their husband/partner



- Spousal violence is substantially higher among women who are divorced, separated, or widowed (67%) than among currently married women (46%). It does not vary substantially by age but increases with number of living children, from 35% among women with no children to 56% among women with five or more children.

- Spousal violence is more common among women who are employed—whether employed for cash (48%) or not for cash (58%)—than among women who are not employed (38%). Women who have at least secondary education are less likely than women in other education groups to have experienced violence.

Patterns by husband's characteristics and empowerment indicators

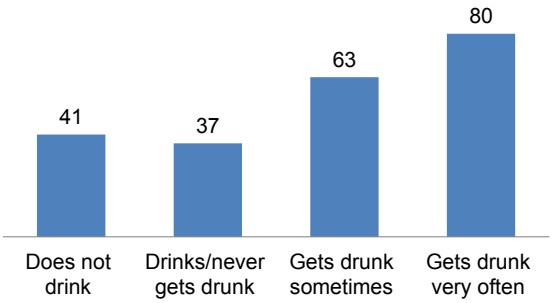
- Women's experience of spousal violence varies as much by the educational level of their husband/partner as it does by their own education, declining sharply from 53% among women whose husband/partner has no education to 36% among those whose husband/partner has secondary or higher education **(Table 17.12)**. There is, however, little variation in the experience of spousal violence by education differential between spouses.

- Women's experience of spousal violence varies greatly by their spouses' alcohol consumption; 80% of women whose husbands/partners get drunk very often have ever experienced spousal violence. Notably, however, experience of spousal violence is very high at 41%, even among women whose husbands do not drink (**Figure 17.5**).

- The likelihood of spousal violence increases substantially with the number of marital control behaviours the husband/partner displays; experience of spousal violence is approximately twice as common among women whose husband/partner displays five controlling behaviours (90%) as among women whose husband/partner displays one or two controlling behaviours (47%).

***Figure 17.5* Spousal violence by husband's alcohol consumption**

Percentage of ever-married women who have ever experienced spousal (physical, sexual, or emotional) violence



- Spousal violence is also substantially more common among women who are afraid of their husbands/partners and whose father beat their mother. Differences in the experience of spousal violence according to women's decision-making capacity and attitudes towards wife beating are less striking.

17.7 Injuries due to Spousal Violence

Injuries due to spousal violence

Percentage of women who have the following types of injuries from spousal violence: cuts, bruises, or aches; eye injuries, sprains, dislocations, or burns; or deep wounds, broken bones, broken teeth, or any other serious injury.

Sample: Ever-married women age 15-49 who have experienced physical or sexual violence committed by their current husbands/partners (if currently married) or most recent husbands/partners (if formerly married)

Overall, 70% of women who have ever experienced physical or sexual violence have experienced one or more types of injuries **(Table 17.14)**. The most common type of injury is cuts, bruises, or aches; however, 15% of women have experienced deep wounds, broken bones, broken teeth, or another serious injury from spousal violence. The prevalence of all types of injuries among women who have experienced spousal physical or sexual violence is higher in the 2015-16 TDHS-MIS than it was in the 2010 TDHS.

17.8 Violence Initiated by Women against Husbands/Partners

Three percent of ever-married women report committing physical violence against their husbands/partners when men were not already beating or physically hurting them; 1% reported having done so in the 12 months preceding the survey **(Table 17.15)**. There has been no apparent change in violence initiated by women since the 2010 TDHS.

Women who have themselves experienced spousal physical violence are more likely to report ever initiated spousal violence (5%) than other women (1%) **(Table 17.15)**.

17.9 RESPONSE TO VIOLENCE

17.9.1 Help Seeking Behaviour to Stop the Violence

More than half of women (54%) who have experienced physical or sexual violence from anyone have sought help from someone. One third of women (34%) have never sought help or told anyone **(Table 17.17)**.

Trends: Among women who have ever experienced physical or sexual violence, the percentage of women who sought help has increased by almost 20% since 2010.

Patterns by background characteristics

- Women who have experienced both physical and sexual violence are more likely to seek help (64%) than women who have experienced physical violence only (53%) or sexual violence only (29%) (**Figure 17.6**).
- By region, help seeking is most common in Iringa (72%) and Morogoro (70%).
- Help seeking in response to violence is higher among formerly or currently married women, women with more children, and women who are employed for cash.

17.9.2 Sources for Help

Among those who sought help, the most common source for help was the woman's own family (56%) irrespective of the type of violence **(Table 17.18)**. Among women who experienced physical violence only, the next most common source was their husband/partner's family, and among women who experienced sexual violence only, the next most common source was a friend (18%). Neighbours are also common sources for help (14%).

Nine percent of women who sought help for violence reported the police as a source, an increase from 6% in the 2010 TDHS. The percentage seeking help from the police was higher among women who experienced physical violence only (9%) than among women who experienced sexual violence only (5%).

***Figure 17.6* Help seeking by type of violence experienced**

Percentage of women age 15-49 who have experienced physical or sexual violence who sought help

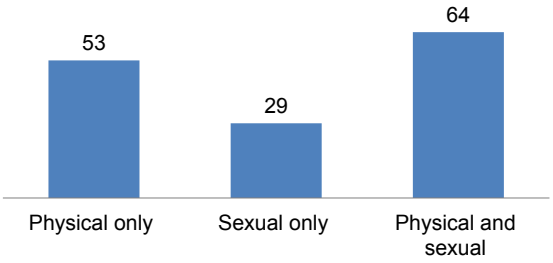


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Table 17.1 Experience of physical violence

Percentage of women age 15-49 who have experienced physical violence since age 15 and percentage who have experienced physical violence during the 12 months preceding the survey, by background characteristics, Tanzania 2015-16

Background characteristic	Percentage who have experienced physical violence since age 15[1]	Percentage who have experienced physical violence in the past 12 months			Number of women
		Often	Sometimes	Often or sometimes[2]	
Age					
15-19	21.9	2.7	10.0	12.7	1,911
15-17	19.5	1.9	10.8	12.7	1,111
18-19	25.2	3.9	8.8	12.6	800
20-24	38.0	5.8	18.2	24.1	1,753
25-29	46.0	7.2	21.5	29.0	1,511
30-39	44.6	6.9	18.5	25.6	2,428
40-49	47.7	6.0	14.7	20.7	1,719
Residence					
Urban	35.5	5.1	14.5	19.6	3,354
Rural	41.8	6.1	17.6	23.8	5,968
Tanzania Mainland/ Zanzibar					
Mainland	40.3	5.9	16.9	22.9	9,036
Urban	36.0	5.2	14.9	20.1	3,260
Rural	42.7	6.3	18.1	24.5	5,776
Zanzibar	14.4	1.4	2.4	3.9	286
Unguja	17.2	1.2	3.1	4.3	207
Pemba	7.1	2.0	0.8	2.7	79
Zone					
Western	49.3	7.3	22.5	29.8	893
Northern	28.7	3.6	12.4	16.0	1,108
Central	37.9	6.6	13.7	20.3	941
Southern Highlands	35.7	4.8	14.0	19.0	566
Southern	33.8	3.0	13.4	16.4	493
South West Highlands	40.2	8.9	20.4	29.5	887
Lake	52.3	7.5	23.1	30.7	2,457
Eastern	30.5	3.5	10.0	13.5	1,691
Zanzibar	14.4	1.4	2.4	3.9	286
Region					
Dodoma	42.7	8.9	13.0	21.9	402
Arusha	34.1	5.7	20.3	26.0	351
Kilimanjaro	23.8	1.8	11.7	13.5	255
Tanga	27.4	3.0	7.2	10.2	502
Morogoro	27.5	5.0	9.0	14.3	429
Pwani	31.5	2.2	7.7	9.9	197
Dar es Salaam	31.6	3.1	10.8	13.9	1,065
Lindi	32.5	3.4	15.7	19.2	203
Mtwara	34.7	2.7	11.8	14.5	290
Ruvuma	38.6	1.5	13.8	15.4	255
Iringa	29.5	9.8	13.6	24.0	173
Mbeya	38.8	9.7	20.6	30.6	587
Singida	31.2	4.9	14.0	18.9	264
Tabora	54.3	8.3	24.7	33.0	512
Rukwa	42.0	8.5	19.1	27.6	207
Kigoma	42.6	6.0	19.6	25.6	381
Shinyanga	59.8	8.8	25.4	34.2	358
Kagera	56.5	8.3	19.8	28.1	434
Mwanza	45.9	8.6	19.8	28.7	602
Mara	61.2	6.2	36.1	42.6	373
Manyara	37.3	4.8	14.6	19.4	275
Njombe	38.2	4.5	14.9	19.4	138
Katavi	45.1	4.8	22.1	27.0	93
Simiyu	41.6	3.8	20.7	24.5	342
Geita	51.2	8.3	18.9	27.5	348
Kaskazini Unguja	11.8	0.8	3.0	3.8	39
Kusini Unguja	20.2	2.9	2.2	5.3	26
Mjini Magharibi	18.2	1.0	3.2	4.2	142
Kaskazini Pemba	7.9	2.2	0.9	3.1	40
Kusini Pemba	6.3	1.7	0.6	2.3	39
Marital status					
Never married	15.6	0.8	5.2	6.0	2,220
Married or living together	43.7	5.9	21.0	27.1	5,873
Divorced/separated/ widowed	62.7	13.8	15.2	29.0	1,228

(Continued…)

Table 17.1—*Continued*

Background characteristic	Percentage who have experienced physical violence since age 15[1]	Percentage who have experienced physical violence in the past 12 months			Number of women
		Often	Sometimes	Often or sometimes[2]	
Number of living children					
0	20.7	2.8	8.3	11.0	2,367
1-2	40.6	6.2	18.0	24.2	2,974
3-4	49.0	7.2	20.6	28.1	2,097
5+	50.7	7.2	19.8	27.0	1,884
Employment					
Employed for cash	40.0	6.3	15.5	21.9	4,402
Employed not for cash	47.9	6.8	21.8	28.7	2,864
Not employed	26.8	3.0	11.3	14.3	2,056
Education					
No education	46.5	7.4	19.4	26.9	1,349
Primary incomplete	46.3	8.7	19.8	28.7	1,042
Primary complete	42.0	5.8	17.8	23.6	4,715
Secondary+	26.8	3.2	10.4	13.7	2,215
Wealth quintile					
Lowest	46.5	7.6	20.1	27.8	1,601
Second	45.1	6.4	19.1	25.6	1,600
Middle	42.0	7.2	18.4	25.7	1,645
Fourth	36.1	5.4	15.1	20.5	1,967
Highest	32.5	3.4	12.5	15.9	2,510
Total 15-49	39.5	5.7	16.5	22.3	9,322

[1] Includes violence in the past 12 months. For women who were married before age 15 and who reported physical violence by a spouse, the violence could have occurred before age 15.
[2] Includes women for whom frequency in the past 12 months is not known

Table 17.2 Experience of violence during pregnancy

Among women age 15-49 who have ever been pregnant, percentage who have ever experienced physical violence during pregnancy, by background characteristics, Tanzania 2015-16

Background characteristic	Percentage who experienced violence during pregnancy	Number of women who have ever been pregnant
Age		
15-19	8.5	534
15-17	7.6	155
18-19	8.9	379
20-24	8.7	1,373
25-29	8.1	1,405
30-39	8.1	2,350
40-49	7.6	1,689
Residence		
Urban	5.8	2,439
Rural	9.3	4,912
Tanzania Mainland/ Zanzibar		
Mainland	8.2	7,173
Urban	5.8	2,391
Rural	9.5	4,782
Zanzibar	4.1	178
Unguja	4.4	123
Pemba	3.4	55
Zone		
Western	12.6	749
Northern	3.6	836
Central	12.2	778
Southern Highlands	6.3	475
Southern	6.8	410
South West Highlands	7.7	741
Lake	10.4	1,949
Eastern	4.4	1,235
Zanzibar	4.1	178
Region		
Dodoma	13.2	346
Arusha	4.6	278
Kilimanjaro	2.9	183
Tanga	3.3	375
Morogoro	6.7	338
Pwani	3.6	165
Dar es Salaam	3.6	732
Lindi	4.7	175
Mtwara	8.4	235
Ruvuma	7.2	221
Iringa	5.7	136
Mbeya	7.9	480
Singida	8.7	211
Tabora	13.5	445
Rukwa	5.8	182
Kigoma	11.4	304
Shinyanga	14.3	281
Kagera	18.0	354
Mwanza	7.9	477
Mara	11.2	291
Manyara	14.0	222
Njombe	5.2	117
Katavi	10.5	80
Simiyu	5.0	262
Geita	5.2	284
Kaskazini Unguja	2.8	27
Kusini Unguja	6.3	18
Mjini Magharibi	4.5	78
Kaskazini Pemba	3.1	28
Kusini Pemba	3.6	27
Marital status		
Never married	2.9	517
Married or living together	7.6	5,644
Divorced/separated/widowed	12.9	1,189
Number of living children		
0	6.3	395
1-2	7.0	2,974
3-4	9.2	2,097
5+	9.2	1,884

(Continued…)

Table 17.2—*Continued*

Background characteristic	Percentage who experienced violence during pregnancy	Number of women who have ever been pregnant
Education		
No education	10.9	1,255
Primary incomplete	13.1	874
Primary complete	7.7	4,014
Secondary+	3.0	1,208
Wealth quintile		
Lowest	10.7	1,383
Second	10.3	1,372
Middle	9.3	1,364
Fourth	7.1	1,543
Highest	4.3	1,690
Total	8.1	7,351

Table 17.3 Persons committing physical violence

Among women age 15-49 who have experienced physical violence since age 15, percentage who report specific persons who committed the violence, according to the respondent's current marital status, Tanzania 2015-16

Person	Marital status		Total
	Ever married	Never married	
Current husband/partner	62.9	na	57.0
Former husband/partner	36.7	na	33.2
Current boyfriend	0.2	2.2	0.4
Former boyfriend	1.6	8.2	2.2
Father/stepfather	2.1	12.6	3.1
Mother/stepmother	1.6	14.1	2.8
Sister/brother	2.2	14.5	3.3
Daughter/son	0.5	5.7	1.0
Other relative	1.8	13.6	2.9
Mother-in-law	0.1	na	0.1
Father-in-law	0.0	na	0.0
Other in-law	0.0	na	0.0
Teacher	2.4	23.2	4.4
Employer/someone at work	0.3	3.4	0.6
Police/soldier	0.0	0.0	0.0
Other	2.5	15.6	3.7
Number of women who have experienced physical violence since age 15	3,337	346	3,683

na = Not applicable

Table 17.4 Experience of sexual violence

Percentage of women age 15-49 who have ever experienced sexual violence and percentage who have experienced sexual violence in the 12 months preceding the survey, by background characteristics, Tanzania 2015-16

Background characteristic	Percentage who have experienced sexual violence: Ever[1]	In the past 12 months	Number of women
Age			
15-19	11.2	5.6	1,911
15-17	8.1	3.7	1,111
18-19	15.5	8.3	800
20-24	15.8	9.5	1,753
25-29	17.7	10.2	1,511
30-39	19.9	10.5	2,428
40-49	17.7	7.5	1,719
Residence			
Urban	17.6	7.9	3,354
Rural	16.1	9.2	5,968
Tanzania Mainland/ Zanzibar			
Mainland	16.8	8.9	9,036
Urban	17.8	8.1	3,260
Rural	16.3	9.4	5,776
Zanzibar	9.3	2.3	286
Unguja	11.2	2.4	207
Pemba	4.5	2.1	79
Zone			
Western	22.2	14.2	893
Northern	10.5	4.3	1,108
Central	11.6	6.4	941
Southern Highlands	15.5	7.1	566
Southern	16.1	6.9	493
South West Highlands	17.5	12.9	887
Lake	21.0	11.4	2,457
Eastern	15.4	6.1	1,691
Zanzibar	9.3	2.3	286
Region			
Dodoma	11.8	6.6	402
Arusha	9.8	4.4	351
Kilimanjaro	14.0	6.5	255
Tanga	9.1	3.2	502
Morogoro	11.5	6.1	429
Pwani	8.2	2.9	197
Dar es Salaam	18.4	6.7	1,065
Lindi	16.8	7.1	203
Mtwara	15.5	6.7	290
Ruvuma	15.6	6.1	255
Iringa	9.3	5.6	173
Mbeya	15.8	11.7	587
Singida	10.1	4.7	264
Tabora	21.5	14.2	512
Rukwa	21.0	15.7	207
Kigoma	23.1	14.1	381
Shinyanga	32.6	17.8	358
Kagera	16.0	7.8	434
Mwanza	21.4	10.1	602
Mara	23.0	14.2	373
Manyara	12.7	7.8	275
Njombe	22.9	10.9	138
Katavi	20.4	13.5	93
Simiyu	12.1	6.9	342
Geita	20.8	12.9	348
Kaskazini Unguja	11.3	3.8	39
Kusini Unguja	11.8	2.0	26
Mjini Magharibi	11.0	2.1	142
Kaskazini Pemba	4.3	1.8	40
Kusini Pemba	4.8	2.4	39
Marital status			
Never married	9.3	2.8	2,220
Married or living together	16.3	9.8	5,873
Divorced/separated/widowed	31.3	14.4	1,228
Employment			
Employed for cash	18.4	9.5	4,402
Employed not for cash	18.3	10.3	2,864
Not employed	10.5	4.9	2,056

(Continued…)

Table 17.4—*Continued*

Background characteristic	Percentage who have experienced sexual violence: Ever[1]	In the past 12 months	Number of women
Number of living children			
0	10.5	4.5	2,367
1-2	17.7	9.6	2,974
3-4	19.5	10.2	2,097
5+	19.2	11.0	1,884
Education			
No education	15.7	9.1	1,349
Primary incomplete	21.0	12.5	1,042
Primary complete	17.6	9.5	4,715
Secondary+	12.9	5.1	2,215
Wealth quintile			
Lowest	17.7	10.4	1,601
Second	16.3	9.4	1,600
Middle	16.8	10.7	1,645
Fourth	14.8	7.9	1,967
Highest	17.4	6.6	2,510
Total 15-49	16.6	8.7	9,322

[1] Includes violence in the past 12 months

Table 17.5 Age at first experience of sexual violence

Percentage of women age 15-49 who experienced sexual violence by specific exact ages, according to current age and current marital status, Tanzania 2015-16

Background characteristic	Percentage who first experienced sexual violence by exact age:					Percentage who have not experienced sexual violence	Number of women
	10	12	15	18	22		
Age							
15-19	0.1	0.5	3.5	na	na	88.8	1,911
15-17	0.0	0.5	3.9	na	na	91.9	1,111
18-19	0.3	0.5	3.0	12.0	na	84.5	800
20-24	0.1	0.4	1.8	6.2	na	84.2	1,753
25-29	0.0	0.2	1.8	6.1	11.5	82.3	1,511
30-39	0.2	0.4	1.6	7.0	12.5	80.1	2,428
40-49	0.1	0.2	1.2	3.9	7.8	82.3	1,719
Marital status							
Never married	0.1	0.4	2.6	6.0	8.6	90.7	2,220
Ever married	0.1	0.3	1.8	6.8	12.3	81.1	7,102
Total	0.1	0.3	2.0	6.6	11.4	83.4	9,322

na = Not applicable

Table 17.6 Persons committing sexual violence

Among women age 15-49 who have experienced sexual violence, percentage who report specific persons who committed the violence, according to the respondent's current marital status, Tanzania 2015-16

Person[1]	Marital status		Total
	Ever married	Never married	
Current husband/partner	48.1	na	41.6
Former husband/partner	39.7	na	34.4
Current/former boyfriend	6.4	41.9	11.1
Father/stepfather	0.7	0.0	0.6
Brother/stepbrother	0.1	0.0	0.1
Other relative	1.1	8.0	2.1
In-law	0.2	na	0.2
Own friend/acquaintance	8.8	30.7	11.8
Family friend	1.3	3.1	1.5
Teacher	0.9	0.3	0.8
Employer/someone at work	0.4	2.4	0.6
Police/soldier	0.3	0.0	0.2
Stranger	2.6	7.0	3.2
Other	2.8	6.5	3.3
Number of women who have experienced sexual violence	1,340	207	1,547

na = Not applicable

[1] Women can report more than one person who committed the violence.

Table 17.7 Experience of different forms of violence

Percentage of women age 15-49 who have ever experienced different forms of violence, by current age, Tanzania 2015-16

Age	Physical violence only	Sexual violence only	Physical and sexual violence	Physical or sexual violence	Number of women
15-19	16.1	5.4	5.8	27.3	1,911
15-17	15.2	3.8	4.3	23.3	1,111
18-19	17.4	7.6	7.8	32.9	800
20-24	26.5	4.3	11.5	42.3	1,753
25-29	31.8	3.5	14.2	49.5	1,511
30-39	28.7	4.1	15.9	48.7	2,428
40-49	32.7	2.7	15.0	50.4	1,719
Total	27.0	4.0	12.5	43.6	9,322

Table 17.8 Marital control exercised by husbands

Percentage of ever-married women age 15-49 whose husbands/partners have ever demonstrated specific types of controlling behaviours, by background characteristics, Tanzania 2015-16

Background characteristic	Percentage of women whose husband/partner: Is jealous or angry if she talks to other men	Frequently accuses her of being unfaithful	Does not permit her to meet her female friends	Tries to limit her contact with her family	Insists on knowing where she is at all times	Displays 3 or more of the specific behaviours	Displays none of the specific behaviours	Number of ever-married women
Age								
15-19	50.0	25.1	14.2	10.4	51.4	23.6	31.6	471
15-17	51.7	30.0	17.6	15.5	49.4	28.9	27.6	139
18-19	49.3	23.0	12.8	8.3	52.2	21.3	33.3	332
20-24	62.2	29.6	17.9	12.7	58.8	30.6	24.6	1,278
25-29	62.0	33.2	17.4	10.4	59.4	31.2	24.2	1,350
30-39	61.7	30.7	17.5	12.2	57.1	30.0	25.4	2,321
40-49	57.3	29.1	17.4	10.3	55.2	27.0	27.0	1,681
Residence								
Urban	65.6	30.0	18.9	12.0	64.3	30.6	19.8	2,300
Rural	57.4	30.3	16.5	11.1	53.5	28.5	28.7	4,802
Tanzania Mainland/ Zanzibar								
Mainland	60.2	30.6	17.5	11.5	57.2	29.5	25.6	6,920
Urban	65.6	30.3	19.1	12.1	64.4	30.8	19.7	2,250
Rural	57.6	30.7	16.8	11.2	53.7	28.8	28.5	4,670
Zanzibar	53.4	17.7	9.6	7.1	50.3	18.2	33.4	182
Unguja	62.8	21.4	10.5	7.7	61.4	22.0	21.1	126
Pemba	32.3	9.6	7.4	5.9	25.4	9.7	61.1	56
Zone								
Western	55.6	27.4	20.5	14.4	50.2	29.6	31.4	721
Northern	61.0	26.5	16.6	7.2	56.7	26.7	27.1	778
Central	58.6	30.9	13.7	11.8	56.6	28.7	30.1	742
Southern Highlands	59.8	24.3	14.9	7.0	49.5	24.2	31.2	432
Southern	64.5	32.8	16.9	11.5	73.4	34.0	14.6	415
South West Highlands	58.1	30.4	15.9	14.1	54.9	28.0	27.0	717
Lake	58.1	35.2	19.6	11.9	54.6	31.5	26.3	1,929
Eastern	66.7	29.0	17.4	11.8	64.7	29.5	18.2	1,186
Zanzibar	53.4	17.7	9.6	7.1	50.3	18.2	33.4	182
Region								
Dodoma	55.1	34.5	14.2	11.5	49.7	31.5	35.5	327
Arusha	65.3	20.3	16.7	6.9	67.3	24.5	18.4	262
Kilimanjaro	56.5	21.7	17.9	11.9	47.6	25.7	33.2	168
Tanga	60.0	33.6	15.8	5.1	53.2	28.8	30.7	348
Morogoro	67.3	31.8	17.0	13.1	60.8	33.4	22.5	311
Pwani	68.9	41.0	20.2	11.5	58.7	31.3	17.7	157
Dar es Salaam	66.0	25.1	16.9	11.3	67.7	27.4	16.5	718
Lindi	59.0	33.7	16.4	10.2	75.1	33.9	11.5	173
Mtwara	68.5	32.1	17.2	12.5	72.1	34.1	16.8	242
Ruvuma	59.5	24.2	13.9	5.9	47.7	22.6	29.8	199
Iringa	63.2	24.2	17.8	6.9	61.7	28.0	26.8	127
Mbeya	59.6	29.4	17.1	16.2	62.7	29.3	23.4	466
Singida	54.9	27.1	13.2	9.8	53.0	22.0	33.6	200
Tabora	58.2	25.2	24.9	16.1	46.9	30.9	32.0	416
Rukwa	53.9	32.7	15.1	12.2	42.4	28.0	33.3	176
Kigoma	52.2	30.3	14.4	12.0	54.6	27.9	30.7	305
Shinyanga	57.5	33.9	27.6	14.4	46.8	33.5	30.6	278
Kagera	57.1	33.0	14.9	11.6	60.6	29.2	23.9	366
Mwanza	58.3	35.7	17.4	9.5	60.1	31.9	26.4	475
Mara	74.0	45.8	22.4	15.7	57.1	39.7	13.0	276
Manyara	67.4	29.1	13.3	13.9	70.4	30.5	18.7	216
Njombe	56.4	24.7	13.4	9.2	38.4	22.5	39.2	106
Katavi	58.5	31.6	9.8	5.6	35.3	19.9	34.5	75
Simiyu	52.3	33.7	16.3	11.6	51.2	27.2	25.7	244
Geita	49.1	29.5	21.8	10.2	46.2	28.0	38.2	290
Kaskazini Unguja	49.7	17.0	7.9	7.8	61.4	17.4	25.6	28
Kusini Unguja	62.9	22.9	8.9	7.1	62.0	24.9	21.0	18
Mjini Magharibi	67.3	22.5	11.8	7.8	61.2	23.0	19.5	80
Kaskazini Pemba	27.5	8.8	8.6	5.6	23.3	10.8	65.4	29
Kusini Pemba	37.2	10.4	6.2	6.2	27.6	8.6	56.5	27
Marital status								
Married or living together	58.1	27.1	13.9	9.3	55.1	25.4	27.4	5,873
Divorced/separated/ widowed	69.4	44.9	33.3	21.5	66.0	47.3	18.3	1,228

(Continued…)

Table 17.8—*Continued*

Background characteristic	Percentage of women whose husband/partner: Is jealous or angry if she talks to other men	Frequently accuses her of being unfaithful	Does not permit her to meet her female friends	Tries to limit her contact with her family	Insists on knowing where she is at all times	Displays 3 or more of the specific behaviours	Displays none of the specific behaviours	Number of ever-married women
Number of living children								
0	57.9	25.2	15.3	9.5	59.1	25.8	24.1	574
1-2	61.6	30.1	18.6	12.6	59.6	31.4	24.3	2,591
3-4	61.2	32.1	17.6	10.9	59.3	30.1	25.2	2,065
5+	57.1	29.9	15.7	10.8	50.2	26.1	29.1	1,872
Employment								
Employed for cash	62.0	30.3	18.4	11.5	59.4	30.4	24.0	3,621
Employed not for cash	57.2	32.7	16.6	12.4	53.1	29.7	27.8	2,450
Not employed	59.9	24.3	15.0	8.4	57.8	23.6	27.7	1,030
Education								
No education	55.8	31.5	16.1	11.6	51.1	27.3	30.5	1,263
Primary incomplete	61.6	35.4	18.4	13.0	56.0	33.6	25.5	859
Primary complete	60.4	30.3	17.2	11.0	56.9	29.2	25.7	3,884
Secondary+	62.2	24.6	18.4	11.3	64.7	27.6	21.2	1,095
Wealth quintile								
Lowest	53.0	28.5	15.5	10.6	49.0	24.1	31.1	1,379
Second	57.6	33.2	16.4	12.7	53.8	30.5	28.0	1,333
Middle	59.1	30.7	16.9	11.3	54.6	30.1	29.8	1,340
Fourth	63.5	31.3	17.7	11.3	59.3	29.9	22.9	1,426
Highest	65.7	27.9	19.6	11.2	66.4	31.0	18.9	1,624
Woman afraid of husband/partner								
Afraid most of the time	78.7	49.6	35.9	26.8	71.8	53.1	13.1	1,173
Sometimes afraid	67.7	39.1	20.6	13.8	65.9	37.9	16.9	1,950
Never afraid	50.8	20.2	10.2	5.6	48.3	17.9	34.0	3,979
Total	60.0	30.2	17.3	11.4	57.0	29.2	25.8	7,102

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated, or widowed women.

Table 17.9 Forms of spousal violence

Percentage of ever-married women age 15-49 who have experienced various forms of violence committed by their husband/partner ever or in the 12 months preceding the survey, Tanzania 2015-16

		In the past 12 months		
Type of violence	Ever	Often	Sometimes	Often or sometimes
Physical violence				
Any physical violence	39.3	7.2	19.7	27.0
Pushed her, shook her, or threw something at her	17.2	3.2	7.9	11.2
Slapped her	35.4	5.5	18.0	23.5
Twisted her arm or pulled her hair	6.5	1.7	2.8	4.5
Punched her with his fist or with something that could hurt her	19.1	3.9	9.1	13.1
Kicked her, dragged her, or beat her up	15.5	3.2	7.1	10.3
Tried to choke her or burn her on purpose	4.1	0.7	2.1	2.9
Threatened her or attacked her with a knife, gun, or other weapon	3.9	0.7	2.1	2.7
Sexual violence				
Any sexual violence	13.6	3.6	6.8	10.4
Physically forced her to have sexual intercourse with him when she did not want to	12.6	3.2	6.4	9.5
Physically forced her to perform any other sexual acts she did not want to	6.4	1.6	2.9	4.5
Forced her with threats or in any other way to perform sexual acts she did not want to	4.0	1.1	1.7	2.8
Emotional violence				
Any emotional violence	35.9	9.5	18.7	28.1
Said or did something to humiliate her in front of others	15.4	4.4	6.5	10.9
Threatened to hurt or harm her or someone she cared about	9.1	2.3	4.0	6.2
Insulted her or made her feel bad about herself	33.8	8.5	18.1	26.6
Any form of physical and/or sexual violence	41.7	9.0	20.5	29.5
Any form of physical and sexual violence	11.2	4.5	4.3	8.8
Any form of emotional and/or physical and/or sexual violence	49.5	13.2	24.4	37.5
Any form of emotional and physical and sexual violence	9.6	5.3	2.5	7.8
Spousal violence committed by any husband/partner				
Physical violence	43.9	na	na	27.1
Sexual violence	15.7	na	na	10.5
Physical and/or sexual violence	46.2	na	na	29.6
Number of ever-married women	7,102	7,102	7,102	7,102

na = Not applicable

Table 17.10 Physical or sexual violence in the past 12 months by any husband/partner

Percentage of ever-married women who have experienced physical or sexual violence by any husband/partner in the past 12 months, by background characteristics, Tanzania 2015-16

Background characteristic	Percentage of women who have experienced physical or sexual violence in the past 12 months from any husband/partner	Number of ever-married women
Age		
15-19	30.1	471
15-17	26.9	139
18-19	31.5	332
20-24	34.2	1,278
25-29	34.6	1,350
30-39	29.0	2,321
40-49	22.8	1,681
Residence		
Urban	27.4	2,300
Rural	30.7	4,802
Tanzania Mainland/ Zanzibar		
Mainland	30.2	6,920
Urban	27.9	2,250
Rural	31.4	4,670
Zanzibar	5.5	182
Unguja	5.6	126
Pemba	5.3	56
Zone		
Western	39.8	721
Northern	21.1	778
Central	25.4	742
Southern Highlands	26.0	432
Southern	21.8	415
South West Highlands	35.6	717
Lake	39.7	1,929
Eastern	19.3	1,186
Zanzibar	5.5	182
Region		
Dodoma	25.5	327
Arusha	30.4	262
Kilimanjaro	21.4	168
Tanga	13.9	348
Morogoro	20.2	311
Pwani	9.5	157
Dar es Salaam	21.1	718
Lindi	24.3	173
Mtwara	20.0	242
Ruvuma	22.5	199
Iringa	28.9	127
Mbeya	36.7	466
Singida	23.0	200
Tabora	44.5	416
Rukwa	34.0	176
Kigoma	33.4	305
Shinyanga	43.4	278
Kagera	32.6	366
Mwanza	36.9	475
Mara	56.8	276
Manyara	27.5	216
Njombe	29.1	106
Katavi	32.4	75
Simiyu	35.1	244
Geita	37.5	290
Kaskazini Unguja	5.0	28
Kusini Unguja	5.8	18
Mjini Magharibi	5.7	80
Kaskazini Pemba	6.0	29
Kusini Pemba	4.6	27
Marital status		
Married or living together	29.5	5,873
Divorced/separated/widowed	30.3	1,228

(Continued…)

Table 17.10—*Continued*

Background characteristic	Percentage of women who have experienced physical or sexual violence in the past 12 months from any husband/partner	Number of ever-married women
Number of living children		
0	24.7	574
1-2	30.1	2,591
3-4	30.3	2,065
5+	29.7	1,872
Employment		
Employed for cash	27.7	3,621
Employed not for cash	35.0	2,450
Not employed	23.3	1,030
Education		
No education	30.5	1,263
Primary incomplete	36.5	859
Primary complete	29.7	3,884
Secondary+	22.8	1,095
Wealth quintile		
Lowest	34.0	1,379
Second	31.2	1,333
Middle	32.6	1,340
Fourth	28.1	1,426
Highest	23.3	1,624
Woman afraid of husband/partner		
Afraid most of the time	54.5	1,173
Sometimes afraid	37.8	1,950
Never afraid	18.3	3,979
Total 15-49	29.6	7,102

Note: Any husband/partner includes all current, most recent, and former husbands/partners.

Table 17.11 Spousal violence by background characteristics

Percentage of ever-married women age 15-49 who have ever experienced emotional, physical, or sexual violence committed by their husband/partner, by background characteristics, Tanzania 2015-16

Background characteristic	Emotional violence	Physical violence	Sexual violence	Physical and sexual	Physical and sexual and emotional	Physical or sexual	Physical or sexual or emotional	Number of ever-married women
Age								
15-19	32.4	31.1	13.1	9.9	9.0	34.3	44.2	471
15-17	27.4	29.5	10.7	9.7	8.7	30.5	39.9	139
18-19	34.5	31.8	14.1	10.0	9.1	35.8	46.0	332
20-24	33.9	38.5	14.7	11.6	9.4	41.5	49.1	1,278
25-29	36.8	41.8	12.7	11.0	10.0	43.5	50.4	1,350
30-39	36.3	38.8	13.6	11.2	9.6	41.2	49.2	2,321
40-49	37.4	41.0	13.6	11.4	9.5	43.2	51.0	1,681
Residence								
Urban	32.4	35.3	13.3	10.4	9.2	38.3	44.9	2,300
Rural	37.6	41.2	13.7	11.6	9.8	43.4	51.7	4,802
Tanzania Mainland/ Zanzibar								
Mainland	36.6	40.1	13.8	11.4	9.8	42.5	50.4	6,920
Urban	32.9	35.9	13.5	10.6	9.4	38.9	45.6	2,250
Rural	38.4	42.2	14.0	11.9	10.0	44.3	52.8	4,670
Zanzibar	10.3	8.9	4.3	2.4	1.9	10.8	14.6	182
Unguja	11.7	11.0	4.7	2.7	2.3	12.9	17.2	126
Pemba	7.1	4.3	3.3	1.5	1.2	6.1	8.6	56
Zone								
Western	57.6	46.8	19.8	14.4	13.6	52.3	66.3	721
Northern	22.5	27.4	6.7	6.1	5.3	28.0	33.7	778
Central	29.4	41.1	9.9	9.5	7.5	41.5	47.0	742
Southern Highlands	26.9	37.2	11.5	9.2	7.8	39.6	44.4	432
Southern	23.2	24.6	9.4	6.2	5.1	27.8	34.7	415
South West Highlands	28.9	41.4	17.1	16.2	12.2	42.2	45.8	717
Lake	52.0	52.0	18.2	15.0	13.1	55.2	67.1	1,929
Eastern	25.6	30.2	10.6	8.3	7.4	32.5	37.4	1,186
Zanzibar	10.3	8.9	4.3	2.4	1.9	10.8	14.6	182
Region								
Dodoma	30.8	45.5	9.4	9.4	8.3	45.5	49.7	327
Arusha	28.8	35.8	6.6	6.3	5.6	36.1	44.5	262
Kilimanjaro	24.2	27.3	13.2	11.2	8.5	29.3	34.5	168
Tanga	16.9	21.1	3.7	3.5	3.5	21.4	25.3	348
Morogoro	24.8	28.8	10.7	10.3	9.2	29.2	35.0	311
Pwani	20.0	30.5	4.9	4.2	3.8	31.2	35.2	157
Dar es Salaam	27.2	30.8	11.9	8.4	7.4	34.3	38.9	718
Lindi	27.7	25.6	8.8	5.8	5.4	28.6	37.4	173
Mtwara	20.0	23.9	9.9	6.6	4.9	27.2	32.8	242
Ruvuma	23.4	39.0	11.9	9.3	8.0	41.6	43.6	199
Iringa	25.5	30.5	8.3	7.0	6.1	31.8	38.1	127
Mbeya	29.1	40.1	15.1	15.0	11.3	40.2	45.0	466
Singida	29.9	34.9	9.2	8.6	7.7	35.5	43.7	200
Tabora	64.0	49.2	18.7	12.7	12.7	55.2	70.5	416
Rukwa	27.1	42.7	21.2	18.7	13.6	45.1	46.4	176
Kigoma	48.8	43.5	21.3	16.6	14.7	48.2	60.6	305
Shinyanga	74.2	52.2	27.3	23.9	23.6	55.6	78.0	278
Kagera	48.5	53.4	13.1	12.6	8.9	54.0	66.9	366
Mwanza	44.1	43.7	18.5	14.4	12.0	47.7	59.8	475
Mara	53.1	69.2	20.5	17.6	15.2	72.1	78.1	276
Manyara	26.8	40.1	11.3	10.6	6.0	40.8	46.2	216
Njombe	35.0	41.7	14.8	11.6	9.3	44.9	53.1	106
Katavi	31.6	46.4	19.8	18.5	14.8	47.7	49.7	75
Simiyu	48.6	50.0	12.9	10.8	9.5	52.1	61.8	244
Geita	49.7	49.3	17.7	11.7	11.3	55.3	62.6	290
Kaskazini Unguja	8.3	5.1	4.7	1.1	0.7	8.7	12.8	28
Kusini Unguja	13.7	17.0	6.1	4.9	4.9	18.3	22.0	18
Mjini Magharibi	12.4	11.7	4.3	2.8	2.2	13.2	17.7	80
Kaskazini Pemba	6.9	4.8	2.5	0.9	0.3	6.4	8.0	29
Kusini Pemba	7.2	3.7	4.1	2.1	2.1	5.7	9.2	27
Marital status								
Married or living together	32.6	35.6	10.9	8.7	7.2	37.8	45.8	5,873
Divorced/separated/widowed	51.9	57.3	26.6	23.3	21.2	60.5	67.1	1,228
Number of living children								
0	24.8	25.5	8.8	7.1	6.3	27.2	34.5	574
1-2	33.9	36.8	13.2	9.9	8.7	40.0	47.2	2,591
3-4	36.4	41.4	14.1	12.3	10.1	43.1	50.8	2,065
5+	41.6	44.8	15.1	13.0	11.3	46.9	55.9	1,872
Employment								
Employed for cash	34.7	37.8	14.1	11.7	10.2	40.2	47.5	3,621
Employed not for cash	43.6	45.5	14.9	12.5	10.8	48.0	57.6	2,450
Not employed	22.2	30.0	8.6	6.5	4.5	32.1	37.5	1,030

(Continued…)

Table 17.11—*Continued*

Background characteristic	Emotional violence	Physical violence	Sexual violence	Physical and sexual	Physical and sexual and emotional	Physical or sexual	Physical or sexual or emotional	Number of ever-married women
Education								
No education	37.1	40.5	11.8	10.0	8.0	42.3	52.1	1,263
Primary incomplete	41.5	45.4	17.5	14.4	12.2	48.5	56.2	859
Primary complete	36.2	40.4	14.0	11.8	10.2	42.6	49.9	3,884
Secondary+	29.5	29.3	11.2	8.1	7.3	32.4	39.8	1,095
Wealth quintile								
Lowest	40.3	44.0	14.3	12.6	10.1	45.6	55.1	1,379
Second	39.5	43.9	14.4	12.8	10.7	45.5	53.1	1,333
Middle	36.8	40.4	14.4	11.4	10.0	43.5	50.9	1,340
Fourth	34.1	38.5	12.6	10.7	9.3	40.3	47.9	1,426
Highest	30.2	31.5	12.6	9.0	8.1	35.1	42.1	1,624
Total 15-49	35.9	39.3	13.6	11.2	9.6	41.7	49.5	7,102

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated, or widowed women.

Table 17.12 Spousal violence by husband's characteristics and empowerment indicators

Percentage of ever-married women age 15-49 who have ever experienced emotional, physical, or sexual violence committed by their husband/partner, by husband's characteristics and empowerment indicators, Tanzania 2015-16

Background characteristic	Emotional violence	Physical violence	Sexual violence	Physical and sexual	Physical and sexual and emotional	Physical or sexual	Physical or sexual or emotional	Number of ever-married women
Husband's/partner's education[1]								
No education	38.9	42.4	11.4	10.0	8.5	43.8	52.9	701
Primary incomplete	39.9	40.8	13.3	10.1	8.1	43.9	53.8	777
Primary complete	32.2	35.6	11.3	9.1	7.5	37.8	45.9	3,267
Secondary+	24.8	27.8	7.3	5.4	4.6	29.7	35.7	1,121
Don't know/missing	(42.0)	(38.5)	(31.5)	(28.6)	(28.6)	(41.4)	(44.9)	8
Husband's/partner's alcohol consumption								
Does not drink	28.6	30.2	9.4	6.9	6.0	32.7	40.5	4,721
Drinks/never gets drunk	30.1	24.2	9.6	6.2	5.4	27.6	37.0	254
Gets drunk sometimes	44.6	51.9	17.3	14.5	11.9	54.7	63.2	1,169
Gets drunk very often	63.4	72.7	30.9	29.7	25.8	73.9	80.4	958
Spousal education difference								
Husband better educated	32.6	36.7	11.0	8.8	7.3	39.0	46.7	1,812
Wife better educated	35.7	34.8	11.0	8.2	7.0	37.7	46.7	1,365
Both equally educated	30.6	34.8	10.9	9.1	7.3	36.7	44.2	2,327
Neither educated	32.5	37.3	8.7	7.5	5.6	38.5	48.7	357
Don't know/missing	52.0	57.2	26.6	23.3	21.2	60.5	67.0	1,241
Spousal age difference[1]								
Wife is older	34.1	39.9	11.8	10.1	9.4	41.6	49.8	265
Wife is same age	32.0	37.3	15.4	10.8	9.6	41.9	46.4	199
Wife is 1-4 years younger	33.3	38.1	11.4	9.4	7.7	40.1	47.7	1,904
Wife is 5-9 years younger	31.9	35.8	11.4	9.4	7.4	37.8	45.7	2,005
Wife is 10+ years younger	32.6	31.0	8.7	6.3	5.5	33.5	42.8	1,500
Missing	*	*	*	*	*	*	*	2
Number of marital control behaviours displayed by husband/partner[2]								
0	16.6	19.4	5.0	3.3	2.5	21.1	26.8	1,834
1-2	31.6	35.3	9.8	7.3	5.9	37.8	46.5	3,196
3-4	55.5	58.9	22.9	19.9	17.5	61.9	70.7	1,673
5F	77.8	81.2	44.2	42.4	38.9	83.0	89.5	399
Number of decisions in which women participate[3]								
0	33.1	38.0	11.9	9.2	7.1	40.7	49.3	1,041
1-2	35.0	36.7	11.0	8.5	7.1	39.2	47.5	2,786
3	29.1	32.8	10.2	8.6	7.3	34.3	41.8	2,047
Number of reasons for which wife beating is justified[4]								
0	29.6	31.7	10.8	8.9	7.5	33.6	40.8	2,850
1-2	39.2	43.1	15.2	12.2	11.1	46.1	53.5	1,474
3-4	42.9	45.0	16.2	13.2	11.5	48.0	56.9	1,663
5	37.3	45.3	14.7	12.9	10.1	47.2	55.4	1,115
Woman's father beat her mother								
Yes	46.8	51.5	18.6	15.8	13.7	54.3	63.4	2,551
No	29.2	30.8	10.4	8.1	7.1	33.1	40.2	3,928
Don't know/missing	33.8	43.4	13.5	12.4	8.3	44.5	51.6	622
Woman afraid of husband/partner								
Afraid most of the time	62.2	71.6	32.8	30.2	26.6	74.2	79.4	1,173
Sometimes afraid	45.5	50.8	17.1	14.0	11.7	53.9	62.6	1,950
Never afraid	23.5	24.2	6.2	4.3	3.5	26.2	34.3	3,979
Total 15-49	35.9	39.3	13.6	11.2	9.6	41.7	49.5	7,102

Note:

- Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
- Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated, or widowed women.

[1] Includes only currently married women
[2] According to the wife's report. See Table 17.8 for the list of behaviours.
[3] According to the wife's report. Includes only currently married women. See Table 15.9.1 for the list of decisions.
[4] According to the wife's report. See Table 15.10.1 for the list of reasons.

Table 17.13 Experience of spousal violence by duration of marriage

Percent distribution of ever-married women by number of years between marriage and first experience of physical or sexual violence by their husband/partner, if ever, according to marital status and duration, Tanzania 2015-16

	Years between marriage[1] and first experience of violence									
	Experienced no violence	Before marriage	<1 year	1-2 years	3-5 years	6-9 years	10+ years	Don't know/ missing[2]	Total	Number
Marital status and duration										
Currently married	62.2	0.9	6.2	13.7	9.5	3.5	3.3	0.7	100.0	5,873
Married only once	62.2	0.9	5.9	13.5	9.7	3.6	3.5	0.6	100.0	4,821
<1 year	79.2	2.1	17.9	na	na	na	na	0.7	100.0	250
1-2 years	74.0	1.1	11.5	12.5	na	na	na	1.0	100.0	645
3-5 years	59.3	0.7	7.9	25.0	6.4	na	na	0.8	100.0	713
6-9 years	59.8	0.4	4.1	15.2	15.7	4.0	0.0	0.7	100.0	775
10+ years	58.9	0.9	3.3	11.3	12.3	5.9	7.0	0.5	100.0	2,438
Married more than once	62.6	1.0	7.1	14.9	8.5	2.9	2.1	1.0	100.0	1,053
Divorced/separated/widowed	39.5	1.5	9.5	22.5	17.5	4.8	3.9	0.8	100.0	1,228
Total	58.3	1.0	6.7	15.3	10.9	3.7	3.4	0.7	100.0	7,102

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated, or widowed women.
na = Not applicable
[1] For couples who are not married but are living together as if married, the time of marriage refers to the time when the respondent first started living together with her partner.
[2] Includes women for whom the timing of the first experience of violence and duration of marriage are inconsistent

Table 17.14 Injuries to women due to spousal violence

Percentage of ever-married women age 15-49 who have experienced specific types of spousal violence by types of injuries resulting from the violence, according to the type of violence and whether they experienced the violence ever and in the 12 months preceding the survey, Tanzania 2015-16

Type of violence	Cuts, bruises, or aches	Eye injuries, sprains, dislocations, or burns	Deep wounds, broken bones, broken teeth, or any other serious injury	Any of these injuries	Number of ever-married women who have ever experienced any physical or sexual violence
Experienced physical violence[1]					
Ever[2]	70.9	11.6	15.5	72.3	2,793
In the past 12 months	72.3	11.7	15.4	73.8	1,914
Experienced sexual violence					
Ever[2]	74.4	15.4	21.4	75.9	965
In the past 12 months	73.5	15.4	20.0	74.8	740
Experienced physical or sexual violence[1]					
Ever[2]	68.7	10.9	14.6	70.0	2,962
In the past 12 months	69.6	11.0	14.2	71.1	2,094

Note: Spouse refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated or widowed women.

[1] Excludes women who reported violence only in response to a direct question on violence during pregnancy

[2] Includes in the past 12 months

Table 17.15 Women's violence against their spouse by background characteristics

Percentage of ever-married women age 15-49 who have committed physical violence against their current or most recent husband/partner when he was not already beating or physically hurting them, ever and in the past 12 months, according to women's own experience of spousal violence and background characteristics, Tanzania 2015-16

Background characteristic	Percentage who have committed physical violence against their husband/partner		Number of ever-married women
	Ever[1]	In the past 12 months	
Woman's experience of spousal physical violence			
Ever[1]	4.7	2.7	2,793
In the past 12 months	4.7	3.2	1,914
Never	1.0	0.4	4,309
Age			
15-19	2.1	2.1	471
15-17	1.8	1.8	139
18-19	2.2	2.2	332
20-24	3.1	1.8	1,278
25-29	2.0	1.3	1,350
30-39	2.7	1.1	2,321
40-49	2.3	0.8	1,681
Residence			
Urban	3.8	1.5	2,300
Rural	1.8	1.2	4,802
Tanzania Mainland/ Zanzibar			
Mainland	2.4	1.2	6,920
Urban	3.8	1.5	2,250
Rural	1.8	1.1	4,670
Zanzibar	4.1	1.7	182
Unguja	5.2	2.0	126
Pemba	1.5	1.2	56
Zone			
Western	2.8	1.5	721
Northern	2.0	0.8	778
Central	2.6	1.7	742
Southern Highlands	2.7	1.3	432
Southern	2.8	1.4	415
South West Highlands	1.5	1.4	717
Lake	1.2	0.9	1,929
Eastern	4.9	1.4	1,186
Zanzibar	4.1	1.7	182
Region			
Dodoma	4.3	2.3	327
Arusha	2.0	0.8	262
Kilimanjaro	1.9	0.3	168
Tanga	1.9	1.0	348
Morogoro	4.1	0.9	311
Pwani	3.4	1.6	157
Dar es Salaam	5.6	1.6	718
Lindi	2.4	1.4	173
Mtwara	3.0	1.3	242
Ruvuma	4.3	2.3	199
Iringa	1.6	0.3	127
Mbeya	1.4	1.4	466
Singida	0.7	0.7	200
Tabora	1.0	0.4	416
Rukwa	2.3	2.1	176
Kigoma	5.4	3.0	305
Shinyanga	3.9	2.5	278
Kagera	1.1	0.9	366
Mwanza	0.0	0.0	475
Mara	1.4	1.4	276
Manyara	1.8	1.6	216
Njombe	1.1	0.7	106
Katavi	0.5	0.5	75
Simiyu	0.9	0.9	244
Geita	0.5	0.5	290
Kaskazini Unguja	2.2	1.3	28
Kusini Unguja	7.3	1.8	18
Mjini Magharibi	5.8	2.3	80
Kaskazini Pemba	2.6	2.0	29
Kusini Pemba	0.4	0.4	27

(Continued…)

Table 17.15—*Continued*

Background characteristic	Percentage who have committed physical violence against their husband/partner		Number of ever-married women
	Ever[1]	In the past 12 months	
Marital status			
Married or living together	2.2	1.2	5,873
Divorced/separated/widowed	3.6	1.4	1,228
Employment			
Employed for cash	3.2	1.4	3,621
Employed not for cash	1.7	1.1	2,450
Not employed	2.0	1.1	1,030
Number of living children			
0	3.7	1.1	574
1-2	2.6	1.7	2,591
3-4	2.8	1.1	2,065
5+	1.6	0.9	1,872
Wealth quintile			
Lowest	2.1	1.6	1,379
Second	2.3	1.4	1,333
Middle	1.6	0.9	1,340
Fourth	2.3	1.0	1,426
Highest	4.0	1.4	1,624
Total	2.5	1.3	7,102

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated, or widowed women.

[1] Includes in the past 12 months

Table 17.16 Women's violence against their spouse by husband's characteristics and empowerment indicators

Percentage of ever-married women age 15-49 who have committed physical violence against their current or most recent husband/partner when he was not already beating or physically hurting them, ever and in the past 12 months, according to their husband's characteristics and empowerment indicators, Tanzania 2015-16

Background characteristic	Percentage who have committed physical violence against their husband/partner		Number of ever-married women
	Ever[1]	In the past 12 months	
Husband's/partner's education			
No education	2.4	1.8	701
Primary incomplete	2.2	1.5	777
Primary complete	2.0	0.9	3,267
Secondary+	3.0	1.7	1,121
Don't know/missing	(5.2)	(1.4)	8
Husband's/partner's alcohol consumption			
Does not drink	2.0	1.0	4,721
Drinks/never gets drunk	2.9	0.6	254
Gets drunk sometimes	3.7	2.2	1,169
Gets drunk very often	3.3	1.8	958
Spousal education difference			
Husband better educated	2.3	1.3	1,812
Wife better educated	2.8	1.8	1,365
Both equally educated	1.9	0.8	2,327
Neither educated	2.0	2.0	357
Don't know/missing	3.6	1.4	1,241
Spousal age difference[2]			
Wife is older	3.2	2.5	265
Wife is same age	3.2	1.4	199
Wife is 1-4 years younger	2.4	1.4	1,904
Wife is 5-9 years younger	2.8	1.3	2,005
Wife is 10+ years younger	1.0	0.7	1,500
Missing	*	*	2
Number of marital control behaviours displayed by husband/partner[3]			
0	0.6	0.4	1,834
1-2	2.5	1.3	3,196
3-4	4.3	2.1	1,673
5	3.7	1.3	399
Number of decisions in which women participate[4]			
0	1.4	0.9	1,041
1-2	2.6	1.3	2,786
3	2.3	1.3	2,047
Number of reasons for which wife beating is justified[5]			
0	1.7	0.9	2,850
1-2	4.0	1.5	1,474
3-4	2.5	1.5	1,663
5	2.4	1.5	1,115
Woman's father beat her mother			
Yes	3.2	1.6	2,551
No	1.9	1.1	3,928
Don't know/missing	3.0	0.8	622
Woman afraid of husband/partner			
Afraid most of the time	2.8	1.8	1,173
Sometimes afraid	3.3	1.6	1,950
Never afraid	2.0	0.9	3,979
Total	2.5	1.3	7,102

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated, or widowed women.

[1] Includes in the past 12 months

[2] Includes only currently married women

[3] According to the wife's report. See Table 17.8 for the list of behaviours.

[4] According to the wife's report. Includes only currently married women. See Table 15.9.1 for the list of decisions.

[5] According to the wife's report. See Table 15.10.1 for the list of reasons.

Table 17.17 Help seeking to stop violence

Percent distribution of women age 15-49 who have ever experienced physical or sexual violence by their help-seeking behaviour, according to type of violence and background characteristics, Tanzania 2015-16

Background characteristic	Sought help to stop violence	Never sought help but told someone	Never sought help, never told anyone	Missing/ don't know	Total	Number of women who have ever experienced any physical or sexual violence
Type of violence experienced						
Physical only	53.2	13.0	33.8	0.0	100.0	2,513
Sexual only	28.9	15.5	55.5	0.0	100.0	378
Physical and sexual	64.1	8.6	27.2	0.0	100.0	1,170
Age						
15-19	38.9	19.5	41.6	0.0	100.0	522
15-17	42.8	18.5	38.7	0.0	100.0	259
18-19	35.1	20.5	44.5	0.0	100.0	263
20-24	51.4	13.1	35.5	0.0	100.0	742
25-29	54.0	12.0	34.0	0.0	100.0	748
30-39	57.6	9.5	32.9	0.0	100.0	1,182
40-49	60.8	9.8	29.3	0.0	100.0	867
Residence						
Urban	51.7	12.5	35.8	0.0	100.0	1,383
Rural	55.3	11.7	33.0	0.0	100.0	2,677
Tanzania Mainland/ Zanzibar						
Mainland	54.2	11.8	34.0	0.0	100.0	4,004
Urban	51.9	12.1	36.0	0.0	100.0	1,362
Rural	55.3	11.7	33.0	0.0	100.0	2,642
Zanzibar	49.0	21.7	29.3	0.0	100.0	56
Unguja	47.5	23.6	28.9	0.0	100.0	48
Pemba	(59.0)	(9.1)	(31.9)	(0.0)	100.0	7
Zone						
Western	49.6	11.5	38.9	0.0	100.0	487
Northern	57.9	11.2	30.9	0.0	100.0	352
Central	65.4	9.7	24.9	0.0	100.0	372
Southern Highlands	58.0	12.6	29.3	0.0	100.0	236
Southern	56.6	15.1	28.4	0.0	100.0	190
South West Highlands	55.7	6.1	38.1	0.0	100.0	371
Lake	50.5	12.7	36.9	0.0	100.0	1,381
Eastern	53.9	14.1	32.0	0.0	100.0	616
Zanzibar	49.0	21.7	29.3	0.0	100.0	56
Region						
Dodoma	65.4	6.7	28.0	0.0	100.0	179
Arusha	50.1	12.3	37.5	0.0	100.0	128
Kilimanjaro	56.5	11.4	32.1	0.0	100.0	72
Tanga	65.0	10.3	24.7	0.0	100.0	152
Morogoro	70.3	12.2	17.5	0.0	100.0	128
Pwani	58.8	16.4	24.8	0.0	100.0	67
Dar es Salaam	48.1	14.3	37.6	0.0	100.0	420
Lindi	52.3	19.1	28.6	0.0	100.0	78
Mtwara	59.5	12.3	28.2	0.0	100.0	112
Ruvuma	53.1	16.2	30.7	0.0	100.0	111
Iringa	71.8	9.3	18.9	0.0	100.0	58
Mbeya	61.8	6.2	32.0	0.0	100.0	234
Singida	68.0	10.8	21.2	0.0	100.0	86
Tabora	53.4	10.0	36.7	0.0	100.0	305
Rukwa	42.9	6.0	51.1	0.0	100.0	93
Kigoma	43.3	14.1	42.6	0.0	100.0	182
Shinyanga	51.6	11.2	37.2	0.0	100.0	228
Kagera	57.5	17.2	25.3	0.0	100.0	253
Mwanza	58.0	15.4	26.6	0.0	100.0	302
Mara	31.7	9.5	58.8	0.0	100.0	253
Manyara	63.4	13.8	22.8	0.0	100.0	108
Njombe	54.3	9.7	36.0	0.0	100.0	67
Katavi	50.7	5.9	43.4	0.0	100.0	44
Simiyu	52.5	5.5	42.1	0.0	100.0	149
Geita	51.2	13.8	35.0	0.0	100.0	195
Kaskazini Unguja	(41.6)	(17.5)	(40.9)	(0.0)	100.0	7
Kusini Unguja	51.4	16.7	31.9	0.0	100.0	7
Mjini Magharibi	48.0	26.3	25.7	0.0	100.0	34
Kaskazini Pemba	*	*	*	*	100.0	4
Kusini Pemba	*	*	*	*	100.0	3
Marital status						
Never married	35.4	22.8	41.8	0.0	100.0	489
Married or living together	52.8	11.1	36.1	0.0	100.0	2,746
Divorced/separated/widowed	69.5	8.5	22.0	0.0	100.0	825

(Continued…)

Table 17.17—*Continued*

Background characteristic	Sought help to stop violence	Never sought help but told someone	Never sought help, never told anyone	Missing/ don't know	Total	Number of women who have ever experienced any physical or sexual violence
Number of living children						
0	40.9	15.8	43.2	0.0	100.0	623
1-2	54.9	12.8	32.3	0.0	100.0	1,342
3-4	56.4	12.5	31.0	0.0	100.0	1,088
5+	58.6	7.9	33.5	0.0	100.0	1,007
Employment						
Employed for cash	56.0	10.9	33.1	0.0	100.0	1,957
Employed not for cash	54.9	12.5	32.6	0.0	100.0	1,463
Not employed	46.4	14.0	39.5	0.0	100.0	640
Education						
No education	55.7	9.9	34.4	0.0	100.0	661
Primary incomplete	54.2	11.9	33.9	0.0	100.0	527
Primary complete	54.1	11.6	34.4	0.0	100.0	2,171
Secondary+	52.5	15.3	32.3	0.0	100.0	701
Wealth quintile						
Lowest	55.8	10.5	33.7	0.0	100.0	785
Second	55.9	11.6	32.5	0.0	100.0	754
Middle	55.8	12.1	32.1	0.0	100.0	756
Fourth	54.4	12.3	33.3	0.0	100.0	774
Highest	49.8	13.1	37.1	0.0	100.0	992
Total	54.1	12.0	33.9	0.0	100.0	4,060

Notes: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Women can report more than one source from which they sought help.

Table 17.18 Sources for help to stop the violence

Percentage of women age 15-49 who have experienced physical or sexual violence and sought help by sources from which they sought help, according to the type of violence that women reported, Tanzania 2015-16

	Type of violence experienced			
Source	Physical only	Sexual only	Physical and sexual	Total
Own family	54.0	57.9	59.1	55.9
Husband/partner's family	43.0	15.1	43.1	41.6
Husband/partner	0.8	1.0	0.5	0.7
Boyfriend	0.2	0.0	0.5	0.3
Friend	4.4	17.5	6.7	5.8
Neighbour	12.7	8.9	16.4	13.8
Religious leader	3.5	0.5	5.5	4.0
Doctor/medical personnel	0.6	4.0	1.1	0.9
Police	8.9	5.1	9.1	8.8
Lawyer	1.6	0.0	4.2	2.4
Social work organisation	1.3	0.0	2.0	1.5
Other	21.3	14.8	24.2	22.0
Number of women who have experienced violence and sought help	1,336	109	750	2,196

Note: Women can report more than one source from which they sought help.

Table 17.19 Frequency of spousal violence among those who report violence

Percent distribution of ever-married women age 15-49 (excluding widows) who suffered emotional violence committed by their current or most recent husband/partner by frequency of violence in the 12 months preceding the survey and percent distribution of those who suffered physical or sexual violence committed by their current or most recent husband/partner by frequency of violence in the 12 months preceding the survey, according to background characteristics, Tanzania 2015-16

	Frequency of emotional violence in the past 12 months					Frequency of physical or sexual violence in the past 12 months				
	Often	Sometimes	Not at all	Total	Number of women	Often	Sometimes	Not at all	Total	Number of women
Age										
15-19	26.7	63.9	9.4	100.0	153	28.8	59.1	12.1	100.0	161
15-17	(35.6)	(56.8)	(7.7)	(100.0)	38	(24.9)	(63.3)	(11.8)	(100.0)	43
18-19	23.8	66.2	10.0	100.0	115	30.2	57.6	12.2	100.0	119
20-24	24.6	63.8	11.5	100.0	427	24.7	58.3	17.0	100.0	523
25-29	24.4	60.8	14.8	100.0	490	22.0	57.6	20.4	100.0	576
30-39	28.9	51.2	19.8	100.0	821	21.8	48.5	29.7	100.0	923
40-49	27.8	35.9	36.3	100.0	577	18.0	36.0	46.0	100.0	656
Employment										
Employed for cash	29.0	49.5	21.5	100.0	1,206	24.4	45.0	30.6	100.0	1,381
Employed not for cash	24.9	56.3	18.8	100.0	1,034	19.9	54.4	25.7	100.0	1,130
Not employed	24.8	51.5	23.8	100.0	227	17.9	54.9	27.2	100.0	328
Number of living children										
0	33.8	56.5	9.7	100.0	143	34.4	56.5	9.2	100.0	156
1-2	26.1	57.6	16.3	100.0	862	23.1	52.6	24.2	100.0	1,005
3-4	24.6	51.8	23.6	100.0	716	20.1	50.3	29.6	100.0	846
5+	28.7	46.6	24.7	100.0	747	19.8	44.9	35.3	100.0	832
Marital status and duration										
Currently married	25.6	60.5	13.9	100.0	1,915	19.7	57.9	22.4	100.0	2,218
Married only once	24.9	60.9	14.2	100.0	1,547	18.9	57.7	23.4	100.0	1,824
0-4 years	21.9	71.3	6.7	100.0	367	18.9	72.5	8.5	100.0	429
5-9 years	23.7	65.9	10.4	100.0	326	20.4	64.1	15.5	100.0	392
10+ years	26.6	54.6	18.8	100.0	854	18.3	48.9	32.8	100.0	1,003
Married more than once	28.8	58.6	12.6	100.0	368	23.2	58.8	18.0	100.0	394
Divorced/separated	31.3	24.8	43.8	100.0	552	29.8	21.1	49.1	100.0	621
Residence										
Urban	31.0	49.3	19.7	100.0	726	22.9	48.6	28.5	100.0	841
Rural	25.2	53.9	21.0	100.0	1,741	21.4	50.4	28.1	100.0	1,998
Tanzania Mainland/ Zanzibar										
Mainland	26.9	52.6	20.5	100.0	2,449	21.9	50.0	28.1	100.0	2,821
Urban	31.0	49.4	19.6	100.0	722	22.8	48.7	28.5	100.0	836
Rural	25.2	54.0	20.8	100.0	1,728	21.5	50.6	28.0	100.0	1,984
Zanzibar	24.7	38.9	36.5	100.0	18	21.0	32.2	46.8	100.0	19
Unguja	16.8	39.3	43.9	100.0	14	14.9	30.7	54.4	100.0	15
Pemba	(52.4)	(37.2)	(10.4)	(100.0)	4	*	*	*	*	3
Zone										
Western	26.9	60.1	13.0	100.0	403	22.1	55.3	22.6	100.0	364
Northern	28.1	51.7	20.2	100.0	172	20.9	54.3	24.8	100.0	213
Central	29.1	38.6	32.3	100.0	211	23.9	38.5	37.6	100.0	297
Southern Highlands	21.7	51.3	27.0	100.0	112	16.5	49.8	33.7	100.0	161
Southern	35.2	43.1	21.7	100.0	95	19.3	59.8	20.9	100.0	114
South West Highlands	38.4	52.4	9.2	100.0	193	30.0	53.9	16.1	100.0	281
Lake	23.1	58.3	18.6	100.0	964	20.6	52.8	26.6	100.0	1,016
Eastern	28.8	38.4	32.8	100.0	298	21.0	38.1	40.8	100.0	374
Zanzibar	24.7	38.9	36.5	100.0	18	21.0	32.2	46.8	100.0	19
Education										
No education	27.2	50.8	22.0	100.0	457	21.7	51.1	27.2	100.0	521
Primary incomplete	29.3	55.4	15.3	100.0	343	27.1	49.9	23.0	100.0	398
Primary complete	26.1	52.3	21.6	100.0	1,348	20.8	49.7	29.5	100.0	1,574
Secondary+	27.2	52.6	20.2	100.0	319	21.2	48.7	30.1	100.0	346
Wealth quintile										
Lowest	25.1	60.1	14.8	100.0	539	25.1	51.1	23.7	100.0	598
Second	25.2	51.4	23.4	100.0	501	21.1	47.8	31.1	100.0	576
Middle	30.3	50.7	19.1	100.0	479	23.3	52.1	24.6	100.0	568
Fourth	27.1	49.5	23.5	100.0	470	20.2	50.6	29.2	100.0	549
Highest	27.1	49.9	22.9	100.0	478	19.3	47.6	33.1	100.0	548
Total	26.9	52.5	20.6	100.0	2,467	21.9	49.9	28.2	100.0	2,839

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

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SAMPLE DESIGN FOR THE 2015-16 TANZANIA DHS-MIS

Appendix A

A.1. INTRODUCTION

The 2015 Tanzania Demographic and Health Survey (2015 TDHS) is the fifth survey of its kind and follows those implemented in 1991-92 (TDHS), 1996 (TDHS), 2004-05 (TDHS), and 2010 (TDHS). A nationally representative sample of about 13,400 households was selected. All women age 15-49 who were usual residents of the selected households or who slept in the households the night before the survey were eligible for the survey. The survey resulted in about 13,000 interviews of women age 15-49. As with prior surveys, the main objectives of the 2015 TDHS survey were to provide up-to-date information on fertility and childhood mortality levels; fertility preferences; awareness, approval, and use of family planning methods; maternal and child health; and knowledge and attitudes toward HIV/AIDS and other sexually transmitted infections (STIs).

Apart from the female survey, a male survey was conducted at the same time in a subsample consisting of one household from every three selected for the female survey. All men age 15-49 who were usual residents of the selected households or who slept in the households the night before the survey are eligible for the male survey. The survey collected information on their basic demographic and social status; their knowledge and use of family planning methods; and their knowledge and attitudes toward HIV/AIDS and other STIs. The survey resulted in about 3,200 interviews of men age 15-49.

In the 2015 TDHS, all eligible women in all sampled household were weighed and measured for anthropometric indicators, and were asked to provide a few drops of blood from a finger-prick for on-the-spot anemia testing. In addition, parents or guardians of all children age 6-59 months living in the interviewed households will be asked for permission to test the children for anemia and administer a rapid test for malaria. These children will also be weighed and measured for anthropometric indicators.

The survey was designed to produce representative estimates for the main demographic and health indictors for the country as a whole, for Tanzania Mainland and Zanzibar, for the city of Dar es Salaam, for other urban areas, for all urban areas together and for all rural areas together, and for each of the nine geographical zones. For most indicators, representative results may be available for each of the thirty regions. However, representative results for total fertility rates and childhood mortality rates will only be available at higher aggregation levels, with means at zonal and national levels.

A.2. SAMPLING FRAME

The sampling frame used for the 2015 TDHS is the Tanzania Population and Housing Census (TPHC 2012), which was conducted in Tanzania in 2012. The sampling frame is a complete list of enumeration areas (EAs) covering the country, provided by the National Bureau of Statistics ((NBS) of Tanzania, the implementing agency for the 2015 TDHS. This frame was created for the 2012 TPHC, which served as a counting unit for the census. In rural areas, an EA is a natural village, or a segment of a large village, or a group of small villages; in urban areas, an EA is a street or a city block. Each EA appears with identification and admistrative information, , and a measure of size, which is the number of residential households residing in the EA. Each EA is also classified into one of two types of residence, urban or rural. Each EA has cartographical materials that delineate its geographical location, boundaries, main access, and landmarks inside or outside the EA that will help with its identification.

Tanzania Mainland's administrative units, re-formed in 2012, increased the number of regions from 21 to 25 compared with those in the last population census conducted in 2002. According to the 2012 TPHC, Tanzania Mainland is divided into regions; each region is sub-divided into districts. There are in total 25

regions, with a total of 160 districts. The 25 regions in Mainland are regrouped to form 8 geographical zones. Zanzibar is treated as a zone, which is subdivided into 5 regions and 10 districts. So there are, in total, 9 geographical zones and 30 regions. Below is the composition of the 9 geographical zones.

Western Zone: Tabora, Kigoma

Northern Zone: Kilimanjaro, Tanga, Arusha

Central Zone: Dodoma, Singida, Manyara

Southern Highlands Zone: Iringa, Njombe, Ruvuma

Southern Zone: Lindi, Mtwara

South West Highlands Zone: Mbeya, Rukwa, Katavi

Lake Zone: Kagera, Mwanza,Geita, Mara, Simiyu, Shinyanga

Eastern Zone: Dar es Salaam, Pwani, Morogoro

Zanzibar: North Unguja, South Unguja, Town West, North Pemba, South Pemba

Table A.1 below shows the distribution of residential households by region and according to type of residence (urban and rural) summarized from the sampling frame after excluding the institutional EAs. The shares go from 11.7% for Dar es Salaam to 0.28% for South Unguja. In Tanzania, 32.59% of the residential households live in urban areas. The urban percentage of the regions varies from 100% percent for Dar es Salaam to 6.75% percent for Ungujia South. Table A.2 below shows the distribution of EAs and their average size in number of households after excluding institutional EAs. Among the 106,642 EAs, 34,960 EAs are in urban areas, and 72,682 EAs are in rural areas. The average size of the EAs is practically the same for urban and rural areas, with an overall average of 86 households per EA.

Table A.1 Distribution of residential households by region and according to type of residence

	Households			Percentage distribution	
Region	Urban	Rural	Total	Urban	Region
Dodoma	72556	376850	449406	16.14	4.89
Arusha	122345	235074	357419	34.23	3.89
Kilimanjaro	96175	283639	379814	25.32	4.13
Tanga	96325	338708	435033	22.14	4.73
Morogoro	149730	349453	499183	30.00	5.43
Pwani	83359	170310	253669	32.86	2.76
Dar es Salaam	1078865		1078865	100.00	11.73
Lindi	43644	180228	223872	19.50	2.43
Mtwara	76997	264559	341556	22.54	3.71
Ruvuma	76482	222819	299301	25.55	3.25
Iringa	60720	159511	220231	27.57	2.39
Mbeya	212556	416759	629315	33.78	6.84
Singida	36689	218533	255222	14.38	2.77
Tabora	62649	305299	367948	17.03	4.00
Rukwa	49269	148581	197850	24.90	2.15
Kigoma	70842	297386	368228	19.24	4.00
Shinyanga	56654	202132	258786	21.89	2.81
Kagera	54870	462167	517037	10.61	5.62
Mwanza	186433	293694	480127	38.83	5.22
Mara	59756	247222	306978	19.47	3.34
Manyara	42664	227923	270587	15.77	2.94
Njombe	40059	128542	168601	23.76	1.83
Katavi	20243	58984	79227	25.55	0.86
Simiyu	22250	205372	227622	9.77	2.47
Geita	54831	228725	283556	19.34	3.08
North Unguja	3188	33325	36513	8.73	0.40
South Unguja	1726	23860	25586	6.75	0.28
Town West	51481	60935	112416	45.80	1.22
North Pemba	7134	32119	39253	18.17	0.43
South Pemba	7022	28487	35509	19.78	0.39
Tanzania	2997514	6201196	9198710	32.59	100.00

*Source: Residential households, 2012 population census, Tanzania

Table A.2 Distribution of EAs and their average size in number of households by region and according to type of residence

Region	Number of EAs			Average EA size in # of HH		
	Urban	Rural	Total	Urban	Rural	Total
Dodoma	621	4170	4791	117	90	94
Arusha	909	2200	3109	135	107	115
Kilimanjaro	729	2570	3299	132	110	115
Tanga	905	3599	4504	106	94	97
Morogoro	1458	3567	5025	103	98	99
Pwani	911	1922	2833	92	89	90
Dar es Salaam	15287		15287	71		71
Lindi	451	2004	2455	97	90	91
Mtwara	812	2979	3791	95	89	90
Ruvuma	694	2309	3003	110	97	100
Iringa	580	1621	2201	105	98	100
Mbeya	2467	4758	7225	86	88	87
Singida	308	2312	2620	119	95	97
Tabora	1026	4859	5885	61	63	63
Rukwa	815	2152	2967	60	69	67
Kigoma	870	3818	4688	81	78	79
Shinyanga	535	2349	2884	106	86	90
Kagera	733	6907	7640	75	67	68
Mwanza	1715	3000	4715	109	98	102
Mara	550	2732	3282	109	90	94
Manyara	357	2218	2575	120	103	105
Njombe	367	1455	1822	109	88	93
Katavi	273	778	1051	74	76	75
Simiyu	201	2373	2574	111	87	88
Geita	619	2842	3461	89	80	82
North Unguja	40	405	445	80	82	82
South Unguja	22	319	341	78	75	75
Town West	542	693	1235	95	88	91
North Pemba	75	406	481	95	79	82
South Pemba	88	365	453	80	78	78
Tanzania	34960	71682	106642	86	87	86

*Source: residential EAs, 2012 population census, Tanzania

A.3. STRUCTURE OF THE SAMPLE AND THE SAMPLING PROCEDURE

The sample for the 2015 TDHS is a stratified sample selected in two stages from the 2012 census frame. Stratification will be achieved by separating each region into urban and rural areas; the urban and rural areas of each region each form a sampling stratum. In total, 59 sampling strata have been created. Samples were selected independently in each sampling stratum, by a two-stage selection. Implicit stratification and proportional allocation were achieved at each of the lower administrative unit levels by sorting the sampling frame within the explicit stratum according to administrative unit in different levels before sample selection and by using a probability proportional-to-size selection at the first stage of sampling.

In the first stage, 608 EAs were selected with probability proportional to the EA size and with independent selection in each sampling stratum with the sample allocation given in Table A.3 below. Among the 608 EAs, 180 EAs were from urban areas and 428 EAs were from rural areas. With a fixed number of 22 households to be selected per cluster, the total number of households to be selected is 13376; among them, 3,960 households were from urban areas, and 9416 households were from rural areas. With the request of representative results for most of DHS indicators at the regional level, the total sample size was tight, and therefore an equal size allocation was adopted with adjustment. All the regions received either 20 or 21 clusters except for Dar es Salaam, which received the largest sample size of 37 clusters because it is urban only, and for the four other regions in Zanzibar, except Town West, each received 15 clusters because of their large household size. With the designed sample size, adequate survey precision will be obtained for female indictors at the 15% level, or above, at the regional level.

A household listing operation was carried out in all of the selected EAs before the main survey. The household listing operation consisted of visiting each of the 608 selected EAs; drawing a location map and a detailed sketch map; and recording on the household listing forms all residential households found in the EA with the address and the name of the head of the households. The resulting list of households served as the sampling frame for the selection of households in the second stage. Some of the selected EAs may be found to be large in size in the household listing operation. To minimize the task of household listing, the

selected EAs with an estimated number of households greater than 400 was segmented. Only one segment was selected for the survey, with probability proportional to the segment size. The methodology and the detailed household listing procedure were addressed in the household listing manual.

At the second stage, a fixed number of 22 households was selected from each selected EA using the newly updated listing. The interviewers were asked to interview only the pre-selected households; no replacement was allowed for nonrespondent households to prevent bias. The interviewers were asked to make at least two to three callbacks in order to reduce nonresponses.

Table A.3 Sample allocation of EAs and households by region and according to type of residence

	Allocation of EAs			Allocation of Households		
Region	Urban	Rural	Total	Urban	Rural	Total
Dodoma	4	16	20	88	352	440
Arusha	7	13	20	154	286	440
Kilimanjaro	6	15	21	132	330	462
Tanga	5	15	20	110	330	440
Morogoro	6	14	20	132	308	440
Pwani	7	13	20	154	286	440
Dar es Salaam	37		37	814		814
Lindi	5	16	21	110	352	462
Mtwara	5	15	20	110	330	440
Ruvuma	6	15	21	132	330	462
Iringa	6	14	20	132	308	440
Mbeya	7	13	20	154	286	440
Singida	4	17	21	88	374	462
Tabora	4	16	20	88	352	440
Rukwa	6	15	21	132	330	462
Kigoma	5	16	21	110	352	462
Shinyanga	5	15	20	110	330	440
Kagera	3	18	21	66	396	462
Mwanza	8	12	20	176	264	440
Mara	5	16	21	110	352	462
Manyara	4	16	20	88	352	440
Njombe	5	15	20	110	330	440
Katavi	6	15	21	132	330	462
Simiyu	2	18	20	44	396	440
Geita	5	16	21	110	352	462
North Unguja	2	13	15	44	286	330
South Unguja	2	13	15	44	286	330
Town West	9	12	21	198	264	462
North Pemba	2	13	15	44	286	330
South Pemba	2	13	15	44	286	330
Tanzania	180	428	608	3960	9416	13376

Table A.4 below shows the sample allocation of expected number of female and male interviews. The sample calculations were based on the survey results of the 2010 TDHS: the household completion rate is 90% and 93.6% for urban and rural areas, respectively; the average number of women 15-49 per household is 1.14 and 1.01 for urban and rural areas, respectively; the women's individual response rate was 96%; the average number of men 15-49 per household was 0.94 and 0.87 for the urban and rural areas, respectively; men's individual response rate was 88% and 91% for urban and rural areas, respectively.

Table A.4 Sample allocation of expected number of interviews by region and according to type of residence

Region	Women 15-49			Men 15-49		
	Urban	Rural	Total	Urban	Rural	Total
Dodoma	86	321	407	21	82	103
Arusha	153	261	414	36	67	103
Kilimanjaro	131	300	431	31	77	108
Tanga	108	300	408	27	77	104
Morogoro	131	280	411	31	72	103
Pwani	153	261	414	36	67	103
Dar es Salaam	805		805	193		193
Lindi	108	321	429	27	82	109
Mtwara	108	300	408	27	77	104
Ruvuma	131	300	431	31	77	108
Iringa	131	280	411	31	72	103
Mbeya	153	261	414	36	67	103
Singida	86	341	427	21	88	109
Tabora	86	321	407	21	82	103
Rukwa	131	300	431	31	77	108
Kigoma	108	321	429	27	82	109
Shinyanga	108	300	408	27	77	104
Kagera	65	361	426	16	92	108
Mwanza	174	241	415	41	62	103
Mara	108	321	429	27	82	109
Manyara	86	321	407	21	82	103
Njombe	108	300	408	27	77	104
Katavi	131	300	431	31	77	108
Simiyu	44	361	405	11	92	103
Geita	108	321	429	27	82	109
North Unguja	53	346	399	13	81	94
South Unguja	53	346	399	13	81	94
Town West	239	319	558	56	75	131
North Pemba	53	346	399	13	81	94
South Pemba	53	346	399	13	81	94
Tanzania	3993	8996	12989	961	2269	3231

* Male survey will be carried out in 1/3 of the households selected for female survey.

IV. SELECTION PROBABILITY AND SAMPLING WEIGHT

Due to the non-proportional allocation of the sample to the different regions and the possible differences in response rates, sampling weights will be required for any analysis using 2015 TDHS data to ensure the actual representative of the survey results at the national as well as at the domain level. Because the 2015 TDHS sample is a two-stage stratified cluster sample, sampling weights are calculated based on sampling probabilities, separately for each sampling stage and for each cluster. We use the following notations

P_{1hi}: first-stage sampling probability of the ith EA in stratum h
P_{2hi}: second -stage sampling probability within the ith EA (household selection)

Let a_h be the number of EAs selected in stratum h, M_{hi} the total population according to the sampling frame in the ith EA, and $\sum M_{hi}$ the total population in the stratum h. The probability of selecting the ith EA in the 2015 TDHS sample is calculated as follows:

$$\frac{a_h M_{hi}}{\sum M_{hi}}$$

Let b_{hi} be the proportion of households in the selected segment compared with the total number of households in the EA i in stratum h if the EA is segmented; otherwise $b_{hi} = 1$. Then the probability of selecting EA i in the sample is:

$$P_{1hi} = \frac{a_h M_{hi}}{\sum M_{hi}} \times b_{hi}$$

A 2015 TDHS cluster is either an EA or a segment of a large EA. Let L_{hi} be the number of households listed in the household listing operation in the cluster *i* in stratum *h*, let g_{hi} be the number of households selected in the cluster. The second stage's selection probability for each household in the cluster is calculated as follows:

$$P_{2hi} = \frac{g_{hi}}{L_{hi}}$$

The overall selection probability of each household in cluster *i* of stratum *h* is therefore the product of the two stages of selection probabilities:

$$P_{hi} = P_{1hi} \times P_{2hi}$$

The design weight for each household in cluster *i* of stratum *h* is the inverse of its overall selection probability:

$$W_{hi} = 1 / P_{hi}$$

A spreadsheet containing all sampling parameters and selection probabilities will be prepared to facilitate the calculation of the design weights. Design weights will be adjusted for household non-response and also individual non-response to get the sampling weights for women's and men's surveys, respectively. The differences of the household sampling weights and the individual sampling weights are introduced by individual non-response. The final sampling weights are normalized in order to give the total number of unweighted cases equal to the total number of weighted cases at the national level, for both household weights and individual weights, respectively. The normalized weights are relative weights, which are valid for estimating means, proportions, and ratios, but are not valid for estimating population totals and for pooled data.

Sampling weights for the domestic violence surveys are calculated based on the number of eligible respondents in the households selected for the domestic violence module, for male and female surveys, respectively. A large number of sets of weights are calculated:

- One set for all households selected for the survey
- One set for women selected for the individual survey
- One set for households selected for the male survey
- One set for the male individual survey

It is important to note that the normalized weights are relative weights, which are valid for estimating means, proportions, and ratios, but not for estimating population totals and for pooled data. Also the number of weighted cases resulting from using the normalized weight has no direct relation to the survey precision because it is relative; especially for oversampled areas, the number of weighted cases will be much smaller than the number of unweighted cases, which are directly related to survey precision.

Sampling errors will be calculated for selected indicators for the national sample, for the urban and rural areas separately, and for each of the five regions.

Table A.5 Sample implementation: Women

Percent distribution of households and eligible women by results of the household and individual interviews, and household, eligible women and overall women response rates, according to urban-rural residence and region (unweighted), Tanzania 2015-16

	Mainland				
Result	Urban	Rural	Total	Zanzibar	Total
Selected households					
Completed (C)	91.5	94.2	93.3	98.5	94.0
Household present but no competent respondent at home (HP)	1.2	0.6	0.8	0.2	0.7
Postponed (P)	0.0	0.0	0.0	0.0	0.0
Refused (R)	0.8	0.3	0.4	0.2	0.4
Dwelling not found (DNF)	0.8	0.3	0.4	0.1	0.4
Household absent (HA)	2.8	2.1	2.3	0.8	2.1
Dwelling vacant/address not a dwelling (DV)	2.4	1.9	2.0	0.2	1.8
Dwelling destroyed (DD)	0.5	0.5	0.5	0.0	0.4
Other (O)	0.1	0.2	0.2	0.1	0.2
Total	100.0	100.0	100.0	100.0	100.0
Number of sampled households	3,570	8,008	11,578	1,782	13,360
Household response rate (HRR)[1]	97.1	98.7	98.2	99.5	98.4
Eligible women					
Completed (EWC)	96.2	97.5	97.1	98.6	97.3
Not at home (EWNH)	2.7	1.4	1.8	0.6	1.6
Postponed (EWP)	0.0	0.0	0.0	0.0	0.0
Refused (EWR)	0.6	0.2	0.3	0.3	0.3
Partly completed (EWPC)	0.1	0.1	0.1	0.0	0.1
Incapacitated (EWI)	0.4	0.7	0.6	0.5	0.6
Other (EWO)	0.0	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0
Number of women	3,750	7,714	11,464	2,170	13,634
Eligible women response rate (EWRR)[2]	96.2	97.5	97.1	98.6	97.3
Overall women response rate (ORR)[3]	93.3	96.3	95.3	98.1	95.7

[1] Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$\frac{100 * C}{C + HP + P + R + DNF}$$

[2] The eligible women response rate (EWRR) is equivalent to the percentage of interviews completed (EWC)
[3] The overall women response rate (OWRR) is calculated as:

$$OWRR = HRR * EWRR/100$$

Table A.6 Sample implementation: Men

Percent distribution of households and eligible men by results of the household and individual interviews, and household, eligible men and overall men response rates, according to urban-rural residence and region (unweighted), Tanzania 2015-16

	Mainland				
Result	Urban	Rural	Total	Zanzibar	Total
Selected households					
Completed (C)	91.5	94.6	93.6	98.1	94.2
Household present but no competent respondent at home (HP)	1.1	0.5	0.7	0.4	0.6
Postponed (P)	0.0	0.0	0.0	0.0	0.0
Refused (R)	0.8	0.2	0.4	0.2	0.4
Dwelling not found (DNF)	1.1	0.1	0.4	0.0	0.4
Household absent (HA)	3.3	2.0	2.4	1.1	2.2
Dwelling vacant/address not a dwelling (DV)	1.8	2.0	1.9	0.4	1.7
Dwelling destroyed (DD)	0.4	0.4	0.4	0.0	0.4
Other (O)	0.0	0.2	0.1	0.0	0.1
Total	100.0	100.0	100.0	100.0	100.0
Number of sampled households	1,136	2,548	3,684	568	4,252
Household response rate (HRR)[1]	96.9	99.1	98.4	99.5	98.6
Eligible men					
Completed (EMC)	89.7	92.9	91.8	92.6	91.9
Not at home (EMNH)	8.3	5.0	6.0	3.4	5.7
Refused (EMR)	1.4	0.7	0.9	2.5	1.2
Partly completed (EMPC)	0.1	0.1	0.1	0.0	0.1
Incapacitated (EMI)	0.6	1.4	1.1	1.5	1.2
Total	100.0	100.0	100.0	100.0	100.0
Number of men	1,054	2,239	3,293	529	3,822
Eligible men response rate (EMRR)[2]	89.7	92.9	91.8	92.6	91.9
Overall men response rate (ORR)[3]	86.9	92.0	90.4	92.1	90.6

[1] Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$\frac{100 * C}{C + HP + P + R + DNF}$$

[2] The eligible men response rate (EMRR) is equivalent to the percentage of interviews completed (EMC)
[3] The overall men response rate (OMRR) is calculated as:

$$OMRR = HRR * EMRR/100$$

ESTIMATES OF SAMPLING ERRORS Appendix B

The estimates from a sample survey are affected by two types of errors: (1) nonsampling errors, and (2) sampling errors. Nonsampling errors are the results of mistakes made in implementing data collection and data processing, such as failure to locate and interview the correct household, misunderstanding the questions on the part of either the interviewer or the respondent, and data entry errors. Although numerous efforts were made during the implementation of the 2015 Tanzania Demographic and Health Survey (TDHS) to minimize this type of error, nonsampling errors are impossible to avoid and difficult to evaluate statistically.

Sampling errors, on the other hand, can be evaluated statistically. The sample of respondents selected in the 2015 TDHS is only one of many samples that could have been selected from the same population, using the same design and identical size. Each of these samples would yield results that differ somewhat from the results of the actual sample selected. Sampling errors are a measure of the variability between all possible samples. Although the degree of variability is not known exactly, it can be estimated from the survey results.

A sampling error is usually measured in terms of the *standard error* for a particular statistic (mean, percentage, etc.), which is the square root of the variance. The standard error can be used to calculate confidence intervals within which the true value for the population can reasonably be assumed to fall. For example, for any given statistic calculated from a sample survey, the value of that statistic will fall within a range of plus or minus two times the standard error of that statistic in 95 percent of all possible samples of identical size and design.

If the sample of respondents had been selected as a simple random sample, it would have been possible to use straightforward formulas for calculating sampling errors. However, the 2015 TDHS sample is the result of a multi-stage stratified design, and, consequently, it was necessary to use more complex formulas. The computer software used to calculate sampling errors for the 2015 TDHS is a SAS program. This program used the Taylor linearization method for variance estimation for survey estimates that are means or proportions. The Jackknife repeated replication method was used for variance estimation of more complex statistics such as fertility and mortality rates.

The Taylor linearization method treats any percentage or average as a ratio estimate, $r = y/x$, where y represents the total sample value for variable y, and x represents the total number of cases in the group or subgroup under consideration. The variance of r is computed using the formula given below, with the standard error being the square root of the variance:

$$SE^2(r) = var(r) = \frac{1}{x^2}\sum_{h=1}^{H}\left[(1-f_h)\frac{m_h}{m_h-1}\left(\sum_{i=1}^{m_h} z_{hi}^2 - \frac{z_h^2}{m_h}\right)\right]$$

in which

$$z_{hi} = y_{hi} - rx_{hi}\text{, and } z_h = y_h - rx_h$$

where h represents the stratum, which varies from 1 to H,
m_h is the total number of clusters selected in the hth stratum,
y_{hi} is the sum of the weighted values of variable y in the ith cluster in the hth stratum,

x_{hi} is the sum of the weighted number of cases in the ith cluster in the hth stratum, and
f_h is the sampling fraction of PSU in the hth stratum

The Jackknife repeated replication method derives estimates of complex rates from each of several replications of the parent sample, and calculates standard errors for these estimates using simple formulas. Each replication considers *all but one* cluster in the calculation of the estimates. Pseudo-independent replications are thus created. In the 2015 TDHS, there were 608 non-empty clusters. Hence, 608 replications were created. The variance of a rate r is calculated as follows:

$$SE^2(r) = var(r) = \frac{1}{k(k-1)} \sum_{i=1}^{k} (r_i - r)^2$$

in which

$$r_i = kr - (k-1)r_{(i)}$$

where r is the estimate computed from the full sample of 608 clusters
$r_{(i)}$ is the estimate computed from the reduced sample of 607 clusters (i^{th} cluster excluded)
k is the total number of clusters

In addition to the standard error, the program computes the design effect (DEFT) for each estimate, which is defined as the ratio between the standard error using the given sample design and the standard error that would result if a simple random sample had been used. A DEFT value of 1.0 indicates that the sample design is as efficient as a simple random sample, while a value greater than 1.0 indicates the increase in the sampling error is due to the use of a more complex and less statistically efficient design, such as multistage and cluster selection. The program also computes the relative standard error and the confidence limits for the estimates.

Sampling errors for the 2015 TDHS are calculated for selected variables considered to be of primary interest for the woman's survey and for the man's survey, respectively. The results are presented in this appendix for the country as a whole, for Tanzania Mainland, for Zanzibar, for urban and rural areas, and for each of the nine zones. For each variable, the type of statistic (mean, proportion, or rate) and the base population are given in Table B.1. Tables B.2 to B.19 present the value of the statistic (R), its standard error (SE), the number of unweighted (N-UNWE) and weighted (N-WEIG) cases, the design effect (DEFT), the relative standard error (SE/R), and the 95 percent confidence limits (R±2SE), for each variable. The DEFT is considered undefined when the standard error considering simple random sample is zero (when the estimate is close to 0 or 1). In the case of the total fertility rate, the number of unweighted cases is not relevant, as there is no known unweighted value for woman-years of exposure to child-bearing.

The confidence interval (e.g., as calculated for *children ever born to women over age 40*) can be interpreted as follows: the overall average from the national sample is 5.705 and its standard error is 0.096. Therefore, to obtain the 95 percent confidence limits, one adds and subtracts twice the standard error to the sample estimate, i.e., 5.075±2×0.096. There is a high probability (95 percent) that the *true* average number of children ever born to all women over age 40 is between 5.513 and 5.897.

For the total sample, the value of the design effect (DEFT), averaged over all variables for the women's survey, is 1.541, which means that, due to multistage and clustering of the sample, the average standard error is increased by a factor of 1.541 over that in an equivalent simple random sample.

Table B.1 List of selected variables for sampling errors, Tanzania DHS 2015

Variable	Estimate	Base Population
WOMEN		
Urban residence	Proportion	All women 15-49
Literacy	Proportion	All women 15-49
No education	Proportion	All women 15-49
Secondary and higher education	Proportion	All women 15-49
Never married (never in union)	Proportion	All women 15-49
Currently married (in union)	Proportion	All women 15-49
Married before age 20	Proportion	Women 20-49
Had sex before age 18	Proportion	Women 20-49
Currently pregnant	Proportion	All women 15-49
Children ever born	Mean	All women 15-49
Children surviving	Mean	All women 15-49
Children ever born to women over age 40	Mean	Women age 40-49
Currently using any method	Proportion	Currently married women 15-49
Currently using a modern method	Proportion	Currently married women 15-49
Currently using pill	Proportion	Currently married women 15-49
Currently use IUD	Proportion	Currently married women 15-49
Currently using condom	Proportion	Currently married women 15-49
Currently using injectable	Proportion	Currently married women 15-49
Currently using implants	Proportion	Currently married women 15-49
Currently using female sterilisation	Proportion	Currently married women 15-49
Currently using rhythm	Proportion	Currently married women 15-49
Currently using withdrawal	Proportion	Currently married women 15-49
Used public sector sources	Proportion	Users of modern methods, women 15-49
Want no more children	Proportion	Currently married women15-49
Want to delay at least 2 years	Proportion	Currently married women 15-49
Ideal family size	Proportion	All women 15-49
Mothers received antenatal care for last birth	Proportion	Last birth in last 5 years
Mothers protected against neonatal tetanus for last birth	Proportion	Last birth in last 5 years
Births with skilled attendant at delivery	Proportion	Births in last 5 years
Had diarrhoea in last 2 weeks	Proportion	Children under 5
Treated with ORS packets or pre-packed liquid	Proportion	Children under 5 with diarrhoea in last 2 weeks
Consulted medical personnel for diarrhoea	Proportion	Children under 5 with diarrhoea in last 2 weeks
Having health card, seen	Proportion	Children 12-23 months
Received BCG vaccination	Proportion	Children 12-23 months
Received DPT vaccination (3 doses)	Proportion	Children 12-23 months
Received polio vaccination (3 doses)	Proportion	Children 12-23 months
Received measles vaccination	Proportion	Children 12-23 months
Fully immunized	Proportion	Children 12-23 months
Weight-for-height (< -2 SD)	Proportion	Children under 5 who were measured
Height-for-age (< -2 SD)	Proportion	Children under 5 who were measured
Weight-for-age (< -2 SD)	Proportion	Children under 5 who were measured
Prevalence of anaemia (children 6-59 months)	Proportion	Children under 6-59 months who were tested
Prevalence of anaemia (women 15-49)	Proportion	Women 15-49 who were tested
Body mass index (BMI) <18.5	Proportion	Women 15-49 who were measured
Body mass index (BMI) ≥25	Proportion	Women 15-49 who were measured
Abstinence among youth (never had sex)	Proportion	Never-married women 15-24
Sexually active in past 12 months among never-married youth	Proportion	Never-married women 15-24
Experienced physical violence since age 15 by anyone	Proportion	All women 15-49
Ever experienced sexual violence by anyone	Proportion	All women 15-49
Ever experienced physical or sexual violence by any husband/partner	Proportion	Ever-married women 15-49
Ever experienced physical or sexual violence in the past 12 months	Proportion	Ever-married women 15-49
Total fertility rate (last 3 years)	Rate	Women-years of exposure to childbearing
Neonatal mortality rate [1]	Rate	Children-months of exposure to death
Postneonatal mortality rate [1]	Rate	Children-months of exposure to death
Infant mortality rate [1]	Rate	Children-months of exposure to death
Child mortality rate [1]	Rate	Children-months of exposure to death
Under-5 mortality rate [1]	Rate	Children-months of exposure to death
MEN		
Urban residence	Proportion	All men 15-49
No education	Proportion	All men 15-49
Secondary and higher education	Proportion	All men 15-49
Never married (never in union)	Proportion	All men 15-49
Currently married (in union)	Proportion	All men 15-49
Had sex before age 18	Proportion	All men 20-49
Want no more children	Proportion	Currently married men 15-49
Want to delay at least 2 years	Proportion	Currently married men 15-49
Abstinence among never-married youth (never had sex)	Proportion	Never-married men 15-24
Sexually active in past 12 months among never-married youth	Proportion	Never-married men 15-24

[1] The mortality rates are calculated for last 5 years for the total sample, and 10 years for the urban, rural, and regional samples.

Table B.2 Sampling errors: Total sample, Tanzania 2015-16

VARIABLE	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
	WOMEN							
Urban residence	0.363	0.010	13266	13266	2.467	0.028	0.342	0.383
Literacy	0.769	0.008	13266	13266	2.103	0.010	0.753	0.784
No education	0.147	0.006	13266	13266	2.106	0.044	0.134	0.160
Secondary or higher education	0.234	0.008	13266	13266	2.240	0.035	0.218	0.251
Never married (never in union)	0.253	0.006	13266	13266	1.524	0.023	0.241	0.264
Currently married (in union)	0.619	0.007	13266	13266	1.543	0.011	0.606	0.632
Married before age 20	0.575	0.009	10334	10362	1.783	0.015	0.558	0.592
Had sexual intercourse before age 18	0.601	0.008	10334	10362	1.665	0.013	0.585	0.617
Currently pregnant	0.086	0.003	13266	13266	1.412	0.040	0.079	0.092
Children ever born	2.740	0.036	13266	13266	1.543	0.013	2.668	2.811
Children surviving	2.456	0.030	13266	13266	1.470	0.012	2.395	2.516
Children ever born to women age 40-49	5.705	0.096	2382	2361	1.652	0.017	5.513	5.897
Currently using any method	0.384	0.009	8189	8210	1.736	0.024	0.365	0.402
Currently using a modern method	0.320	0.009	8189	8210	1.686	0.027	0.303	0.337
Currently using pill	0.055	0.003	8189	8210	1.371	0.063	0.048	0.062
Currently using IUD	0.009	0.001	8189	8210	1.334	0.157	0.006	0.011
Currently using condoms	0.024	0.003	8189	8210	1.516	0.108	0.019	0.029
Currently using injectables	0.126	0.005	8189	8210	1.415	0.041	0.116	0.136
Currently using implants	0.067	0.004	8189	8210	1.507	0.062	0.059	0.076
Currently using female sterilisation	0.034	0.003	8189	8210	1.453	0.086	0.028	0.039
Currently using rhythm	0.037	0.003	8189	8210	1.333	0.075	0.031	0.042
Currently using withdrawal	0.020	0.002	8189	8210	1.320	0.101	0.016	0.025
Using public sector source	0.608	0.014	3199	3557	1.591	0.023	0.581	0.636
Want no more children	0.292	0.007	8189	8210	1.417	0.024	0.277	0.306
Want to delay next birth at least 2 years	0.422	0.007	8189	8210	1.324	0.017	0.408	0.437
Ideal number of children	4.740	0.041	12633	12731	2.148	0.009	4.659	4.822
Mothers received antenatal care for last birth	0.980	0.002	7050	7079	1.405	0.002	0.975	0.985
Mothers protected against tetanus for last birth	0.880	0.006	7050	7079	1.510	0.007	0.869	0.892
Births with skilled attendant at delivery	0.637	0.014	10233	10052	2.427	0.022	0.609	0.665
Had diarrhoea in the last 2 weeks	0.118	0.005	9713	9520	1.401	0.041	0.108	0.127
Treated with ORS	0.448	0.019	1125	1122	1.255	0.044	0.409	0.487
Sought medical treatment for diarrhoea	0.431	0.020	1125	1122	1.270	0.046	0.392	0.470
Vaccination card seen	0.842	0.010	2158	2134	1.271	0.012	0.822	0.862
Received BCG vaccination	0.960	0.006	2158	2134	1.383	0.006	0.948	0.972
Received DPT vaccination (3 doses)	0.890	0.013	2158	2134	1.828	0.014	0.865	0.915
Received polio vaccination (3 doses)	0.825	0.013	2158	2134	1.583	0.016	0.799	0.852
Received measles vaccination	0.860	0.012	2158	2134	1.642	0.014	0.835	0.885
Received all vaccinations	0.753	0.015	2158	2134	1.625	0.020	0.723	0.784
Height-for-age (-2SD)	0.344	0.007	10184	9846	1.421	0.021	0.330	0.359
Weight-for-height (-2SD)	0.045	0.002	10150	9811	1.138	0.054	0.040	0.050
Weight-for-age (-2SD)	0.137	0.005	10239	9886	1.360	0.036	0.127	0.147
Prevalence of anaemia (children 6-59 months)	0.577	0.008	9198	8877	1.522	0.014	0.561	0.594
Prevalence of anaemia (women 15-49)	0.448	0.007	13102	13064	1.700	0.016	0.434	0.463
Body mass index (BMI) < 18.5	0.094	0.003	11735	11738	1.263	0.036	0.087	0.101
Body mass index (BMI) ≥ 25	0.284	0.007	11735	11738	1.719	0.025	0.270	0.299
Abstinence among never-married youth (never had sex)	0.548	0.012	3022	2917	1.368	0.023	0.524	0.573
Sexually active in past 12 months among never-married youth	0.353	0.011	3022	2917	1.306	0.032	0.331	0.376
Ever experienced any physical violence since age 15	0.395	0.008	9322	9322	1.561	0.020	0.379	0.411
Ever experienced any sexual violence	0.166	0.005	9322	9322	1.322	0.031	0.156	0.176
Ever experienced any physical/sexual violence by any husband/partner	0.462	0.009	7597	7102	1.492	0.018	0.445	0.479
Physical/sexual violence in the last 12 months by any husband/partner	0.296	0.008	7597	7102	1.538	0.027	0.280	0.312
Total fertility rate (last 3 years)	5.198	0.121	36917	37009	1.812	0.023	4.957	5.440
Neonatal mortality (last 0-4 years)	25.451	2.126	10192	10009	1.238	0.084	21.199	29.704
Post-neonatal mortality (last 0-4 years)	17.781	1.637	10145	9966	1.150	0.092	14.507	21.055
Infant mortality (last 0-4 years)	43.232	2.601	10205	10022	1.195	0.060	38.030	48.434
Child mortality (last 0-4 years)	25.004	2.106	9887	9747	1.227	0.084	20.793	29.215
Under-5 mortality (last 0-4 years)	67.155	3.462	10292	10110	1.273	0.052	60.230	74.080
	MEN							
Urban residence	0.356	0.013	3514	3514	1.669	0.038	0.329	0.383
No education	0.081	0.007	3514	3514	1.540	0.088	0.066	0.095
Secondary or higher education	0.282	0.012	3514	3514	1.612	0.043	0.257	0.306
Never married (in union)	0.430	0.010	3514	3514	1.179	0.023	0.410	0.449
Currently married (in union)	0.519	0.011	3514	3514	1.275	0.021	0.498	0.541
Had first sexual intercourse before age 18	0.472	0.013	2584	2582	1.311	0.027	0.446	0.498
Want no more children	0.223	0.012	1768	1825	1.206	0.054	0.199	0.247
Want to delay birth at least 2 years	0.517	0.015	1768	1825	1.291	0.030	0.486	0.548
Abstinence among youth (never had intercourse)	0.434	0.018	1358	1304	1.348	0.042	0.398	0.470
Sexually active in past 12 months among never married youth	0.465	0.017	1358	1304	1.285	0.037	0.430	0.499

Table B.3 Sampling errors: Urban sample, Tanzania 2015-16

VARIABLE	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
	WOMEN							
Urban residence	1.000	0.000	4145	4811	na	0.000	1.000	1.000
Literacy	0.888	0.009	4145	4811	1.761	0.010	0.870	0.905
No education	0.062	0.007	4145	4811	1.794	0.108	0.049	0.076
Secondary or higher education	0.386	0.016	4145	4811	2.116	0.041	0.354	0.418
Never married (never in union)	0.336	0.009	4145	4811	1.280	0.028	0.317	0.354
Currently married (in union)	0.527	0.010	4145	4811	1.329	0.020	0.506	0.548
Married before age 20	0.442	0.014	3210	3728	1.550	0.031	0.415	0.469
Had sexual intercourse before age 18	0.510	0.014	3210	3728	1.585	0.027	0.482	0.538
Currently pregnant	0.071	0.006	4145	4811	1.521	0.086	0.059	0.083
Children ever born	1.978	0.057	4145	4811	1.748	0.029	1.863	2.092
Children surviving	1.780	0.046	4145	4811	1.567	0.026	1.689	1.871
Children ever born to women age 40-49	4.406	0.147	630	716	1.593	0.033	4.111	4.700
Currently using any method	0.461	0.016	2183	2535	1.534	0.036	0.428	0.493
Currently using a modern method	0.352	0.013	2183	2535	1.304	0.038	0.325	0.379
Currently using pill	0.072	0.007	2183	2535	1.199	0.092	0.059	0.085
Currently using IUD	0.008	0.002	2183	2535	1.200	0.283	0.004	0.013
Currently using condoms	0.040	0.006	2183	2535	1.521	0.160	0.027	0.053
Currently using injectables	0.129	0.009	2183	2535	1.233	0.069	0.111	0.146
Currently using implants	0.064	0.006	2183	2535	1.158	0.095	0.052	0.077
Currently using female sterilisation	0.036	0.005	2183	2535	1.314	0.145	0.026	0.047
Currently using rhythm	0.073	0.007	2183	2535	1.288	0.098	0.058	0.087
Currently using withdrawal	0.031	0.005	2183	2535	1.277	0.152	0.022	0.041
Using public sector source	0.458	0.018	1131	1379	1.232	0.040	0.422	0.495
Want no more children	0.303	0.015	2183	2535	1.535	0.050	0.273	0.333
Want to delay next birth at least 2 years	0.405	0.016	2183	2535	1.488	0.039	0.373	0.436
Ideal number of children	3.915	0.046	3994	4688	1.815	0.012	3.824	4.007
Mothers received antenatal care for last birth	0.985	0.004	1837	2123	1.456	0.004	0.976	0.993
Mothers protected against tetanus for last birth	0.910	0.010	1837	2123	1.511	0.011	0.890	0.930
Births with skilled attendant at delivery	0.870	0.027	2392	2727	3.185	0.031	0.816	0.924
Had diarrhoea in the last 2 weeks	0.141	0.012	2243	2541	1.500	0.083	0.117	0.164
Treated with ORS	0.460	0.035	318	357	1.172	0.076	0.390	0.529
Sought medical treatment for diarrhoea	0.503	0.030	318	357	1.022	0.060	0.443	0.564
Vaccination card seen	0.832	0.017	545	611	1.026	0.020	0.798	0.866
Received BCG vaccination	0.985	0.005	545	611	1.022	0.006	0.974	0.996
Received DPT vaccination (3 doses)	0.950	0.010	545	611	1.052	0.011	0.930	0.970
Received polio vaccination (3 doses)	0.866	0.014	545	611	0.931	0.016	0.838	0.894
Received measles vaccination	0.933	0.011	545	611	1.035	0.012	0.910	0.956
Received all vaccinations	0.822	0.016	545	611	0.936	0.019	0.791	0.854
Height-for-age (-2SD)	0.247	0.014	2291	2499	1.547	0.059	0.218	0.276
Weight-for-height (-2SD)	0.038	0.005	2275	2479	1.155	0.127	0.028	0.047
Weight-for-age (-2SD)	0.091	0.008	2302	2507	1.221	0.087	0.075	0.107
Prevalence of anaemia (children 6-59 months)	0.535	0.014	2053	2229	1.254	0.027	0.506	0.563
Prevalence of anaemia (women 15-49)	0.445	0.013	4066	4682	1.681	0.030	0.419	0.471
Body mass index (BMI) < 18.5	0.074	0.005	3737	4330	1.191	0.069	0.064	0.084
Body mass index (BMI) ≥ 25	0.415	0.012	3737	4330	1.542	0.030	0.390	0.440
Abstinence among never-married youth (never had sex)	0.498	0.021	1197	1377	1.458	0.042	0.456	0.540
Sexually active in past 12 months among never-married youth	0.410	0.020	1197	1377	1.387	0.048	0.370	0.449
Ever experienced any physical violence since age 15	0.355	0.014	2713	3354	1.557	0.040	0.326	0.383
Ever experienced any sexual violence	0.176	0.009	2713	3354	1.192	0.050	0.158	0.193
Ever experienced any physical/sexual violence by any husband/partner	0.427	0.016	2037	2300	1.423	0.037	0.396	0.458
Physical/sexual violence in the last 12 months by any husband/partner	0.274	0.015	2037	2300	1.542	0.056	0.244	0.305
Total fertility rate (last 3 years)	3.802	0.192	11547	13445	2.010	0.050	3.418	4.185
Neonatal mortality (last 0-9 years)	43.278	4.150	4363	4937	1.140	0.096	34.977	51.578
Post-neonatal mortality (last 0-9 years)	19.589	3.004	4350	4918	1.239	0.153	13.582	25.597
Infant mortality (last 0-9 years)	62.867	4.994	4371	4948	1.134	0.079	52.879	72.855
Child mortality (last 0-9 years)	24.533	3.823	4228	4757	1.412	0.156	16.888	32.178
Under-5 mortality (last 0-9 years)	85.858	6.975	4394	4971	1.364	0.081	71.907	99.809
	MEN							
Urban residence	1.000	0.000	1057	1251	na	0.000	1.000	1.000
No education	0.035	0.010	1057	1251	1.835	0.297	0.014	0.056
Secondary or higher education	0.472	0.024	1057	1251	1.544	0.050	0.424	0.519
Never married (in union)	0.461	0.017	1057	1251	1.099	0.037	0.427	0.495
Currently married (in union)	0.484	0.019	1057	1251	1.249	0.040	0.446	0.522
Had first sexual intercourse before age 18	0.442	0.023	797	946	1.317	0.052	0.396	0.488
Want no more children	0.232	0.023	496	605	1.210	0.099	0.186	0.277
Want to delay birth at least 2 years	0.462	0.030	496	605	1.349	0.066	0.401	0.522
Abstinence among youth (never had intercourse)	0.416	0.033	414	466	1.363	0.080	0.350	0.482
Sexually active in past 12 months among never married youth	0.490	0.031	414	466	1.266	0.064	0.428	0.553

Table B.4 Sampling errors: Rural sample, Tanzania 2015-16

VARIABLE	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
	WOMEN							
Urban residence	0.000	0.000	9121	8455	na	na	0.000	0.000
Literacy	0.701	0.010	9121	8455	2.178	0.015	0.680	0.722
No education	0.195	0.009	9121	8455	2.198	0.047	0.177	0.213
Secondary or higher education	0.148	0.008	9121	8455	2.081	0.052	0.132	0.163
Never married (never in union)	0.206	0.007	9121	8455	1.637	0.034	0.192	0.219
Currently married (in union)	0.671	0.008	9121	8455	1.623	0.012	0.655	0.687
Married before age 20	0.650	0.010	7124	6634	1.804	0.016	0.629	0.670
Had sexual intercourse before age 18	0.651	0.009	7124	6634	1.659	0.014	0.633	0.670
Currently pregnant	0.094	0.004	9121	8455	1.326	0.043	0.086	0.102
Children ever born	3.174	0.042	9121	8455	1.407	0.013	3.090	3.258
Children surviving	2.840	0.036	9121	8455	1.376	0.013	2.767	2.913
Children ever born to women age 40-49	6.271	0.111	1752	1645	1.626	0.018	6.049	6.492
Currently using any method	0.349	0.011	6006	5675	1.826	0.032	0.327	0.372
Currently using a modern method	0.306	0.011	6006	5675	1.859	0.036	0.284	0.328
Currently using pill	0.048	0.004	6006	5675	1.455	0.084	0.040	0.056
Currently using IUD	0.009	0.002	6006	5675	1.392	0.189	0.006	0.012
Currently using condoms	0.016	0.002	6006	5675	1.369	0.137	0.012	0.021
Currently using injectables	0.125	0.006	6006	5675	1.498	0.051	0.112	0.138
Currently using implants	0.069	0.005	6006	5675	1.649	0.078	0.058	0.080
Currently using female sterilisation	0.032	0.003	6006	5675	1.515	0.107	0.025	0.039
Currently using rhythm	0.021	0.002	6006	5675	1.197	0.106	0.016	0.025
Currently using withdrawal	0.015	0.002	6006	5675	1.315	0.135	0.011	0.020
Using public sector source	0.703	0.018	2068	2177	1.825	0.026	0.667	0.740
Want no more children	0.286	0.008	6006	5675	1.322	0.027	0.271	0.302
Want to delay next birth at least 2 years	0.430	0.008	6006	5675	1.204	0.018	0.415	0.446
Ideal number of children	5.221	0.053	8639	8043	2.187	0.010	5.115	5.327
Mothers received antenatal care for last birth	0.978	0.003	5213	4955	1.389	0.003	0.972	0.983
Mothers protected against tetanus for last birth	0.868	0.007	5213	4955	1.537	0.008	0.853	0.882
Births with skilled attendant at delivery	0.550	0.016	7841	7325	2.402	0.029	0.518	0.582
Had diarrhoea in the last 2 weeks	0.110	0.005	7470	6980	1.380	0.047	0.099	0.120
Treated with ORS	0.442	0.023	807	764	1.290	0.053	0.395	0.489
Sought medical treatment for diarrhoea	0.397	0.024	807	764	1.363	0.061	0.349	0.446
Vaccination card seen	0.846	0.013	1613	1523	1.384	0.015	0.821	0.871
Received BCG vaccination	0.950	0.008	1613	1523	1.448	0.008	0.934	0.966
Received DPT vaccination (3 doses)	0.866	0.017	1613	1523	1.971	0.020	0.832	0.900
Received polio vaccination (3 doses)	0.809	0.018	1613	1523	1.770	0.022	0.774	0.844
Received measles vaccination	0.831	0.017	1613	1523	1.763	0.020	0.798	0.864
Received all vaccinations	0.726	0.020	1613	1523	1.814	0.028	0.685	0.766
Height-for-age (-2SD)	0.378	0.008	7893	7347	1.400	0.022	0.361	0.394
Weight-for-height (-2SD)	0.047	0.003	7875	7332	1.144	0.060	0.042	0.053
Weight-for-age (-2SD)	0.152	0.006	7937	7379	1.404	0.040	0.140	0.164
Prevalence of anaemia (children 6-59 months)	0.592	0.010	7145	6648	1.616	0.017	0.572	0.611
Prevalence of anaemia (women 15-49)	0.450	0.009	9036	8382	1.699	0.020	0.432	0.468
Body mass index (BMI) < 18.5	0.106	0.005	7998	7408	1.308	0.042	0.097	0.115
Body mass index (BMI) ≥ 25	0.208	0.008	7998	7408	1.655	0.036	0.193	0.223
Abstinence among never-married youth (never had sex)	0.593	0.015	1825	1540	1.263	0.024	0.564	0.622
Sexually active in past 12 months among never-married youth	0.303	0.013	1825	1540	1.205	0.043	0.277	0.329
Ever experienced any physical violence since age 15	0.418	0.009	6609	5968	1.542	0.022	0.399	0.436
Ever experienced any sexual violence	0.161	0.006	6609	5968	1.384	0.039	0.148	0.173
Ever experienced any physical/sexual violence by any husband/partner	0.478	0.010	5560	4802	1.507	0.021	0.458	0.498
Physical/sexual violence in the last 12 months by any husband/partner	0.307	0.009	5560	4802	1.504	0.030	0.288	0.325
Total fertility rate (last 3 years)	5.995	0.126	25370	23564	1.645	0.021	5.743	6.248
Neonatal mortality (last 0-9 years)	23.977	1.667	14840	13913	1.213	0.070	20.642	27.311
Post-neonatal mortality (last 0-9 years)	23.397	1.661	14825	13885	1.191	0.071	20.075	26.718
Infant mortality (last 0-9 years)	47.373	2.263	14851	13923	1.133	0.048	42.848	51.899
Child mortality (last 0-9 years)	29.266	1.939	14492	13617	1.276	0.066	25.388	33.143
Under-5 mortality (last 0-9 years)	75.253	2.890	14938	14015	1.169	0.038	69.472	81.033
	MEN							
Urban residence	0.000	0.000	2457	2263	na	na	0.000	0.000
No education	0.106	0.009	2457	2263	1.494	0.088	0.087	0.124
Secondary or higher education	0.177	0.011	2457	2263	1.408	0.061	0.155	0.199
Never married (in union)	0.412	0.012	2457	2263	1.205	0.029	0.388	0.436
Currently married (in union)	0.539	0.013	2457	2263	1.265	0.024	0.513	0.564
Had first sexual intercourse before age 18	0.489	0.015	1787	1636	1.283	0.031	0.459	0.519
Want no more children	0.219	0.014	1272	1219	1.188	0.063	0.191	0.246
Want to delay birth at least 2 years	0.544	0.017	1272	1219	1.241	0.032	0.510	0.579
Abstinence among youth (never had intercourse)	0.444	0.021	944	838	1.324	0.048	0.401	0.487
Sexually active in past 12 months among never married youth	0.450	0.021	944	838	1.283	0.046	0.409	0.492

Table B.5 Sampling errors: Tanzania Mainland sample, Tanzania 2015-16

VARIABLE	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
WOMEN								
Urban residence	0.363	0.011	11127	12862	2.325	0.029	0.342	0.385
Literacy	0.766	0.008	11127	12862	1.976	0.010	0.750	0.781
No education	0.148	0.007	11127	12862	1.981	0.045	0.135	0.161
Secondary or higher education	0.221	0.009	11127	12862	2.167	0.039	0.204	0.238
Never married (never in union)	0.249	0.006	11127	12862	1.446	0.024	0.237	0.261
Currently married (in union)	0.621	0.007	11127	12862	1.458	0.011	0.608	0.635
Married before age 20	0.580	0.009	8720	10054	1.691	0.015	0.562	0.597
Had sexual intercourse before age 18	0.610	0.008	8720	10054	1.581	0.014	0.594	0.627
Currently pregnant	0.086	0.004	11127	12862	1.329	0.041	0.079	0.093
Children ever born	2.751	0.037	11127	12862	1.462	0.013	2.677	2.825
Children surviving	2.464	0.031	11127	12862	1.394	0.013	2.402	2.526
Children ever born to women age 40-49	5.697	0.099	1982	2286	1.559	0.017	5.500	5.895
Currently using any method	0.388	0.010	6995	7990	1.647	0.025	0.369	0.407
Currently using a modern method	0.325	0.009	6995	7990	1.597	0.028	0.307	0.343
Currently using pill	0.056	0.004	6995	7990	1.292	0.064	0.049	0.063
Currently using IUD	0.009	0.001	6995	7990	1.253	0.158	0.006	0.012
Currently using condoms	0.024	0.003	6995	7990	1.423	0.108	0.019	0.029
Currently using injectables	0.128	0.005	6995	7990	1.337	0.042	0.117	0.138
Currently using implants	0.068	0.004	6995	7990	1.421	0.063	0.060	0.077
Currently using female sterilisation	0.034	0.003	6995	7990	1.369	0.087	0.028	0.040
Currently using rhythm	0.037	0.003	6995	7990	1.261	0.077	0.031	0.043
Currently using withdrawal	0.019	0.002	6995	7990	1.269	0.108	0.015	0.024
Using public sector source	0.607	0.014	2993	3521	1.553	0.023	0.579	0.634
Want no more children	0.294	0.007	6995	7990	1.342	0.025	0.280	0.309
Want to delay next birth at least 2 years	0.422	0.007	6995	7990	1.256	0.018	0.407	0.437
Ideal number of children	4.700	0.042	10689	12363	2.053	0.009	4.617	4.784
Mothers received antenatal care for last birth	0.979	0.002	6099	6908	1.327	0.002	0.975	0.984
Mothers protected against tetanus for last birth	0.879	0.006	6099	6908	1.430	0.007	0.866	0.891
Births with skilled attendant at delivery	0.635	0.014	8739	9788	2.316	0.023	0.607	0.664
Had diarrhoea in the last 2 weeks	0.118	0.005	8286	9268	1.336	0.042	0.108	0.128
Treated with ORS	0.446	0.020	973	1095	1.196	0.045	0.406	0.486
Sought medical treatment for diarrhoea	0.428	0.020	973	1095	1.210	0.047	0.388	0.468
Vaccination card seen	0.842	0.010	1848	2077	1.213	0.012	0.821	0.863
Received BCG vaccination	0.959	0.006	1848	2077	1.310	0.006	0.947	0.971
Received DPT vaccination (3 doses)	0.889	0.013	1848	2077	1.737	0.014	0.863	0.914
Received polio vaccination (3 doses)	0.824	0.014	1848	2077	1.509	0.016	0.797	0.851
Received measles vaccination	0.859	0.013	1848	2077	1.564	0.015	0.834	0.885
Received all vaccinations	0.752	0.016	1848	2077	1.549	0.021	0.720	0.783
Height-for-age (-2SD)	0.347	0.007	8695	9585	1.347	0.021	0.333	0.362
Weight-for-height (-2SD)	0.044	0.002	8666	9550	1.090	0.056	0.039	0.049
Weight-for-age (-2SD)	0.137	0.005	8747	9624	1.294	0.037	0.126	0.147
Prevalence of anaemia (children 6-59 months)	0.575	0.009	7840	8639	1.448	0.015	0.558	0.592
Prevalence of anaemia (women 15-49)	0.443	0.008	10986	12664	1.606	0.017	0.428	0.459
Body Mass Index (BMI) < 18.5	0.093	0.004	9820	11377	1.194	0.038	0.086	0.100
Body Mass Index (BMI) ≥ 25	0.281	0.007	9820	11377	1.629	0.026	0.266	0.296
Abstinence among never-married youth (never had sex)	0.531	0.013	2362	2790	1.256	0.024	0.506	0.557
Sexually active in past 12 months among never-married youth	0.367	0.012	2362	2790	1.196	0.032	0.344	0.391
Ever experienced any physical violence since age 15	0.403	0.008	7960	9036	1.480	0.020	0.387	0.419
Ever experienced any sexual violence	0.168	0.005	7960	9036	1.249	0.031	0.158	0.179
Ever experienced any physical/sexual violence by any husband/partner	0.470	0.009	6581	6920	1.418	0.019	0.452	0.487
Physical/sexual violence in the last 12 months by any husband/partner	0.302	0.008	6581	6920	1.457	0.027	0.286	0.319
Total fertility rate (last 3 years)	5.204	0.124	31028	35891	1.709	0.024	4.956	5.452
Neonatal mortality (last 0-9 years)	29.058	1.788	16461	18368	1.162	0.062	25.482	32.634
Post-neonatal mortality (last 0-9 years)	22.537	1.492	16434	18323	1.116	0.066	19.553	25.520
Infant mortality (last 0-9 years)	51.595	2.228	16478	18389	1.087	0.043	47.140	56.050
Child mortality (last 0-9 years)	28.504	1.770	16065	17908	1.210	0.062	24.965	32.044
Under-five mortality (last 0-9 years)	78.628	2.895	16579	18502	1.178	0.037	72.839	84.417
MEN								
Urban residence	0.357	0.014	3024	3425	1.585	0.039	0.330	0.385
No education	0.082	0.007	3024	3425	1.457	0.089	0.067	0.096
Secondary or higher education	0.272	0.013	3024	3425	1.553	0.046	0.247	0.298
Never married (in union)	0.426	0.010	3024	3425	1.122	0.024	0.406	0.446
Currently married (in union)	0.522	0.011	3024	3425	1.214	0.021	0.500	0.544
Had first sexual intercourse before age 18	0.481	0.013	2234	2517	1.248	0.027	0.455	0.507
Want no more children	0.226	0.012	1568	1788	1.153	0.054	0.202	0.250
Want to delay birth at least 2 years	0.518	0.016	1568	1788	1.240	0.030	0.486	0.549
Abstinence among youth (never had intercourse)	0.422	0.019	1126	1262	1.269	0.044	0.385	0.460
Sexually active in past 12 months among never married youth	0.475	0.018	1126	1262	1.205	0.038	0.439	0.511

Table B.6 Sampling errors: Mainland urban sample, Tanzania 2015-16

VARIABLE	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
	WOMEN							
Urban residence	1.000	0.000	3606	4675	na	0.000	1.000	1.000
Literacy	0.886	0.009	3606	4675	1.679	0.010	0.868	0.904
No education	0.063	0.007	3606	4675	1.714	0.110	0.049	0.076
Secondary or higher education	0.374	0.017	3606	4675	2.050	0.044	0.341	0.408
Never married (never in union)	0.333	0.010	3606	4675	1.230	0.029	0.313	0.352
Currently married (in union)	0.528	0.011	3606	4675	1.273	0.020	0.507	0.549
Married before age 20	0.446	0.014	2797	3622	1.489	0.031	0.418	0.474
Had sexual intercourse before age 18	0.518	0.014	2797	3622	1.520	0.028	0.490	0.547
Currently pregnant	0.071	0.006	3606	4675	1.457	0.088	0.058	0.083
Children ever born	1.979	0.059	3606	4675	1.688	0.030	1.862	2.097
Children surviving	1.780	0.047	3606	4675	1.514	0.026	1.687	1.874
Children ever born to women age 40-49	4.371	0.151	530	691	1.524	0.035	4.069	4.673
Currently using any method	0.466	0.017	1915	2468	1.477	0.036	0.432	0.500
Currently using a modern method	0.358	0.014	1915	2468	1.253	0.038	0.331	0.385
Currently using pill	0.073	0.007	1915	2468	1.143	0.093	0.060	0.087
Currently using IUD	0.008	0.002	1915	2468	1.147	0.288	0.003	0.013
Currently using condoms	0.041	0.007	1915	2468	1.444	0.160	0.028	0.054
Currently using injectables	0.131	0.009	1915	2468	1.181	0.070	0.112	0.149
Currently using implants	0.065	0.006	1915	2468	1.107	0.096	0.053	0.078
Currently using female sterilisation	0.037	0.005	1915	2468	1.256	0.147	0.026	0.048
Currently using rhythm	0.073	0.007	1915	2468	1.231	0.100	0.059	0.088
Currently using withdrawal	0.030	0.005	1915	2468	1.233	0.161	0.020	0.039
Using public sector source	0.457	0.018	1088	1369	1.217	0.040	0.420	0.494
Want no more children	0.306	0.015	1915	2468	1.469	0.051	0.275	0.337
Want to delay next birth at least 2 years	0.404	0.016	1915	2468	1.429	0.040	0.372	0.436
Ideal number of children	3.875	0.046	3510	4564	1.763	0.012	3.782	3.967
Mothers received antenatal care for last birth	0.984	0.004	1643	2075	1.402	0.004	0.976	0.993
Mothers protected against tetanus for last birth	0.909	0.010	1643	2075	1.452	0.011	0.888	0.930
Births with skilled attendant at delivery	0.869	0.028	2114	2658	3.080	0.032	0.814	0.925
Had diarrhoea in the last 2 weeks	0.142	0.012	1976	2475	1.452	0.085	0.118	0.166
Treated with ORS	0.461	0.035	293	351	1.130	0.077	0.390	0.531
Sought medical treatment for diarrhoea	0.505	0.031	293	351	0.987	0.061	0.443	0.566
Vaccination card seen	0.832	0.017	485	595	0.993	0.021	0.798	0.867
Received BCG vaccination	0.985	0.006	485	595	0.983	0.006	0.973	0.996
Received DPT vaccination (3 doses)	0.950	0.010	485	595	1.022	0.011	0.929	0.971
Received polio vaccination (3 doses)	0.867	0.014	485	595	0.903	0.016	0.838	0.895
Received measles vaccination	0.934	0.012	485	595	1.012	0.012	0.911	0.957
Received all vaccinations	0.823	0.016	485	595	0.908	0.020	0.791	0.856
Height-for-age (-2SD)	0.249	0.015	1994	2425	1.492	0.059	0.220	0.279
Weight-for-height (-2SD)	0.038	0.005	1980	2406	1.125	0.131	0.028	0.048
Weight-for-age (-2SD)	0.091	0.008	2005	2433	1.188	0.089	0.075	0.107
Prevalence of anaemia (children 6-59 months)	0.532	0.015	1783	2162	1.218	0.028	0.503	0.562
Prevalence of anaemia (women 15-49)	0.441	0.014	3532	4547	1.616	0.031	0.414	0.468
Body Mass Index (BMI) < 18.5	0.073	0.005	3249	4207	1.148	0.072	0.062	0.083
Body Mass Index (BMI) ≥ 25	0.415	0.013	3249	4207	1.478	0.031	0.389	0.440
Abstinence among never-married youth (never had sex)	0.483	0.022	1009	1329	1.392	0.045	0.439	0.527
Sexually active in past 12 months among never-married youth	0.422	0.021	1009	1329	1.320	0.049	0.381	0.463
Ever experienced any physical violence since age 15	0.360	0.015	2420	3260	1.503	0.041	0.331	0.390
Ever experienced any sexual violence	0.178	0.009	2420	3260	1.149	0.050	0.160	0.195
Ever experienced any physical/sexual violence by any husband/partner	0.433	0.016	1852	2250	1.380	0.037	0.401	0.465
Physical/sexual violence in the last 12 months by any husband/partner	0.279	0.016	1852	2250	1.496	0.056	0.248	0.310
Total fertility rate (last 3 years)	3.805	0.197	10050	13062	1.925	0.052	3.412	4.199
Neonatal mortality (last 0-9 years)	43.561	4.248	3840	4811	1.084	0.098	35.066	52.056
Post-neonatal mortality (last 0-9 years)	19.722	3.079	3830	4793	1.180	0.156	13.564	25.881
Infant mortality (last 0-9 years)	63.283	5.111	3848	4822	1.078	0.081	53.060	73.506
Child mortality (last 0-9 years)	24.865	3.916	3718	4635	1.341	0.157	17.033	32.696
Under-five mortality (last 0-9 years)	86.574	7.136	3869	4844	1.297	0.082	72.302	100.847
	MEN							
Urban residence	1.000	0.000	945	1224	na	0.000	1.000	1.000
No education	0.036	0.011	945	1224	1.758	0.298	0.014	0.057
Secondary or higher education	0.465	0.024	945	1224	1.497	0.052	0.416	0.513
Never married (in union)	0.459	0.017	945	1224	1.061	0.037	0.425	0.494
Currently married (in union)	0.485	0.020	945	1224	1.206	0.040	0.446	0.524
Had first sexual intercourse before age 18	0.449	0.024	718	926	1.274	0.053	0.402	0.496
Want no more children	0.234	0.023	449	593	1.169	0.100	0.188	0.281
Want to delay birth at least 2 years	0.461	0.031	449	593	1.309	0.067	0.399	0.523
Abstinence among youth (never had intercourse)	0.403	0.034	360	453	1.310	0.084	0.335	0.471
Sexually active in past 12 months among never married youth	0.502	0.032	360	453	1.211	0.064	0.438	0.566

Table B.7 Sampling errors: Mainland rural sample, Tanzania 2015-16

VARIABLE	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
	WOMEN							
Urban residence	0.000	0.000	7521	8187	na	na	0.000	0.000
Literacy	0.697	0.011	7521	8187	2.031	0.015	0.675	0.718
No education	0.197	0.009	7521	8187	2.052	0.048	0.178	0.215
Secondary or higher education	0.133	0.008	7521	8187	2.031	0.060	0.117	0.149
Never married (never in union)	0.201	0.007	7521	8187	1.546	0.036	0.187	0.215
Currently married (in union)	0.675	0.008	7521	8187	1.523	0.012	0.658	0.691
Married before age 20	0.655	0.010	5923	6432	1.699	0.016	0.634	0.676
Had sexual intercourse before age 18	0.662	0.010	5923	6432	1.566	0.015	0.643	0.681
Currently pregnant	0.095	0.004	7521	8187	1.237	0.044	0.086	0.103
Children ever born	3.192	0.043	7521	8187	1.323	0.014	3.105	3.279
Children surviving	2.854	0.038	7521	8187	1.295	0.013	2.779	2.930
Children ever born to women age 40-49	6.272	0.114	1452	1595	1.530	0.018	6.044	6.500
Currently using any method	0.353	0.012	5080	5523	1.723	0.033	0.330	0.376
Currently using a modern method	0.310	0.011	5080	5523	1.753	0.037	0.287	0.333
Currently using pill	0.048	0.004	5080	5523	1.367	0.085	0.040	0.056
Currently using IUD	0.009	0.002	5080	5523	1.298	0.189	0.006	0.013
Currently using condoms	0.017	0.002	5080	5523	1.280	0.138	0.012	0.021
Currently using injectables	0.127	0.007	5080	5523	1.408	0.052	0.113	0.140
Currently using implants	0.070	0.006	5080	5523	1.548	0.079	0.059	0.081
Currently using female sterilisation	0.033	0.004	5080	5523	1.418	0.108	0.026	0.040
Currently using rhythm	0.021	0.002	5080	5523	1.133	0.109	0.016	0.025
Currently using withdrawal	0.015	0.002	5080	5523	1.269	0.146	0.010	0.019
Using public sector source	0.702	0.019	1905	2152	1.768	0.026	0.665	0.739
Want no more children	0.289	0.008	5080	5523	1.247	0.027	0.273	0.305
Want to delay next birth at least 2 years	0.430	0.008	5080	5523	1.136	0.018	0.414	0.445
Ideal number of children	5.184	0.054	7179	7799	2.078	0.011	5.075	5.293
Mothers received antenatal care for last birth	0.977	0.003	4456	4833	1.303	0.003	0.971	0.983
Mothers protected against tetanus for last birth	0.866	0.007	4456	4833	1.448	0.009	0.851	0.880
Births with skilled attendant at delivery	0.548	0.017	6625	7130	2.278	0.030	0.515	0.581
Had diarrhoea in the last 2 weeks	0.110	0.005	6310	6794	1.310	0.049	0.099	0.120
Treated with ORS	0.439	0.024	680	744	1.224	0.055	0.391	0.487
Sought medical treatment for diarrhoea	0.392	0.025	680	744	1.292	0.064	0.342	0.441
Vaccination card seen	0.845	0.013	1363	1482	1.313	0.015	0.820	0.871
Received BCG vaccination	0.949	0.008	1363	1482	1.363	0.009	0.933	0.965
Received DPT vaccination (3 doses)	0.864	0.017	1363	1482	1.860	0.020	0.829	0.899
Received polio vaccination (3 doses)	0.807	0.018	1363	1482	1.676	0.022	0.771	0.843
Received measles vaccination	0.829	0.017	1363	1482	1.666	0.021	0.795	0.863
Received all vaccinations	0.723	0.021	1363	1482	1.717	0.029	0.681	0.765
Height-for-age (-2SD)	0.381	0.008	6701	7159	1.317	0.022	0.364	0.397
Weight-for-height (-2SD)	0.046	0.003	6686	7144	1.088	0.062	0.041	0.052
Weight-for-age (-2SD)	0.152	0.006	6742	7190	1.324	0.041	0.140	0.164
Prevalence of anaemia (children 6-59 months)	0.590	0.010	6057	6477	1.525	0.017	0.569	0.610
Prevalence of anaemia (women 15-49)	0.445	0.009	7454	8117	1.592	0.021	0.427	0.463
Body Mass Index (BMI) < 18.5	0.105	0.005	6571	7170	1.226	0.044	0.096	0.115
Body Mass Index (BMI) ≥ 25	0.203	0.008	6571	7170	1.565	0.038	0.187	0.218
Abstinence among never-married youth (never had sex)	0.575	0.015	1353	1460	1.124	0.026	0.545	0.606
Sexually active in past 12 months among never-married youth	0.317	0.014	1353	1460	1.071	0.043	0.290	0.344
Ever experienced any physical violence since age 15	0.427	0.010	5540	5776	1.452	0.023	0.408	0.446
Ever experienced any sexual violence	0.163	0.006	5540	5776	1.298	0.040	0.150	0.176
Ever experienced any physical/sexual violence by any husband/partner	0.487	0.010	4729	4670	1.421	0.021	0.466	0.508
Physical/sexual violence in the last 12 months by any husband/partner	0.314	0.010	4729	4670	1.411	0.030	0.295	0.333
Total fertility rate (last 3 years)	6.006	0.130	20978	22829	1.541	0.022	5.746	6.265
Neonatal mortality (last 0-9 years)	23.920	1.707	12621	13557	1.133	0.071	20.507	27.333
Post-neonatal mortality (last 0-9 years)	23.529	1.701	12604	13530	1.106	0.072	20.128	26.930
Infant mortality (last 0-9 years)	47.449	2.317	12630	13567	1.054	0.049	42.815	52.083
Child mortality (last 0-9 years)	29.741	1.985	12347	13273	1.183	0.067	25.771	33.710
Under-five mortality (last 0-9 years)	75.778	2.959	12710	13658	1.087	0.039	69.861	81.695
	MEN							
Urban residence	0.000	0.000	2079	2201	na	na	0.000	0.000
No education	0.107	0.010	2079	2201	1.405	0.089	0.088	0.126
Secondary or higher education	0.166	0.011	2079	2201	1.361	0.067	0.143	0.188
Never married (in union)	0.408	0.012	2079	2201	1.141	0.030	0.383	0.432
Currently married (in union)	0.543	0.013	2079	2201	1.197	0.024	0.516	0.569
Had first sexual intercourse before age 18	0.500	0.016	1516	1591	1.213	0.031	0.469	0.531
Want no more children	0.222	0.014	1119	1194	1.131	0.063	0.194	0.250
Want to delay birth at least 2 years	0.546	0.018	1119	1194	1.186	0.032	0.510	0.581
Abstinence among youth (never had intercourse)	0.433	0.022	766	809	1.236	0.051	0.389	0.478
Sexually active in past 12 months among never married youth	0.460	0.022	766	809	1.193	0.047	0.417	0.503

Table B.8 Sampling errors: Zanzibar sample, Tanzania 2015-16

VARIABLE	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
WOMEN								
Urban residence	0.337	0.018	2139	404	1.733	0.053	0.302	0.372
Literacy	0.872	0.010	2139	404	1.441	0.012	0.851	0.893
No education	0.111	0.010	2139	404	1.419	0.087	0.091	0.130
Secondary or higher education	0.660	0.013	2139	404	1.274	0.020	0.633	0.686
Never married (never in union)	0.372	0.012	2139	404	1.142	0.032	0.348	0.396
Currently married (in union)	0.545	0.013	2139	404	1.230	0.024	0.518	0.571
Married before age 20	0.422	0.012	1614	307	1.011	0.029	0.397	0.446
Had sexual intercourse before age 18	0.290	0.014	1614	307	1.238	0.048	0.262	0.318
Currently pregnant	0.076	0.007	2139	404	1.250	0.094	0.062	0.091
Children ever born	2.384	0.061	2139	404	0.963	0.026	2.262	2.505
Children surviving	2.194	0.057	2139	404	0.980	0.026	2.081	2.308
Children ever born to women age 40-49	5.940	0.149	400	75	0.956	0.025	5.642	6.238
Currently using any method	0.234	0.017	1194	220	1.391	0.073	0.200	0.269
Currently using a modern method	0.140	0.012	1194	220	1.211	0.087	0.116	0.165
Currently using pill	0.028	0.007	1194	220	1.516	0.260	0.013	0.042
Currently using IUD	0.002	0.002	1194	220	1.389	0.996	0.000	0.005
Currently using condoms	0.004	0.002	1194	220	1.099	0.477	0.000	0.009
Currently using injectables	0.061	0.007	1194	220	0.973	0.111	0.048	0.075
Currently using implants	0.031	0.006	1194	220	1.161	0.188	0.019	0.043
Currently using female sterilisation	0.013	0.004	1194	220	1.151	0.286	0.006	0.021
Currently using rhythm	0.033	0.007	1194	220	1.287	0.203	0.019	0.046
Currently using withdrawal	0.058	0.012	1194	220	1.720	0.201	0.035	0.081
Using public sector source	0.768	0.032	206	36	1.080	0.041	0.704	0.832
Want no more children	0.194	0.012	1194	220	1.080	0.064	0.169	0.218
Want to delay next birth at least 2 years	0.441	0.017	1194	220	1.149	0.037	0.408	0.474
Ideal number of children	6.077	0.082	1944	368	1.345	0.013	5.913	6.241
Mothers received antenatal care for last birth	0.997	0.002	951	171	1.214	0.002	0.993	1.001
Mothers protected against tetanus for last birth	0.954	0.008	951	171	1.140	0.008	0.938	0.969
Births with skilled attendant at delivery	0.688	0.021	1494	264	1.403	0.031	0.646	0.730
Had diarrhoea in the last 2 weeks	0.105	0.011	1427	252	1.239	0.103	0.083	0.126
Treated with ORS	0.511	0.046	152	26	1.069	0.090	0.419	0.603
Sought medical treatment for diarrhoea	0.567	0.046	152	26	1.048	0.080	0.476	0.658
Vaccination card seen	0.849	0.023	310	57	1.107	0.027	0.804	0.894
Received BCG vaccination	0.986	0.006	310	57	0.990	0.007	0.973	0.999
Received DPT vaccination (3 doses)	0.934	0.019	310	57	1.339	0.020	0.897	0.972
Received polio vaccination (3 doses)	0.856	0.024	310	57	1.187	0.028	0.809	0.903
Received measles vaccination	0.894	0.018	310	57	1.013	0.020	0.859	0.930
Received all vaccinations	0.808	0.025	310	57	1.117	0.031	0.758	0.858
Height-for-age (-2SD)	0.234	0.016	1489	261	1.279	0.067	0.203	0.266
Weight-for-height (-2SD)	0.071	0.007	1484	261	1.075	0.104	0.056	0.085
Weight-for-age (-2SD)	0.138	0.012	1492	262	1.188	0.085	0.114	0.161
Prevalence of anemia (children 6-59 months)	0.645	0.018	1358	239	1.326	0.028	0.609	0.681
Prevalence of anemia (women 15-49)	0.601	0.015	2116	400	1.420	0.025	0.571	0.631
Body Mass Index (BMI) < 18.5	0.120	0.008	1915	362	1.058	0.066	0.104	0.135
Body Mass Index (BMI) ≥ 25	0.388	0.014	1915	362	1.261	0.036	0.360	0.416
Abstinence among never-married youth (never had sex)	0.920	0.013	660	127	1.229	0.014	0.895	0.946
Sexually active in past 12 months among never-married youth	0.050	0.011	660	127	1.335	0.228	0.027	0.072
Ever experienced any physical violence since age 15	0.144	0.012	1362	286	1.230	0.081	0.121	0.168
Ever experienced any sexual violence	0.093	0.011	1362	286	1.369	0.116	0.072	0.115
Ever experienced any physical/sexual violence by any husband/partner	0.164	0.017	1016	182	1.450	0.103	0.130	0.197
Physical/sexual violence in the last 12 months by any husband/partner	0.055	0.009	1016	182	1.284	0.168	0.036	0.073
Total fertility rate (last 3 years)	5.080	0.262	5889	1118	1.270	0.052	4.556	5.605
Neonatal mortality (last 0-9 years)	27.797	4.204	2742	482	1.192	0.151	19.389	36.205
Post-neonatal mortality (last 0-9 years)	17.353	3.370	2741	480	1.301	0.194	10.612	24.093
Infant mortality (last 0-9 years)	45.150	5.192	2744	482	1.207	0.115	34.765	55.534
Child mortality (last 0-9 years)	11.338	2.490	2655	466	1.059	0.220	6.359	16.318
Under-five mortality (last 0-9 years)	55.976	5.632	2753	484	1.161	0.101	44.711	67.241
MEN								
Urban residence	0.308	0.028	490	89	1.363	0.092	0.251	0.365
No education	0.043	0.009	490	89	0.975	0.208	0.025	0.061
Secondary or higher education	0.642	0.023	490	89	1.073	0.036	0.595	0.688
Never married (in union)	0.559	0.025	490	89	1.130	0.045	0.508	0.610
Currently married (in union)	0.413	0.024	490	89	1.093	0.059	0.364	0.462
Had first sexual intercourse before age 18	0.110	0.021	350	64	1.278	0.195	0.067	0.153
Want no more children	0.084	0.019	200	37	0.945	0.221	0.047	0.121
Want to delay birth at least 2 years	0.482	0.039	200	37	1.107	0.081	0.404	0.561
Abstinence among youth (never had intercourse)	0.793	0.031	232	42	1.162	0.039	0.731	0.855
Sexually active in past 12 months among never married youth	0.146	0.025	232	42	1.082	0.172	0.096	0.197

Table B.9 Sampling errors: Unguja (Zanzibar Island) sample, Tanzania 2015-16

VARIABLE	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
WOMEN								
Urban residence	0.383	0.021	1435	293	1.624	0.055	0.341	0.424
Literacy	0.916	0.008	1435	293	1.068	0.009	0.900	0.931
No education	0.061	0.007	1435	293	1.154	0.120	0.046	0.076
Secondary or higher education	0.722	0.012	1435	293	1.038	0.017	0.698	0.747
Never married (never in union)	0.391	0.015	1435	293	1.173	0.039	0.361	0.421
Currently married (in union)	0.516	0.017	1435	293	1.301	0.033	0.481	0.550
Married before age 20	0.377	0.015	1091	224	1.014	0.039	0.347	0.407
Had sexual intercourse before age 18	0.275	0.017	1091	224	1.222	0.060	0.242	0.308
Currently pregnant	0.058	0.008	1435	293	1.280	0.136	0.042	0.074
Children ever born	2.105	0.069	1435	293	1.001	0.033	1.967	2.244
Children surviving	1.939	0.065	1435	293	1.019	0.033	1.809	2.068
Children ever born to women age 40-49	5.187	0.163	263	54	0.932	0.031	4.860	5.513
Currently using any method	0.291	0.022	758	151	1.312	0.075	0.247	0.334
Currently using a modern method	0.163	0.016	758	151	1.168	0.096	0.132	0.195
Currently using pill	0.028	0.006	758	151	1.040	0.223	0.016	0.041
Currently using IUD	0.002	0.002	758	151	1.334	0.995	0.000	0.007
Currently using condoms	0.006	0.003	758	151	1.093	0.532	0.000	0.011
Currently using injectables	0.075	0.009	758	151	0.924	0.118	0.057	0.093
Currently using implants	0.038	0.008	758	151	1.167	0.213	0.022	0.055
Currently using female sterilisation	0.013	0.005	758	151	1.300	0.419	0.002	0.023
Currently using rhythm	0.045	0.009	758	151	1.254	0.210	0.026	0.064
Currently using withdrawal	0.078	0.016	758	151	1.651	0.207	0.046	0.110
Using public sector source	0.722	0.038	164	29	1.078	0.052	0.647	0.798
Want no more children	0.193	0.015	758	151	1.079	0.080	0.162	0.224
Want to delay next birth at least 2 years	0.436	0.020	758	151	1.133	0.047	0.395	0.477
Ideal number of children	5.382	0.085	1270	261	1.298	0.016	5.212	5.552
Mothers received antenatal care for last birth	1.000	0.000	594	114	na	0.000	1.000	1.000
Mothers protected against tetanus for last birth	0.958	0.009	594	114	1.079	0.009	0.940	0.976
Births with skilled attendant at delivery	0.775	0.021	870	165	1.247	0.027	0.733	0.816
Had diarrhoea in the last 2 weeks	0.102	0.014	827	158	1.305	0.139	0.074	0.131
Treated with ORS	0.554	0.059	84	16	1.075	0.106	0.437	0.672
Sought medical treatment for diarrhoea	0.601	0.055	84	16	1.004	0.092	0.491	0.711
Vaccination card seen	0.830	0.030	187	38	1.106	0.036	0.769	0.890
Received BCG vaccination	0.998	0.002	187	38	0.669	0.002	0.993	1.002
Received DPT vaccination (3 doses)	0.970	0.013	187	38	1.074	0.014	0.944	0.997
Received polio vaccination (3 doses)	0.855	0.028	187	38	1.087	0.033	0.799	0.910
Received measles vaccination	0.931	0.017	187	38	0.915	0.018	0.897	0.964
Received all vaccinations	0.811	0.029	187	38	1.006	0.035	0.754	0.868
Height-for-age (-2SD)	0.200	0.015	873	166	1.039	0.074	0.170	0.230
Weight-for-height (-2SD)	0.060	0.009	875	166	1.078	0.143	0.043	0.077
Weight-for-age (-2SD)	0.127	0.013	876	166	1.087	0.103	0.101	0.153
Prevalence of anemia (children 6-59 months)	0.619	0.023	799	152	1.288	0.037	0.573	0.665
Prevalence of anemia (women 15-49)	0.578	0.020	1423	290	1.497	0.034	0.539	0.617
Body Mass Index (BMI) < 18.5	0.125	0.010	1319	268	1.058	0.077	0.106	0.144
Body Mass Index (BMI) ≥ 25	0.415	0.016	1319	268	1.145	0.038	0.384	0.446
Abstinence among never-married youth (never had sex)	0.899	0.016	462	96	1.163	0.018	0.867	0.932
Sexually active in past 12 months among never-married youth	0.063	0.014	462	96	1.285	0.232	0.034	0.091
Ever experienced any physical violence since age 15	0.172	0.015	875	207	1.182	0.088	0.142	0.203
Ever experienced any sexual violence	0.112	0.015	875	207	1.374	0.131	0.082	0.141
Ever experienced any physical/sexual violence by any husband/partner	0.196	0.023	637	126	1.463	0.118	0.150	0.242
Physical/sexual violence in the last 12 months by any husband/partner	0.056	0.010	637	126	1.143	0.187	0.035	0.076
Total fertility rate (last 3 years)	4.429	0.263	3947	810	1.269	0.059	3.903	4.954
Neonatal mortality (last 0-9 years)	33.230	5.794	1587	301	1.186	0.174	21.642	44.819
Post-neonatal mortality (last 0-9 years)	16.787	3.577	1579	299	1.061	0.213	9.634	23.941
Infant mortality (last 0-9 years)	50.017	6.846	1587	301	1.171	0.137	36.325	63.709
Child mortality (last 0-9 years)	7.153	2.735	1513	288	1.130	0.382	1.683	12.622
Under-five mortality (last 0-9 years)	56.812	6.916	1589	302	1.102	0.122	42.980	70.645
MEN								
Urban residence	0.348	0.038	319	62	1.411	0.108	0.273	0.424
No education	0.018	0.006	319	62	0.791	0.325	0.006	0.030
Secondary or higher education	0.694	0.028	319	62	1.091	0.041	0.638	0.751
Never married (in union)	0.554	0.034	319	62	1.232	0.062	0.485	0.623
Currently married (in union)	0.418	0.033	319	62	1.189	0.079	0.352	0.484
Had first sexual intercourse before age 18	0.126	0.028	235	45	1.286	0.221	0.070	0.182
Want no more children	0.087	0.024	133	26	0.966	0.272	0.040	0.135
Want to delay birth at least 2 years	0.430	0.045	133	26	1.042	0.104	0.340	0.520
Abstinence among youth (never had intercourse)	0.764	0.043	144	28	1.200	0.056	0.678	0.849
Sexually active in past 12 months among never married youth	0.183	0.036	144	28	1.121	0.198	0.110	0.255

Table B.10 Sampling errors: Pemba (Pemba Island) sample, Tanzania 2015-16

VARIABLE	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
	WOMEN							
Urban residence	0.217	0.032	704	111	2.037	0.146	0.154	0.281
Literacy	0.757	0.029	704	111	1.788	0.038	0.700	0.815
No education	0.241	0.027	704	111	1.675	0.112	0.186	0.295
Secondary or higher education	0.495	0.030	704	111	1.584	0.060	0.435	0.555
Never married (never in union)	0.321	0.018	704	111	1.005	0.055	0.285	0.356
Currently married (in union)	0.621	0.018	704	111	0.975	0.029	0.585	0.657
Married before age 20	0.542	0.022	523	83	1.031	0.041	0.497	0.587
Had sexual intercourse before age 18	0.332	0.025	523	83	1.189	0.074	0.283	0.381
Currently pregnant	0.123	0.015	704	111	1.175	0.118	0.094	0.153
Children ever born	3.114	0.111	704	111	0.850	0.036	2.892	3.337
Children surviving	2.867	0.104	704	111	0.864	0.036	2.659	3.074
Children ever born to women age 40-49	7.829	0.241	137	21	0.951	0.031	7.346	8.312
Currently using any method	0.112	0.022	436	69	1.433	0.194	0.068	0.155
Currently using a modern method	0.091	0.019	436	69	1.378	0.210	0.053	0.129
Currently using pill	0.027	0.018	436	69	2.366	0.685	0.000	0.064
Currently using IUD	0.000	0.000	436	69	na	na	0.000	0.000
Currently using condoms	0.002	0.002	436	69	0.943	1.013	0.000	0.006
Currently using injectables	0.031	0.009	436	69	1.045	0.281	0.013	0.048
Currently using implants	0.016	0.006	436	69	0.968	0.368	0.004	0.027
Currently using female sterilisation	0.015	0.004	436	69	0.679	0.262	0.007	0.023
Currently using rhythm	0.006	0.004	436	69	1.143	0.698	0.000	0.015
Currently using withdrawal	0.015	0.006	436	69	1.032	0.400	0.003	0.027
Using public sector source	0.961	0.029	42	7	0.939	0.030	0.903	1.018
Want no more children	0.196	0.020	436	69	1.059	0.103	0.156	0.236
Want to delay next birth at least 2 years	0.453	0.028	436	69	1.165	0.061	0.398	0.509
Ideal number of children	7.775	0.126	674	107	1.187	0.016	7.523	8.027
Mothers received antenatal care for last birth	0.992	0.006	357	57	1.281	0.006	0.980	1.004
Mothers protected against tetanus for last birth	0.944	0.015	357	57	1.226	0.016	0.914	0.974
Births with skilled attendant at delivery	0.541	0.038	624	98	1.523	0.070	0.465	0.617
Had diarrhoea in the last 2 weeks	0.109	0.016	600	94	1.159	0.149	0.077	0.142
Treated with ORS	0.444	0.072	68	10	1.064	0.162	0.300	0.587
Sought medical treatment for diarrhoea	0.515	0.077	68	10	1.116	0.150	0.361	0.669
Vaccination card seen	0.885	0.028	123	19	0.962	0.031	0.829	0.940
Received BCG vaccination	0.965	0.019	123	19	1.117	0.019	0.928	1.002
Received DPT vaccination (3 doses)	0.864	0.048	123	19	1.546	0.055	0.769	0.960
Received polio vaccination (3 doses)	0.859	0.044	123	19	1.396	0.051	0.771	0.947
Received measles vaccination	0.824	0.041	123	19	1.200	0.050	0.741	0.906
Received all vaccinations	0.804	0.048	123	19	1.342	0.060	0.707	0.900
Height-for-age (-2SD)	0.293	0.033	616	96	1.499	0.112	0.228	0.359
Weight-for-height (-2SD)	0.089	0.013	609	95	1.065	0.147	0.063	0.115
Weight-for-age (-2SD)	0.157	0.022	616	96	1.298	0.138	0.113	0.200
Prevalence of anemia (children 6-59 months)	0.691	0.027	559	87	1.322	0.039	0.637	0.744
Prevalence of anemia (women 15-49)	0.662	0.021	693	110	1.164	0.032	0.620	0.704
Body Mass Index (BMI) < 18.5	0.104	0.012	596	94	0.958	0.116	0.080	0.128
Body Mass Index (BMI) ≥ 25	0.312	0.027	596	94	1.407	0.086	0.259	0.366
Abstinence among never-married youth (never had sex)	0.986	0.010	198	31	1.226	0.010	0.966	1.007
Sexually active in past 12 months among never-married youth	0.009	0.006	198	31	0.945	0.696	0.000	0.022
Ever experienced any physical violence since age 15	0.071	0.014	487	79	1.174	0.193	0.043	0.098
Ever experienced any sexual violence	0.045	0.007	487	79	0.792	0.164	0.031	0.060
Ever experienced any physical/sexual violence by any husband/partner	0.091	0.019	379	56	1.291	0.210	0.053	0.129
Physical/sexual violence in the last 12 months by any husband/partner	0.053	0.019	379	56	1.614	0.352	0.016	0.090
Total fertility rate (last 3 years)	6.838	0.333	1942	307	1.261	0.049	6.172	7.503
Neonatal mortality (last 0-9 years)	18.814	4.914	1155	181	1.083	0.261	8.986	28.642
Post-neonatal mortality (last 0-9 years)	18.268	6.802	1162	182	1.697	0.372	4.665	31.871
Infant mortality (last 0-9 years)	37.082	7.799	1157	181	1.302	0.210	21.484	52.681
Child mortality (last 0-9 years)	17.985	4.555	1142	178	1.062	0.253	8.875	27.096
Under-five mortality (last 0-9 years)	54.401	9.749	1164	183	1.296	0.179	34.903	73.898
	MEN							
Urban residence	0.218	0.028	171	28	0.873	0.127	0.163	0.274
No education	0.099	0.026	171	28	1.149	0.266	0.046	0.152
Secondary or higher education	0.525	0.039	171	28	1.030	0.075	0.446	0.604
Never married (in union)	0.571	0.029	171	28	0.762	0.051	0.513	0.629
Currently married (in union)	0.401	0.028	171	28	0.741	0.069	0.346	0.457
Had first sexual intercourse before age 18	0.072	0.028	115	19	1.165	0.393	0.015	0.128
Want no more children	0.076	0.028	67	11	0.853	0.364	0.021	0.132
Want to delay birth at least 2 years	0.604	0.075	67	11	1.240	0.124	0.455	0.754
Abstinence among youth (never had intercourse)	0.852	0.041	88	14	1.087	0.049	0.769	0.935
Sexually active in past 12 months among never married youth	0.074	0.025	88	14	0.898	0.341	0.023	0.124

Table B.11 Sampling errors: Western sample, Tanzania 2015-16

VARIABLE	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
	WOMEN							
Urban residence	0.186	0.021	1051	1278	1.724	0.111	0.145	0.227
Literacy	0.651	0.033	1051	1278	2.273	0.051	0.584	0.718
No education	0.250	0.030	1051	1278	2.228	0.119	0.191	0.310
Secondary or higher education	0.121	0.020	1051	1278	2.012	0.167	0.081	0.162
Never married (never in union)	0.206	0.020	1051	1278	1.602	0.097	0.166	0.246
Currently married (in union)	0.688	0.023	1051	1278	1.620	0.034	0.641	0.734
Married before age 20	0.672	0.030	786	954	1.787	0.045	0.612	0.732
Had sexual intercourse before age 18	0.659	0.025	786	954	1.453	0.037	0.610	0.708
Currently pregnant	0.118	0.012	1051	1278	1.182	0.100	0.095	0.142
Children ever born	3.181	0.122	1051	1278	1.311	0.038	2.937	3.425
Children surviving	2.891	0.111	1051	1278	1.333	0.038	2.670	3.112
Children ever born to women age 40-49	6.725	0.294	171	203	1.241	0.044	6.138	7.312
Currently using any method	0.228	0.028	701	879	1.756	0.122	0.172	0.284
Currently using a modern method	0.193	0.024	701	879	1.597	0.124	0.145	0.240
Currently using pill	0.024	0.007	701	879	1.156	0.281	0.010	0.037
Currently using IUD	0.003	0.002	701	879	0.903	0.594	0.000	0.007
Currently using condoms	0.017	0.004	701	879	0.894	0.260	0.008	0.025
Currently using injectables	0.083	0.015	701	879	1.436	0.181	0.053	0.113
Currently using implants	0.037	0.008	701	879	1.112	0.216	0.021	0.052
Currently using female sterilisation	0.030	0.008	701	879	1.184	0.255	0.015	0.045
Currently using rhythm	0.012	0.005	701	879	1.192	0.416	0.002	0.021
Currently using withdrawal	0.020	0.008	701	879	1.563	0.409	0.004	0.037
Using public sector source	0.673	0.046	198	223	1.361	0.068	0.582	0.764
Want no more children	0.230	0.018	701	879	1.160	0.080	0.193	0.267
Want to delay next birth at least 2 years	0.431	0.016	701	879	0.864	0.038	0.399	0.463
Ideal number of children	5.868	0.169	979	1192	2.259	0.029	5.530	6.207
Mothers received antenatal care for last birth	0.987	0.004	620	779	0.907	0.004	0.978	0.995
Mothers protected against tetanus for last birth	0.866	0.024	620	779	1.754	0.028	0.818	0.914
Births with skilled attendant at delivery	0.511	0.051	966	1225	2.675	0.099	0.410	0.613
Had diarrhoea in the last 2 weeks	0.116	0.016	920	1170	1.518	0.141	0.083	0.149
Treated with ORS	0.451	0.073	105	136	1.533	0.163	0.304	0.597
Sought medical treatment for diarrhoea	0.280	0.052	105	136	1.187	0.186	0.176	0.384
Vaccination card seen	0.836	0.030	229	293	1.248	0.036	0.775	0.896
Received BCG vaccination	0.932	0.026	229	293	1.565	0.028	0.880	0.983
Received DPT vaccination (3 doses)	0.775	0.068	229	293	2.480	0.087	0.640	0.910
Received polio vaccination (3 doses)	0.735	0.062	229	293	2.157	0.084	0.611	0.859
Received measles vaccination	0.778	0.057	229	293	2.109	0.073	0.664	0.892
Received all vaccinations	0.661	0.071	229	293	2.307	0.108	0.519	0.803
Height-for-age (-2SD)	0.322	0.023	975	1214	1.450	0.070	0.277	0.368
Weight-for-height (-2SD)	0.046	0.006	970	1207	0.818	0.119	0.035	0.057
Weight-for-age (-2SD)	0.141	0.016	976	1214	1.409	0.117	0.108	0.174
Prevalence of anemia (children 6-59 months)	0.641	0.025	883	1100	1.523	0.039	0.591	0.692
Prevalence of anemia (women 15-49)	0.537	0.028	1048	1274	1.812	0.052	0.481	0.593
Body Mass Index (BMI) < 18.5	0.104	0.011	899	1082	1.113	0.110	0.081	0.127
Body Mass Index (BMI) ≥ 25	0.219	0.015	899	1082	1.098	0.070	0.188	0.249
Abstinence among never-married youth (never had sex)	0.641	0.031	212	237	0.927	0.048	0.580	0.702
Sexually active in past 12 months among never-married youth	0.277	0.025	212	237	0.817	0.091	0.226	0.327
Ever experienced any physical violence since age 15	0.493	0.032	688	893	1.663	0.064	0.430	0.557
Ever experienced any sexual violence	0.222	0.022	688	893	1.400	0.100	0.177	0.266
Ever experienced any physical/sexual violence by any husband/partner	0.562	0.032	574	721	1.547	0.057	0.498	0.626
Physical/sexual violence in the last 12 months by any husband/partner	0.398	0.027	574	721	1.329	0.068	0.343	0.452
Total fertility rate (last 3 years)	6.718	0.359	2911	3551	1.483	0.054	5.999	7.437
Neonatal mortality (last 0-9 years)	25.119	4.459	1768	2255	1.205	0.178	16.201	34.038
Post-neonatal mortality (last 0-9 years)	15.395	3.320	1769	2258	1.130	0.216	8.755	22.034
Infant mortality (last 0-9 years)	40.514	5.626	1768	2255	1.160	0.139	29.261	51.767
Child mortality (last 0-9 years)	30.032	5.917	1729	2198	1.325	0.197	18.199	41.866
Under-five mortality (last 0-9 years)	69.330	6.445	1779	2271	1.068	0.093	56.440	82.219
	MEN							
Urban residence	0.170	0.021	270	322	0.908	0.122	0.129	0.212
No education	0.210	0.030	270	322	1.191	0.141	0.151	0.269
Secondary or higher education	0.149	0.026	270	322	1.192	0.174	0.097	0.201
Never married (in union)	0.444	0.026	270	322	0.872	0.059	0.391	0.497
Currently married (in union)	0.517	0.027	270	322	0.874	0.052	0.463	0.570
Had first sexual intercourse before age 18	0.495	0.038	184	222	1.028	0.077	0.419	0.571
Want no more children	0.188	0.037	131	166	1.094	0.200	0.113	0.263
Want to delay birth at least 2 years	0.580	0.046	131	166	1.067	0.080	0.488	0.673
Abstinence among youth (never had intercourse)	0.462	0.046	119	133	0.996	0.099	0.370	0.553
Sexually active in past 12 months among never married youth	0.378	0.049	119	133	1.091	0.129	0.281	0.476

Table B.12 Sampling errors: Northern sample, Tanzania 2015-16

VARIABLE	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
	WOMEN							
Urban residence	0.392	0.036	1255	1575	2.595	0.091	0.320	0.464
Literacy	0.801	0.025	1255	1575	2.238	0.032	0.750	0.851
No education	0.126	0.024	1255	1575	2.543	0.190	0.078	0.173
Secondary or higher education	0.294	0.017	1255	1575	1.320	0.058	0.260	0.328
Never married (never in union)	0.318	0.017	1255	1575	1.260	0.052	0.285	0.351
Currently married (in union)	0.575	0.022	1255	1575	1.548	0.038	0.532	0.618
Married before age 20	0.436	0.023	993	1240	1.474	0.053	0.390	0.482
Had sexual intercourse before age 18	0.464	0.021	993	1240	1.324	0.045	0.422	0.506
Currently pregnant	0.057	0.009	1255	1575	1.353	0.156	0.039	0.074
Children ever born	2.325	0.094	1255	1575	1.449	0.040	2.138	2.512
Children surviving	2.162	0.087	1255	1575	1.450	0.040	1.989	2.335
Children ever born to women age 40-49	4.778	0.217	248	310	1.520	0.045	4.344	5.211
Currently using any method	0.404	0.031	730	906	1.729	0.078	0.341	0.467
Currently using a modern method	0.343	0.029	730	906	1.646	0.084	0.285	0.401
Currently using pill	0.087	0.014	730	906	1.318	0.158	0.060	0.115
Currently using IUD	0.014	0.005	730	906	1.101	0.344	0.004	0.023
Currently using condoms	0.011	0.004	730	906	0.986	0.351	0.003	0.018
Currently using injectables	0.135	0.015	730	906	1.183	0.111	0.105	0.165
Currently using implants	0.069	0.012	730	906	1.306	0.178	0.044	0.093
Currently using female sterilisation	0.027	0.007	730	906	1.123	0.249	0.014	0.041
Currently using rhythm	0.043	0.007	730	906	0.919	0.161	0.029	0.056
Currently using withdrawal	0.016	0.005	730	906	1.083	0.316	0.006	0.026
Using public sector source	0.605	0.029	335	406	1.101	0.049	0.546	0.664
Want no more children	0.337	0.025	730	906	1.402	0.073	0.288	0.386
Want to delay next birth at least 2 years	0.358	0.021	730	906	1.196	0.059	0.315	0.400
Ideal number of children	4.187	0.118	1201	1510	2.092	0.028	3.951	4.423
Mothers received antenatal care for last birth	0.974	0.008	564	699	1.147	0.008	0.958	0.989
Mothers protected against tetanus for last birth	0.884	0.016	564	699	1.176	0.018	0.852	0.916
Births with skilled attendant at delivery	0.688	0.052	760	935	2.536	0.075	0.585	0.792
Had diarrhoea in the last 2 weeks	0.080	0.011	735	901	0.984	0.137	0.058	0.102
Treated with ORS	0.415	0.077	57	72	1.087	0.184	0.262	0.568
Sought medical treatment for diarrhoea	0.449	0.073	57	72	1.017	0.162	0.304	0.595
Vaccination card seen	0.843	0.027	151	193	0.917	0.032	0.790	0.897
Received BCG vaccination	0.972	0.014	151	193	1.023	0.014	0.945	0.999
Received DPT vaccination (3 doses)	0.950	0.020	151	193	1.155	0.021	0.910	0.991
Received polio vaccination (3 doses)	0.862	0.033	151	193	1.192	0.038	0.796	0.928
Received measles vaccination	0.889	0.037	151	193	1.464	0.042	0.815	0.963
Received all vaccinations	0.817	0.040	151	193	1.282	0.049	0.737	0.897
Height-for-age (-2SD)	0.362	0.025	785	943	1.368	0.068	0.313	0.411
Weight-for-height (-2SD)	0.044	0.009	779	934	1.242	0.200	0.027	0.062
Weight-for-age (-2SD)	0.146	0.021	790	947	1.570	0.142	0.104	0.187
Prevalence of anemia (children 6-59 months)	0.512	0.029	698	833	1.538	0.057	0.454	0.570
Prevalence of anemia (women 15-49)	0.361	0.017	1225	1540	1.204	0.046	0.328	0.394
Body Mass Index (BMI) < 18.5	0.099	0.011	1138	1431	1.258	0.112	0.077	0.121
Body Mass Index (BMI) ≥ 25	0.363	0.023	1138	1431	1.592	0.062	0.318	0.409
Abstinence among never-married youth (never had sex)	0.617	0.030	322	411	1.093	0.048	0.558	0.676
Sexually active in past 12 months among never-married youth	0.308	0.028	322	411	1.095	0.092	0.251	0.364
Ever experienced any physical violence since age 15	0.287	0.025	920	1108	1.670	0.087	0.237	0.337
Ever experienced any sexual violence	0.105	0.017	920	1108	1.690	0.163	0.070	0.139
Ever experienced any physical/sexual violence by any husband/partner	0.330	0.030	704	778	1.673	0.090	0.271	0.390
Physical/sexual violence in the last 12 months by any husband/partner	0.211	0.022	704	778	1.404	0.102	0.168	0.254
Total fertility rate (last 3 years)	4.232	0.273	3479	4376	1.335	0.065	3.685	4.778
Neonatal mortality (last 0-9 years)	23.258	4.314	1424	1747	1.033	0.185	14.631	31.886
Post-neonatal mortality (last 0-9 years)	15.124	4.130	1414	1735	1.118	0.273	6.864	23.384
Infant mortality (last 0-9 years)	38.382	5.167	1424	1747	0.974	0.135	28.049	48.716
Child mortality (last 0-9 years)	18.409	3.845	1377	1686	1.005	0.209	10.718	26.100
Under-five mortality (last 0-9 years)	56.085	6.312	1428	1752	0.990	0.113	43.460	68.709
	MEN							
Urban residence	0.349	0.051	339	415	1.954	0.146	0.248	0.451
No education	0.095	0.029	339	415	1.801	0.303	0.037	0.153
Secondary or higher education	0.360	0.039	339	415	1.492	0.108	0.282	0.438
Never married (in union)	0.453	0.029	339	415	1.055	0.063	0.396	0.510
Currently married (in union)	0.507	0.031	339	415	1.122	0.060	0.445	0.568
Had first sexual intercourse before age 18	0.485	0.034	252	303	1.077	0.070	0.417	0.553
Want no more children	0.318	0.042	167	210	1.172	0.133	0.234	0.403
Want to delay birth at least 2 years	0.447	0.043	167	210	1.105	0.095	0.362	0.533
Abstinence among youth (never had intercourse)	0.317	0.060	121	148	1.407	0.189	0.197	0.437
Sexually active in past 12 months among never married youth	0.506	0.057	121	148	1.256	0.114	0.391	0.621

Table B.13 Sampling errors: Central sample, Tanzania 2015-16

VARIABLE	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
	WOMEN							
Urban residence	0.180	0.021	1190	1336	1.847	0.115	0.139	0.221
Literacy	0.752	0.024	1190	1336	1.897	0.032	0.704	0.799
No education	0.181	0.023	1190	1336	2.057	0.127	0.135	0.227
Secondary or higher education	0.164	0.019	1190	1336	1.765	0.116	0.126	0.202
Never married (never in union)	0.206	0.016	1190	1336	1.373	0.078	0.174	0.239
Currently married (in union)	0.663	0.017	1190	1336	1.253	0.026	0.628	0.697
Married before age 20	0.612	0.025	953	1075	1.556	0.040	0.563	0.661
Had sexual intercourse before age 18	0.607	0.027	953	1075	1.720	0.045	0.553	0.662
Currently pregnant	0.100	0.010	1190	1336	1.100	0.096	0.081	0.119
Children ever born	3.110	0.089	1190	1336	1.137	0.029	2.932	3.289
Children surviving	2.817	0.080	1190	1336	1.123	0.028	2.658	2.976
Children ever born to women age 40-49	6.132	0.207	243	275	1.243	0.034	5.718	6.547
Currently using any method	0.420	0.030	775	886	1.690	0.071	0.360	0.480
Currently using a modern method	0.364	0.029	775	886	1.682	0.080	0.306	0.422
Currently using pill	0.068	0.013	775	886	1.448	0.193	0.042	0.094
Currently using IUD	0.004	0.002	775	886	0.846	0.506	0.000	0.007
Currently using condoms	0.011	0.004	775	886	1.008	0.341	0.004	0.019
Currently using injectables	0.146	0.017	775	886	1.350	0.117	0.112	0.180
Currently using implants	0.087	0.014	775	886	1.429	0.167	0.058	0.115
Currently using female sterilisation	0.030	0.009	775	886	1.456	0.296	0.012	0.048
Currently using rhythm	0.034	0.007	775	886	1.156	0.223	0.019	0.049
Currently using withdrawal	0.019	0.006	775	886	1.217	0.316	0.007	0.031
Using public sector source	0.786	0.030	334	393	1.352	0.039	0.726	0.847
Want no more children	0.272	0.017	775	886	1.040	0.061	0.238	0.305
Want to delay next birth at least 2 years	0.449	0.019	775	886	1.086	0.043	0.410	0.488
Ideal number of children	4.886	0.112	1133	1260	1.901	0.023	4.661	5.110
Mothers received antenatal care for last birth	0.989	0.005	694	795	1.143	0.005	0.980	0.998
Mothers protected against tetanus for last birth	0.880	0.021	694	795	1.713	0.024	0.838	0.923
Births with skilled attendant at delivery	0.604	0.039	987	1111	2.161	0.064	0.527	0.682
Had diarrhoea in the last 2 weeks	0.102	0.012	946	1065	1.150	0.114	0.078	0.125
Treated with ORS	0.388	0.064	92	108	1.252	0.165	0.260	0.517
Sought medical treatment for diarrhoea	0.485	0.060	92	108	1.128	0.124	0.365	0.605
Vaccination card seen	0.855	0.023	209	245	0.936	0.026	0.810	0.900
Received BCG vaccination	0.970	0.016	209	245	1.388	0.017	0.937	1.002
Received DPT vaccination (3 doses)	0.960	0.020	209	245	1.498	0.021	0.920	1.000
Received polio vaccination (3 doses)	0.901	0.026	209	245	1.263	0.029	0.850	0.953
Received measles vaccination	0.907	0.032	209	245	1.629	0.036	0.842	0.971
Received all vaccinations	0.832	0.034	209	245	1.325	0.041	0.764	0.900
Height-for-age (-2SD)	0.340	0.022	986	1103	1.398	0.065	0.296	0.384
Weight-for-height (-2SD)	0.055	0.007	984	1102	0.960	0.132	0.041	0.070
Weight-for-age (-2SD)	0.154	0.015	986	1104	1.200	0.096	0.124	0.183
Prevalence of anemia (children 6-59 months)	0.457	0.027	876	980	1.538	0.059	0.403	0.511
Prevalence of anemia (women 15-49)	0.311	0.018	1174	1320	1.323	0.057	0.276	0.347
Body Mass Index (BMI) < 18.5	0.151	0.013	1038	1164	1.152	0.085	0.125	0.176
Body Mass Index (BMI) ≥ 25	0.216	0.016	1038	1164	1.256	0.074	0.183	0.248
Abstinence among never-married youth (never had sex)	0.602	0.036	238	242	1.129	0.060	0.530	0.674
Sexually active in past 12 months among never-married youth	0.305	0.034	238	242	1.151	0.113	0.236	0.374
Ever experienced any physical violence since age 15	0.379	0.022	929	941	1.388	0.058	0.335	0.423
Ever experienced any sexual violence	0.116	0.013	929	941	1.223	0.111	0.090	0.142
Ever experienced any physical/sexual violence by any husband/partner	0.432	0.023	776	742	1.280	0.053	0.387	0.478
Physical/sexual violence in the last 12 months by any husband/partner	0.254	0.024	776	742	1.510	0.093	0.207	0.301
Total fertility rate (last 3 years)	5.724	0.247	3346	3764	1.204	0.043	5.231	6.218
Neonatal mortality (last 0-9 years)	28.848	4.274	1913	2149	1.003	0.148	20.300	37.396
Post-neonatal mortality (last 0-9 years)	14.868	3.048	1905	2141	0.967	0.205	8.772	20.965
Infant mortality (last 0-9 years)	43.716	5.090	1913	2149	0.954	0.116	33.537	53.896
Child mortality (last 0-9 years)	23.794	4.582	1864	2095	1.131	0.193	14.630	32.959
Under-five mortality (last 0-9 years)	66.470	6.637	1920	2159	0.886	0.100	53.195	79.745
	MEN							
Urban residence	0.153	0.017	316	372	0.823	0.109	0.120	0.187
No education	0.113	0.032	316	372	1.785	0.282	0.049	0.177
Secondary or higher education	0.212	0.028	316	372	1.229	0.133	0.156	0.269
Never married (in union)	0.438	0.034	316	372	1.218	0.078	0.370	0.506
Currently married (in union)	0.538	0.034	316	372	1.214	0.063	0.470	0.606
Had first sexual intercourse before age 18	0.481	0.041	230	267	1.242	0.085	0.399	0.563
Want no more children	0.217	0.037	165	200	1.134	0.169	0.144	0.290
Want to delay birth at least 2 years	0.575	0.038	165	200	0.991	0.067	0.498	0.652
Abstinence among youth (never had intercourse)	0.486	0.067	126	147	1.489	0.138	0.352	0.619
Sexually active in past 12 months among never married youth	0.459	0.064	126	147	1.427	0.139	0.331	0.587

Table B.14 Sampling errors: Southern Highlands sample, Tanzania 2015-16

VARIABLE	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
WOMEN								
Urban residence	0.348	0.026	1082	807	1.787	0.074	0.296	0.400
Literacy	0.855	0.015	1082	807	1.356	0.017	0.826	0.884
No education	0.071	0.011	1082	807	1.346	0.148	0.050	0.092
Secondary or higher education	0.235	0.020	1082	807	1.533	0.084	0.195	0.274
Never married (never in union)	0.255	0.015	1082	807	1.108	0.058	0.226	0.285
Currently married (in union)	0.623	0.019	1082	807	1.284	0.030	0.585	0.661
Married before age 20	0.499	0.024	893	661	1.444	0.048	0.450	0.547
Had sexual intercourse before age 18	0.568	0.020	893	661	1.184	0.035	0.529	0.607
Currently pregnant	0.069	0.009	1082	807	1.118	0.125	0.052	0.087
Children ever born	2.661	0.083	1082	807	1.217	0.031	2.495	2.828
Children surviving	2.401	0.079	1082	807	1.288	0.033	2.243	2.560
Children ever born to women age 40-49	5.020	0.144	206	149	0.980	0.029	4.732	5.308
Currently using any method	0.533	0.023	681	503	1.214	0.044	0.487	0.580
Currently using a modern method	0.439	0.023	681	503	1.212	0.053	0.393	0.485
Currently using pill	0.073	0.012	681	503	1.164	0.160	0.049	0.096
Currently using IUD	0.020	0.007	681	503	1.251	0.337	0.007	0.033
Currently using condoms	0.043	0.009	681	503	1.107	0.199	0.026	0.061
Currently using injectables	0.147	0.016	681	503	1.179	0.109	0.115	0.179
Currently using implants	0.109	0.016	681	503	1.313	0.144	0.078	0.140
Currently using female sterilisation	0.047	0.009	681	503	1.051	0.180	0.030	0.065
Currently using rhythm	0.043	0.008	681	503	0.999	0.181	0.027	0.059
Currently using withdrawal	0.035	0.008	681	503	1.156	0.231	0.019	0.052
Using public sector source	0.625	0.038	390	300	1.544	0.061	0.549	0.700
Want no more children	0.373	0.021	681	503	1.112	0.055	0.332	0.415
Want to delay next birth at least 2 years	0.411	0.017	681	503	0.927	0.043	0.376	0.446
Ideal number of children	3.889	0.063	1055	788	1.234	0.016	3.762	4.016
Mothers received antenatal care for last birth	0.993	0.003	562	426	0.885	0.003	0.987	0.999
Mothers protected against tetanus for last birth	0.855	0.015	562	426	1.048	0.018	0.824	0.886
Births with skilled attendant at delivery	0.880	0.029	720	542	2.222	0.033	0.821	0.939
Had diarrhoea in the last 2 weeks	0.101	0.014	685	517	1.230	0.140	0.073	0.129
Treated with ORS	0.407	0.064	67	52	1.087	0.157	0.279	0.535
Sought medical treatment for diarrhoea	0.412	0.064	67	52	1.091	0.156	0.283	0.540
Vaccination card seen	0.876	0.028	155	120	1.089	0.032	0.819	0.933
Received BCG vaccination	0.994	0.006	155	120	0.949	0.006	0.982	1.006
Received DPT vaccination (3 doses)	0.967	0.014	155	120	1.007	0.015	0.938	0.995
Received polio vaccination (3 doses)	0.914	0.021	155	120	0.927	0.022	0.873	0.955
Received measles vaccination	0.906	0.024	155	120	1.024	0.026	0.859	0.953
Received all vaccinations	0.834	0.031	155	120	1.050	0.037	0.772	0.895
Height-for-age (-2SD)	0.447	0.024	715	534	1.231	0.053	0.400	0.494
Weight-for-height (-2SD)	0.026	0.008	710	530	1.184	0.298	0.010	0.041
Weight-for-age (-2SD)	0.122	0.014	722	540	1.152	0.118	0.093	0.150
Prevalence of anemia (children 6-59 months)	0.446	0.026	642	476	1.270	0.057	0.395	0.498
Prevalence of anemia (women 15-49)	0.344	0.020	1076	803	1.370	0.058	0.305	0.384
Body Mass Index (BMI) < 18.5	0.068	0.009	987	735	1.062	0.126	0.051	0.085
Body Mass Index (BMI) ≥ 25	0.253	0.019	987	735	1.393	0.076	0.214	0.291
Abstinence among never-married youth (never had sex)	0.471	0.040	228	171	1.206	0.085	0.392	0.551
Sexually active in past 12 months among never-married youth	0.397	0.036	228	171	1.099	0.090	0.326	0.469
Ever experienced any physical violence since age 15	0.357	0.020	848	566	1.192	0.055	0.318	0.397
Ever experienced any sexual violence	0.155	0.013	848	566	1.076	0.087	0.128	0.181
Ever experienced any physical/sexual violence by any husband/partner	0.435	0.017	701	432	0.897	0.039	0.401	0.468
Physical/sexual violence in the last 12 months by any husband/partner	0.260	0.018	701	432	1.090	0.070	0.224	0.296
Total fertility rate (last 3 years)	4.319	0.222	3039	2266	1.107	0.051	3.875	4.764
Neonatal mortality (last 0-9 years)	30.216	5.249	1412	1047	1.007	0.174	19.719	40.714
Post-neonatal mortality (last 0-9 years)	15.475	3.542	1412	1045	1.045	0.229	8.391	22.560
Infant mortality (last 0-9 years)	45.692	5.828	1412	1047	0.945	0.128	34.036	57.347
Child mortality (last 0-9 years)	20.622	4.296	1398	1034	1.143	0.208	12.031	29.213
Under-five mortality (last 0-9 years)	65.372	6.611	1421	1054	0.951	0.101	52.150	78.593
MEN								
Urban residence	0.354	0.031	319	234	1.170	0.089	0.291	0.417
No education	0.024	0.008	319	234	0.970	0.348	0.007	0.040
Secondary or higher education	0.237	0.035	319	234	1.448	0.146	0.168	0.306
Never married (in union)	0.432	0.035	319	234	1.245	0.080	0.363	0.501
Currently married (in union)	0.503	0.035	319	234	1.249	0.070	0.433	0.573
Had first sexual intercourse before age 18	0.494	0.036	248	180	1.124	0.072	0.422	0.566
Want no more children	0.303	0.040	164	118	1.115	0.133	0.223	0.383
Want to delay birth at least 2 years	0.465	0.049	164	118	1.263	0.106	0.366	0.563
Abstinence among youth (never had intercourse)	0.385	0.049	112	83	1.056	0.127	0.288	0.483
Sexually active in past 12 months among never married youth	0.493	0.049	112	83	1.042	0.100	0.394	0.592

Table B.15 Sampling errors: Southern sample, Tanzania 2015-16

VARIABLE	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
	WOMEN							
Urban residence	0.252	0.034	728	700	2.128	0.136	0.183	0.320
Literacy	0.705	0.024	728	700	1.434	0.034	0.656	0.753
No education	0.189	0.022	728	700	1.543	0.119	0.144	0.234
Secondary or higher education	0.135	0.016	728	700	1.272	0.120	0.102	0.167
Never married (never in union)	0.176	0.018	728	700	1.264	0.102	0.140	0.211
Currently married (in union)	0.646	0.021	728	700	1.159	0.032	0.605	0.688
Married before age 20	0.686	0.021	602	582	1.084	0.030	0.645	0.727
Had sexual intercourse before age 18	0.742	0.018	602	582	1.013	0.024	0.706	0.778
Currently pregnant	0.069	0.008	728	700	0.873	0.119	0.052	0.085
Children ever born	2.516	0.087	728	700	1.095	0.034	2.343	2.689
Children surviving	2.168	0.074	728	700	1.081	0.034	2.020	2.316
Children ever born to women age 40-49	4.726	0.195	163	155	1.221	0.041	4.336	5.115
Currently using any method	0.531	0.027	470	452	1.155	0.050	0.478	0.584
Currently using a modern method	0.505	0.027	470	452	1.157	0.053	0.451	0.558
Currently using pill	0.159	0.022	470	452	1.274	0.135	0.116	0.202
Currently using IUD	0.002	0.002	470	452	1.031	0.983	0.000	0.007
Currently using condoms	0.009	0.005	470	452	1.026	0.484	0.000	0.019
Currently using injectables	0.217	0.020	470	452	1.046	0.092	0.177	0.256
Currently using implants	0.085	0.015	470	452	1.189	0.180	0.054	0.116
Currently using female sterilisation	0.030	0.011	470	452	1.331	0.349	0.009	0.051
Currently using rhythm	0.009	0.004	470	452	0.819	0.391	0.002	0.016
Currently using withdrawal	0.011	0.005	470	452	0.999	0.438	0.001	0.021
Using public sector source	0.717	0.037	349	331	1.521	0.051	0.643	0.790
Want no more children	0.213	0.018	470	452	0.960	0.085	0.177	0.250
Want to delay next birth at least 2 years	0.464	0.020	470	452	0.886	0.044	0.423	0.505
Ideal number of children	4.554	0.163	708	680	1.973	0.036	4.228	4.880
Mothers received antenatal care for last birth	0.996	0.003	350	341	0.813	0.003	0.991	1.001
Mothers protected against tetanus for last birth	0.842	0.024	350	341	1.219	0.028	0.794	0.889
Births with skilled attendant at delivery	0.813	0.038	403	392	1.755	0.046	0.737	0.888
Had diarrhoea in the last 2 weeks	0.163	0.021	381	372	1.060	0.126	0.122	0.204
Treated with ORS	0.524	0.066	64	61	1.015	0.126	0.392	0.657
Sought medical treatment for diarrhoea	0.607	0.068	64	61	1.072	0.112	0.471	0.742
Vaccination card seen	0.900	0.034	87	86	1.078	0.038	0.831	0.968
Received BCG vaccination	0.988	0.012	87	86	1.035	0.012	0.964	1.012
Received DPT vaccination (3 doses)	0.893	0.043	87	86	1.305	0.048	0.807	0.978
Received polio vaccination (3 doses)	0.854	0.049	87	86	1.300	0.057	0.756	0.952
Received measles vaccination	0.892	0.038	87	86	1.163	0.043	0.815	0.969
Received all vaccinations	0.796	0.057	87	86	1.320	0.071	0.683	0.909
Height-for-age (-2SD)	0.366	0.032	405	394	1.299	0.088	0.301	0.430
Weight-for-height (-2SD)	0.023	0.009	405	394	1.250	0.398	0.005	0.041
Weight-for-age (-2SD)	0.129	0.018	405	394	1.039	0.137	0.094	0.164
Prevalence of anemia (children 6-59 months)	0.598	0.030	369	359	1.128	0.050	0.538	0.657
Prevalence of anemia (women 15-49)	0.478	0.027	724	696	1.446	0.056	0.425	0.532
Body Mass Index (BMI) < 18.5	0.084	0.011	674	644	1.062	0.136	0.061	0.107
Body Mass Index (BMI) ≥ 25	0.284	0.018	674	644	1.046	0.064	0.248	0.321
Abstinence among never-married youth (never had sex)	0.411	0.050	114	108	1.074	0.121	0.312	0.511
Sexually active in past 12 months among never-married youth	0.458	0.050	114	108	1.063	0.109	0.359	0.558
Ever experienced any physical violence since age 15	0.338	0.025	548	493	1.258	0.075	0.287	0.389
Ever experienced any sexual violence	0.161	0.016	548	493	1.027	0.100	0.128	0.193
Ever experienced any physical/sexual violence by any husband/partner	0.356	0.027	481	415	1.241	0.076	0.302	0.410
Physical/sexual violence in the last 12 months by any husband/partner	0.218	0.025	481	415	1.315	0.114	0.168	0.268
Total fertility rate (last 3 years)	3.783	0.252	2060	1981	1.120	0.066	3.280	4.286
Neonatal mortality (last 0-9 years)	46.968	8.997	810	796	1.024	0.192	28.975	64.961
Post-neonatal mortality (last 0-9 years)	22.159	5.958	809	795	1.091	0.269	10.243	34.074
Infant mortality (last 0-9 years)	69.126	10.781	811	797	1.070	0.156	47.565	90.688
Child mortality (last 0-9 years)	10.780	3.762	831	813	1.079	0.349	3.257	18.304
Under-five mortality (last 0-9 years)	79.162	11.557	818	803	1.101	0.146	56.048	102.275
	MEN							
Urban residence	0.264	0.031	194	180	0.970	0.117	0.202	0.325
No education	0.061	0.017	194	180	0.993	0.281	0.027	0.095
Secondary or higher education	0.166	0.032	194	180	1.177	0.190	0.103	0.229
Never married (in union)	0.357	0.047	194	180	1.367	0.132	0.262	0.451
Currently married (in union)	0.599	0.058	194	180	1.626	0.096	0.484	0.714
Had first sexual intercourse before age 18	0.539	0.041	151	140	0.997	0.075	0.458	0.620
Want no more children	0.135	0.033	116	108	1.027	0.243	0.069	0.200
Want to delay birth at least 2 years	0.570	0.058	116	108	1.253	0.102	0.454	0.686
Abstinence among youth (never had intercourse)	0.321	0.060	59	56	0.974	0.186	0.201	0.440
Sexually active in past 12 months among never married youth	0.608	0.056	59	56	0.883	0.093	0.495	0.721

Table B.16 Sampling errors: South West Highlands sample, Tanzania 2015-16

VARIABLE	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
	WOMEN							
Urban residence	0.317	0.026	1265	1246	1.966	0.081	0.265	0.368
Literacy	0.754	0.026	1265	1246	2.133	0.034	0.703	0.806
No education	0.144	0.016	1265	1246	1.603	0.110	0.112	0.175
Secondary or higher education	0.201	0.022	1265	1246	1.983	0.111	0.156	0.246
Never married (never in union)	0.241	0.018	1265	1246	1.485	0.074	0.205	0.277
Currently married (in union)	0.614	0.023	1265	1246	1.665	0.037	0.569	0.660
Married before age 20	0.629	0.026	996	977	1.706	0.042	0.576	0.681
Had sexual intercourse before age 18	0.627	0.019	996	977	1.230	0.030	0.590	0.665
Currently pregnant	0.091	0.011	1265	1246	1.347	0.120	0.069	0.113
Children ever born	2.883	0.090	1265	1246	1.205	0.031	2.703	3.064
Children surviving	2.573	0.073	1265	1246	1.095	0.029	2.426	2.719
Children ever born to women age 40-49	5.672	0.396	222	250	2.043	0.070	4.879	6.465
Currently using any method	0.456	0.036	812	765	2.076	0.080	0.383	0.529
Currently using a modern method	0.388	0.038	812	765	2.228	0.099	0.311	0.464
Currently using pill	0.036	0.008	812	765	1.235	0.225	0.020	0.052
Currently using IUD	0.009	0.005	812	765	1.436	0.518	0.000	0.019
Currently using condoms	0.033	0.011	812	765	1.743	0.331	0.011	0.055
Currently using injectables	0.158	0.017	812	765	1.336	0.108	0.124	0.192
Currently using implants	0.119	0.024	812	765	2.079	0.199	0.071	0.166
Currently using female sterilisation	0.033	0.013	812	765	2.107	0.403	0.006	0.059
Currently using rhythm	0.037	0.010	812	765	1.530	0.275	0.017	0.057
Currently using withdrawal	0.016	0.006	812	765	1.455	0.397	0.003	0.029
Using public sector source	0.579	0.061	333	408	2.231	0.105	0.458	0.701
Want no more children	0.382	0.027	812	765	1.592	0.071	0.328	0.437
Want to delay next birth at least 2 years	0.381	0.024	812	765	1.424	0.064	0.332	0.429
Ideal number of children	4.638	0.087	1182	1174	1.570	0.019	4.464	4.812
Mothers received antenatal care for last birth	0.973	0.009	782	715	1.534	0.009	0.955	0.991
Mothers protected against tetanus for last birth	0.839	0.019	782	715	1.383	0.022	0.802	0.877
Births with skilled attendant at delivery	0.626	0.044	1129	974	2.457	0.071	0.537	0.715
Had diarrhoea in the last 2 weeks	0.155	0.012	1068	914	1.021	0.077	0.131	0.178
Treated with ORS	0.462	0.041	172	141	0.949	0.088	0.381	0.543
Sought medical treatment for diarrhoea	0.427	0.058	172	141	1.385	0.137	0.310	0.544
Vaccination card seen	0.842	0.029	236	193	1.123	0.034	0.784	0.900
Received BCG vaccination	0.948	0.017	236	193	1.100	0.018	0.914	0.983
Received DPT vaccination (3 doses)	0.881	0.027	236	193	1.138	0.030	0.828	0.935
Received polio vaccination (3 doses)	0.759	0.051	236	193	1.669	0.068	0.656	0.861
Received measles vaccination	0.831	0.041	236	193	1.531	0.049	0.750	0.912
Received all vaccinations	0.667	0.059	236	193	1.746	0.088	0.549	0.785
Height-for-age (-2SD)	0.431	0.023	1087	934	1.342	0.053	0.385	0.477
Weight-for-height (-2SD)	0.047	0.007	1079	926	0.963	0.145	0.033	0.061
Weight-for-age (-2SD)	0.157	0.012	1104	939	0.955	0.077	0.133	0.182
Prevalence of anemia (children 6-59 months)	0.547	0.023	986	852	1.328	0.041	0.501	0.592
Prevalence of anemia (women 15-49)	0.288	0.016	1254	1236	1.272	0.056	0.255	0.321
Body Mass Index (BMI) < 18.5	0.048	0.008	1091	1090	1.184	0.158	0.033	0.063
Body Mass Index (BMI) ≥ 25	0.298	0.027	1091	1090	1.979	0.091	0.244	0.353
Abstinence among never-married youth (never had sex)	0.498	0.054	245	262	1.679	0.108	0.390	0.606
Sexually active in past 12 months among never-married youth	0.378	0.049	245	262	1.573	0.129	0.280	0.476
Ever experienced any physical violence since age 15	0.402	0.019	959	887	1.226	0.048	0.363	0.441
Ever experienced any sexual violence	0.175	0.015	959	887	1.255	0.088	0.144	0.206
Ever experienced any physical/sexual violence by any husband/partner	0.454	0.024	820	717	1.404	0.054	0.405	0.503
Physical/sexual violence in the last 12 months by any husband/partner	0.356	0.025	820	717	1.521	0.072	0.305	0.407
Total fertility rate (last 3 years)	5.217	0.425	3537	3474	1.835	0.082	4.367	6.068
Neonatal mortality (last 0-9 years)	39.895	6.305	2138	1835	1.293	0.158	27.284	52.505
Post-neonatal mortality (last 0-9 years)	30.555	5.787	2135	1823	1.218	0.189	18.980	42.129
Infant mortality (last 0-9 years)	70.449	6.644	2139	1836	0.945	0.094	57.160	83.738
Child mortality (last 0-9 years)	26.815	4.907	2060	1776	1.080	0.183	17.001	36.628
Under-five mortality (last 0-9 years)	95.375	7.747	2151	1845	0.899	0.081	79.881	110.869
	MEN							
Urban residence	0.332	0.035	331	308	1.360	0.106	0.261	0.402
No education	0.055	0.016	331	308	1.272	0.291	0.023	0.087
Secondary or higher education	0.261	0.037	331	308	1.521	0.141	0.187	0.334
Never married (in union)	0.400	0.036	331	308	1.325	0.089	0.329	0.472
Currently married (in union)	0.528	0.043	331	308	1.566	0.082	0.442	0.614
Had first sexual intercourse before age 18	0.397	0.054	247	230	1.727	0.136	0.289	0.505
Want no more children	0.257	0.042	177	163	1.266	0.163	0.173	0.340
Want to delay birth at least 2 years	0.464	0.047	177	163	1.252	0.102	0.370	0.558
Abstinence among youth (never had intercourse)	0.540	0.069	116	108	1.475	0.128	0.402	0.678
Sexually active in past 12 months among never married youth	0.375	0.060	116	108	1.321	0.160	0.256	0.495

Table B.17 Sampling errors: Lake sample, Tanzania 2015-16

VARIABLE	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
WOMEN								
Urban residence	0.251	0.016	3081	3463	2.071	0.064	0.219	0.283
Literacy	0.721	0.014	3081	3463	1.793	0.020	0.692	0.750
No education	0.161	0.011	3081	3463	1.714	0.071	0.138	0.184
Secondary or higher education	0.175	0.014	3081	3463	2.056	0.080	0.147	0.203
Never married (never in union)	0.231	0.012	3081	3463	1.636	0.054	0.206	0.256
Currently married (in union)	0.633	0.012	3081	3463	1.375	0.019	0.609	0.657
Married before age 20	0.671	0.014	2316	2613	1.426	0.021	0.643	0.698
Had sexual intercourse before age 18	0.686	0.017	2316	2613	1.730	0.024	0.652	0.719
Currently pregnant	0.103	0.008	3081	3463	1.419	0.075	0.088	0.119
Children ever born	3.191	0.073	3081	3463	1.331	0.023	3.044	3.338
Children surviving	2.819	0.060	3081	3463	1.259	0.021	2.699	2.940
Children ever born to women age 40-49	6.904	0.156	522	582	1.177	0.023	6.591	7.216
Currently using any method	0.263	0.016	1968	2192	1.646	0.062	0.230	0.296
Currently using a modern method	0.234	0.015	1968	2192	1.611	0.066	0.203	0.264
Currently using pill	0.022	0.005	1968	2192	1.403	0.213	0.012	0.031
Currently using IUD	0.009	0.003	1968	2192	1.258	0.301	0.003	0.014
Currently using condoms	0.011	0.003	1968	2192	1.075	0.227	0.006	0.016
Currently using injectables	0.093	0.010	1968	2192	1.563	0.110	0.072	0.113
Currently using implants	0.047	0.005	1968	2192	1.130	0.115	0.036	0.058
Currently using female sterilisation	0.044	0.006	1968	2192	1.356	0.143	0.031	0.056
Currently using rhythm	0.017	0.003	1968	2192	1.074	0.182	0.011	0.024
Currently using withdrawal	0.005	0.002	1968	2192	1.214	0.386	0.001	0.009
Using public sector source	0.650	0.029	573	674	1.478	0.045	0.591	0.709
Want no more children	0.295	0.011	1968	2192	1.022	0.036	0.274	0.316
Want to delay next birth at least 2 years	0.435	0.012	1968	2192	1.095	0.028	0.410	0.459
Ideal number of children	5.216	0.064	3013	3387	1.697	0.012	5.088	5.345
Mothers received antenatal care for last birth	0.969	0.006	1804	2015	1.373	0.006	0.957	0.980
Mothers protected against tetanus for last birth	0.889	0.011	1804	2015	1.485	0.012	0.867	0.911
Births with skilled attendant at delivery	0.510	0.022	2869	3194	1.995	0.044	0.465	0.555
Had diarrhoea in the last 2 weeks	0.120	0.011	2709	3014	1.611	0.088	0.099	0.141
Treated with ORS	0.470	0.034	311	361	1.167	0.073	0.401	0.538
Sought medical treatment for diarrhoea	0.391	0.033	311	361	1.177	0.085	0.325	0.458
Vaccination card seen	0.827	0.023	569	615	1.409	0.028	0.781	0.873
Received BCG vaccination	0.942	0.012	569	615	1.219	0.013	0.918	0.967
Received DPT vaccination (3 doses)	0.855	0.020	569	615	1.354	0.024	0.814	0.896
Received polio vaccination (3 doses)	0.802	0.021	569	615	1.230	0.026	0.760	0.844
Received measles vaccination	0.832	0.022	569	615	1.348	0.026	0.789	0.876
Received all vaccinations	0.705	0.025	569	615	1.255	0.035	0.656	0.754
Height-for-age (-2SD)	0.356	0.013	2904	3229	1.334	0.037	0.330	0.382
Weight-for-height (-2SD)	0.042	0.004	2905	3229	1.023	0.092	0.034	0.049
Weight-for-age (-2SD)	0.142	0.009	2920	3242	1.287	0.063	0.124	0.160
Prevalence of anemia (children 6-59 months)	0.621	0.015	2631	2921	1.440	0.024	0.592	0.651
Prevalence of anemia (women 15-49)	0.520	0.015	3053	3429	1.607	0.028	0.491	0.549
Body Mass Index (BMI) < 18.5	0.110	0.008	2661	2993	1.308	0.072	0.094	0.126
Body Mass Index (BMI) ≥ 25	0.179	0.011	2661	2993	1.496	0.062	0.157	0.202
Abstinence among never-married youth (never had sex)	0.530	0.023	657	745	1.190	0.044	0.484	0.577
Sexually active in past 12 months among never-married youth	0.355	0.022	657	745	1.171	0.062	0.311	0.399
Ever experienced any physical violence since age 15	0.523	0.016	2031	2457	1.481	0.031	0.490	0.555
Ever experienced any sexual violence	0.210	0.010	2031	2457	1.065	0.046	0.190	0.229
Ever experienced any physical/sexual violence by any husband/partner	0.610	0.016	1709	1929	1.349	0.026	0.578	0.641
Physical/sexual violence in the last 12 months by any husband/partner	0.397	0.016	1709	1929	1.333	0.040	0.366	0.429
Total fertility rate (last 3 years)	6.415	0.230	8496	9560	1.742	0.036	5.954	6.876
Neonatal mortality (last 0-9 years)	23.963	3.515	5343	5949	1.346	0.147	16.933	30.993
Post-neonatal mortality (last 0-9 years)	27.914	2.651	5336	5933	1.002	0.095	22.612	33.216
Infant mortality (last 0-9 years)	51.877	4.215	5354	5961	1.154	0.081	43.447	60.307
Child mortality (last 0-9 years)	38.178	3.704	5186	5748	1.285	0.097	30.769	45.587
Under-five mortality (last 0-9 years)	88.075	6.303	5397	6006	1.387	0.072	75.469	100.680
MEN								
Urban residence	0.244	0.019	863	933	1.317	0.079	0.205	0.282
No education	0.077	0.012	863	933	1.320	0.155	0.053	0.101
Secondary or higher education	0.223	0.018	863	933	1.284	0.082	0.187	0.259
Never married (in union)	0.429	0.019	863	933	1.106	0.043	0.392	0.467
Currently married (in union)	0.517	0.019	863	933	1.101	0.036	0.479	0.554
Had first sexual intercourse before age 18	0.467	0.026	619	668	1.306	0.056	0.415	0.520
Want no more children	0.218	0.021	447	482	1.094	0.098	0.176	0.261
Want to delay birth at least 2 years	0.551	0.024	447	482	1.036	0.044	0.502	0.600
Abstinence among youth (never had intercourse)	0.433	0.032	343	368	1.194	0.074	0.369	0.497
Sexually active in past 12 months among never married youth	0.462	0.030	343	368	1.111	0.065	0.402	0.522

Table B.18 Sampling errors: Eastern sample, Tanzania 2015-16

VARIABLE	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
	WOMEN							
Urban residence	0.756	0.024	1475	2457	2.102	0.031	0.709	0.803
Literacy	0.867	0.012	1475	2457	1.403	0.014	0.842	0.892
No education	0.088	0.011	1475	2457	1.500	0.126	0.066	0.110
Secondary or higher education	0.352	0.027	1475	2457	2.167	0.077	0.298	0.405
Never married (never in union)	0.298	0.012	1475	2457	1.034	0.041	0.273	0.323
Currently married (in union)	0.573	0.016	1475	2457	1.223	0.028	0.541	0.604
Married before age 20	0.457	0.024	1181	1952	1.673	0.053	0.408	0.505
Had sexual intercourse before age 18	0.546	0.021	1181	1952	1.475	0.039	0.503	0.589
Currently pregnant	0.063	0.007	1475	2457	1.155	0.116	0.049	0.078
Children ever born	2.014	0.080	1475	2457	1.498	0.040	1.855	2.173
Children surviving	1.792	0.059	1475	2457	1.270	0.033	1.675	1.910
Children ever born to women age 40-49	4.349	0.264	207	361	1.655	0.061	3.820	4.877
Currently using any method	0.516	0.017	858	1407	1.010	0.033	0.481	0.550
Currently using a modern method	0.380	0.016	858	1407	0.961	0.042	0.348	0.412
Currently using pill	0.073	0.009	858	1407	0.988	0.120	0.055	0.091
Currently using IUD	0.011	0.005	858	1407	1.295	0.424	0.002	0.020
Currently using condoms	0.059	0.011	858	1407	1.323	0.181	0.037	0.080
Currently using injectables	0.143	0.013	858	1407	1.108	0.093	0.117	0.170
Currently using implants	0.063	0.010	858	1407	1.244	0.164	0.042	0.083
Currently using female sterilisation	0.027	0.007	858	1407	1.213	0.251	0.013	0.040
Currently using rhythm	0.089	0.011	858	1407	1.133	0.124	0.067	0.111
Currently using withdrawal	0.042	0.008	858	1407	1.121	0.182	0.027	0.058
Using public sector source	0.422	0.030	481	785	1.342	0.072	0.362	0.483
Want no more children	0.270	0.025	858	1407	1.668	0.094	0.220	0.321
Want to delay next birth at least 2 years	0.433	0.027	858	1407	1.574	0.062	0.379	0.486
Ideal number of children	3.948	0.085	1418	2371	1.749	0.022	3.778	4.118
Mothers received antenatal care for last birth	0.984	0.006	723	1137	1.362	0.007	0.971	0.997
Mothers protected against tetanus for last birth	0.908	0.011	723	1137	1.011	0.012	0.886	0.930
Births with skilled attendant at delivery	0.879	0.019	905	1415	1.525	0.022	0.840	0.917
Had diarrhoea in the last 2 weeks	0.124	0.012	842	1315	1.036	0.098	0.100	0.149
Treated with ORS	0.410	0.056	105	163	1.134	0.137	0.298	0.523
Sought medical treatment for diarrhoea	0.524	0.050	105	163	0.986	0.095	0.424	0.624
Vaccination card seen	0.836	0.027	212	332	1.030	0.032	0.782	0.889
Received BCG vaccination	0.986	0.008	212	332	1.007	0.008	0.970	1.003
Received DPT vaccination (3 doses)	0.938	0.016	212	332	0.946	0.017	0.906	0.970
Received polio vaccination (3 doses)	0.865	0.021	212	332	0.866	0.024	0.823	0.906
Received measles vaccination	0.919	0.017	212	332	0.870	0.018	0.886	0.952
Received all vaccinations	0.830	0.021	212	332	0.784	0.025	0.789	0.871
Height-for-age (-2SD)	0.232	0.019	838	1235	1.222	0.080	0.195	0.269
Weight-for-height (-2SD)	0.051	0.010	834	1227	1.212	0.202	0.030	0.071
Weight-for-age (-2SD)	0.089	0.012	844	1243	1.161	0.138	0.064	0.113
Prevalence of anemia (children 6-59 months)	0.612	0.020	755	1118	1.079	0.033	0.572	0.651
Prevalence of anemia (women 15-49)	0.514	0.018	1432	2366	1.385	0.036	0.477	0.551
Body Mass Index (BMI) < 18.5	0.066	0.007	1332	2238	0.978	0.101	0.052	0.079
Body Mass Index (BMI) ≥ 25	0.429	0.018	1332	2238	1.368	0.043	0.392	0.466
Abstinence among never-married youth (never had sex)	0.457	0.035	346	614	1.292	0.076	0.388	0.526
Sexually active in past 12 months among never-married youth	0.453	0.032	346	614	1.197	0.071	0.388	0.517
Ever experienced any physical violence since age 15	0.305	0.019	1037	1691	1.308	0.061	0.268	0.343
Ever experienced any sexual violence	0.154	0.012	1037	1691	1.064	0.077	0.131	0.178
Ever experienced any physical/sexual violence by any husband/partner	0.362	0.020	816	1186	1.209	0.056	0.321	0.403
Physical/sexual violence in the last 12 months by any husband/partner	0.193	0.018	816	1186	1.315	0.094	0.157	0.229
Total fertility rate (last 3 years)	3.861	0.257	4161	6918	1.673	0.066	3.348	4.374
Neonatal mortality (last 0-9 years)	34.629	5.373	1653	2591	0.975	0.155	23.884	45.374
Post-neonatal mortality (last 0-9 years)	25.093	4.999	1654	2593	1.147	0.199	15.096	35.090
Infant mortality (last 0-9 years)	59.722	6.753	1657	2598	0.976	0.113	46.216	73.227
Child mortality (last 0-9 years)	26.523	4.006	1620	2558	0.920	0.151	18.511	34.535
Under-five mortality (last 0-9 years)	84.661	7.853	1665	2611	1.023	0.093	68.954	100.367
	MEN							
Urban residence	0.768	0.026	392	659	1.233	0.034	0.716	0.821
No education	0.037	0.010	392	659	1.035	0.268	0.017	0.057
Secondary or higher education	0.428	0.037	392	659	1.462	0.086	0.355	0.501
Never married (in union)	0.419	0.025	392	659	1.001	0.060	0.369	0.469
Currently married (in union)	0.516	0.030	392	659	1.168	0.057	0.457	0.575
Had first sexual intercourse before age 18	0.508	0.034	303	507	1.166	0.066	0.441	0.575
Want no more children	0.191	0.030	201	340	1.085	0.158	0.131	0.251
Want to delay birth at least 2 years	0.476	0.051	201	340	1.443	0.107	0.374	0.578
Abstinence among youth (never had intercourse)	0.392	0.050	130	219	1.171	0.129	0.291	0.493
Sexually active in past 12 months among never married youth	0.555	0.050	130	219	1.131	0.089	0.456	0.654

Table B.19 Sampling errors: Zanzibar sample, Tanzania 2015-16

VARIABLE	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
	WOMEN							
Urban residence	0.337	0.018	2139	404	1.733	0.053	0.302	0.372
Literacy	0.872	0.010	2139	404	1.441	0.012	0.851	0.893
No education	0.111	0.010	2139	404	1.419	0.087	0.091	0.130
Secondary or higher education	0.660	0.013	2139	404	1.274	0.020	0.633	0.686
Never married (never in union)	0.372	0.012	2139	404	1.142	0.032	0.348	0.396
Currently married (in union)	0.545	0.013	2139	404	1.230	0.024	0.518	0.571
Married before age 20	0.422	0.012	1614	307	1.011	0.029	0.397	0.446
Had sexual intercourse before age 18	0.290	0.014	1614	307	1.238	0.048	0.262	0.318
Currently pregnant	0.076	0.007	2139	404	1.250	0.094	0.062	0.091
Children ever born	2.384	0.061	2139	404	0.963	0.026	2.262	2.505
Children surviving	2.194	0.057	2139	404	0.980	0.026	2.081	2.308
Children ever born to women age 40-49	5.940	0.149	400	75	0.956	0.025	5.642	6.238
Currently using any method	0.234	0.017	1194	220	1.391	0.073	0.200	0.269
Currently using a modern method	0.140	0.012	1194	220	1.211	0.087	0.116	0.165
Currently using pill	0.028	0.007	1194	220	1.516	0.260	0.013	0.042
Currently using IUD	0.002	0.002	1194	220	1.389	0.996	0.000	0.005
Currently using condoms	0.004	0.002	1194	220	1.099	0.477	0.000	0.009
Currently using injectables	0.061	0.007	1194	220	0.973	0.111	0.048	0.075
Currently using implants	0.031	0.006	1194	220	1.161	0.188	0.019	0.043
Currently using female sterilisation	0.013	0.004	1194	220	1.151	0.286	0.006	0.021
Currently using rhythm	0.033	0.007	1194	220	1.287	0.203	0.019	0.046
Currently using withdrawal	0.058	0.012	1194	220	1.720	0.201	0.035	0.081
Using public sector source	0.768	0.032	206	36	1.080	0.041	0.704	0.832
Want no more children	0.194	0.012	1194	220	1.080	0.064	0.169	0.218
Want to delay next birth at least 2 years	0.441	0.017	1194	220	1.149	0.037	0.408	0.474
Ideal number of children	6.077	0.082	1944	368	1.345	0.013	5.913	6.241
Mothers received antenatal care for last birth	0.997	0.002	951	171	1.214	0.002	0.993	1.001
Mothers protected against tetanus for last birth	0.954	0.008	951	171	1.140	0.008	0.938	0.969
Births with skilled attendant at delivery	0.688	0.021	1494	264	1.403	0.031	0.646	0.730
Had diarrhoea in the last 2 weeks	0.105	0.011	1427	252	1.239	0.103	0.083	0.126
Treated with ORS	0.511	0.046	152	26	1.069	0.090	0.419	0.603
Sought medical treatment for diarrhoea	0.567	0.046	152	26	1.048	0.080	0.476	0.658
Vaccination card seen	0.849	0.023	310	57	1.107	0.027	0.804	0.894
Received BCG vaccination	0.986	0.006	310	57	0.990	0.007	0.973	0.999
Received DPT vaccination (3 doses)	0.934	0.019	310	57	1.339	0.020	0.897	0.972
Received polio vaccination (3 doses)	0.856	0.024	310	57	1.187	0.028	0.809	0.903
Received measles vaccination	0.894	0.018	310	57	1.013	0.020	0.859	0.930
Received all vaccinations	0.808	0.025	310	57	1.117	0.031	0.758	0.858
Height-for-age (-2SD)	0.234	0.016	1489	261	1.279	0.067	0.203	0.266
Weight-for-height (-2SD)	0.071	0.007	1484	261	1.075	0.104	0.056	0.085
Weight-for-age (-2SD)	0.138	0.012	1492	262	1.188	0.085	0.114	0.161
Prevalence of anemia (children 6-59 months)	0.645	0.018	1358	239	1.326	0.028	0.609	0.681
Prevalence of anemia (women 15-49)	0.601	0.015	2116	400	1.420	0.025	0.571	0.631
Body Mass Index (BMI) < 18.5	0.120	0.008	1915	362	1.058	0.066	0.104	0.135
Body Mass Index (BMI) ≥ 25	0.388	0.014	1915	362	1.261	0.036	0.360	0.416
Abstinence among never-married youth (never had sex)	0.920	0.013	660	127	1.229	0.014	0.895	0.946
Sexually active in past 12 months among never-married youth	0.050	0.011	660	127	1.335	0.228	0.027	0.072
Ever experienced any physical violence since age 15	0.144	0.012	1362	286	1.230	0.081	0.121	0.168
Ever experienced any sexual violence	0.093	0.011	1362	286	1.369	0.116	0.072	0.115
Ever experienced any physical/sexual violence by any husband/partner	0.164	0.017	1016	182	1.450	0.103	0.130	0.197
Physical/sexual violence in the last 12 months by any husband/partner	0.055	0.009	1016	182	1.284	0.168	0.036	0.073
Total fertility rate (last 3 years)	5.080	0.262	5889	1118	1.270	0.052	4.556	5.605
Neonatal mortality (last 0-9 years)	27.797	4.204	2742	482	1.192	0.151	19.389	36.205
Post-neonatal mortality (last 0-9 years)	17.353	3.370	2741	480	1.301	0.194	10.612	24.093
Infant mortality (last 0-9 years)	45.150	5.192	2744	482	1.207	0.115	34.765	55.534
Child mortality (last 0-9 years)	11.338	2.490	2655	466	1.059	0.220	6.359	16.318
Under-five mortality (last 0-9 years)	55.976	5.632	2753	484	1.161	0.101	44.711	67.241
	MEN							
Urban residence	0.308	0.028	490	89	1.363	0.092	0.251	0.365
No education	0.043	0.009	490	89	0.975	0.208	0.025	0.061
Secondary or higher education	0.642	0.023	490	89	1.073	0.036	0.595	0.688
Never married (in union)	0.559	0.025	490	89	1.130	0.045	0.508	0.610
Currently married (in union)	0.413	0.024	490	89	1.093	0.059	0.364	0.462
Had first sexual intercourse before age 18	0.110	0.021	350	64	1.278	0.195	0.067	0.153
Want no more children	0.084	0.019	200	37	0.945	0.221	0.047	0.121
Want to delay birth at least 2 years	0.482	0.039	200	37	1.107	0.081	0.404	0.561
Abstinence among youth (never had intercourse)	0.793	0.031	232	42	1.162	0.039	0.731	0.855
Sexually active in past 12 months among never married youth	0.146	0.025	232	42	1.082	0.172	0.096	0.197

Table B.20 Sampling errors for adult and maternal mortality rates, Tanzania DHS 2015

Variable	Value R	Standard Error SE	Number of cases Un-weighted (N)	Number of cases Weighted (WN)	Design Effect DEFT	Relative Error SE/R	Confidence limits Lower R-2SE	Confidence limits Upper R+2SE
			WOMEN					
Adult mortality rates								
15-19	1.427	0.229	44688	42486	1.252	0.160	0.970	1.885
20-24	2.455	0.324	47293	45230	1.398	0.132	1.806	3.104
25-29	3.443	0.368	43447	41721	1.276	0.107	2.706	4.179
30-34	5.193	0.548	36514	35047	1.379	0.105	4.098	6.288
35-39	6.770	0.614	27491	26357	1.175	0.091	5.542	7.999
40-44	8.983	1.068	18318	17434	1.429	0.119	6.846	11.120
45-49	11.590	1.413	10957	10345	1.342	0.122	8.764	14.416
15-49 (age-adjusted)	4.641	0.239	228708	218620	1.334	0.051	4.163	5.119
Adult mortality probabilities								
$_{35}q_{15}$ 2015-16	181	9	228708	218620	1.739	0.051	163	199
$_{35}q_{15}$ 2010	224	10	188249	184305	1.522	0.045	204	244
$_{35}q_{15}$ 2004-05	193	11	176879	171132	1.741	0.057	171	215
$_{35}q_{15}$ 1996	181	9	228708	218620	1.739	0.051	163	199
Maternal mortality rates								
15-19	0.264	0.093	44688	42486	1.184	0.354	0.077	0.450
20-24	0.773	0.157	47293	45230	1.203	0.203	0.459	1.087
25-29	1.035	0.187	43447	41721	1.185	0.180	0.662	1.408
30-34	0.841	0.191	36514	35047	1.232	0.226	0.460	1.223
35-39	1.377	0.283	27491	26357	1.244	0.206	0.810	1.943
40-44	1.640	0.416	18318	17434	1.356	0.254	0.809	2.472
45-49	1.558	0.470	10957	10345	1.218	0.302	0.617	2.498
15-49 (age-adjusted)	0.935	0.089	228708	218620	1.247	0.095	0.758	1.113
Maternal mortality ratio (MMR) 2015-16	556	55	228708	218620	1.247	0.099	446	666
Maternal mortality ratio (MMR) 2010	454	51	176879	171132	1.341	0.112	353	556
Maternal mortality ratio (MMR) 2004-05	578	56	188249	184305	1.207	0.097	466	690
Maternal mortality ratio (MMR) 1996	529	64	134266	134649	1.202	0.12	402	656
			MEN					
Adult mortality rates								
15-19	1.071	0.221	44798	42812	1.400	0.207	0.628	1.514
20-24	2.013	0.276	47420	45558	1.292	0.137	1.460	2.566
25-29	2.462	0.290	44169	42715	1.205	0.118	1.882	3.043
30-34	4.017	0.454	37245	36555	1.333	0.113	3.109	4.926
35-39	6.540	0.627	28092	27621	1.285	0.096	5.287	7.793
40-44	10.368	1.162	18135	17641	1.466	0.112	8.044	12.691
45-49	11.635	1.297	10215	9864	1.193	0.111	9.042	14.228
15-49 (age-adjusted)	4.286	0.231	230074	222766	1.321	0.054	3.824	4.747
Adult mortality probabilities								
$_{35}q_{15}$ 2015-16	174	9	230074	222766	1.710	0.051	156	191
$_{35}q_{15}$ 2010	188	11	177387	171488	1.777	0.059	166	210
$_{35}q_{15}$ 2004-05	234	11	182981	179080	1.478	0.046	212	255
$_{35}q_{15}$ 1996	195	11	133646	133719	1.181	0.058	173	218

*All rates are calculated for last 0-9 years before the survey

Table B.21 Sampling errors: Total sample

VARIABLE	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
Proportion of households having at least one ITN	0.656	0.009	12563	12563	2.048	0.013	0.639	0.673
Child under five slept under an ITN last night	0.545	0.010	10376	10043	1.609	0.019	0.525	0.566
Child under five had fever in last two weeks	0.179	0.006	9713	9520	1.465	0.034	0.167	0.191
Had recieved antimalaria treatment for fever	0.502	0.016	1667	1706	1.253	0.032	0.470	0.534
Pregnant women slept under an ITN last night	0.539	0.019	1141	1122	1.241	0.035	0.502	0.577
Took 2+ doses of SP/Fansidar and received at least one during an ANC visit	0.346	0.011	4219	4167	1.504	0.032	0.324	0.368
Prevalence of malaria (based on rapid test)	0.144	0.010	9161	8847	2.260	0.070	0.124	0.165

Table B.22 Sampling errors: Urban sample

VARIABLE	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
Proportion of households having at least one ITN	0.673	0.015	3634	4141	1.871	0.022	0.643	0.702
Child under five slept under an ITN last night	0.610	0.019	2350	2582	1.515	0.031	0.572	0.647
Child under five had fever in last two weeks	0.181	0.011	2243	2541	1.287	0.060	0.159	0.203
Had recieved antimalaria treatment for fever	0.444	0.029	389	460	1.147	0.065	0.386	0.502
Pregnant women slept under an ITN last night	0.559	0.033	292	333	1.130	0.060	0.492	0.626
Took 2+ doses of SP/Fansidar and received at least one during an ANC visit	0.444	0.024	1014	1155	1.531	0.054	0.396	0.492
Prevalence of malaria (based on rapid test)	0.039	0.010	2041	2215	2.061	0.256	0.019	0.059

Table B.23 Sampling errors: Rural sample

VARIABLE	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
Proportion of households having at least one ITN	0.648	0.011	8929	8422	2.130	0.017	0.626	0.669
Child under five slept under an ITN last night	0.523	0.012	8026	7462	1.613	0.023	0.499	0.547
Child under five had fever in last two weeks	0.179	0.007	7470	6980	1.549	0.041	0.164	0.193
Had recieved antimalaria treatment for fever	0.524	0.019	1278	1246	1.277	0.035	0.487	0.561
Pregnant women slept under an ITN last night	0.531	0.022	849	789	1.282	0.042	0.486	0.576
Took 2+ doses of SP/Fansidar and received at least one during an ANC visit	0.308	0.012	3205	3013	1.477	0.039	0.284	0.333
Prevalence of malaria (based on rapid test)	0.180	0.013	7120	6632	2.324	0.071	0.154	0.205

Table B.24 Sampling errors: Tanzania Mainland sample

VARIABLE	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
Proportion of households having at least one ITN	0.654	0.009	10808	12247	1.942	0.014	0.636	0.672
Child under five slept under an ITN last night	0.545	0.010	8861	9777	1.528	0.019	0.524	0.566
Child under five had fever in last two weeks	0.179	0.006	8286	9268	1.378	0.035	0.167	0.192
Had recieved antimalaria treatment for fever	0.515	0.016	1425	1662	1.176	0.032	0.482	0.548
Pregnant women slept under an ITN last night	0.540	0.019	976	1091	1.180	0.036	0.501	0.578
Took 2+ doses of SP/Fansidar and received at least one during an ANC visit	0.352	0.011	3621	4061	1.429	0.032	0.329	0.374
Prevalence of malaria (based on rapid test)	0.148	0.010	7821	8611	2.125	0.070	0.128	0.169

Table B.25 Sampling errors: Mainland urban sample

VARIABLE	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
Proportion of households having at least one ITN	0.673	0.015	3265	4053	1.810	0.022	0.644	0.703
Child under five slept under an ITN last night	0.614	0.019	2050	2507	1.468	0.031	0.576	0.652
Child under five had fever in last two weeks	0.181	0.011	1976	2475	1.231	0.061	0.159	0.203
Had recieved antimalaria treatment for fever	0.455	0.030	345	449	1.101	0.065	0.395	0.514
Pregnant women slept under an ITN last night	0.565	0.034	255	323	1.093	0.060	0.497	0.633
Took 2+ doses of SP/Fansidar and received at least one during an ANC visit	0.452	0.025	907	1128	1.486	0.054	0.402	0.501
Prevalence of malaria (based on rapid test)	0.041	0.010	1776	2149	1.974	0.256	0.020	0.061

Table B.26 Sampling errors: Mainland rural sample

VARIABLE	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
Proportion of households having at least one ITN	0.644	0.011	7543	8195	2.003	0.017	0.622	0.666
Child under five slept under an ITN last night	0.521	0.012	6811	7270	1.517	0.023	0.497	0.545
Child under five had fever in last two weeks	0.179	0.008	6310	6794	1.445	0.042	0.164	0.194
Had recieved antimalaria treatment for fever	0.537	0.019	1080	1214	1.187	0.035	0.500	0.575
Pregnant women slept under an ITN last night	0.529	0.023	721	768	1.207	0.044	0.483	0.575
Took 2+ doses of SP/Fansidar and received at least one during an ANC visit	0.313	0.012	2714	2933	1.394	0.040	0.288	0.338
Prevalence of malaria (based on rapid test)	0.184	0.013	6045	6462	2.168	0.071	0.158	0.210

Table B.27 Sampling errors: Zanzibar sample

VARIABLE	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
Proportion of households having at least one ITN	0.738	0.016	1755	316	1.567	0.022	0.705	0.771
Child under five slept under an ITN last night	0.564	0.025	1515	266	1.530	0.044	0.514	0.614
Child under five had fever in last two weeks	0.174	0.014	1427	252	1.249	0.079	0.147	0.202
Had recieved antimalaria treatment for fever	0.019	0.008	242	44	0.865	0.406	0.004	0.035
Pregnant women slept under an ITN last night	0.515	0.046	165	31	1.177	0.089	0.424	0.606
Took 2+ doses of SP/Fansidar and received at least one during an ANC visit	0.130	0.013	598	106	0.972	0.103	0.103	0.157
Prevalence of malaria (based on rapid test)	0.000	0.000	1340	236	0.649	1.003	0.000	0.001

Table B.28 Sampling errors: Unguja (Zanzibar Island) sample

VARIABLE	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
Proportion of households having at least one ITN	0.716	0.021	1107	213	1.564	0.030	0.673	0.758
Child under five slept under an ITN last night	0.522	0.031	883	168	1.490	0.060	0.460	0.584
Child under five had fever in last two weeks	0.169	0.016	827	158	1.130	0.095	0.137	0.201
Had recieved antimalaria treatment for fever	0.020	0.010	132	27	0.840	0.521	0.000	0.040
Pregnant women slept under an ITN last night	0.414	0.056	81	17	1.043	0.134	0.303	0.526
Took 2+ doses of SP/Fansidar and received at least one during an ANC visit	0.121	0.019	356	68	1.073	0.153	0.084	0.158
Prevalence of malaria (based on rapid test)	0.000	0.001	794	151	0.628	1.005	0.000	0.002

Table B.29 Sampling errors: Pemba (Pemba Island) sample

VARIABLE	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
Proportion of households having at least one ITN	0.784	0.026	648	102	1.612	0.033	0.732	0.836
Child under five slept under an ITN last night	0.637	0.043	632	98	1.648	0.067	0.551	0.722
Child under five had fever in last two weeks	0.183	0.025	600	94	1.490	0.139	0.132	0.234
Had recieved antimalaria treatment for fever	0.019	0.012	110	17	0.935	0.651	0.000	0.043
Pregnant women slept under an ITN last night	0.641	0.074	84	14	1.429	0.115	0.493	0.788
Took 2+ doses of SP/Fansidar and received at least one during an ANC visit	0.145	0.017	242	38	0.752	0.117	0.111	0.179
Prevalence of malaria (based on rapid test)	0.000	0.000	546	85	na	na	0.000	0.000

Table B.30 Sampling errors: Western sample

VARIABLE	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
Proportion of households having at least one ITN	0.922	0.014	858	1010	1.508	0.015	0.894	0.949
Child under five slept under an ITN last night	0.681	0.035	982	1221	1.781	0.051	0.611	0.750
Child under five had fever in last two weeks	0.185	0.022	920	1170	1.637	0.116	0.142	0.229
Had recieved antimalaria treatment for fever	0.659	0.041	157	217	1.043	0.062	0.578	0.740
Pregnant women slept under an ITN last night	0.661	0.050	117	148	1.144	0.075	0.561	0.761
Took 2+ doses of SP/Fansidar and received at least one during an ANC visit	0.213	0.029	415	534	1.436	0.136	0.155	0.271
Prevalence of malaria (based on rapid test)	0.277	0.040	883	1100	2.210	0.143	0.198	0.357

Table B.31 Sampling errors: Northern sample

VARIABLE	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
Proportion of households having at least one ITN	0.527	0.025	1293	1526	1.814	0.048	0.477	0.578
Child under five slept under an ITN last night	0.367	0.035	803	961	1.718	0.094	0.298	0.436
Child under five had fever in last two weeks	0.139	0.014	735	901	1.012	0.099	0.111	0.166
Had recieved antimalaria treatment for fever	0.285	0.048	98	125	1.024	0.168	0.189	0.380
Pregnant women slept under an ITN last night	0.314	0.051	73	89	0.951	0.163	0.212	0.417
Took 2+ doses of SP/Fansidar and received at least one during an ANC visit	0.417	0.039	318	399	1.389	0.092	0.340	0.494
Prevalence of malaria (based on rapid test)	0.014	0.007	692	827	1.481	0.463	0.001	0.028

Table B.32 Sampling errors: Central sample

VARIABLE	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
Proportion of households having at least one ITN	0.357	0.029	1284	1469	2.175	0.082	0.299	0.415
Child under five slept under an ITN last night	0.244	0.032	1001	1119	1.940	0.133	0.179	0.309
Child under five had fever in last two weeks	0.076	0.012	946	1065	1.339	0.163	0.051	0.101
Had recieved antimalaria treatment for fever	0.266	0.052	70	81	0.960	0.196	0.162	0.371
Pregnant women slept under an ITN last night	0.314	0.047	115	132	1.082	0.149	0.220	0.407
Took 2+ doses of SP/Fansidar and received at least one during an ANC visit	0.384	0.033	426	486	1.392	0.086	0.318	0.450
Prevalence of malaria (based on rapid test)	0.017	0.016	875	979	2.954	0.932	0.000	0.049

Table B.33 Sampling errors: Southern Highlands sample

VARIABLE	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
Proportion of households having at least one ITN	0.554	0.021	1255	933	1.491	0.038	0.512	0.596
Child under five slept under an ITN last night	0.382	0.023	728	545	1.111	0.061	0.335	0.428
Child under five had fever in last two weeks	0.149	0.026	685	517	1.814	0.171	0.098	0.200
Had recieved antimalaria treatment for fever	0.446	0.079	92	77	1.539	0.177	0.288	0.604
Pregnant women slept under an ITN last night	0.358	0.052	76	56	0.935	0.145	0.255	0.462
Took 2+ doses of SP/Fansidar and received at least one during an ANC visit	0.394	0.041	284	218	1.417	0.105	0.312	0.477
Prevalence of malaria (based on rapid test)	0.104	0.024	642	476	1.966	0.235	0.055	0.152

Table B.34 Sampling errors: Southern sample

VARIABLE	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
Proportion of households having at least one ITN	0.647	0.021	833	798	1.274	0.033	0.605	0.689
Child under five slept under an ITN last night	0.514	0.037	407	396	1.318	0.073	0.439	0.589
Child under five had fever in last two weeks	0.234	0.032	381	372	1.416	0.136	0.171	0.298
Had recieved antimalaria treatment for fever	0.560	0.059	94	87	1.114	0.106	0.441	0.679
Pregnant women slept under an ITN last night	0.474	0.080	48	48	1.122	0.169	0.314	0.634
Took 2+ doses of SP/Fansidar and received at least one during an ANC visit	0.401	0.041	151	148	1.023	0.102	0.319	0.482
Prevalence of malaria (based on rapid test)	0.188	0.031	369	359	1.531	0.164	0.126	0.250

TableB.35 Sampling errors: South West Highlands sample

VARIABLE	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
Proportion of households having at least one ITN	0.493	0.031	1247	1306	2.189	0.063	0.431	0.556
Child under five slept under an ITN last night	0.344	0.029	1120	959	1.541	0.086	0.285	0.403
Child under five had fever in last two weeks	0.151	0.013	1068	914	1.022	0.083	0.126	0.176
Had recieved antimalaria treatment for fever	0.354	0.055	152	138	1.342	0.156	0.243	0.465
Pregnant women slept under an ITN last night	0.410	0.074	127	113	1.545	0.180	0.262	0.558
Took 2+ doses of SP/Fansidar and received at least one during an ANC visit	0.293	0.029	481	415	1.415	0.101	0.234	0.352
Prevalence of malaria (based on rapid test)	0.031	0.011	984	847	1.533	0.371	0.008	0.054

Table B.36 Sampling errors: Lake sample

VARIABLE	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
Proportion of households having at least one ITN	0.904	0.011	2555	2935	1.898	0.012	0.882	0.926
Child under five slept under an ITN last night	0.735	0.015	2948	3279	1.279	0.020	0.706	0.765
Child under five had fever in last two weeks	0.231	0.012	2709	3014	1.372	0.051	0.207	0.254
Had recieved antimalaria treatment for fever	0.555	0.027	614	695	1.276	0.049	0.501	0.609
Pregnant women slept under an ITN last night	0.704	0.029	319	357	1.102	0.042	0.646	0.763
Took 2+ doses of SP/Fansidar and received at least one during an ANC visit	0.332	0.019	1165	1280	1.404	0.058	0.293	0.371
Prevalence of malaria (based on rapid test)	0.235	0.019	2622	2909	1.915	0.083	0.196	0.274

Table B.37 Sampling errors: Eastern sample

VARIABLE	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
Proportion of households having at least one ITN	0.625	0.025	1483	2270	2.009	0.040	0.574	0.675
Child under five slept under an ITN last night	0.553	0.028	872	1297	1.418	0.051	0.496	0.610
Child under five had fever in last two weeks	0.184	0.017	842	1315	1.202	0.095	0.149	0.219
Had recieved antimalaria treatment for fever	0.571	0.037	148	242	0.852	0.064	0.497	0.644
Pregnant women slept under an ITN last night	0.548	0.050	101	148	0.992	0.092	0.448	0.648
Took 2+ doses of SP/Fansidar and received at least one during an ANC visit	0.464	0.030	381	581	1.160	0.064	0.405	0.524
Prevalence of malaria (based on rapid test)	0.106	0.026	754	1115	2.124	0.242	0.055	0.158

Table B.38 Sampling errors: Zanzibar sample

VARIABLE	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
Proportion of households having at least one ITN	0.738	0.016	1755	316	1.567	0.022	0.705	0.771
Child under five slept under an ITN last night	0.564	0.025	1515	266	1.530	0.044	0.514	0.614
Child under five had fever in last two weeks	0.174	0.014	1427	252	1.249	0.079	0.147	0.202
Had recieved antimalaria treatment for fever	0.019	0.008	242	44	0.865	0.406	0.004	0.035
Pregnant women slept under an ITN last night	0.515	0.046	165	31	1.177	0.089	0.424	0.606
Took 2+ doses of SP/Fansidar and received at least one during an ANC visit	0.130	0.013	598	106	0.972	0.103	0.103	0.157
Prevalence of malaria (based on rapid test)	0.000	0.000	1340	236	0.649	1.003	0.000	0.001

DATA QUALITY TABLES

Appendix C

Table C.1 Household age distribution

Single-year age distribution of the de facto household population by sex (weighted), Tanzania 2015-16

	Female		Male			Female		Male	
Age	Number	Percent	Number	Percent	Age	Number	Percent	Number	Percent
0	977	3.2	1,020	3.5	36	303	1.0	292	1.0
1	1,078	3.5	1,102	3.8	37	249	0.8	289	1.0
2	932	3.0	1,021	3.6	38	351	1.1	301	1.0
3	1,033	3.3	964	3.4	39	295	1.0	248	0.9
4	976	3.2	975	3.4	40	351	1.1	326	1.1
5	893	2.9	892	3.1	41	301	1.0	255	0.9
6	960	3.1	1,005	3.5	42	234	0.8	243	0.8
7	984	3.2	1,012	3.5	43	303	1.0	241	0.8
8	908	2.9	950	3.3	44	181	0.6	146	0.5
9	912	3.0	894	3.1	45	270	0.9	250	0.9
10	900	2.9	915	3.2	46	178	0.6	183	0.6
11	827	2.7	785	2.7	47	197	0.6	163	0.6
12	868	2.8	837	2.9	48	146	0.5	186	0.6
13	886	2.9	747	2.6	49	183	0.6	180	0.6
14	659	2.1	652	2.3	50	188	0.6	142	0.5
15	679	2.2	791	2.8	51	190	0.6	158	0.6
16	556	1.8	604	2.1	52	210	0.7	155	0.5
17	519	1.7	553	1.9	53	201	0.6	155	0.5
18	637	2.1	582	2.0	54	200	0.6	161	0.6
19	602	1.9	477	1.7	55	198	0.6	178	0.6
20	609	2.0	473	1.6	56	131	0.4	128	0.4
21	497	1.6	416	1.4	57	133	0.4	136	0.5
22	519	1.7	393	1.4	58	117	0.4	87	0.3
23	516	1.7	436	1.5	59	102	0.3	93	0.3
24	393	1.3	313	1.1	60	193	0.6	152	0.5
25	557	1.8	466	1.6	61	104	0.3	117	0.4
26	353	1.1	303	1.1	62	95	0.3	109	0.4
27	404	1.3	280	1.0	63	103	0.3	113	0.4
28	443	1.4	349	1.2	64	88	0.3	63	0.2
29	403	1.3	323	1.1	65	139	0.4	101	0.3
30	432	1.4	374	1.3	66	60	0.2	78	0.3
31	365	1.2	298	1.0	67	57	0.2	84	0.3
32	325	1.1	287	1.0	68	72	0.2	101	0.3
33	382	1.2	296	1.0	69	50	0.2	34	0.1
34	267	0.9	219	0.8	70+	1,013	3.3	743	2.6
35	467	1.5	359	1.2					
					Total	30,904	100.0	28,753	100.0

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview.

Table C.2.1 Age distribution of eligible and interviewed women

De facto household population of women age 10-54, interviewed women age 15-49; and percent distribution and percentage of eligible women who were interviewed (weighted), by five-year age groups, Tanzania 2015-16

Age group	Household population of women age 10-54	Interviewed women age 15-49		Percentage of eligible women interviewed
		Number	Percentage	
10-14	4,140	-	-	-
15-19	2,993	2,882	22.1	96.3
20-24	2,534	2,447	18.7	96.6
25-29	2,159	2,099	16.1	97.2
30-34	1,772	1,710	13.1	96.5
35-39	1,665	1,635	12.5	98.2
40-44	1,370	1,333	10.2	97.3
45-49	975	955	7.3	97.9
50-54	988	-	-	-
15-49	13,467	13,060	100.0	97.0

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview. Weights for both household population of women and interviewed women are household weights. Age is based on the Household Questionnaire.
na = Not applicable

Table C.2.2 Age distribution of eligible and interviewed men

De facto household population of men age 10-54, interviewed men age 15-49,and percent of eligible men who were interviewed (weighted), by 5-year age groups, Tanzania 2015-16

Age group	Household population of men age 10-54	Interviewed men age 15-49		Percentage of eligible men interviewed
		Number	Percentage	
10-14	1,278	na	na	na
15-19	1,023	938	26.9	91.7
20-24	598	559	16.0	93.6
25-29	526	474	13.6	90.2
30-34	460	416	11.9	90.5
35-39	478	445	12.8	93.3
40-44	384	345	9.9	90.0
45-49	331	308	8.8	92.9
50-54	269	na	na	na
15-59	3,800	3,487	100.0	91.8

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview. Weights for both household population of men and interviewed men are household weights. Age is based on the household questionnaire.
na = Not applicable

Table C.3 Completeness of reporting

Percentage of observations missing information for selected demographic and health questions (weighted), Tanzania 2015-16

Subject	Percentage with information missing	Number of cases
Month Only (Births in the 15 years preceding the survey)	0.27	25,762
Month and Year (Births in the 15 years preceding the survey)	0.01	25,762
Age at Death (Deceased children born in the 15 years preceding the survey)	0.00	2,067
Age/date at first union[1] (Ever married women age 15-49)	0.05	9,913
Age/date at first union (Ever married men age 15-49)	0.15	2,004
Respondent's education (All women age 15-49)	0.01	13,266
Respondent's education (All men age 15-49)	0.00	3,514
Diarrhoea in last 2 weeks (Living children 0-59 months)	2.65	9,520
Height (Living children age 0-59 months from the Household Questionnaire)	2.07	10,111
Weight (Living children age 0-59 months from the Household Questionnaire)	1.93	10,111
Height or weight (Living children age 0-59 months from the Household Questionnaire)	2.08	10,111
Height (Women age 15-49 from the Household Questionnaire)	3.46	13,467
Weight (Women age 15-49 from the Household Questionnaire)	3.40	13,467
Height or weight (Women age 15-49 from the Household Questionnaire)	3.48	13,467
Anaemia (Living children age 6-59 months from the Household Questionnaire)	3.04	9,155
Anaemia (All women from the Household Questionnaire)	4.22	13,467

[1] Both year and age missing

Table C.4 Births by calendar years

Number of births, percentage with complete birth date, sex ratio at birth, and calendar year ratio by calendar year, according to living (L), dead (D), and total (T) children (weighted), Tanzania 2015-16

	Number of births			Percentage with complete birth date[1]			Sex ratio at birth[2]			Calendar year ratio[3]		
Calendar year	L	D	T	L	D	T	L	D	T	L	D	T
2016	35	1	36	100.0	100.0	100.0	62.7	0.0	59.2	na	na	na
2015	1,763	64	1,827	100.0	100.0	100.0	106.2	127.9	106.9	na	na	na
2014	2,112	114	2,226	100.0	100.0	100.0	100.7	135.7	102.2	116.9	137.7	117.9
2013	1,849	102	1,951	100.0	100.0	100.0	111.1	80.9	109.3	94.7	94.9	94.7
2012	1,795	100	1,895	100.0	99.3	100.0	91.8	149.9	94.2	99.3	84.7	98.4
2011	1,766	135	1,901	100.0	100.0	100.0	101.5	122.9	102.9	102.4	123.9	103.7
2010	1,653	117	1,770	99.8	100.0	99.8	105.6	84.3	104.1	96.3	67.6	93.7
2009	1,666	213	1,878	99.5	98.8	99.5	101.8	89.4	100.3	99.9	150.9	103.8
2008	1,684	164	1,848	99.6	99.2	99.5	92.5	135.0	95.7	106.0	91.9	104.6
2007	1,510	145	1,655	99.6	96.8	99.3	110.0	151.7	113.1	92.4	96.4	92.7
2012 - 2016	7,555	381	7,935	100.0	99.8	100.0	101.9	119.0	102.7	na	na	na
2007 - 2011	8,278	774	9,052	99.7	98.9	99.6	102.0	112.7	102.8	na	na	na
2002 - 2006	6,791	763	7,553	99.6	99.6	99.6	99.0	106.3	99.7	na	na	na
1997 - 2001	4,807	779	5,586	99.7	97.9	99.5	101.6	95.7	100.8	na	na	na
<1997	5,148	1,073	6,221	99.5	98.8	99.4	100.1	109.7	101.7	na	na	na
All	32,578	3,769	36,347	99.7	98.9	99.6	101.0	107.4	101.6	na	na	na

na = Not applicable
[1] All year month and day of birth given
[2] (Bm/Bf)x100, where Bm and Bf are the numbers of male and female births, respectively
[3] [2Bx/(Bx-1+Bx+1)]x100, where Bx is the number of births in calendar year x

Table C.5 Reporting of age at death in days

Distribution of reported deaths under one month by age at death in days and the percentage of neonatal deaths reported to occur at ages 0-6 days, for 5-year periods of birth preceding the survey (weighted), Tanzania 2015-16

	Number of years preceding the survey				Total
Age at death (days)	0-4	5-9	10-14	15-19	0-19
<1	94	84	72	51	301
1	45	43	38	29	156
2	24	41	17	17	99
3	29	27	25	18	99
4	9	11	13	3	35
5	8	5	7	7	27
6	6	7	4	5	23
7	11	24	11	18	64
8	1	1	2	2	7
9	2	3	0	0	6
10	4	1	0	0	5
11	1	2	0	2	4
12	1	1	1	0	2
13	0	2	2	0	4
14	7	20	7	11	44
15	1	0	2	2	6
16	0	0	2	1	3
17	0	3	0	0	3
18	1	2	0	1	3
20	0	2	0	0	2
21	4	8	4	5	21
22	0	0	0	0	0
24	2	2	0	2	6
25	1	0	2	0	3
26	0	2	0	0	2
27	0	0	2	0	2
28	0	0	2	2	4
29	2	4	0	1	7
30	0	2	1	2	5
Total 0-30	251	295	214	182	942
Percentage early neonatal[1]	85.4	74.1	82.1	71.5	78.4

[1] 0-6 days / 0-30 days

Table C.6 Reporting of age at death in months

Distribution of reported deaths under age 2 by age at death in months and the percentage of infant deaths reported to occur at age under 1 month, for 5-year periods of birth preceding the survey, Tanzania 2015-16

	Number of years preceding the survey				Total
Age at death (months)	0-4	5-9	10-14	15-19	0-19
<1[a]	251	295	214	182	942
1	22	34	18	30	104
2	14	22	23	33	92
3	20	33	26	29	108
4	18	19	15	19	71
5	7	16	24	31	78
6	14	30	30	37	111
7	8	18	22	30	79
8	13	16	18	24	71
9	20	23	27	28	98
10	7	8	13	8	36
11	11	15	19	12	57
12	7	21	25	30	82
13	6	19	19	19	63
14	9	18	12	23	62
15	11	10	10	6	37
16	9	6	3	4	22
17	2	8	8	6	23
18	11	10	24	18	62
19	4	2	3	1	9
20	10	6	8	8	32
21	4	5	1	1	12
22	2	3	3	3	11
23	5	2	4	1	12
24+	0	0	0	0	0
1 Year	3	5	2	4	14
Total 0-11	407	530	449	462	1,848
Percentage neonatal[1]	61.6	55.7	47.8	39.4	51.0

[a] Includes deaths under 1month reported in days
[1] Under 1month / 1 year

PERSONS INVOLVED IN THE 2015-16 TANZANIA DHS-MIS

Appendix D

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QUESTIONNAIRES

Appendix **E**

August, 2015

CONFIDENTIAL

2015-16 TANZANIA DEMOGRAPHIC AND HEALTH AND MALARIA INDICATOR SURVEY
HOUSEHOLD QUESTIONNAIRE

UNITED REPUBLIC OF TANZANIA
NATIONAL BUREAU OF STATISTICS

QST No. | | | | | |

IDENTIFICATION

REGION . . . . . |__|__|
DISTRCIT . . . . . |__|__|
WARD . . . . . |__|__|__|
LARGE CITY, MUNICIPALITY, SMALL TOWN, COUNTRISIDE . . . . . |__|
LARGE CITY=1, MUNICIPALITY=2, SMALL TOWN=3, RURAL=4

NAME OF HOUSEHOLD HEAD _____

CLUSTER NUMBER . . . . . |__|__|__|__|
HOUSEHOLD NUMBER . . . . . |__|__|__|__|
HOUSEHOLD SELECTED FOR MAN'S SURVEY,SALT AND URINE TESTING? (1=YES, 2 . . . . . |__|

CITY: DSM, TANGA, MWANZA **MUNICALITY** = DODOMA, KILIMANJARO, MOROGORO, PWANI, LINDI, MTWARA SONGEA, IRINGA, SINGIDA, TABORA, RUKWA, SHINYANGA, KAGERA, MARA, MJINI MAGHARIBI, WETE, CHAKE CHAKE, MKOANI.
SMALL TOWN: ALL OTHER CITIES. **RURAL**: ALL OTHER AREAS

INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE	_____	_____	_____	DAY
				MONTH
				YEAR 2 0 1
INTERVIEWER'S NAME	_____	_____	_____	INT. NO.
RESULT*	_____	_____	_____	RESULT*
NEXT VISIT DATE	_____	_____		TOTAL NUMBER OF VISITS
TIME	_____	_____		

*RESULT CODES:

1 COMPLETED
2 NO HOUSEHOLD MEMBER AT HOME OR NO COMPETENT RESPONDENT AT HOME AT TIME OF VISIT
3 ENTIRE HOUSEHOLD ABSENT FOR EXTENDED PERIOD OF TIME
4 POSTPONED
5 REFUSED
6 DWELLING VACANT OR ADDRESS NOT A DWELLING
7 DWELLING DESTROYED
8 DWELLING NOT FOUND
9 OTHER _____ (SPECIFY)

TOTAL PERSONS IN HOUSEHOLD |__|__|
TOTAL ELIGIBLE WOMEN |__|__|
TOTAL ELIGIBLE MEN |__|__|
LINE NO. OF RESPONDENT TO HOUSEHOLD QUESTIONNAIRE |__|__|

LANGUAGE OF QUESTIONNAIRE** 0 1
LANGUAGE OF INTERVIEW** |__|__|
TRANSLATOR USED (YES = 1, NO = 2) |__|

LANGUAGE OF QUESTIONNAIRE** ENGLISH

**LANGUAGE CODES:
01 ENGLISH
02 KISWAHILI

SUPERVISOR	FIELD EDITOR	OFFICE EDITOR	KEYED BY
NAME _____ NUMBER |__|__|__|__|	NAME _____ NUMBER |__|__|__|__|	NUMBER |__|__|	NUMBER |__|__|

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July 30

INTRODUCTION AND CONSENT

Hello. My name is _____. I am working with the National Bureau of Statistics (NBS). We are conducting a survey about health and other topics all over the United Republic of Tanzania. The information we collect will help the government to plan health services. Your household was selected for the survey. I would like to ask you some questions about your household. The questions usually take about 20 to 25 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of our survey team. You don't have to be in the survey, but we hope you will agree to answer the questions since your views are important. If I ask you any question you don't want to answer, just let me know and I will go on to the next question or you can stop the interview at any time. In case you need more information about the survey, you may contact the person listed on this card.

GIVE CARD WITH CONTACT INFORMATION

Do you have any questions?
May I begin the interview now?

SIGNATURE OF INTERVIEWER _____ DATE _____

RESPONDENT AGREES TO BE INTERVIEWED . . 1 ↓

RESPONDENT DOES NOT AGREE TO BE INTERVIEWED . . 2 → END

100	RECORD THE TIME.	HOURS . . . . . ☐☐ MINUTES . . . . . ☐☐ MORNING . . . . . 1 AFTERNOON . . . . . 2 EVENING 3

HOUSEHOLD SCHEDULE

						IF AGE 15 OR OLDER			
LINE NO.	USUAL RESIDENTS AND VISITORS	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	RESIDENCE		AGE	MARITAL STATUS	ELIGIBILITY CHECK COLUMN 4 AND 7		
1	2	3	4	5	6	7	8	9	10	11
	Please give me the names of the persons who usually live in your household and guests of the household who stayed here last night, starting with the head of the household. AFTER LISTING THE NAMES AND RECORDING THE RELATIONSHIP AND SEX FOR EACH PERSON, ASK QUESTIONS 2A-2C TO BE SURE THAT THE LISTING IS COMPLETE. THEN ASK APPROPRIATE QUESTIONS IN COLUMNS 5-25 FOR EACH PERSON.	What is the relationship of (NAME) to the head of the household? SEE CODES BELOW.	Is (NAME) male or female?	Does (NAME) usually live here?	Did (NAME) stay here last night?	How old is (NAME)? IF 95 OR MORE, RECORD '95'.	What is (NAME)'s current marital status? 1 = MARRIED OR LIVING TOGETHER 2 = DIVORCED/ SEPARATED 3 = WIDOWED 4 = NEVER-MARRIED AND NEVER LIVED TOGETHER	CIRCLE LINE NUMBER OF ALL WOMEN AGE 15-49	IF HOUSE-HOLD SELEC-TED FOR MAN'S SURVEY CIRCLE LINE NUMBER OF ALL MEN AGE 15-49	CIRCLE LINE NUMBER OF ALL CHILDREN AGE 0-5
01			M F 1 2	Y N 1 2	Y N 1 2	IN YEARS		01	01	01
02			1 2	1 2	1 2			02	02	02
03			1 2	1 2	1 2			03	03	03
04			1 2	1 2	1 2			04	04	04
05			1 2	1 2	1 2			05	05	05
06			1 2	1 2	1 2			06	06	06
07			1 2	1 2	1 2			07	07	07
08			1 2	1 2	1 2			08	08	08
09			1 2	1 2	1 2			09	09	09
10			1 2	1 2	1 2			10	10	10

2A)	Just to make sure that I have a complete listing: are there any other people such as small children or infants that we have not listed?	YES ☐ →	ADD TO TABLE	NO ☐
2B)	Are there any other people who may not be members of your family, such as domestic servants, lodgers, or friends who usually live here?	YES ☐ →	ADD TO TABLE	NO ☐
2C)	Are there any guests or temporary visitors staying here, or anyone else who stayed here last night, who have not been listed?	YES ☐ →	ADD TO TABLE	NO ☐

CODES FOR Q. 3: RELATIONSHIP TO HEAD OF HOUSEHOL

01 = HEAD
02 = WIFE OR HUSBAND
03 = SON OR DAUGHTER
04 = SON-IN-LAW OR DAUGHTER-IN-LAW
05 = GRANDCHILD
06 = PARENT
07 = PARENT-IN-LAW
08 = BROTHER OR SISTER
09 = CO-WIFE
10 = OTHER RELATIVE
11 = ADOPTED/FOSTER/ STEPCHILD
12 = NOT RELATED
98 = DON'T KNOW

HOUSEHOLD SCHEDULE

	CHECK COLUMN 7, IF AGE 0-17 YEARS				CHECK COLUMN 7, IF AGE 0-4 YEARS	CHECK COLUMN 7, IF AGE 5 YEARS OR OLDER		CHECK COLUMN 7, IF AGE 5-24 YEARS	
LINE NO.	SURVIVORSHIP AND RESIDENCE OF BIOLOGICAL PARENTS				BIRTH REGISTRATION	EVER ATTENDED SCHOOL		CURRENT/RECENT SCHOOL ATTENDANCE	
	12	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
	Is (NAME)'s natural mother alive?	Does (NAME)'s natural mother usually live in this household or was she a guest last night? IF YES: What is her name? RECORD MOTHER'S LINE NUMBER. IF NO, RECORD '00'.	Is (NAME)'s natural father alive?	Does (NAME)'s natural father usually live in this household or was he a guest last night? IF YES: What is his name? RECORD FATHER'S LINE NUMBER. IF NO, RECORD '00'.	Does (NAME) have a birth certificate? IF NO, PROBE: Has (NAME)'s birth ever been registered with the civil authority? 1 = HAS CERTIFICATE 2 = REGISTERED 3 = NEITHER 8 = DON'T KNOW	Has (NAME) ever attended school?	What is the highest level of school (NAME) has attended? What is the highest grade (NAME) completed at that level? SEE CODES BELOW.	Did (NAME) attend school at any time during the 2015 school year?	During [this/that] school year, what level and grade [is/was] (NAME) attending? SEE CODES BELOW.
01	Y N DK 1 2 8 GO TO 14		Y N DK 1 2 8 GO TO 16			Y N 1 2 GO TO 20A	LEVEL GRADE	Y N 1 2 GO TO 20A	LEVEL GRADE
02	1 2 8 GO TO 14		1 2 8 GO TO 16			1 2 GO TO 20A		1 2 GO TO 20A	
03	1 2 8 GO TO 14		1 2 8 GO TO 16			1 2 GO TO 20A		1 2 GO TO 20A	
04	1 2 8 GO TO 14		1 2 8 GO TO 16			1 2 GO TO 20A		1 2 GO TO 20A	
05	1 2 8 GO TO 14		1 2 8 GO TO 16			1 2 GO TO 20A		1 2 GO TO 20A	
06	1 2 8 GO TO 14		1 2 8 GO TO 16			1 2 GO TO 20A		1 2 GO TO 20A	
07	1 2 8 GO TO 14		1 2 8 GO TO 16			1 2 GO TO 20A		1 2 GO TO 20A	
08	1 2 8 GO TO 14		1 2 8 GO TO 16			1 2 GO TO 20A		1 2 GO TO 20A	
09	1 2 8 GO TO 14		1 2 8 GO TO 16			1 2 GO TO 20A		1 2 GO TO 20A	
10	1 2 8 GO TO 14		1 2 8 GO TO 16			1 2 GO TO 20A		1 2 GO TO 20A	

LD

CODES FOR Qs. 17 AND 19: EDUCATION

LEVEL
0 = PRE-PRIMARY
1 = PRIMARY
2 = POST PRIMARY TRAINING
3 = SECONDARY 'O' LEVEL
4 = POST SECONDARY 'O' LEVEL
5 = SECONDARY 'A' LEVEL
6 = POST SECONDARY 'A' LEVEL
7 = UNIVERSITY
8 = DON'T KNOW

GRADE
00 = LESS THAN 1 YEAR COMPLETED (USE '00' FOR Q. 18 ONLY. THIS CODE IS NOT ALLOWED FOR Q. 20.)
98 = DON'T KNOW

HOUSEHOLD SCHEDULE

LINE NO.	HEALTH INSURANCE		INPATIENT		OUTPATIENT		
	20A	**20B**	**21**	**22**	**23**	**24**	**25**
	Is (NAME) covered by any health Insurance?	What is (NAME)'s main type of health insurance SEE CODES BELOW.	In the last six months, was (NAME) admitted overnight to stay at a health facility?	CIRCLE LINE NUMBER OF HOUSE-HOLD MEMBER ELIGIBLE FOR IN-PATIENT MODULE. CHECK COLUMN 21: CODE '1' 'YES' CIRCLED.	In the last four weeks, did (NAME) receive care from a health provider, a pharmacy, or a traditional healer without staying overnight?	The last time (NAME) received care, was any money paid?	CIRCLE LINE NUMBER OF HOUSEHOLD MEMBER ELIGIBLE FOR OUT-PATIENT MODULE. CHECK COLUMN 24: CODE '1' 'YES' CIRCLED.
01	Y N DK 1 2 8 GO TO 21		Y N DK 1 2 8 GO TO 23	01	Y N DK 1 2 8 NEXT LINE	Y N DK 1 2 8 NEXT LINE	01
02	1 2 8 GO TO 21		1 2 8 GO TO 23	02	1 2 8 NEXT LINE	1 2 8 NEXT LINE	02
03	1 2 8 GO TO 21		1 2 8 GO TO 23	03	1 2 8 NEXT LINE	1 2 8 NEXT LINE	03
04	1 2 8 GO TO 21		1 2 8 GO TO 23	04	1 2 8 NEXT LINE	1 2 8 NEXT LINE	04
05	1 2 8 GO TO 21		1 2 8 GO TO 23	05	1 2 8 NEXT LINE	1 2 8 NEXT LINE	05
06	1 2 8 GO TO 21		1 2 8 GO TO 23	06	1 2 8 NEXT LINE	1 2 8 NEXT LINE	06
07	1 2 8 GO TO 21		1 2 8 GO TO 23	07	1 2 8 NEXT LINE	1 2 8 NEXT LINE	07
08	1 2 8 GO TO 21		1 2 8 GO TO 23	08	1 2 8 NEXT LINE	1 2 8 NEXT LINE	08
09	1 2 8 GO TO 21		1 2 8 GO TO 23	09	1 2 8 NEXT LINE	1 2 8 NEXT LINE	09
10	1 2 8 GO TO 21		1 2 8 GO TO 23	10	1 2 8 NEXT LINE	1 2 8 NEXT LINE	10

CODES FOR Qs. 20B

0=NHIF
1=NSSF
2= CHF
D 3= OTHER EMPLOYER BASED
4= OTHER COMMUNITY BASED/MUTUAL
5= PRIVATELY PURCHASED
6= OTHER _____
SPECIFY
8= DON'T KNOW

HOUSEHOLD SCHEDULE

							IF AGE 15 OR OLDER			
LINE NO.	USUAL RESIDENTS AND VISITORS	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	RESIDENCE		AGE	MARITAL STATUS	ELIGIBILITY **CHECK COLUMN 4 AND 7**		
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**
	Please give me the names of the persons who usually live in your household and guests of the household who stayed here last night, starting with the head of the household. AFTER LISTING THE NAMES AND RECORDING THE RELATIONSHIP AND SEX FOR EACH PERSON, ASK QUESTIONS 2A-2C TO BE SURE THAT THE LISTING IS COMPLETE. THEN ASK APPROPRIATE QUESTIONS IN COLUMNS 5-25 FOR EACH PERSON.	What is the relationship of (NAME) to the head of the household? SEE CODES BELOW.	Is (NAME) male or female? M F 1 2	Does (NAME) usually live here? Y N 1 2	Did (NAME) stay here last night? Y N 1 2	How old is (NAME)? IF 95 OR MORE, RECORD '95'. IN YEARS	What is (NAME)'s current marital status? 1 = MARRIED OR LIVING TOGETHER 2 = DIVORCED/ SEPARATED 3 = WIDOWED 4 = NEVER-MARRIED AND NEVER LIVED TOGETHER	CIRCLE LINE NUMBER OF ALL WOMEN AGE 15-49	**IF HOUSE-HOLD SELEC-TED FOR MAN'S SURVEY** CIRCLE LINE NUMBER OF ALL MEN AGE 15-49	CIRCLE LINE NUMBER OF ALL CHILDREN AGE 0-5
11			1 2	1 2	1 2			11	11	11
12			1 2	1 2	1 2			12	12	12
13			1 2	1 2	1 2			13	13	13
14			1 2	1 2	1 2			14	14	14
15			1 2	1 2	1 2			15	15	15
16			1 2	1 2	1 2			16	16	16
17			1 2	1 2	1 2			17	17	17
18			1 2	1 2	1 2			18	18	18
19			1 2	1 2	1 2			19	19	19
20			1 2	1 2	1 2			20	20	20

ICK HERE IF CONTINUATION SHEET USED ☐

CODES FOR Q. 3: RELATIONSHIP TO HEAD OF HOUSEHO

01 = HEAD
02 = WIFE OR HUSBAND
03 = SON OR DAUGHTER
04 = SON-IN-LAW OR DAUGHTER-IN-LAW
05 = GRANDCHILD
06 = PARENT
07 = PARENT-IN-LAW
08 = BROTHER OR SISTER
09 = CO-WIFE
10 = OTHER RELATIVE
11 = ADOPTED/FOSTER/ STEP CHILD
12 = NOT RELATED
98 = DON'T KNOW

HOUSEHOLD SCHEDULE

	CHECK COLUMN 7, IF AGE 0-17 YEARS				CHECK COLUMN 7, IF AGE 0-4 YEARS	CHECK COLUMN 7, IF AGE 5 YEARS OR OLDER		CHECK COLUMN 7, IF AGE 5-24 YEARS	
LINE NO.	SURVIVORSHIP AND RESIDENCE OF BIOLOGICAL PARENTS				BIRTH REGISTRATION	EVER ATTENDED SCHOOL		CURRENT/RECENT SCHOOL ATTENDANCE	
	12	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
	Is (NAME)'s natural mother alive?	Does (NAME)'s natural mother usually live in this household or was she a guest last night? IF YES: What is her name? RECORD MOTHER'S LINE NUMBER. IF NO, RECORD '00'.	Is (NAME)'s natural father alive?	Does (NAME)'s natural father usually live in this household or was he a guest last night? IF YES: What is his name? RECORD FATHER'S LINE NUMBER. IF NO, RECORD '00'.	Does (NAME) have a birth certificate? IF NO, PROBE: Has (NAME)'s birth ever been registered with the civil authority? 1 = HAS CERTIFICATE 2 = REGISTERED 3 = NEITHER 8 = DON'T KNOW	Has (NAME) ever attended school?	What is the highest level of school (NAME) has attended? What is the highest grade (NAME) completed at that level? SEE CODES BELOW.	Did (NAME) attend school at any time during the 2015 school year?	During [this/that] school year, what level and grade [is/was] (NAME) attending? SEE CODES BELOW.
11	Y N DK 1 2 8 GO TO 14		Y N DK 1 2 8 GO TO 16			Y N 1 2 GO TO 20A	LEVEL GRADE	Y N 1 2 GO TO 20A	LEVEL GRADE
12	1 2 8 GO TO 14		1 2 8 GO TO 16			1 2 GO TO 20A		1 2 GO TO 20A	
13	1 2 8 GO TO 14		1 2 8 GO TO 16			1 2 GO TO 20A		1 2 GO TO 20A	
14	1 2 8 GO TO 14		1 2 8 GO TO 16			1 2 GO TO 20A		1 2 GO TO 20A	
15	1 2 8 GO TO 14		1 2 8 GO TO 16			1 2 GO TO 20A		1 2 GO TO 20A	
16	1 2 8 GO TO 14		1 2 8 GO TO 16			1 2 GO TO 20A		1 2 GO TO 20A	
17	1 2 8 GO TO 14		1 2 8 GO TO 16			1 2 GO TO 20A		1 2 GO TO 20A	
18	1 2 8 GO TO 14		1 2 8 GO TO 16			1 2 GO TO 20A		1 2 GO TO 20A	
19	1 2 8 GO TO 14		1 2 8 GO TO 16			1 2 GO TO 20A		1 2 GO TO 20A	
20	1 2 8 GO TO 14		1 2 8 GO TO 16			1 2 GO TO 20A		1 2 GO TO 20A	

LD

CODES FOR Qs. 17 AND 19: EDUCATION

LEVEL
0 = PRE-PRIMARY
1 = PRIMARY
2 = POST PRIMARY TRAINING
3 = SECONDARY 'O' LEVEL
4 = POST SECONDARY 'O' LEVEL
5 = SECONDARY 'A' LEVEL
6 = POST SECONDARY 'A' LEVEL
7 = UNIVERSITY
8 = DON'T KNOW

GRADE
00 = LESS THAN 1 YEAR COMPLETED
(USE '00' FOR Q. 18ONLY. THIS CODE IS NOT ALLOWE FOR Q. 20.)
98 = DON'T KNOW

HOUSEHOLD SCHEDULE

LINE NO.	HEALTH INSURANCE		INPATIENT		OUTPATIENT		
	20A	**20B**	**21**	**22**	**23**	**24**	**25**
	Is (NAME) covered by any health Insurance?	What is (NAME)'s main type of health insurance SEE CODES BELOW.	In the last six months, was (NAME) admitted overnight to stay at a health facility?	CIRCLE LINE NUMBER OF HOUSE-HOLD MEMBER ELIGIBLE FOR IN-PATIENT MODULE. CHECK COLUMN 21: CODE '1' 'YES' CIRCLED.	In the last four weeks, did (NAME) receive care from a health provider, a pharmacy, or a traditional healer without staying overnight?	The last time (NAME) received care, was any money paid?	CIRCLE LINE NUMBER OF HOUSEHOL D MEMBER ELIGIBLE FOR OUT-PATIENT MODULE. CHECK COLUMN 24: CODE '1' 'YES' CIRCLED.
11	Y N DK 1 2 8 GO TO 21	☐	Y N DK 1 2 8 GO TO 23	01	Y N DK 1 2 8 NEXT LINE	Y N DK 1 2 8 NEXT LINE	01
12	1 2 8 GO TO 21	☐	1 2 8 GO TO 23	02	1 2 8 NEXT LINE	1 2 8 NEXT LINE	02
13	1 2 8 GO TO 21	☐	1 2 8 GO TO 23	03	1 2 8 NEXT LINE	1 2 8 NEXT LINE	03
14	1 2 8 GO TO 21	☐	1 2 8 GO TO 23	04	1 2 8 NEXT LINE	1 2 8 NEXT LINE	04
15	1 2 8 GO TO 21	☐	1 2 8 GO TO 23	05	1 2 8 NEXT LINE	1 2 8 NEXT LINE	05
16	1 2 8 GO TO 21	☐	1 2 8 GO TO 23	06	1 2 8 NEXT LINE	1 2 8 NEXT LINE	06
17	1 2 8 GO TO 21	☐	1 2 8 GO TO 23	07	1 2 8 NEXT LINE	1 2 8 NEXT LINE	07
18	1 2 8 GO TO 21	☐	1 2 8 GO TO 23	08	1 2 8 NEXT LINE	1 2 8 NEXT LINE	08
19	1 2 8 GO TO 21	☐	1 2 8 GO TO 23	09	1 2 8 NEXT LINE	1 2 8 NEXT LINE	09
20	1 2 8 GO TO 21	☐	1 2 8 GO TO 23	10	1 2 8 NEXT LINE	1 2 8 NEXT LINE	10

CODES FOR Qs. 22

0=NHIF
1=NSSF
2= CHF
D 3= OTHER EMPLOYER BASED
4= OTHER COMMUNITY BASED/MUTUAL
5= PRIVATELY PURCHASED
6= OTHER _____
SPECIFY
7= DON'T KNOW

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	What is the main source of drinking water for members of your household?	**PIPED WATER** PIPED INTO DWELLING . . . . . 11 PIPED TO YARD/PLOT . . . . . 12 PIPED TO NEIGHBOR . . . . . 13 PUBLIC TAP/STANDPIPE . . . . . 14 TUBE WELL OR BOREHOLE . . . . . 21 **DUG WELL** PROTECTED WELL . . . . . 31 UNPROTECTED WELL . . . . . 32 **WATER FROM SPRING** PROTECTED SPRING . . . . . 41 UNPROTECTED SPRING . . . . . 42 RAINWATER . . . . . 51 TANKER TRUCK . . . . . 61 CART WITH SMALL TANK . . . . . 71 SURFACE WATER (RIVER/DAM/ LAKE/POND/STREAM/CANAL/ IRRIGATION CHANNEL) . . . . . 81 BOTTLED WATER . . . . . 91 OTHER _____ 96 (SPECIFY)	→ 103 → 102 → 103
101A	Which agency is providing water at your main source?	AUTHORITY . . . . . 1 CBO 2 PRIVATE OPERATOR 3 DON'T KNOW 8	→ 106
102	What is the main source of water used by your household for other purposes such as cooking and handwashing?	**PIPED WATER** PIPED INTO DWELLING . . . . . 11 PIPED TO YARD/PLOT . . . . . 12 PIPED TO NEIGHBOR . . . . . 13 PUBLIC TAP/STANDPIPE . . . . . 14 TUBE WELL OR BOREHOLE . . . . . 21 **DUG WELL** PROTECTED WELL . . . . . 31 UNPROTECTED WELL . . . . . 32 **WATER FROM SPRING** PROTECTED SPRING . . . . . 41 UNPROTECTED SPRING . . . . . 42 RAINWATER . . . . . 51 TANKER TRUCK . . . . . 61 CART WITH SMALL TANK . . . . . 71 SURFACE WATER (RIVER/DAM/ LAKE/POND/STREAM/CANAL/ IRRIGATION CHANNEL) . . . . . 81 OTHER _____ 96 (SPECIFY)	→ 106
103	Where is that water source located?	IN OWN DWELLING . . . . . 1 IN OWN YARD/PLOT . . . . . 2 ELSEWHERE 3	→ 105
104	How long does it take to go there, get water, and come back?	MINUTES . . . . . [ ][ ][ ] DON'T KNOW 998	
104A	Who usually goes to the source to collect water for your household? PROBE: Is this person under age 15? What sex?	ADULT WOMAN (AGE 15+YEARS). . . . . 1 ADULT MAN (AGE 15+YEARS) . . . . . 2 FEMALE CHILD (UNDER 15 . . . . . 3 MALE CHILD (UNDER 15) . . . . . 4 DON'T KNOW 8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
105	CHECK 101 AND 102: CODE '14' OR '21' CIRCLED? YES ☐ ↓	NO ☐ → 107	
106	In the past two weeks, was the water from this source not available for at least one full day?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
107	Do you do anything to the water to make it safer to drink?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 109
108	What do you usually do to make the water safer to drink? Anything else? RECORD ALL MENTIONED.	BOIL . . . . . A ADD BLEACH/CHLORINE . . . . . B STRAIN THROUGH A CLOTH . . . . . C USE WATER FILTER (CERAMIC/ SAND/COMPOSITE/ETC) . . . . . D SOLAR DISINFECTION . . . . . E LET IT STAND AND SETTLE . . . . . F OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	
109	What kind of toilet facility do members of your household usually use? IF NOT POSSIBLE TO DETERMINE, ASK PERMISSION TO OBSERVE THE FACILITY.	**FLUSH OR POUR FLUSH TOILET** FLUSH TO PIPED SEWER SYSTEM . . . . . 11 FLUSH TO SEPTIC TANK . . . . . 12 FLUSH TO PIT LATRINE . . . . . 13 FLUSH TO SOMEWHERE ELSE . . . . . 14 FLUSH, DON'T KNOW WHERE . . . . . 15 **PIT LATRINE** VENTILATED IMPROVED PIT LATRINE . . . . . 21 PIT LATRINE WITH SLAB (WASHABLE) . . . . . 22 PIT LATRINE WITH SLAB (NOT WASHABLE) . . 23 PIT LATRINE WITHOUT SLAB/OPEN PIT . . . . . 24 COMPOSTING TOILET . . . . . 31 BUCKET TOILET . . . . . 41 HANGING TOILET/HANGING LATRINE . . . . . 51 NO TOILET/BUSH/FIELD . . . . . 61 OTHER _____ 96 (SPECIFY)	→ 113
110	Do you share this toilet facility with other households?	YES . . . . . 1 NO 2	→ 112
111	Including your own household, how many households use this toilet facility?	NO. OF HOUSEHOLDS IF LESS THAN 10 . . . . . 0 ☐ 10 OR MORE HOUSEHOLDS . . . . . 95 DON'T KNOW 98	
112	Where is this toilet facility located?	IN OWN DWELLING . . . . . 1 IN OWN YARD/PLOT . . . . . 2 ELSEWHERE 3	
113	What type of fuel does your household mainly use for cooking?	ELECTRICITY . . . . . 01 BOTTLED GAS . . . . . 02 PARAFFIN/KEROSENE . . . . . 03 CHARCOAL . . . . . 04 FIREWOOD . . . . . 05 CROP RESIDUALS,STRAW,GRASS . . . . . 06 ANIMAL DUNG . . . . . 07 NO FOOD COOKED IN HOUSEHOLD . . . . . 95 OTHER _____ 96 (SPECIFY)	→ 115A

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
114	Is the cooking usually done in the house, in a separate building, or outdoors?	IN THE HOUSE . . . . . 1 IN A SEPARATE BUILDING . . . . . 2 OUTDOORS . . . . . 3 OTHER _____ 6 (SPECIFY)	→ 115A
115	Do you have a separate room which is used as a kitchen?	YES . . . . . 1 NO 2	
115A	What is the main source of energy for lighting in the household?	ELECTRICITY . . . . . 01 SOLAR . . . . . 02 GAS . . . . . 03 PARAFFIN-HURRICANE LAMP . . . . . 04 PARAFFIN-PRESSURE LAMP . . . . . 05 PARAFFIN-WICK LAMP . . . . . 06 FIREWOOD . . . . . 07 CANDLES . . . . . 08 OTHER _____ 96 (SPECIFY)	
116	How many rooms in this household are used for sleeping?	ROOMS	
116A	How many sleeping spaces such as mats, rugs, mattresses or beds are used in this household?	SLEEPING SPACES	
117	Does this household own any livestock, herds, other farm animals, or poultry?	YES . . . . . 1 NO 2	→ 119
118	How many of the following animals does this household own? IF NONE, RECORD '00'. IF 95 OR MORE, RECORD '95'. IF UNKNOWN, RECORD '98'. a) Milk cows or bulls? b) Other cattle? c) Horses, donkeys, or mules? d) Goats? e) Sheep? f) Chickens or other poultry?	a) COWS/BULLS . . . . . b) OTHER CATTLE . . . . . c) HORSES/DONKEYS/MULES . . . . . d) GOATS . . . . . e) SHEEP . . . . . f) CHICKENS/POULTRY	
119	Does any member of this household own any agricultural land?	YES . . . . . 1 NO 2	→ 121
120	How many hectares of agricultural land do members of this household own? IF 95 OR MORE, CIRCLED '950'.	HECTARES . . . . 95 OR MORE HECTARES . . . . . 950 DON'T KNOW 998	
121	Does your household have: a) Electricity that is connected? b) A radio in working condition? c) A television in working condition? d) A non-mobile telephone in working condition? e) A computer in working conditions? f) A refrigerator in working condition? g) A battery or Generator for power? h) An iron (charcoal or electricity)	YES NO a) ELECTRICITY . . . . . 1 2 b) RADIO . . . . . 1 2 c) TELEVISION . . . . . 1 2 d) NON-MOBILE TELEPHONE . . 1 2 e) COMPUTER . . . . . 1 2 f) REFRIGERATOR . . . . . 1 2 g) BATTERY . . . . . 1 2 h) IRON 1 2	

HOUSEHOLD CHARACTERISTICS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
122	Does any member of this household own: a) A watch? b) A mobile phone? c) A bicycle? d) A motorcycle or motor scooter? e) An animal-drawn cart? f) A car or truck? g) A boat with a motor?	YES NO a) WATCH . . . . . 1 2 b) MOBILE PHONE . . . . . 1 2 c) BICYCLE . . . . . 1 2 d) MOTORCYCLE/SCOOTER . . . . . 1 2 e) ANIMAL-DRAWN CART . . . . . 1 2 f) CAR/TRUCK . . . . . 1 2 g) BOAT WITH MOTOR 1 2	
123	Does any member of this household have a bank account?	YES . . . . . 1 NO 2	
123A	How far is it to the nearest market place? IF LESS THAN ONE KM, ENTER 00. IF MORE THAN 95 KM, ENTER 95.	KILOMETRES	
124	How often does anyone smoke inside your house? Would you say daily, weekly, monthly, less often than once a month, or never?	DAILY . . . . . 1 WEEKLY . . . . . 2 MONTHLY . . . . . 3 LESS OFTEN THAN ONCE A MONTH . . . . . 4 NEVER 5	
124A	Now I would like to ask you about the food your household eats. How many meals does your household usually have per day?	MEALS	
124B	In the past week, on how many days did the household eat meat or fish?	DAYS	
124C	How often in the last year did you have problems in satisfying the food needs of the household?	NEVER . . . . . 1 SELDOM . . . . . 2 SOMETIMES . . . . . 3 OFTEN . . . . . 4 ALWAYS 5	
124D	In the past four weeks, was there ever no food to eat of any kind in your household because of lack of resources to get food? Would you say it never happened? Rearely happended? Happended sometimes or Often?	NEVER . . . . . 1 RARELY . . . . . 2 SOMETIMES . . . . . 3 OFTEN 4	
124E	In the past four weeks, did you or any household member go to sleep at night hungry because there was not enough food? Would you say it never happened? Rearely happended? Happended sometimes or Often?	NEVER . . . . . 1 RARELY . . . . . 2 SOMETIMES . . . . . 3 OFTEN 4	
124F	In the past four weeks, did you or any household member go a whole day and night without eating anything because there was not enough food? Would you say it never happened? Rearely happended? Happended sometimes or Often?	NEVER . . . . . 1 RARELY . . . . . 2 SOMETIMES . . . . . 3 OFTEN 4	
124G	How far is it to the nearest health facility? IF LESS THAN ONE KM, ENTER '00'. IF MORE THAN 95 KM, ENTER '95'.	KILOMETRES	
124H	If you were to go to the nearest health facility, how would usually you go there?	CAR/MOTORCYCLE . . . . . 1 PUBLIC TRANSPORT (BUS, TAXI) . . . . . 2 ANIMAL/ANIMAL CART . . . . . 3 WALKING . . . . . 4 BICYCLE . . . . . 5 OTHER _____ 6 (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
124I	Did your household ever receive any (NAME OF ASSISTANCE) from government or non Government organisations?	124J What is the name of the organisation or program that provided this assistance?	
		GOVERNMENT / NON GVT PROGRAM	
	a) CASH ASSISTANCE	YES 1 → GOVERNMENT 1 / NON GVT PROGRAM 2 ____ SPECIFY ____ NO 2 DK 8	
	b) FOOD ASSISTANCE	YES 1 → GOVERNMENT 1 / NON GVT PROGRAM 2 ____ SPECIFY NO 2 DK 8	
	c) OTHER ASSISTANCE ____ SPECIFY	YES 1 → GOVERNMENT 1 / NON GVT PROGRAM 2 ____ SPECIFY ____ NO 2 DK 8	
124J1	CHECK 124I, AT LEAST ONE YES CIRCLED? YES ☐ ↓ NO ☐ →		125
124K	When was the last time you received an assistance? IF LESS THAN 2 YEARS, RECORD NUMBER OF MONTH. IF LESS THAN 1 MONTH, RECORD '00'	MONTHS AGO 1 ☐☐ YEARS AGO 2 ☐☐	
125	At any time in the past 12 months, has anyone come into your dwelling to spray the interior walls against mosquitoes?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 127
126	Who sprayed the dwelling?	GOVERNMENT WORKER/PROGRAM . . . . . A PRIVATE COMPANY . . . . . B NONGOVERNMENTAL ORGANIZATION (NGO) . . C OTHER ____ (SPECIFY) X DON'T KNOW . . . . . Z	
127	Does your household have any mosquito nets?	YES . . . . . 1 NO 2	→ 139
128	How many mosquito nets does your household have? IF 7 OR MORE NETS, RECORD '7'.	NUMBER OF NETS . . . . . ☐	

MOSQUITO NETS

		NET #1	NET #2	NET #3
129	ASK THE RESPONDENT TO SHOW YOU ALL THE NETS IN THE HOUSEHOLD IF MORE THAN 6 NETS, USE ADDITIONAL	OBSERVED . . . . . 1 NOT OBSERVED 2	OBSERVED . . . . . 1 NOT OBSERVED 2	OBSERVED . . . . . 1 NOT OBSERVED 2
129A	IF NET OBSERVED, RECORD ITS COLOR(S). IF NET NOT OBSERVED, ASK: What color is the net?	SOLID BLUE . . . . . 1 SOLID WHITI . . . . . 2 BLUE AND WHITE STRIPEI 3 OTHER _____ 6 (SPECIFY)	SOLID BLUE . . . . . 1 SOLID WHITI . . . . . 2 BLUE AND WHITE STRIPE 3 OTHER _____ 6 (SPECIFY)	SOLID BLUE . . . . . 1 SOLID WHITI . . . . . 2 BLUE AND WHITE STRIPEI 3 OTHER _____ 6 (SPECIFY)
130	How many months ago did your household get the mosquito net? IF LESS THAN ONE MONTH AGO, RECORD '00'.	MONTHS AGO . . . . . [ ][ ] MORE THAN 36 MONTHS AGO . . . . . 95 NOT SURE 98	MONTHS AGO . . . . . [ ][ ] MORE THAN 36 MONTHS AGO . . . . . 95 NOT SURE 98	MONTHS AGO . . . . . [ ][ ] MORE THAN 36 MONTHS AGO . . . . . 95 NOT SURE 98
131	OBSERVE OR ASK BRAND/TYPE OF MOSQUITO NET. IF BRAND IS UNKNOWN AND YOU CANNOT OBSERVE THE NET, SHOW PICTURES OF TYPICAL NET TYPES/BRANDS TO RESPONDENT.	**LONG-LASTING INSECTICIDE-TREATED NET (LLIN)** PERMANENT . . . . . 11 OLYSET . . . . . 12 NETPROTEC . . . . . 13 DURANET . . . . . 14 OTHER/DON'T KNOW BRAND . . . . . 16 CONVENTIONAL POLYESTER NET . . 21 OTHER TYPE . . . . . 96 DON'T KNOW TYPE . . 98	**LONG-LASTING INSECTICIDE-TREATED NET (LLIN)** PERMANENT . . . . . 11 OLYSET . . . . . 12 NETPROTEC . . . . . 13 DURANET . . . . . 14 OTHER/DON'T KNOW BRAND . . . . . 16 CONVENTIONAL POLYESTER NET . . 21 OTHER TYPE . . . . . 96 DON'T KNOW TYPE . . 98	**LONG-LASTING INSECTICIDE-TREATED NET (LLIN)** PERMANENT . . . . . 11 OLYSET . . . . . 12 NETPROTEC . . . . . 13 DURANET . . . . . 14 OTHER/DON'T KNOW BRAND . . . . . 16 CONVENTIONAL POLYESTER NET . . 21 OTHER TYPE . . . . . 96 DON'T KNOW TYPE . . 98
134	Did you get the net through Government's net distribution campaign to households, during an antenatal care visit, during an immunization visit or through the school net programme (SNP) ?	YES, NET DISTRIBUTION CAMPAIGN . . . . . 1 YES, ANC . . . . . 2 YES, IMMUNIZATION VISIT . . . . . 3 YES, SNP . . . . . 4 (SKIP TO 136) NO 5	YES, NET DISTRIBUTION CAMPAIGN . . . . . 1 YES, ANC . . . . . 2 YES, IMMUNIZATION VISIT . . . . . 3 YES, SNP . . . . . 4 (SKIP TO 136) NO 5	YES, NET DISTRIBUTION CAMPAIGN . . . . . 1 YES, ANC . . . . . 2 YES, IMMUNIZATION VISIT . . . . . 3 YES, SNP . . . . . 4 (SKIP TO 136) NO 5
135	Where did you get the net?	GOVT. HEALTH FACILITY . . . . . 01 PRIVATE HEALTH FACILITY . . . . . 02 PHARMACY . . . . . 03 ADDO . . . . . 04 SHOP/MARKET . . . . . 05 CHW . . . . . 06 RELIGIOUS INSTITUTION . . . . . 07 SCHOOL . . . . . 08 OTHER . . . . . 96 DON'T KNOW 98	GOVT. HEALTH FACILITY . . . . . 01 PRIVATE HEALTH FACILITY . . . . . 02 PHARMACY . . . . . 03 ADDO . . . . . 04 SHOP/MARKET . . . . . 05 CHW . . . . . 06 RELIGIOUS INSTITUTION . . . . . 07 SCHOOL . . . . . 08 OTHER . . . . . 96 DON'T KNOW 98	GOVT. HEALTH FACILITY . . . . . 01 PRIVATE HEALTH FACILITY . . . . . 02 PHARMACY . . . . . 03 ADDO . . . . . 04 SHOP/MARKET . . . . . 05 CHW . . . . . 06 RELIGIOUS INSTITUTION . . . . . 07 SCHOOL . . . . . 08 OTHER . . . . . 96 DON'T KNOW 98
136	Did anyone sleep under this mosquito net last night?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 137A) NOT SURE 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 137A) NOT SURE 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 137A) NOT SURE 8

MOSQUITO NETS

		NET #1	NET #2	NET #3
137	Who slept under this mosquito net last night? RECORD THE PERSON'S NAME AND LINE NUMBER FROM HOUSEHOLD SCHEDULE.	NAME _____ LINE NO. . . . . [ ][ ] NAME _____ LINE NO. . . . . [ ][ ] NAME _____ LINE NO. . . . . [ ][ ] NAME _____ LINE NO. . . . . [ ][ ] GO BACK TO Q129 FOR NEXT NET; OR, IF NO MORE NETS, GO TO Q139	NAME _____ LINE NO. . . . . [ ][ ] NAME _____ LINE NO. . . . . [ ][ ] NAME _____ LINE NO. . . . . [ ][ ] NAME _____ LINE NO. . . . . [ ][ ] GO BACK TO Q129 FOR NEXT NET; OR, IF NO MORE NETS, GO TO Q139	NAME _____ LINE NO. . . . . [ ][ ] NAME _____ LINE NO. . . . . [ ][ ] NAME _____ LINE NO. . . . . [ ][ ] NAME _____ LINE NO. . . . . [ ][ ] GO BACK TO Q129 FOR NEXT NET; OR, IF NO MORE NETS, GO TO Q139
137A	Why not? RECORD ALL MENTIONED	NO MOSQUITOES . . . . . A NO MALARIA NOW . . . . . B TOO HOT . . . . . C DON'T LIKE SMELL . . . . . D FEEL CLOSED IN/ AFRAID . . . . . E NET TOO OLD/TORN F NET TOO DIRTY . . . . . G NET NOT AVAILABLE LAST NIGHT/NET BEING WASH . . . . . H USUAL USER(S) DID NOT SLEEP HERE LAST NIGHT . . . . . I NET TOO SMALL . . . . . J SAVING NET FOR LATER . . . . . K NO LONGER KILLS/ REPELS MOSQ. . . . . L OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	NO MOSQUITOE . . . . . A NO MALARIA NOW . . . . . B TOO HOT . . . . . C DON'T LIKE SMELL . . . . . D FEEL CLOSED IN/ AFRAID . . . . . E NET TOO OLD/TORN F NET TOO DIRTY . . . . . G NET NOT AVAILABLE LAST NIGHT/NET BEING WASH . . . . . H USUAL USER(S) DID NOT SLEEP HERE LAST NIGHT . . . . . I NET TOO SMALL . . . . . J SAVING NET FOR LATER . . . . . K NO LONGER KILLS/ REPELS MOSQ. . . . . L OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	NO MOSQUITOE . . . . . A NO MALARIA NOW . . . . . B TOO HOT . . . . . C DON'T LIKE SMELL . . . . . D FEEL CLOSED IN/ AFRAID . . . . . E NET TOO OLD/TORN F NET TOO DIRTY . . . . . G NET NOT AVAILABLE LAST NIGHT/NET BEING WASH . . . . . H USUAL USER(S) DID NOT SLEEP HERE LAST NIGHT . . . . . I NET TOO SMALL . . . . . J SAVING NET FOR LATER . . . . . K NO LONGER KILLS/ REPELS MOSQ. . . . . L OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z
138		GO BACK TO 129 FOR NEXT NET; OR, IF NO MORE NETS, GO TO 139.	GO BACK TO 129 FOR NEXT NET; OR, IF NO MORE NETS, GO TO 139.	GO TO 129 IN FIRST COLUMN OF A NEW QUESTIONNAIRE; OR, IF NO MORE NETS, GO TO 139.

MOSQUITO NETS

		NET #4	NET #5	NET #6
129	ASK THE RESPONDENT TO SHOW YOU ALL THE NETS IN THE HOUSEHOLD IF MORE THAN 6 NETS, USE ADDITIONAL QUESTIONNAIRE(S).	OBSERVED . . . . . 1 NOT OBSERVED 2	OBSERVED . . . . . 1 NOT OBSERVED 2	OBSERVED . . . . . 1 NOT OBSERVED 2
129A	IF NET OBSERVED, RECORD ITS COLOR(S). IF NET NOT OBSERVED, ASK: What color is the net?	SOLID BLUE . . . . . 1 SOLID WHITE . . . . . 2 BLUE AND WHITE STRIPE 3 OTHER _____ 6 (SPECIFY)	SOLID BLUE . . . . . 1 SOLID WHITE . . . . . 2 BLUE AND WHITE STRIPE 3 OTHER _____ 6 (SPECIFY)	SOLID BLUE . . . . . 1 SOLID WHITE . . . . . 2 BLUE AND WHITE STRIPE 3 OTHER _____ 6 (SPECIFY)
130	How many months ago did your household get the mosquito net? IF LESS THAN ONE MONTH AGO, RECORD '00'.	MONTHS AGO . . . . . [ ][ ] MORE THAN 36 MONTHS AGO . . . . . 95 NOT SURE 98	MONTHS AGO . . . . . [ ][ ] MORE THAN 36 MONTHS AGO . . . . . 95 NOT SURE 98	MONTHS AGO . . . . . [ ][ ] MORE THAN 36 MONTHS AGO . . . . . 95 NOT SURE 98
131	OBSERVE OR ASK BRAND/TYPE OF MOSQUITO NET. IF BRAND IS UNKNOWN AND YOU CANNOT OBSERVE THE NET, SHOW PICTURES OF TYPICAL NET TYPES/BRANDS TO RESPONDENT.	**LONG-LASTING INSECTICIDE-TREATED NET (LLIN)** PERMANENT . . . . . 11 OLYSET . . . . . 12 NETPROTEC . . . . . 13 DURANET . . . . . 14 OTHER/DON'T KNOW BRAND . . . . . 16 (SKIP TO 134) CONVENTIONAL POLYESTER NET . . 21 OTHER TYPE . . . . . 96 DON'T KNOW TYPE . . 98	**LONG-LASTING INSECTICIDE-TREATED NET (LLIN)** PERMANENT . . . . . 11 OLYSET . . . . . 12 NETPROTEC . . . . . 13 DURANET . . . . . 14 OTHER/DON'T KNOW BRAND . . . . . 16 (SKIP TO 134) CONVENTIONAL POLYESTER NET . . 21 OTHER TYPE . . . . . 96 DON'T KNOW TYPE . . 98	**LONG-LASTING INSECTICIDE-TREATED NET (LLIN)** PERMANENT . . . . . 11 OLYSET . . . . . 12 NETPROTEC . . . . . 13 DURANET . . . . . 14 OTHER/DON'T KNOW BRAND . . . . . 16 (SKIP TO 134) CONVENTIONAL POLYESTER NET . . 21 OTHER TYPE . . . . . 96 DON'T KNOW TYPE . . 98
134	Did you get the net through Government's net distribution campaign to households, during an antenatal care visit, during an immunization visit or through the school net programme (SNP) ?	YES, NET DISTRIBUTION CAMPAIGN . . . . . 1 YES, ANC . . . . . 2 YES, IMMUNIZATION VISIT . . . . . 3 YES, SNP . . . . . 4 (SKIP TO 136) NO 5	YES, NET DISTRIBUTION CAMPAIGN . . . . . 1 YES, ANC . . . . . 2 YES, IMMUNIZATION VISIT . . . . . 3 YES, SNP . . . . . 4 (SKIP TO 136) NO 5	YES, NET DISTRIBUTION CAMPAIGN . . . . . 1 YES, ANC . . . . . 2 YES, IMMUNIZATION VISIT . . . . . 3 YES, SNP . . . . . 4 (SKIP TO 136) NO 5
135	Where did you get the net?	GOVT. HEALTH FACILITY . . . . . 01 PRIVATE HEALTH FACILITY . . . . . 02 PHARMACY . . . . . 03 SHOP/MARKET . . . . . 04 CHW . . . . . 05 RELIGIOUS INSTITUTION . . . . . 06 SCHOOL . . . . . 07 OTHER . . . . . 08 DON'T KNOW 98	GOVT. HEALTH FACILITY . . . . . 01 PRIVATE HEALTH FACILITY . . . . . 02 PHARMACY . . . . . 03 SHOP/MARKET . . . . . 04 CHW . . . . . 05 RELIGIOUS INSTITUTION . . . . . 06 SCHOOL . . . . . 07 OTHER . . . . . 08 DON'T KNOW 98	GOVT. HEALTH FACILITY . . . . . 01 PRIVATE HEALTH FACILITY . . . . . 02 PHARMACY . . . . . 03 SHOP/MARKET . . . . . 04 CHW . . . . . 05 RELIGIOUS INSTITUTION . . . . . 06 SCHOOL . . . . . 07 OTHER . . . . . 08 DON'T KNOW 98
136	Did anyone sleep under this mosquito net last night?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 137A) NOT SURE 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 137A) NOT SURE 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 137A) NOT SURE 8

MOSQUITO NETS

		NET #4	NET #5	NET #6
137	Who slept under this mosquito net last night? RECORD THE PERSON'S NAME AND LINE NUMBER FROM HOUSEHOLD SCHEDULE.	NAME _____ LINE NO. . . . . [ ][ ] NAME _____ LINE NO. . . . . [ ][ ] NAME _____ LINE NO. . . . . [ ][ ] NAME _____ LINE NO. . . . . [ ][ ] GO BACK TO Q129 FOR NEXT NET; OR, IF NO MORE NETS, GO TO Q139	NAME _____ LINE NO. . . . . [ ][ ] NAME _____ LINE NO. . . . . [ ][ ] NAME _____ LINE NO. . . . . [ ][ ] NAME _____ LINE NO. . . . . [ ][ ] GO BACK TO Q129 FOR NEXT NET; OR, IF NO MORE NETS, GO TO Q139	NAME _____ LINE NO. . . . . [ ][ ] NAME _____ LINE NO. . . . . [ ][ ] NAME _____ LINE NO. . . . . [ ][ ] NAME _____ LINE NO. . . . . [ ][ ] GO BACK TO Q129 FOR NEXT NET; OR, IF NO MORE NETS, GO TO Q139
137A	Why not? RECORD ALL MENTIONED	NO MOSQUITOES . . . . . A NO MALARIA NOW . . . . . B TOO HOT . . . . . C DON'T LIKE SMELL . . . . . D FEEL CLOSED IN/ AFRAID . . . . . E NET TOO OLD/TOR . . . . . F NET TOO DIRTY . . . . . G NET NOT AVAILABLE LAST NIGHT/NET BEING WASHED . . . . . H USUAL USER(S) DID NOT SLEEP HERE LAST NIGHT . . . . . I NET TOO SMALL . . . . . J SAVING NET FOR LATER . . . . . K NO LONGER KILLS/ REPELS MOSQ. . . . . L OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	NO MOSQUITOES . . . . . A NO MALARIA NOW . . . . . B TOO HOT . . . . . C DON'T LIKE SMELL . . . . . D FEEL CLOSED IN/ AFRAID . . . . . E NET TOO OLD/TOR . . . . . F NET TOO DIRTY . . . . . G NET NOT AVAILABLE LAST NIGHT/NET BEING WASHED . . . . . H USUAL USER(S) DID NOT SLEEP HERE LAST NIGHT . . . . . I NET TOO SMALL . . . . . J SAVING NET FOR LATER . . . . . K NO LONGER KILLS/ REPELS MOSQ. . . . . L OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	NO MOSQUITOES . . . . . A NO MALARIA NOW . . . . . B TOO HOT . . . . . C DON'T LIKE SMELL . . . . . D FEEL CLOSED IN/ AFRAID . . . . . E NET TOO OLD/TOR . . . . . F NET TOO DIRTY . . . . . G NET NOT AVAILABLE LAST NIGHT/NET BEING WASHED . . . . . H USUAL USER(S) DID NOT SLEEP HERE LAST NIGHT . . . . . I NET TOO SMALL . . . . . J SAVING NET FOR LATER . . . . . K NO LONGER KILLS/ REPELS MOSQ. . . . . L OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z
138		GO BACK TO 129 FOR NEXT NET; OR, IF NO MORE NETS, GO TO 139.	GO BACK TO 129 FOR NEXT NET; OR, IF NO MORE NETS, GO TO 139.	GO TO 129 IN FIRST COLUMN OF A NEW QUESTIONNAIRE; OR, IF NO MORE NETS, GO TO 139.

ADDITIONAL HOUSEHOLD CHARACTERISTICS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
139	We would like to learn about the places that households use to wash their hands. Can you please show me where members of your household most often wash their hands?	OBSERVED, FIXED PLACE . . . . . 1 OBSERVED, MOBILE . . . . . 2 NOT OBSERVED, NOT IN DWELLING/YARD/PLOT . . . . . 3 NOT OBSERVED, NO PERMISSION TO SEE . . . . . 4 NOT OBSERVED, OTHER REASON 5	→ 142
140	OBSERVE PRESENCE OF WATER AT THE PLACE FOR HANDWASHING. RECORD OBSERVATION.	WATER IS AVAILABLE . . . . . 1 WATER IS NOT AVAILABLE 2	
141	OBSERVE PRESENCE OF SOAP, DETERGENT, OR OTHER CLEANSING AGENT AT THE PLACE FOR HANDWASHING. RECORD OBSERVATION.	SOAP OR DETERGENT (BAR, LIQUID, POWDER, PASTE) . . . . . A ASH, MUD, SAND . . . . . B NONE C	
142	OBSERVE MAIN MATERIAL OF THE FLOOR OF THE DWELLING. RECORD OBSERVATION.	**NATURAL FLOOR** EARTH/SAND . . . . . 11 DUNG . . . . . 12 **RUDIMENTARY FLOOR** WOOD PLANKS . . . . . 21 PALM/BAMBOO . . . . . 22 **FINISHED FLOOR** PARQUET OR POLISHED WOOD . . . . . 31 VINYL OR ASPHALT STRIPS . . . . . 32 CERAMIC TILES, TERRAZZO . . . . . 33 CEMENT/CONCRETE . . . . . 34 CARPET . . . . . 35 OTHER _____ 96 (SPECIFY)	
143	OBSERVE MAIN MATERIAL OF THE ROOF OF THE DWELLING. RECORD OBSERVATION.	**NATURAL ROOFING** NO ROOF . . . . . 11 GRASS/THATCH/PALM LEAF/MUD . . . . . 12 **RUDIMENTARY ROOFING** RUSTIC MAT . . . . . 21 PALM/BAMBOO . . . . . 22 WOOD PLANKS . . . . . 23 **FINISHED ROOFING** IRON SHEET . . . . . 31 CONCRETE . . . . . 32 TILES . . . . . 33 OTHER _____ 96 (SPECIFY)	
144	OBSERVE MAIN MATERIAL OF THE EXTERIOR WALLS OF THE DWELLING. RECORD OBSERVATION.	**NATURAL WALLS** NO WALL 11 GRASS . . . . . 12 CANE/PALM/TRUNKS/BAMBOO 13 **RUDIMENTARY WALLS** POLES WITH MUD . . . . . 21 STONE WITH MUD . . . . . 22 WOOD,TIMBER . . . . . 23 **FINISHED WALLS** CEMENT/CONCRETE . . . . . 31 STONE WITH LIME/CEMENT . . . . . 32 SUN-DRIED BRICKS/MUD BRICK . . . . . 33 BAKED BRICKS . . . . . 34 CEMENT BLOCKS . . . . . 35 OTHER _____ 96 (SPECIFY)	

ADDITIONAL HOUSEHOLD CHARACTERISTICS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
145	I would like to check whether the salt used in your household is iodized. May I have a sample of the salt used to cook meals in your household? TEST SALT FOR IODINE.	IODINE PRESENT . . . . . 1 NO IODINE . . . . . 2 NO SALT IN HOUSEHOLD . . . . . 3 SALT NOT TESTED _____ 6 (SPECIFY REASON)	
146	CHECK COVER OF HOUSEHOLD QUESTIONNAIRE. IF HOUSEHOLD SELECTED FOR ADDITIONAL SALT TESTING ASK FOR ADDITIONAL FULL TABLESPOON OF SALT. PLACE SALT IN CONTAINER PUT THE 1ST BAR CODE LABEL HERE PUT THE 2ND BAR CODE LABEL ON THE RESPONDENT'S CONTAINER OF SALT AND THE 3RD ON THE TRANSIMITAL FORM		

INPATIENT HEALTH EXPENDITURES MODULE

201	CHECK COLUMN 22 IN HOUSEHOLD SCHEDULE: ONE OR MORE INPATIENTS ☐ ↓ NO INPATIENTS ☐ → 301			
202	CHECK COLUMN 22 IN HOUSEHOLD SCHEDULE: ENTER THE LINE NUMBER AND NAME OF EACH HOUSEHOLD MEMBER WHO WAS AN INPATIENT. THEN ASK: Now I would like to ask some questions about the household members who stayed overnight in a health facility in the last six months. (IF THERE ARE MORE THAN 3 INPATIENTS, USE ADDITIONAL QUESTIONNAIRE).			
203	LINE NUMBER FROM COLUMN 22 IN HOUSEHOLD SCHEDULE	INPATIENT LINE NUMBER	INPATIENT LINE NUMBER	INPATIENT LINE NUMBER . . . . .
204	NAME FROM COLUMN 2 IN HOUSEHOLD SCHEDULE	NAME _____	NAME _____	NAME _____
205	Where did (NAME) most recently stay overnight for health care?	**GOVERNMENT/PARASTATAL** NATIONAL/ZONAL/ SPEC.HOSPIT. . . 21 REGIONAL REFERAL HOS 22 REGIONAL HOSPITAL . . 23 DISTRICT HOSPITA . . . . . 24 HEALTH CENTR . . . . . 25 DISPENSARY . . . . . 26 CLINI(. . . . . 27 CHW . . . . . 28 **RELIGIOUS/VOLUNTARY** REFERAL/SPEC. HOSP. 31 DISTRICT HOSPITAL 32 HOSPITAL 33 HEALTH CENTRE . . . . . 34 DISPENSARY . . . . . 35 CLINI(. . . . . 36 **PRIVATE** . . . . . . SPECIALISED HOSPIT . . 41 HOSPITA . . . . . 42 HEALTH CENTR . . . . . 43 DISPENSAR` . . . . . 44 CLINIC 45 TRADITIONAL HEALER/ ALTERNATIVE MEDEC. 46 OTHER _____ 96 SPECIFY	**GOVERNMENT/PARASTATAL** NATIONAL/ZONAL/ SPEC.HOSPIT. . . 21 REGIONAL REFERAL HOS 22 REGIONAL HOSPITAL . . 23 DISTRICT HOSPITA . . . . . 24 HEALTH CENTR . . . . . 25 DISPENSARY . . . . . 26 CLINI(. . . . . 27 CHW . . . . . 28 **RELIGIOUS/VOLUNTARY** REFERAL/SPEC. HOSP. 31 DISTRICT HOSPITAL 32 HOSPITAL 33 HEALTH CENTRE . . . . . 34 DISPENSARY . . . . . 35 CLINI(. . . . . 36 **PRIVATE** . . . . . . SPECIALISED HOSPIT . . 41 HOSPITA . . . . . 42 HEALTH CENTR . . . . . 43 DISPENSAR` . . . . . 44 CLINIC 45 TRADITIONAL HEALER/ ALTERNATIVE MEDEC. 46 OTHER _____ 96 SPECIFY	**GOVERNMENT/PARASTATAL** NATIONAL/ZONAL/ SPEC.HOSPIT. . . 21 REGIONAL REFERAL HOS 22 REGIONAL HOSPITAL . . 23 DISTRICT HOSPITA . . . . . 24 HEALTH CENTR . . . . . 25 DISPENSARY . . . . . 26 CLINI(. . . . . 27 CHW . . . . . 28 **RELIGIOUS/VOLUNTARY** REFERAL/SPEC. HOSP. 31 DISTRICT HOSPITAL 32 HOSPITAL 33 HEALTH CENTRE . . . . . 34 DISPENSARY . . . . . 35 CLINI(. . . . . 36 **PRIVATE** . . . . . . SPECIALISED HOSPIT . . 41 HOSPITA . . . . . 42 HEALTH CENTR . . . . . 43 DISPENSAR` . . . . . 44 CLINIC 45 TRADITIONAL HEALER/ ALTERNATIVE MEDEC. 46 OTHER _____ 96 SPECIFY
206	What was the main reason for (NAME) to seek care this most recent time?	PREGNANCY/ DELIVERY . . . . . 01 ILLNESS . . . . . 02 ACCIDENT/INJURY . . . . . 03 OTHER _____ 06 (SPECIFY)	PREGNANCY/ DELIVERY . . . . . 01 ILLNESS . . . . . 02 ACCIDENT/INJURY . . . . . 03 OTHER _____ 06 (SPECIFY)	PREGNANCY/ DELIVERY . . . . . 01 ILLNESS . . . . . 02 ACCIDENT/INJURY . . . . . 03 OTHER _____ 06 (SPECIFY)
207	How much money in total did you or any other member of your household spend on the treatment and services (NAME) received during the most recent overnight stay? We want to know about all the costs for the stay, including	COST (TSH) NO COST/ FREE . . . . . 00000000 IN KIND ONL . . . . . 99999995 DON'T KNOW 99999998	COST (TSH) NO COST/ FREE . . . . . 00000000 IN KIND ONL . . . . . 99999995 DON'T KNOW 99999998	COST (TSH) NO COST/ FREE . . . . . 00000000 IN KIND ONL . . . . . 99999995 DON'T KNOW 99999998
208	Did (NAME) stay overnight at a health facility another time in the last six months?	YES . . . . . 1 NO . . . . . 2 (GO TO 220)	YES . . . . . 1 NO . . . . . 2 (GO TO 220)	YES . . . . . 1 NO . . . . . 2 (GO TO 220)

	NAME FROM COLUMN 2 IN HOUSEHOLD SCHEDULE	INPATIENT NAME _____	INPATIENT NAME _____	INPATIENT NAME _____
209	Where did (NAME) stay the next-to-last time (he/she) stayed overnight for health care?	**GOVERNMENT/PARASTATAL** NATIONAL/ZONAL/ SPEC.HOSPIT. . . 21 REGIONAL REFERAL HOS 22 REGIONAL HOSPITAL . . 23 DISTRICT HOSPITA . . . . . 24 HEALTH CENTR . . . . . 25 DISPENSARY . . . . . 26 CLINI(. . . . . 27 CHW . . . . . 28 **RELIGIOUS/VOLUNTARY** REFERAL/SPEC. HOSP. 31 DISTRICT HOSPITAL (DDI 32 HOSPITAL 33 HEALTH CENTRE . . . . . 34 DISPENSARY . . . . . 35 CLINI(. . . . . 36 **PRIVATE** . . . . . . SPECIALISED HOSPIT . . 41 HOSPITA . . . . . 42 HEALTH CENTR . . . . . 43 DISPENSAR` . . . . . 44 CLINIC 45 TRADITIONAL HEALER/ ALTERNATIVE MEDEC. 46 OTHER _____ 96 SPECIFY	**GOVERNMENT/PARASTATAL** NATIONAL/ZONAL/ SPEC.HOSPIT. . . 21 REGIONAL REFERAL HOS 22 REGIONAL HOSPITAL . . 23 DISTRICT HOSPITA . . . . . 24 HEALTH CENTR . . . . . 25 DISPENSARY . . . . . 26 CLINI(. . . . . 27 CHW . . . . . 28 **RELIGIOUS/VOLUNTARY** REFERAL/SPEC. HOSP. 31 DISTRICT HOSPITAL (DDI 32 HOSPITAL 33 HEALTH CENTRE . . . . . 34 DISPENSARY . . . . . 35 CLINI(. . . . . 36 **PRIVATE** . . . . . . SPECIALISED HOSPIT . . 41 HOSPITA . . . . . 42 HEALTH CENTR . . . . . 43 DISPENSAR` . . . . . 44 CLINIC 45 TRADITIONAL HEALER/ ALTERNATIVE MEDEC. 46 OTHER _____ 96 SPECIFY	**GOVERNMENT/PARASTATAL** NATIONAL/ZONAL/ SPEC.HOSPIT. . . 21 REGIONAL REFERAL HOS 22 REGIONAL HOSPITAL . . 23 DISTRICT HOSPITA . . . . . 24 HEALTH CENTR . . . . . 25 DISPENSARY . . . . . 26 CLINI(. . . . . 27 CHW . . . . . 28 **RELIGIOUS/VOLUNTARY** REFERAL/SPEC. HOSP. 31 DISTRICT HOSPITAL (DDI 32 HOSPITAL 33 HEALTH CENTRE . . . . . 34 DISPENSARY . . . . . 35 CLINI(. . . . . 36 **PRIVATE** . . . . . . SPECIALISED HOSPIT . . 41 HOSPITA . . . . . 42 HEALTH CENTR . . . . . 43 DISPENSAR` . . . . . 44 CLINIC 45 TRADITIONAL HEALER/ ALTERNATIVE MEDEC. 46 OTHER _____ 96 SPECIFY
210	What was the main reason for (NAME) to seek care this next-to-last time?	PREGNANCY/ DELIVERY . . . . . 01 ILLNESS . . . . . 02 ACCIDENT/INJURY . . . . . 03 OTHER _____ 06 (SPECIFY)	PREGNANCY/ DELIVERY . . . . . 01 ILLNESS . . . . . 02 ACCIDENT/INJURY . . . . . 03 OTHER _____ 06 (SPECIFY)	PREGNANCY/ DELIVERY . . . . . 01 ILLNESS . . . . . 02 ACCIDENT/INJURY . . . . . 03 OTHER _____ 06 (SPECIFY)
211	How much money in total did you or any other member of your household spend on the treatment and services (NAME) received during the next-to-last overnight stay? We want to know about all the costs for the stay, including any charges for laboratory	COST (TSH) NO COST/ FREE . . . . . 00000000 IN KIND ONL . . . . . 99999995 DON'T KNOV 99999998	COST (TSH) NO COST/ FREE . . . . . 00000000 IN KIND ONL . . . . . 99999995 DON'T KNOV 99999998	COST (TSH) NO COST/ FREE . . . . . 00000000 IN KIND ONL . . . . . 99999995 DON'T KNOV 99999998
212	Besides the two stays you have told me about, did (NAME) stay overnight in a health facility another time in the last six months?	YES . . . . . 1 NO . . . . . 2 (GO TO 220)	YES . . . . . 1 NO . . . . . 2 (GO TO 220)	YES . . . . . 1 NO . . . . . 2 (GO TO 220)
213	Where did (NAME) stay the second-to-last time (he/she) stayed overnight for health care?	**GOVERNMENT/PARASTATAL** NATIONAL/ZONAL/ SPEC.HOSPIT. . . 21 REGIONAL REFERAL HOS 22 REGIONAL HOSPITAL . . 23 DISTRICT HOSPITA . . . . . 24 HEALTH CENTR . . . . . 25 DISPENSARY . . . . . 26 CLINI(. . . . . 27 CHW . . . . . 28 **RELIGIOUS/VOLUNTARY** REFERAL/SPEC. HOSP. 31 DISTRICT HOSPITAL (DDI 32 HOSPITAL 33 HEALTH CENTRE . . . . . 34 DISPENSARY . . . . . 35 CLINI(. . . . . 36 **PRIVATE** . . . . . . SPECIALISED HOSPIT . . 41 HOSPITA . . . . . 42 HEALTH CENTR . . . . . 43 DISPENSAR` . . . . . 44 CLINIC 45 TRADITIONAL HEALER/ ALTERNATIVE MEDEC. 46 OTHER _____ 96 SPECIFY	**GOVERNMENT/PARASTATAL** NATIONAL/ZONAL/ SPEC.HOSPIT. . . 21 REGIONAL REFERAL HOS 22 REGIONAL HOSPITAL . . 23 DISTRICT HOSPITA . . . . . 24 HEALTH CENTR . . . . . 25 DISPENSARY . . . . . 26 CLINI(. . . . . 27 CHW . . . . . 28 **RELIGIOUS/VOLUNTARY** REFERAL/SPEC. HOSP. 31 DISTRICT HOSPITAL (DDI 32 HOSPITAL 33 HEALTH CENTRE . . . . . 34 DISPENSARY . . . . . 35 CLINI(. . . . . 36 **PRIVATE** . . . . . . SPECIALISED HOSPIT . . 41 HOSPITA . . . . . 42 HEALTH CENTR . . . . . 43 DISPENSAR` . . . . . 44 CLINIC 45 TRADITIONAL HEALER/ ALTERNATIVE MEDEC. 46 OTHER _____ 96 SPECIFY	**GOVERNMENT/PARASTATAL** NATIONAL/ZONAL/ SPEC.HOSPIT. . . 21 REGIONAL REFERAL HOS 22 REGIONAL HOSPITAL . . 23 DISTRICT HOSPITA . . . . . 24 HEALTH CENTR . . . . . 25 DISPENSARY . . . . . 26 CLINI(. . . . . 27 CHW . . . . . 28 **RELIGIOUS/VOLUNTARY** REFERAL/SPEC. HOSP. 31 DISTRICT HOSPITAL (DDI 32 HOSPITAL 33 HEALTH CENTRE . . . . . 34 DISPENSARY . . . . . 35 CLINI(. . . . . 36 **PRIVATE** . . . . . . SPECIALISED HOSPIT . . 41 HOSPITA . . . . . 42 HEALTH CENTR . . . . . 43 DISPENSAR` . . . . . 44 CLINIC 45 TRADITIONAL HEALER/ ALTERNATIVE MEDEC. 46 OTHER _____ 96 SPECIFY

INPATIENT HEALTH EXPENDITURES

	NAME FROM COLUMN 2 IN HOUSEHOLD SCHEDULE	INPATIENT NAME _____	INPATIENT NAME _____	INPATIENT NAME _____
214	What was the main reason for (NAME) to seek care this second-to-last time?	PREGNANCY/ DELIVERY . . . . . 01 ILLNESS . . . . . 02 ACCIDENT/INJURY . . . . . 03 OTHER _____ 06 (SPECIFY)	PREGNANCY/ DELIVERY . . . . . 01 ILLNESS . . . . . 02 ACCIDENT/INJURY . . . . . 03 OTHER _____ 06 (SPECIFY)	PREGNANCY/ DELIVERY . . . . . 01 ILLNESS . . . . . 02 ACCIDENT/INJURY . . . . . 03 OTHER _____ 06 (SPECIFY)
215	How much money in total did you or any other member of your household spend on the treatment and services (NAME) received during the second-to-last overnight stay? We want to know about all the costs for the stay, including	COST (TSH) ☐☐☐☐☐☐☐☐ NO COST/ FREE . . . . . 00000000 IN KIND ONL . . . . . 99999995 DON'T KNOW 99999998	COST (TSH) ☐☐☐☐☐☐☐☐ NO COST/ FREE . . . . . 00000000 IN KIND ONL . . . . . 99999995 DON'T KNOW 99999998	COST (TSH) ☐☐☐☐☐☐☐☐ NO COST/ FREE . . . . . 00000000 IN KIND ONL . . . . . 99999995 DON'T KNOW 99999998
216	Besides the three stays you have told me about, did (NAME) stay overnight in a health facility another time in the last six months?	YES . . . . . 1 NO . . . . . 2 (GO TO 220)	YES . . . . . 1 NO . . . . . 2 (GO TO 220)	YES . . . . . 1 NO . . . . . 2 (GO TO 220)
217	In total, how many times did (NAME) stay overnight in a health facility in the last six months?	NUMBER OF INPATIENT VISITS ☐☐	NUMBER OF INPATIENT VISITS ☐☐	NUMBER OF INPATIENT VISITS ☐☐
220		GO BACK TO 205 IN NEXT COLUMN; OR, IF NO MORE INPATIENTS, GO TO 301	GO BACK TO 205 IN NEXT COLUMN; OR, IF NO MORE INPATIENTS, GO TO 301	GO TO 205 IN FIRST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE INPATIENTS, GO TO 301

SELECTION FOR OUTPATIENT HEALTH EXPENDITURES MODULE

301 CHECK COLUMN 25:

ONE OR MORE ELIGIBLE OUTPATIENTS ☐ ↓

NO ELIGIBLE OUTPATIENTS ☐ → 311

TABLE FOR SELECTION OF OUTPATIENT WHO PAID FOR CARE THE LAST TIME SOUGHT CARE IN THE LAST FOUR WEEKS

LOOK AT THE LAST DIGIT OF THE HOUSEHOLD QUESTIONNAIRE SERIAL NUMBER ON THE COVER PAGE. THIS IS THE ROW NUMBER YOU SHOULD GO TO. CHECK THE TOTAL NUMBER OF ELIGIBLE OUTPATIENTS (COLUMN 25) IN THE HOUSEHOLD SCHEDULE. THIS IS THE COLUMN NUMBER YOU SHOULD GO TO. FOLLOW THE SELECTED ROW AND COLUMN TO THE CELL WHERE THEY MEET AND CIRCLE THE NUMBER IN THE CELL. THIS IS THE NUMBER OF THE PERSON SELECTED FOR THE OUTPATIENT QUESTIONS FROM THE LIST OF ELIGIBLE OUTPATIENTS IN COLUMN 25 OF THE HOUSEHOLD SCHEDULE. WRITE THE NAME AND LINE NUMBER OF THE SELECTED OUTPATIENT IN Q302.

EXAMPLE: THE HOUSEHOLD QUESTIONNAIRE SERIAL NUMBER IS ‘716’ AND THE HOUSEHOLD SCHEDULE COLUMN 25 SHOWS THAT THERE ARE THREE ELIGIBLE OUTPATIENTS IN THE HOUSEHOLD (LINE NUMBERS 02, 04, AND 05). SINCE THE LAST DIGIT OF THE HOUSEHOLD SERIAL NUMBER IS '6' GO TO ROW '6' AND SINCE THERE ARE THREE ELIGIBLE OUTPATIENTS IN THE HOUSEHOLD, GO TO COLUMN '3'. FOLLOW THE ROW AND COLUMN AND FIND THE NUMBER IN THE CELL WHERE THEY MEET ('2') AND CIRCLE THE NUMBER. NOW GO TO THE HOUSEHOLD SCHEDULE AND FIND THE SECOND OUTPATIENT WHO IS ELIGIBLE FOR THE OUTPATIENT QUESTIONS (LINE NUMBER '04' IN THIS EXAMPLE). WRITE THE NAME AND LINE

LAST DIGIT OF THE HOUSE-HOLD QUESTION-NAIRE SERIAL NUMBER	TOTAL NUMBER OF ELIGIBLE OUTPATIENTS IN HOUSEHOLD SCHEDULE COLUMN 25							
	1	2	3	4	5	6	7	8
0	1	2	2	4	3	6	5	4
1	1	1	3	1	4	1	6	5
2	1	2	1	2	5	2	7	6
3	1	1	2	3	1	3	1	7
4	1	2	3	4	2	4	2	8
5	1	1	1	1	3	5	3	1
6	1	2	2	2	4	6	4	2
7	1	1	3	3	5	1	5	3
8	1	2	1	4	1	2	6	4
9	1	1	2	1	2	3	7	5

302

NAME OF SELECTED OUTPATIENT _____

HH LINE NUMBER OF SELECTED OUTPATIENT ☐☐

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
303	Now I would like to ask some questions about health care that (NAME IN 302) received in the last four weeks, without having to stay overnight. Where did (NAME) get care most recently without staying overnight?	**GOVERNMENT/PARASTATAL** NATIONAL/ZONAL/SPEC.HOSPIT. 21 REGIIONAL HOSPITAL 22 REGIIONAL HOSPITAL 23 DISTRICT HOSPITA 24 HEALTH CENTR 25 DISPENSAR\ 26 CLINIC 27 CHW 28 **RELIGIOUS/VOLUNTARY** REFERAL/SPEC. HOSF 31 DISTRICT HOSPITAL 32 HEALTH CENTRE 33 DISPENSARY 34 CLINIC 35 **PRIVATE** SPECIALISED HOSPIT 41 HOSPITA 42 HEALTH CENTR 43 DISPENSAR\ 44 CLINIC 45 TRADITIONAL HEALER/ALTERNATIVE MEI 46 PHARMACY 47 ADDO 48 OTHER _____ 96 SPECIFY	
304	How much money in total did you or any other member of your household spend on treatment and services (NAME) received from (NAME OF PROVIDER IN 303)? Please include the consulting fee and any expenses for other items including drugs and tests.	COST (TSH) [ ][ ][ ][ ][ ][ ] DON'T KNOW 999998	
305	What was the main reason for (NAME) to seek care this most recent time?	FAMILY PLANNING 01 ANTENATAL CARE/ DELIVERY/ POSTNATAL CARE 02 MALARIA 03 FEVER 04 DIARRHEA 05 HIV/AIDS/STD 06 OTHER ILLNESS 07 CHECK-UP/ PREVENTIVE CARE 08 ACCIDENT/INJURY 09 OTHER _____ 96 (SPECIFY) MISSING/DON'T KNOW 98	
306	Did (NAME) get care another time in the last four weeks from a health provider, a pharmacy, or a traditional healer, without staying overnight?	YES 1 NO 2 → 311	
307	How many other times did (NAME) get care in the last four weeks?	NUMBER OF OUTPATIENT VISITS [ ][ ]	
308	How many times was money spent?	NUMBER OF OUTPATIENT VISITS PAID MONEY [ ][ ]	
311	Sometimes people buy vitamins, medicines, and herbal remedies without consulting with a health provider, pharmacy, or traditional healer. They may also buy other health-related items such as band-aids/plasters, thermometers, or other medical devices, and so on without a consultation. In the last four weeks, how much money was spent on these types of health-related items for members of your household?	COST (TSH) [ ][ ][ ][ ][ ][ ] NONE 000000 IN KIND ONLY 999995 DON'T KNOW 999998	

SELECTION OF WOMEN FOR THE DOMESTIC VIOLENCE QUESTIONS

312A

CHECK COLUMN 9
ONE OR MORE WOMEN AGE 15-49 YEARS OLD ☐

NO WOMEN AGE 15-49 YEARS OLD ☐ → 313

LOOK AT THE LAST DIGIT OF THE HOUSEHOLD QUESTIONNAIRE SERIAL NUMBER ON THE COVER PAGE. THIS IS THE ROW NUMBER YOU SHOULD GO TO. CHECK THE TOTAL NUMBER OF ELIGIBLE WOMEN (COLUMN 9) IN THE HOUSEHOLD SCHEDULE. THIS IS THE COLUMN NUMBER YOU SHOULD GO TO. FOLLOW THE SELECTED ROW AND COLUMN TO THE CELL WHERE THEY MEET AND CIRCLE THE NUMBER IN THE CELL. THIS IS THE NUMBER OF THE WOMAN SELECTED FOR THE DOMESTIC VIOLENCE QUESTIONS FROM THE LIST OF ELIGIBLE WOMEN IN COLUMN 9 OF THE HOUSEHOLD SCHEDULE. WRITE THE NAME AND LINE NUMBER OF THE SELECTED WOMAN IN THE SPACE BELOW THE TABLE.

EXAMPLE: THE HOUSEHOLD QUESTIONNAIRE SERIAL NUMBER IS '716' AND THE HOUSEHOLD SCHEDULE COLUMN 9 SHOWS THAT THERE ARE THREE ELIGIBLE WOMEN AGE 15-49 IN THE HOUSEHOLD (LINE NUMBERS 02, 04, AND 05). SINCE THE LAST DIGIT OF THE HOUSEHOLD SERIAL NUMBER IS '6' GO TO ROW '6' AND SINCE THERE ARE THREE ELIGIBLE WOMEN IN THE HOUSEHOLD, GO TO COLUMN '3'. FOLLOW THE ROW AND COLUMN AND FIND THE NUMBER IN THE CELL WHERE THEY MEET ('2') AND CIRCLE THE NUMBER. NOW GO TO THE HOUSEHOLD SCHEDULE AND FIND THE SECOND WOMAN WHO IS ELIGIBLE FOR THE WOMAN'S INTERVIEW (LINE NUMBER '04' IN THIS EXAMPLE). WRITE HER NAME AND LINE NUMBER IN

LAST DIGIT OF THE HOUSE-HOLD QUESTION-NAIRE SERIAL NUMBER	TOTAL NUMBER OF ELIGIBLE WOMEN AGE 15-49 IN HOUSEHOLD SCHEDULE COLUMN 9							
	1	2	3	4	5	6	7	8
0	1	2	2	4	3	6	5	4
1	1	1	3	1	4	1	6	5
2	1	2	1	2	5	2	7	6
3	1	1	2	3	1	3	1	7
4	1	2	3	4	2	4	2	8
5	1	1	1	1	3	5	3	1
6	1	2	2	2	4	6	4	2
7	1	1	3	3	5	1	5	3
8	1	2	1	4	1	2	6	4
9	1	1	2	1	2	3	7	5

NAME OF SELECTED WOMAN _____

HH LINE NUMBER OF SELECTED WOMAN ☐☐

313 RECORD THE TIME.

HOURS . . . . . ☐☐

MINUTES . . . . . ☐☐

MORNING 1
AFTERNOON 2
EVENING 3

INTERVIEWER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING INTERVIEW

COMMENTS ABOUT INTERVIEW:

COMMENTS ON SPECIFIC QUESTIONS:

ANY OTHER COMMENTS:

SUPERVISOR'S OBSERVATIONS

EDITOR'S OBSERVATIONS

2015-16 TANZANIZ DEMOGRAPHIC AND HEALTH AND MALARIA INDICATORS SURVEYS
BIOMARKER QUESTIONNAIRE

THE UNITED REPUBLIC OF TANZANIA
NATIONAL BUREAU OF STATISTICS

IDENTIFICATION

PLACE NAME _____

NAME OF HOUSEHOLD HEAD _____

CLUSTER NUMBER . . . . . [ ][ ][ ][ ]

HOUSEHOLD NUMBER . . . . . [ ][ ][ ][ ]

HOUSEHOLD SELECTED FOR MAN'S SURVEY, SALT AND URINE TESTING? (1=YES, 2=N . . . . . [ ]

INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE	_____	_____	_____	DAY [ ][ ]
INTERVIEWER'S NAME	_____	_____	_____	MONTH [ ][ ]
				YEAR 2 0 [ ][ ]
NEXT VISIT: DATE	_____	_____		TOTAL NUMBER OF VISITS [ ]
TIME	_____	_____		

NOTES:

_____

_____

_____

_____

_____

TOTAL ELIGIBLE WOMEN [ ][ ]

TOTAL ELIGIBLE CHILDREN [ ][ ]

LANGUAGE OF QUESTIONNAIRE** 0 1

LANGUAGE OF INTERVIEW** [ ][ ]

TRANSLATOR (YES = 1, NO = 2) [ ]

LANGUAGE OF QUESTIONNAIRE** **ENGLISH**

**LANGUAGE CODES:

01 ENGLISH	03 LANGUAGE 3	05 LANGUAGE 5
02 KISWAHILI	04 LANGUAGE 4	06 LANGUAGE 6

SUPERVISOR	FIELD EDITOR	OFFICE EDITOR	KEYED BY
NAME _____ NUMBER [ ][ ][ ][ ]	NAME _____ NUMBER [ ][ ][ ][ ]	NUMBER [ ][ ]	NUMBER [ ][ ]

WEIGHT, HEIGHT, HEMOGLOBIN MEASUREMENT AND MALARIA TESTING FOR CHILDREN AGE 0-5

101	CHECK COLUMN 11 IN HOUSEHOLD QUESTIONNAIRE. RECORD THE LINE NUMBER AND NAME FOR ALL ELIGIBLE CHILDREN 0-5 YEARS IN QUESTION 102; IF MORE THAN SIX CHILDREN, USE ADDITIONAL QUESTIONNAIRE(S).			
		CHILD 1	CHILD 2	CHILD 3
102	CHECK HOUSEHOLD QUESTIONNAIRE: LINE NUMBER FROM COLUMN 11.	LINE NUMBER . . . . . ☐☐ NAME _____	LINE NUMBER . . . . . ☐☐ NAME _____	LINE NUMBER . . . . . ☐☐ NAME _____
103	IF MOTHER INTERVIEWED: COPY CHILD'S DATE OF BIRTH (DAY, MONTH, AND YEAR) FROM BIRTH HISTORY. IF MOTHER NOT INTERVIEWED ASK: What is (NAME)'s date of birth?	DAY . . . . . ☐☐ MONTH . . . . . ☐☐ YEAR . . . ☐☐☐☐	DAY . . . . . ☐☐ MONTH . . . . . ☐☐ YEAR . . . ☐☐☐☐	DAY . . . . . ☐☐ MONTH . . . . . ☐☐ YEAR . . . ☐☐☐☐
104	CHECK 103: CHILD BORN IN 2010-2016	YES . . . . . 1 NO . . . . . 2 (SKIP TO 130)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 130)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 130)
105	WEIGHT IN KILOGRAMS.	KG. . . . ☐☐.☐☐ NOT PRESENT . . . . 9994 REFUSED . . . . . 9995 OTHER 9996	KG. . . . ☐☐.☐☐ NOT PRESENT . . . . 9994 REFUSED . . . . . 9995 OTHER 9996	KG. . . . ☐☐.☐☐ NOT PRESENT . . . . 9994 REFUSED . . . . . 9995 OTHER 9996
106	HEIGHT IN CENTIMETERS.	CM. . . . ☐☐☐.☐ NOT PRESENT . . . . 9994 REFUSED . . . . . 9995 OTHER . . . . . 9996 (SKIP TO 109)	CM. . . . ☐☐☐.☐ NOT PRESENT . . . . 9994 REFUSED . . . . . 9995 OTHER . . . . . 9996 (SKIP TO 109)	CM. . . . ☐☐☐.☐ NOT PRESENT . . . . 9994 REFUSED . . . . . 9995 OTHER . . . . . 9996 (SKIP TO 109)
107	MEASURED LYING DOWN OR STANDING UP?	LYING DOWN . . . . . 1 STANDING UP 2	LYING DOWN . . . . . 1 STANDING UP 2	LYING DOWN . . . . . 1 STANDING UP 2
108	MEASURER: ENTER YOUR FIELDWORKER NUMBER.	☐☐☐☐ FIELDWORKER NUMBER	☐☐☐☐ FIELDWORKER NUMBER	☐☐☐☐ FIELDWORKER NUMBER
109	CHECK 103: CHILD AGE 0-5 MONTHS, I.E., WAS CHILD BORN IN MONTH OF INTERVIEW OR 5 PREVIOUS MONTHS?	0-5 MONTHS . . . . . 1 (SKIP TO 130) OLDER 2	0-5 MONTHS . . . . . 1 (SKIP TO 130) OLDER 2	0-5 MONTHS . . . . . 1 (SKIP TO 130) OLDER 2
110	LINE NUMBER OF PARENT/OTHER ADULT RESPONSIBLE FOR THE CHILD FROM COLUMN 1 OF HOUSEHOLD SCHEDULE.	LINE NUMBER . . . . . ☐☐ (RECORD '00' IF NOT LISTED)	LINE NUMBER . . . . . ☐☐ (RECORD '00' IF NOT LISTED)	LINE NUMBER . . . . . ☐☐ (RECORD '00' IF NOT LISTED)

WEIGHT, HEIGHT, HEMOGLOBIN MEASUREMENT AND MALARIA TESTING FOR CHILDREN AGE 0-5

101	CHECK COLUMN 11 IN HOUSEHOLD QUESTIONNAIRE. RECORD THE LINE NUMBER AND NAME FOR ALL ELIGIBLE CHILDREN 0-5 YEARS IN QUESTION 102; IF MORE THAN SIX CHILDREN, USE ADDITIONAL QUESTIONNAIRE(S).			
		CHILD 1	CHILD 2	CHILD 3
102	CHECK HOUSEHOLD QUESTIONNAIRE: LINE NUMBER FROM COLUMN 11.	LINE NUMBER . . . . . ☐☐ NAME _____	LINE NUMBER . . . . . ☐☐ NAME _____	LINE NUMBER . . . . . ☐☐ NAME _____

111	"ASK CONSENT FOR ANEMIA TEST FROM PARENT/OTHER ADULT."	As part of this survey, we are asking people all over the country to take an anemia test. Anemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat anemia. We ask that all children born in 2010 or later take part in anemia testing in this survey and give a few drops of blood from a finger or heel. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test.The blood will be tested for anemia immediately, and the result will be told to you right away. The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team.Do you have any questions?You can say yes or no. It is up to you to decide.Will you allow (NAME OF CHILD) to participate in the anemia test?		
112	CIRCLE THE CODE AND SIGN YOUR NAME.	(SIGN AND ENTER YOUR FIELDWORKER NUMBER) ☐☐☐☐ GRANTED . . . . . 1 REFUSED . . . . . 2 NOT PRESENT/OTHER . 3 → 112B	(SIGN AND ENTER YOUR FIELDWORKER NUMBER) ☐☐☐☐ GRANTED . . . . . 1 REFUSED . . . . . 2 NOT PRESENT/OTHER . 3 → 112B	(SIGN AND ENTER YOUR FIELDWORKER NUMBER) ☐☐☐☐ GRANTED . . . . . 1 REFUSED . . . . . 2 NOT PRESENT/OTHER . 3 → 112B
112A	ASK CONSENT FOR MALARIA TEST FROM PARENT/OTHER ADULT.	As part of this survey, we are asking children all over the country to take a test to see if they have malaria. Malaria is a serious illness caused by a parasite transmitted by a mosquito bite. This survey will assist the government to develop programs to prevent malaria. We ask that all children born in 2010 or later take part in malaria testing in this survey and give a few drops of blood from a finger or heel. One blood drop will be tested for malaria immediately, and the result will be told to you right away. A few blood drops will be collected on slide(s) and taken to a laboratory for testing. You will not be told the results of the laboratory testing. All results will be kept strictly confidential and will not be shared with anyone other than members of our survey team. Do you have any questions? You can say yes or no. It is up to you to decide. Will you allow (NAME OF CHILD) to participate in the malaria test?		
112B	CIRCLE THE CODE AND SIGN YOUR NAME.	(SIGN AND ENTER YOUR FIELDWORKER NUMBER) ☐☐☐ GRANTED . . . . . 1 REFUSED . . . . . 2 NOT PRESENT/OTHER 3	(SIGN AND ENTER YOUR FIELDWORKER NUMBER) ☐☐☐ GRANTED . . . . . 1 REFUSED . . . . . 2 NOT PRESENT/OTHER 3	(SIGN AND ENTER YOUR FIELDWORKER NUMBER) ☐☐☐ GRANTED . . . . . 1 REFUSED . . . . . 2 NOT PRESENT/OTHER 3

WEIGHT, HEIGHT, HEMOGLOBIN MEASUREMENT AND MALARIA TESTING FOR CHILDREN AGE 0-5

101	CHECK COLUMN 11 IN HOUSEHOLD QUESTIONNAIRE. RECORD THE LINE NUMBER AND NAME FOR ALL ELIGIBLE CHILDREN 0-5 YEARS IN QUESTION 102; IF MORE THAN SIX CHILDREN, USE ADDITIONAL QUESTIONNAIRE(S).			
		CHILD 1	CHILD 2	CHILD 3
102	CHECK HOUSEHOLD QUESTIONNAIRE: LINE NUMBER FROM COLUMN 11.	LINE NUMBER . . . . . ☐☐ NAME _____	LINE NUMBER . . . . . ☐☐ NAME _____	LINE NUMBER . . . . . ☐☐ NAME _____
112C	PREPARE EQUIPMENT AND SUPPLIES ONLY FOR THE TEST(S) FOR WHICH CONSENT HAS BEEN OBTAINED AND PROCEED WITH THE TEST(S).			
112D	PLACE BAR CODE LABEL FOR MALARIA LAB TEST.	PUT THE 1ST BAR CODE LABEL HERE. NOT PRESENT . . . . . 99994 REFUSED . . . . . 99995 OTHER . . . . . 99996 PUT THE 2ND BAR CODE LABEL ON THE SLIDE AND THE 3RD ON THE TRANSMITTAL FORM.	PUT THE 1ST BAR CODE LABEL HERE. NOT PRESENT . . . . . 99994 REFUSED . . . . . 99995 OTHER . . . . . 99996 PUT THE 2ND BAR CODE LABEL ON THE SLIDE AND THE 3RD ON THE TRANSMITTAL FORM.	PUT THE 1ST BAR CODE LABEL HERE. NOT PRESENT . . . . . 99994 REFUSED . . . . . 99995 OTHER . . . . . 99996 PUT THE 2ND BAR CODE LABEL ON THE SLIDE AND THE 3RD ON THE TRANSMITTAL FORM.
113	RECORD HEMOGLOBIN LEVEL HERE AND IN THE ANEMIA	G/DL . . . . . ☐☐.☐ NOT PRESENT . . . . . 994 REFUSED . . . . . 995 OTHER 996	G/DL . . . . . ☐☐.☐ NOT PRESENT . . . . . 994 REFUSED . . . . . 995 OTHER 996	G/DL . . . . . ☐☐.☐ NOT PRESENT . . . . . 994 REFUSED . . . . . 995 OTHER 996
114	CIRCLE THE CODE FOR THE MALARIA RDT.	TESTED . . . . . 1 NOT PRESENT . . . . . 2 REFUSED . . . . . 3 OTHER . . . . . 6 (SKIP TO 116)	TESTED . . . . . 1 NOT PRESENT . . . . . 2 REFUSED . . . . . 3 OTHER . . . . . 6 (SKIP TO 116)	TESTED . . . . . 1 NOT PRESENT . . . . . 2 REFUSED . . . . . 3 OTHER . . . . . 6 (SKIP TO 116)
115	RECORD THE RESULT OF THE MALARIA RDT HERE AND IN THE ANEMIA AND MALARIA PAMPHLET.	POSITIVE 1 (SKIP TO 117A) NEGATIVE . . . . . 2 OTHER 6	POSITIVE 1 (SKIP TO 117A) NEGATIVE . . . . . 2 OTHER 6	POSITIVE 1 (SKIP TO 117A) NEGATIVE . . . . . 2 OTHER 6
116	CHECK 113: HEMOGLOBIN RESULT	BELOW 7.0 G/DL, SEVERE ANEMIA . . . . . 1 7.0 G/DL OR ABOVE . . . 2 NOT PRESENT . . . . . 3 REFUSED . . . . . 4 OTHER . . . . . 6 (SKIP TO 130)	BELOW 7.0 G/DL, SEVERE ANEMIA . . . . . 1 7.0 G/DL OR ABOVE . . . 2 NOT PRESENT . . . . . 3 REFUSED . . . . . 4 OTHER . . . . . 6 (SKIP TO 130)	BELOW 7.0 G/DL, SEVERE ANEMIA . . . . . 1 7.0 G/DL OR ABOVE . . . 2 NOT PRESENT . . . . . 3 REFUSED . . . . . 4 OTHER . . . . . 6 (SKIP TO 130)
117	**SEVERE ANEMIA REFERRAL** RECORD THE RESULT OF THE ANEMIA TEST ON THE REFERRAL	The anemia test shows that (NAME OF CHILD) has severe anemia. Your child is very ill and must be taken to a health facility immediately. (SKIP TO 130)		
117A	LOCATION OF INTERVIEW:	ZANZIBAR ☐	MAINLAND TANZANIA ☐ → SKIP TP Q118	
117B	**MALARIA REFERRAL** RECORD THE RESULT OF THE MALARIA TEST ON THE REFERRAL FORM.	The malaria test shows that (NAME OF CHILD) has smalaria. Your child is ill and must be taken to a health facility immediately. (SKIP TO 130)		

101	CHECK COLUMN 11 IN HOUSEHOLD QUESTIONNAIRE. RECORD THE LINE NUMBER AND NAME FOR ALL ELIGIBLE CHILDREN 0-5 YEARS IN QUESTION 102; IF MORE THAN SIX CHILDREN, USE ADDITIONAL QUESTIONNAIRE(S).			
		CHILD 1	CHILD 2	CHILD 3
102	CHECK HOUSEHOLD QUESTIONNAIRE: LINE NUMBER FROM COLUMN 11.	LINE NUMBER . . . . . ☐☐ NAME _____	LINE NUMBER . . . . . ☐☐ NAME _____	LINE NUMBER . . . . . ☐☐ NAME _____
118	Does (NAME) suffer from any of the following illnesses or symptoms: Extreme weakness? Heart problems? Loss of consciousness? Rapid or difficult breathing? Seizures? Abnormal bleeding? Jaundice or yellow skin? Dark urine? IF NONE OF THE ABOVE SYMPTOMS, CIRCLE CODE Y	EXTREME WEAKNESS .. A HEART PROBLEMS ..... B LOSS OF CONSCIOUSNESS . . . C RAPID BREATHING . . . . . D SEIZURES ..... E BLEEDING ..... F JAUNDICE ..... G DARK URINE ..... H NONE OF THE ABOVE SYMPTOMS . . . . . Y	EXTREME WEAKNESS .. A HEART PROBLEMS ..... B LOSS OF CONSCIOUSNESS . . . C RAPID BREATHING . . . . . D SEIZURES ..... E BLEEDING ..... F JAUNDICE ..... G DARK URINE ..... H NONE OF THE ABOVE SYMPTOMS . . . . . Y	EXTREME WEAKNESS .. A HEART PROBLEMS ..... B LOSS OF CONSCIOUSNESS . . . C RAPID BREATHING . . . . . D SEIZURES E BLEEDING F JAUNDICE G DARK URINE H NONE OF THE ABOVE SYMPTOMS . . . . . Y
119	CHECK 118: ANY CODE A-H CIRCLED?	ONLY CODE Y CIRCLED . . . . . 1 ANY CODE A-H CIRCLED . . . . . 2 (SKIP TO 122)	ONLY CODE Y CIRCLED . . . . . 1 ANY CODE A-H CIRCLED . . . . . 2 (SKIP TO 122)	ONLY CODE Y CIRCLED . . . . . 1 ANY CODE A-H CIRCLED . . . . . 2 (SKIP TO 122)
120	CHECK 113: HEMOGLOBIN RESULT	BELOW 7.0 G/DL, SEVERE ANEMIA 1 (SKIP TO 122) 7.0 G/DL OR ABOVE 2 NOT PRESENT 3 REFUSED 4 OTHER 6	BELOW 7.0 G/DL, SEVERE ANEMIA 1 (SKIP TO 122) 7.0 G/DL OR ABOVE 2 NOT PRESENT 3 REFUSED 4 OTHER 6	BELOW 7.0 G/DL, SEVERE ANEMIA 1 (SKIP TO 122) 7.0 G/DL OR ABOVE 2 NOT PRESENT 3 REFUSED 4 OTHER 6
121	In the past two weeks has (NAME) taken or is taking ALU given by a doctor or health center to treat the malaria? VERIFY BY ASKING TO SEE TREATMENT	YES . . . . . 1 (SKIP TO 123) NO . . . . . 2 (SKIP TO 124)	YES . . . . . 1 (SKIP TO 123) NO . . . . . 2 (SKIP TO 124)	YES . . . . . 1 (SKIP TO 123) NO . . . . . 2 (SKIP TO 124)
122	**SEVERE MALARIA REFERRAL** RECORD THE RESULT OF THE MALARIA RDT ON THE REFERRAL FORM.	The malaria test shows that (NAME OF CHILD) has malaria. Your child also has symptoms of severe malaria. The malaria treatment I have will not help your child, and I cannot give you the medication. Your child is very ill and must be taked to a health facility right away. (SKIP TO 130)		
123	**ALREADY TAKING [FIRST LINE MEDICATION] REFERRAL STATEMENT**	You have told me that (NAME OF CHILD) had already received ALU for malaria. Therefore, I cannot give you additional ALU. However, the test shows that he/she has malaria. If your child has a fever for two days after the last dose of ALU, you should take the child to the nearest health facility for further examination. (SKIP TO 130)		

WEIGHT, HEIGHT, HEMOGLOBIN MEASUREMENT AND MALARIA TESTING FOR CHILDREN AGE 0-5

101	CHECK COLUMN 11 IN HOUSEHOLD QUESTIONNAIRE. RECORD THE LINE NUMBER AND NAME FOR ALL ELIGIBLE CHILDREN 0-5 YEARS IN QUESTION 102; IF MORE THAN SIX CHILDREN, USE ADDITIONAL QUESTIONNAIRE(S).			
		CHILD 1	CHILD 2	CHILD 3
102	CHECK HOUSEHOLD QUESTIONNAIRE: LINE NUMBER FROM COLUMN 11.	LINE NUMBER . . . . . ☐☐ NAME _____	LINE NUMBER . . . . . ☐☐ NAME _____	LINE NUMBER . . . . . ☐☐ NAME _____

124	READ INFORMATION FOR MALARIA TREATMENT AND CONSENT STATEMENT TO PARENT/OTHER	The malaria test shows that your child has malaria. We can give you free medicine. The medicine is called [FIRST LINE OF MEDICATION]. [FIRST LINE OF MEDICATION] is very effective and in a few days it should get rid of the fever and other symptoms. You do not have to give the child the medicine. This is up to you. Please tell me whether you accept the medicine or not.		
125	CIRCLE THE APPROPRIATE CODE AND SIGN YOUR NAME.	ACCEPTED MEDICINE 1 _____ (SIGN) REFUSED . . . . . 2 OTHER 6	ACCEPTED MEDICINE 1 _____ (SIGN) REFU . . . . . 2 OTHER 6	ACCEPTED MEDICINE 1 _____ (SIGN) REFUSED . . . . . 2 OTHER 6
126	CHECK 125: MEDICATION ACCEPTED	ACCEPTED MEDICINE 1 REFUSED . . . . . 2 OTHER . . . . . 6 (SKIP TO 130)	ACCEPTED MEDICINE 1 REFUSED . . . . . 2 OTHER . . . . . 6 (SKIP TO 130)	ACCEPTED MEDICINE 1 REFUSED . . . . . 2 OTHER . . . . . 6 (SKIP TO 130)
127	READ INFORMATION FOR MALARIA TREATMENT AND CONSENT STATEMENT TO PARENT/OTHER ADULT.	**Weight (in Kg) – Approximate Age** / **Dosage *** 5 to less than 15 – under 3 years of age / 1 tablet ALu twice daily for 3 days 15 to less than 25 – 3 to 8 years of age / 2 tablets ALu twice daily for 3 days ALSO TELL THE PARENT/OTHER ADULT: First day starts by taking first dose followed by the second one 8 hours later; on subsequent days the recommendation is simply “morning” and “evening” (usually around 12 hours apart). Put the tablet in a little water, mix water and tablet well, and give to the child with fatty food or drinks like milk or breast milk. Make sure that the FULL 3 days treatment is taken at the recommended times, otherwise the infection may return. If your child vomits within an hour of taking the medicine, repeat the dose and get additional tablets. If [NAME] has a high fever, fast or difficult breathing, is not able to drink or breastfeed, gets sicker or does not get better in two days, you should take him/her to a health professional for treatment right away. with fatty food or drinks like milk or breast milk. Make sure that the FULL 3 days treatment is		
130	GO BACK TO 103 IN NEXT COLUMN OF THIS PAGE OR IN THE FIRST COLUMN OF THE NEXT PAGE; IF NO MORE CHILDREN, GO TO 201.			

WEIGHT, HEIGHT, HEMOGLOBIN MEASUREMENT AND MALARIA TESTING FOR CHILDREN AGE 0-5

101	CHECK COLUMN 11 IN HOUSEHOLD QUESTIONNAIRE. RECORD THE LINE NUMBER AND NAME FOR ALL ELIGIBLE CHILDREN 0-5 YEARS IN QUESTION 102; IF MORE THAN SIX CHILDREN, USE ADDITIONAL QUESTIONNAIRE(S).			
		CHILD 4	CHILD 5	CHILD 6
102	CHECK HOUSEHOLD QUESTIONNAIRE: LINE NUMBER FROM COLUMN 11.	LINE NUMBER . . . . . ☐☐ NAME _____	LINE NUMBER . . . . . ☐☐ NAME _____	LINE NUMBER . . . . . ☐☐ NAME _____
103	IF MOTHER INTERVIEWED: COPY CHILD'S DATE OF BIRTH (DAY, MONTH, AND YEAR) FROM BIRTH HISTORY. IF MOTHER NOT INTERVIEWED ASK: What is (NAME)'s date of birth?	DAY . . . . . ☐☐ MONTH . . . . . ☐☐ YEAR . . . ☐☐☐☐	DAY . . . . . ☐☐ MONTH . . . . . ☐☐ YEAR . . . ☐☐☐☐	DAY . . . . . ☐☐ MONTH . . . . . ☐☐ YEAR . . . ☐☐☐☐
104	CHECK 103: CHILD BORN IN 2010-2016	YES . . . . . 1 NO . . . . . 2 (SKIP TO 130)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 130)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 130)
105	WEIGHT IN KILOGRAMS.	KG. . . . ☐☐.☐☐ NOT PRESENT . . . . 9994 REFUSED . . . . . 9995 OTHER 9996	KG. . . . ☐☐.☐☐ NOT PRESENT . . . . 9994 REFUSED . . . . . 9995 OTHER 9996	KG. . . . ☐☐.☐☐ NOT PRESENT . . . . 9994 REFUSED . . . . . 9995 OTHER 9996
106	HEIGHT IN CENTIMETERS.	CM. . . . ☐☐☐.☐ NOT PRESENT . . . . 9994 REFUSED . . . . . 9995 OTHER . . . . . 9996 (SKIP TO 109)	CM. . . . ☐☐☐.☐ NOT PRESENT . . . . 9994 REFUSED . . . . . 9995 OTHER . . . . . 9996 (SKIP TO 109)	CM. . . . ☐☐☐.☐ NOT PRESENT . . . . 9994 REFUSED . . . . . 9995 OTHER . . . . . 9996 (SKIP TO 109)
107	MEASURED LYING DOWN OR STANDING UP?	LYING DOWN . . . . . 1 STANDING UP 2	LYING DOWN . . . . . 1 STANDING UP 2	LYING DOWN . . . . . 1 STANDING UP 2
108	MEASURER: ENTER YOUR FIELDWORKER NUMBER.	☐☐☐☐ FIELDWORKER NUMBER	☐☐☐☐ FIELDWORKER NUMBER	☐☐☐☐ FIELDWORKER NUMBER
109	CHECK 103: CHILD AGE 0-5 MONTHS, I.E., WAS CHILD BORN IN MONTH OF INTERVIEW OR 5 PREVIOUS MONTHS?	0-5 MONTHS . . . . . 1 (SKIP TO 130) OLDER 2	0-5 MONTHS . . . . . 1 (SKIP TO 130) OLDER 2	0-5 MONTHS . . . . . 1 (SKIP TO 130) OLDER 2
110	LINE NUMBER OF PARENT/OTHER ADULT RESPONSIBLE FOR THE CHILD FROM COLUMN 1 OF HOUSEHOLD SCHEDULE.	LINE NUMBER . . . . . ☐☐ (RECORD '00' IF NOT LISTED)	LINE NUMBER . . . . . ☐☐ (RECORD '00' IF NOT LISTED)	LINE NUMBER . . . . . ☐☐ (RECORD '00' IF NOT LISTED)

WEIGHT, HEIGHT, HEMOGLOBIN MEASUREMENT AND MALARIA TESTING FOR CHILDREN AGE 0-5

101	CHECK COLUMN 11 IN HOUSEHOLD QUESTIONNAIRE. RECORD THE LINE NUMBER AND NAME FOR ALL ELIGIBLE CHILDREN 0-5 YEARS IN QUESTION 102; IF MORE THAN SIX CHILDREN, USE ADDITIONAL QUESTIONNAIRE(S).			
		CHILD 4	CHILD 5	CHILD 6
102	CHECK HOUSEHOLD QUESTIONNAIRE: LINE NUMBER FROM COLUMN 11.	LINE NUMBER . . . . . ☐☐ NAME _____	LINE NUMBER . . . . . ☐☐ NAME _____	LINE NUMBER . . . . . ☐☐ NAME _____
111	"ASK CONSENT FOR ANEMIA TEST FROM PARENT/OTHER ADULT."	As part of this survey, we are asking people all over the country to take an anemia test. Anemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat anemia. We ask that all children born in 2010 or later take part in anemia testing in this survey and give a few drops of blood from a finger or heel. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test.The blood will be tested for anemia immediately, and the result will be told to you right away. The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team.Do you have any questions?You can say yes or no. It is up to you to decide.Will you allow (NAME OF CHILD) to participate in the anemia test?		
112	CIRCLE THE CODE AND SIGN YOUR NAME.	(SIGN AND ENTER YOUR FIELDWORKER NUMBER) ☐☐☐☐ GRANTED . . . . . 1 REFUSED . . . . . 2 NOT PRESENT/OTHER . 3 → 112B	(SIGN AND ENTER YOUR FIELDWORKER NUMBER) ☐☐☐☐ GRANTED . . . . . 1 REFUSED . . . . . 2 NOT PRESENT/OTHER . 3 → 112B	(SIGN AND ENTER YOUR FIELDWORKER NUMBER) ☐☐☐☐ GRANTED . . . . . 1 REFUSED . . . . . 2 NOT PRESENT/OTHER . 3 → 112B
112A	ASK CONSENT FOR MALARIA TEST FROM PARENT/OTHER ADULT.	As part of this survey, we are asking children all over the country to take a test to see if they have malaria. Malaria is a serious illness caused by a parasite transmitted by a mosquito bite. This survey will assist the government to develop programs to prevent malaria. We ask that all children born in 2010 or later take part in malaria testing in this survey and give a few drops of blood from a finger or heel. One blood drop will be tested for malaria immediately, and the result will be told to you right away. A few blood drops will be collected on slide(s) and taken to a laboratory for testing. You will not be told the results of the laboratory testing. All results will be kept strictly confidential and will not be shared with anyone other than members of our survey team. Do you have any questions? You can say yes or no. It is up to you to decide. Will you allow (NAME OF CHILD) to participate in the malaria test?		
112B	CIRCLE THE CODE AND SIGN YOUR NAME.	(SIGN AND ENTER YOUR FIELDWORKER NUMBER) ☐☐☐ GRANTED . . . . . 1 REFUSED . . . . . 2 NOT PRESENT/OTHER 3	(SIGN AND ENTER YOUR FIELDWORKER NUMBER) ☐☐☐ GRANTED . . . . . 1 REFUSED . . . . . 2 NOT PRESENT/OTHER 3	(SIGN AND ENTER YOUR FIELDWORKER NUMBER) ☐☐☐ GRANTED . . . . . 1 REFUSED . . . . . 2 NOT PRESENT/OTHER 3

WEIGHT, HEIGHT, HEMOGLOBIN MEASUREMENT AND MALARIA TESTING FOR CHILDREN AGE 0-5

101	CHECK COLUMN 11 IN HOUSEHOLD QUESTIONNAIRE. RECORD THE LINE NUMBER AND NAME FOR ALL ELIGIBLE CHILDREN 0-5 YEARS IN QUESTION 102; IF MORE THAN SIX CHILDREN, USE ADDITIONAL QUESTIONNAIRE(S).			
		CHILD 4	CHILD 5	CHILD 6
102	CHECK HOUSEHOLD QUESTIONNAIRE: LINE NUMBER FROM COLUMN 11.	LINE NUMBER . . . . . ☐☐ NAME _____	LINE NUMBER . . . . . ☐☐ NAME _____	LINE NUMBER . . . . . ☐☐ NAME _____
112C	PREPARE EQUIPMENT AND SUPPLIES ONLY FOR THE TEST(S) FOR WHICH CONSENT HAS BEEN OBTAINED AND PROCEED WITH THE TEST(S).			
112D	PLACE BAR CODE LABEL FOR MALARIA LAB TEST.	PUT THE 1ST BAR CODE LABEL HERE. NOT PRESENT . . . . . 99994 REFUSED . . . . . 99995 OTHER . . . . . 99996 PUT THE 2ND BAR CODE LABEL ON THE SLIDE AND THE 3RD ON THE TRANSMITTAL FORM.	PUT THE 1ST BAR CODE LABEL HERE. NOT PRESENT . . . . . 99994 REFUSED . . . . . 99995 OTHER . . . . . 99996 PUT THE 2ND BAR CODE LABEL ON THE SLIDE AND THE 3RD ON THE TRANSMITTAL FORM.	PUT THE 1ST BAR CODE LABEL HERE. NOT PRESENT . . . . . 99994 REFUSED . . . . . 99995 OTHER . . . . . 99996 PUT THE 2ND BAR CODE LABEL ON THE SLIDE AND THE 3RD ON THE TRANSMITTAL FORM.
113	RECORD HEMOGLOBIN LEVEL HERE AND IN THE ANEMIA	G/DL . . . . . ☐☐.☐ NOT PRESENT . . . . . 994 REFUSED . . . . . 995 OTHER 996	G/DL . . . . . ☐☐.☐ NOT PRESENT . . . . . 994 REFUSED . . . . . 995 OTHER 996	G/DL . . . . . ☐☐.☐ NOT PRESENT . . . . . 994 REFUSED . . . . . 995 OTHER 996
114	CIRCLE THE CODE FOR THE MALARIA RDT.	TESTED . . . . . 1 NOT PRESENT . . . . . 2 REFUSED . . . . . 3 OTHER . . . . . 6 (SKIP TO 116)	TESTED . . . . . 1 NOT PRESENT . . . . . 2 REFUSED . . . . . 3 OTHER . . . . . 6 (SKIP TO 116)	TESTED . . . . . 1 NOT PRESENT . . . . . 2 REFUSED . . . . . 3 OTHER . . . . . 6 (SKIP TO 116)
115	RECORD THE RESULT OF THE MALARIA RDT HERE AND IN THE ANEMIA AND MALARIA PAMPHLET.	POSITIVE 1 (SKIP TO 117A) NEGATIVE . . . . . 2 OTHER 6	POSITIVE 1 (SKIP TO 117A) NEGATIVE . . . . . 2 OTHER 6	POSITIVE 1 (SKIP TO 117A) NEGATIVE . . . . . 2 OTHER 6
116	CHECK 113: HEMOGLOBIN RESULT	BELOW 7.0 G/DL, SEVERE ANEMIA . . . . . 1 7.0 G/DL OR ABOVE . . . 2 NOT PRESENT . . . . . 3 REFUSED . . . . . 4 OTHER . . . . . 6 (SKIP TO 130)	BELOW 7.0 G/DL, SEVERE ANEMIA . . . . . 1 7.0 G/DL OR ABOVE . . . 2 NOT PRESENT . . . . . 3 REFUSED . . . . . 4 OTHER . . . . . 6 (SKIP TO 130)	BELOW 7.0 G/DL, SEVERE ANEMIA . . . . . 1 7.0 G/DL OR ABOVE . . . 2 NOT PRESENT . . . . . 3 REFUSED . . . . . 4 OTHER . . . . . 6 (SKIP TO 130)
117	**SEVERE ANEMIA REFERRAL** RECORD THE RESULT OF THE ANEMIA TEST ON THE REFERRAL	The anemia test shows that (NAME OF CHILD) has severe anemia. Your child is very ill and must be taken to a health facility immediately. (SKIP TO 130)		
117A	LOCATION OF INTERVIEW:	ZANZIBAR ☐	MAINLAND TANZANIA ☐ → SKIP TP Q118	
117B	**MALARIA REFERRAL** RECORD THE RESULT OF THE MALARIA TEST ON THE REFERRAL FORM.	The malaria test shows that (NAME OF CHILD) has smalaria. Your child is ill and must be taken to a health facility immediately. (SKIP TO 130)		

101	CHECK COLUMN 11 IN HOUSEHOLD QUESTIONNAIRE. RECORD THE LINE NUMBER AND NAME FOR ALL ELIGIBLE CHILDREN 0-5 YEARS IN QUESTION 102; IF MORE THAN SIX CHILDREN, USE ADDITIONAL QUESTIONNAIRE(S).			
		CHILD 4	CHILD 5	CHILD 6
102	CHECK HOUSEHOLD QUESTIONNAIRE: LINE NUMBER FROM COLUMN 11.	LINE NUMBER ..... ☐☐ NAME _____	LINE NUMBER ..... ☐☐ NAME _____	LINE NUMBER ..... ☐☐ NAME _____
118	Does (NAME) suffer from any of the following illnesses or symptoms: Extreme weakness? Heart problems? Loss of consciousness? Rapid or difficult breathing? Seizures? Abnormal bleeding? Jaundice or yellow skin? Dark urine? IF NONE OF THE ABOVE SYMPTOMS, CIRCLE CODE Y	EXTREME WEAKNESS .. A HEART PROBLEMS ..... B LOSS OF CONSCIOUSNESS . . . C RAPID BREATHING . . . . . D SEIZURES ..... E BLEEDING ..... F JAUNDICE ..... G DARK URINE ..... H NONE OF THE ABOVE SYMPTOMS . . . . . Y	EXTREME WEAKNESS .. A HEART PROBLEMS ..... B LOSS OF CONSCIOUSNESS . . . C RAPID BREATHING . . . . . D SEIZURES ..... E BLEEDING ..... F JAUNDICE ..... G DARK URINE ..... H NONE OF THE ABOVE SYMPTOMS . . . . . Y	EXTREME WEAKNESS .. A HEART PROBLEMS ..... B LOSS OF CONSCIOUSNESS . . . C RAPID BREATHING . . . . . D SEIZURES E BLEEDING F JAUNDICE G DARK URINE H NONE OF THE ABOVE SYMPTOMS . . . . . Y
119	CHECK 118: ANY CODE A-H CIRCLED?	ONLY CODE Y CIRCLED . . . . . 1 ANY CODE A-H CIRCLED . . . . . 2 (SKIP TO 122)	ONLY CODE Y CIRCLED . . . . . 1 ANY CODE A-H CIRCLED . . . . . 2 (SKIP TO 122)	ONLY CODE Y CIRCLED . . . . . 1 ANY CODE A-H CIRCLED . . . . . 2 (SKIP TO 122)
120	CHECK 113: HEMOGLOBIN RESULT	BELOW 7.0 G/DL, SEVERE ANEMIA 1 (SKIP TO 122) 7.0 G/DL OR ABOVE 2 NOT PRESENT 3 REFUSED 4 OTHER 6	BELOW 7.0 G/DL, SEVERE ANEMIA 1 (SKIP TO 122) 7.0 G/DL OR ABOVE 2 NOT PRESENT 3 REFUSED 4 OTHER 6	BELOW 7.0 G/DL, SEVERE ANEMIA 1 (SKIP TO 122) 7.0 G/DL OR ABOVE 2 NOT PRESENT 3 REFUSED 4 OTHER 6
121	In the past two weeks has (NAME) taken or is taking ALU given by a doctor or health center to treat the malaria? VERIFY BY ASKING TO SEE TREATMENT	YES . . . . . 1 (SKIP TO 123) NO . . . . . 2 (SKIP TO 124)	YES . . . . . 1 (SKIP TO 123) NO . . . . . 2 (SKIP TO 124)	YES . . . . . 1 (SKIP TO 123) NO . . . . . 2 (SKIP TO 124)
122	**SEVERE MALARIA REFERRAL** RECORD THE RESULT OF THE MALARIA RDT ON THE REFERRAL FORM.	The malaria test shows that (NAME OF CHILD) has malaria. Your child also has symptoms of severe malaria. The malaria treatment I have will not help your child, and I cannot give you the medication. Your child is very ill and must be taked to a health facility right away. (SKIP TO 130)		
123	**ALREADY TAKING [FIRST LINE MEDICATION] REFERRAL STATEMENT**	You have told me that (NAME OF CHILD) had already received ALU for malaria. Therefore, I cannot give you additional ALU. However, the test shows that he/she has malaria. If your child has a fever for two days after the last dose of ALU, you should take the child to the nearest health facility for further examination. (SKIP TO 130)		

101	CHECK COLUMN 11 IN HOUSEHOLD QUESTIONNAIRE. RECORD THE LINE NUMBER AND NAME FOR ALL ELIGIBLE CHILDREN 0-5 YEARS IN QUESTION 102; IF MORE THAN SIX CHILDREN, USE ADDITIONAL QUESTIONNAIRE(S).			
		CHILD 4	CHILD 5	CHILD 6
102	CHECK HOUSEHOLD QUESTIONNAIRE: LINE NUMBER FROM COLUMN 11.	LINE NUMBER . . . . . ☐☐ NAME _____	LINE NUMBER . . . . . ☐☐ NAME _____	LINE NUMBER . . . . . ☐☐ NAME _____

124	READ INFORMATION FOR MALARIA TREATMENT AND CONSENT STATEMENT TO PARENT/OTHER	The malaria test shows that your child has malaria. We can give you free medicine. The medicine is called [FIRST LINE OF MEDICATION]. [FIRST LINE OF MEDICATION] is very effective and in a few days it should get rid of the fever and other symptoms. You do not have to give the child the medicine. This is up to you. Please tell me whether you accept the medicine or not.		
125	CIRCLE THE APPROPRIATE CODE AND SIGN YOUR NAME.	ACCEPTED MEDICINE 1 _____ (SIGN) REFUSED . . . . . 2 OTHER 6	ACCEPTED MEDICINE 1 _____ (SIGN) REFU . . . . . 2 OTHER 6	ACCEPTED MEDICINE 1 _____ (SIGN) REFUSED . . . . . 2 OTHER 6
126	CHECK 125: MEDICATION ACCEPTED	ACCEPTED MEDICINE 1 REFUSED . . . . . 2 OTHER . . . . . 6 (SKIP TO 130)	ACCEPTED MEDICINE 1 REFUSED . . . . . 2 OTHER . . . . . 6 (SKIP TO 130)	ACCEPTED MEDICINE 1 REFUSED . . . . . 2 OTHER . . . . . 6 (SKIP TO 130)
127	READ INFORMATION FOR MALARIA TREATMENT AND CONSENT STATEMENT TO PARENT/OTHER ADULT.	**Weight (in Kg) – Approximate Age** / **Dosage *** 5 to less than 15 – under 3 years of age / 1 tablet ALu twice daily for 3 days 15 to less than 25 – 3 to 8 years of age / 2 tablets ALu twice daily for 3 days ALSO TELL THE PARENT/OTHER ADULT: First day starts by taking first dose followed by the second one 8 hours later; on subsequent days the recommendation is simply “morning” and “evening” (usually around 12 hours apart). Put the tablet in a little water, mix water and tablet well, and give to the child with fatty food or drinks like milk or breast milk. Make sure that the FULL 3 days treatment is taken at the recommended times, otherwise the infection may return. If your child vomits within an hour of taking the medicine, repeat the dose and get additional tablets. If [NAME] has a high fever, fast or difficult breathing, is not able to drink or breastfeed, gets sicker or does not get better in two days, you should take him/her to a health professional for treatment right away. with fatty food or drinks like milk or breast milk. Make sure that the FULL 3 days treatment is		
130	GO BACK TO 103 IN NEXT COLUMN OF THIS PAGE OR IN THE FIRST COLUMN OF THE NEXT PAGE; IF NO MORE CHILDREN, GO TO 201.			

WEIGHT AND HEIGHT MEASUREMENT, HEMOGLOBIN AND URINE (FOR IODINE) TEST FOR WOMEN AGE 15-49

201	CHECK COLUMN 9 IN HOUSEHOLD QUESTIONNAIRE. RECORD THE LINE NUMBER, NAME, AGE, AND MARITAL STATUS FOR ALL ELIGIBLE WOMEN IN 202, 203, AND 204. IF THERE ARE MORE THAN THREE WOMEN, USE ADDITIONAL QUESTIONNAIRE(S).			
		WOMAN 1	WOMAN 2	WOMAN 3
202	CHECK HOUSEHOLD QUESTIONNAIRE: LINE NUMBER FROM COLUMN 9.	LINE NUMBER ..... ☐☐ NAME _____	LINE NUMBER ..... ☐☐ NAME _____	LINE NUMBER ..... ☐☐ NAME _____
203	CHECK HOUSEHOLD QUESTIONNAIRE COLUMN 7	15-17 YEARS . . . . . 1 18-49 YEARS 2	15-17 YEARS . . . . . 1 18-49 YEARS 2	15-17 YEARS . . . . . 1 18-49 YEARS 2
204	CHECK HOUSEHOLD QUESTIONNAIRE COLUMN 8 (MARITAL STATUS):	CODE 4 (NEVER IN UNION) . . . 1 OTHER 2	CODE 4 (NEVER IN UNION) . . . 1 OTHER 2	CODE 4 (NEVER IN UNION) . . . 1 OTHER 2
204A	CHECK HOUSEHOLD QUESTIONNAIRE COLUMN 3 (RELATIONSHIP):	CODE 1 (HEAD OF HH . 1 OTHER 2	CODE 1 (HEAD OF HH . 1 OTHER 2	CODE 1 (HEAD OF HH . 1 OTHER 2

205	WEIGHT IN KILOGRAMS.	KG . . ☐☐☐.☐☐ NOT PRESEN. . . . . 99994 REFUSE. . . . . .99995 OTHEF. 99996	KG . . ☐☐☐.☐☐ NOT PRESEN. . . . . 99994 REFUSE. . . . . .99995 OTHEF. 99996	KG . . ☐☐☐.☐☐ NOT PRESEN. . . . . 99994 REFUSE. . . . . .99995 OTHEF. 99996
206	HEIGHT IN CENTIMETERS.	CM. . . . . ☐☐☐.☐ NOT PRESEN. . . . . 9994 REFUSE. . . . . .9995 OTHER 9996	CM. . . . . ☐☐☐.☐ NOT PRESEN. . . . . 9994 REFUSE. . . . . .9995 OTHER 9996	CM. . . . . ☐☐☐.☐ NOT PRESEN. . . . . 9994 REFUSE. . . . . .9995 OTHER 9996
207	MEASURER: ENTER YOUR INTERVIEWER NUMBER	☐☐☐☐ INTERVIEWER NUMBER	☐☐☐☐ INTERVIEWER NUMBER	☐☐☐☐ INTERVIEWER NUMBER
208	CHECK 203: AGE	15-17 YEARS . . . . . 1 18-49 YEARS . . . . . 3 (SKIP TO 210)	15-17 YEARS . . . . . 1 18-49 YEARS . . . . . 3 (SKIP TO 210)	15-17 YEARS . . . . . 1 18-49 YEARS . . . . . 3 (SKIP TO 210)
209	CHECK 204: MARITAL STATUS	NEVER IN UNION . . . . 1 OTHER . . . . . 2 (SKIP TO 210)	NEVER IN UNION . . . . 1 OTHER . . . . . 2 (SKIP TO 210)	NEVER IN UNION . . . . 1 OTHER . . . . . 2 (SKIP TO 210)
209A	CHECK 204A: RELATIONSHIP	HEAD OF HH . . . . . 1 OTHER . . . . . 2 (SKIP TO 216)	HEAD OF HH . . . . . 1 OTHER . . . . . 2 (SKIP TO 216)	HEAD OF HH . . . . . 1 OTHER . . . . . 2 (SKIP TO 216)

WEIGHT AND HEIGHT MEASUREMENT, HEMOGLOBIN AND URINE (FOR IODINE) TEST FOR WOMEN AGE 15-49

		WOMAN 1	WOMAN 2	WOMAN 3
	NAME FROM COLUMN 2.	NAME _____	NAME _____	NAME _____
ADULT RESPONDENT CONSENT FOR ANEMIA TEST				
ADULT RESPONDENT CONSENT 210	ASK CONSENT FOR ANEMIA TEST.	As part of this survey, we are asking people all over the country to take an anemia test. Anemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat anemia. For the anemia testing, we will need a few drops of blood from a finger. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after we take your blood. The blood will be tested for anemia immediately, and the result will be told to you right away. The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team. Do you have any questions? You can say yes or no. It is up to you to decide.		
211	CIRCLE THE CODE AND SIGN YOUR	(SIGN AND ENTER YOUR FIELDWORKER ☐☐☐☐ GRANTED ..... 1 RESPONDENT REFUSED 2 NOT PRESENT/OTHER 3 (SKIP TO 221)	(SIGN AND ENTER YOUR FIELDWORKER ☐☐☐☐ GRANTED ..... 1 RESPONDENT REFUSE 2 NOT PRESENT/OTHER 3 (SKIP TO 221)	(SIGN AND ENTER YOUR FIELDWORKER ☐☐☐☐ GRANTED ..... 1 RESPONDENT REFUSE 2 NOT PRESENT/OTHER 3 (SKIP TO 221)
211A	CHECK 226 IN WOMAN'S QUESTIONNAIRE OR ASK: Are you pregnant?	YES ..... 1 NO ..... 2 DON'T KNO' ..... 8 (SKIP TO 221)	YES ..... 1 NO ..... 2 DON'T KNO' ..... 8 (SKIP TO 221)	YES ..... 1 NO ..... 2 DON'T KNO' ..... 8 (SKIP TO 221)
216	RECORD LINE NUMBER OF PARENT/OTHER ADULT RESPONSIBLE FOR ADOLESCENT	LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT ☐☐ RECORD '00' IF NOT LISTED	LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT ☐☐ RECORD '00' IF NOT LISTED	LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT ☐☐ RECORD '00' IF NOT LISTED
PARENTAL/RESPONSIBLE ADULT CONSENT FOR ANEMIA TEST				
PARENT — RESP ADULT CONSENT 217	ASK CONSENT FOR ANEMIA TEST FROM PARENT/ADULT.	As part of this survey, we are asking people all over the country to take an anemia test. Anemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat anemia. For the anemia testing, we will need a few drops of blood from a finger. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The blood will be tested for anemia immediately, and the result will be told to you and (NAME OF MINOR) right away. The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team. Do you have any questions?		
218	CIRCLE THE CODE AND SIGN YOUR NAME.	(SIGN AND ENTER YOUR ☐☐☐☐ GRANTED ..... 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED ... 2 NOT PRESENT/OTHER 3 (SKIP TO 221)	(SIGN AND ENTER YOUR ☐☐☐☐ GRANTED ..... 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED ... 2 NOT PRESENT/OTHER 3 (SKIP TO 221)	(SIGN AND ENTER YOUR ☐☐☐☐ GRANTED ..... 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED ... 2 NOT PRESENT/OTHER 3 (SKIP TO 221)

WEIGHT AND HEIGHT MEASUREMENT, HEMOGLOBIN AND URINE (FOR IODINE) TEST FOR WOMEN AGE 15-49

		WOMAN 1	WOMAN 2	WOMAN 3
	NAME FROM COLUMN 2.	NAME _____	NAME _____	NAME _____

MINOR RESPONDENT CONSENT FOR ANEMIA TEST

219	ASK CONSENT FOR ANEMIA TEST FROM RESPONDENT.	As part of this survey, we are asking people all over the country to take an anemia test. Anemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat anemia. For the anemia testing, we will need a few drops of blood from a finger. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after we take your blood. The blood will be tested for anemia immediately, and the result will be told to you and (NAME OF PARENT/RESPONSIBLE ADULT) right away. The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team.		
220	CIRCLE THE CODE AND SIGN YOUR	_____ (SIGN) GRANTED . . . . . 1 MINOR RESPONDENT REFUSED . . . . . 2 NOT PRESENT/OTHER 3 (SKIP TO 221)	_____ (SIGN) GRANTED . . . . . 1 MINOR RESPONDENT REFUSED . . . . . 2 NOT PRESENT/OTHER 3 (SKIP TO 221)	_____ (SIGN) GRANTED . . . . . 1 MINOR RESPONDENT REFUSED . . . . . 2 NOT PRESENT/OTHER 3 (SKIP TO 221)
220A	CHECK 226 IN WOMAN'S QUESTIONNAIRE OR ASK: Are you pregnant?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
221	CHECK COVER PAGE OF HOUSEHOLD QUESTIONNAIRE. HOUSEHOLD SELECTED FOR MANS' SURVEY AND IODINE TESTING.	SELECTED 1 NOT SELECTED 2 (SKIP TO 229B)	SELECTED 1 NOT SELECTED 2 (SKIP TO 229B)	SELECTED 1 NOT SELECTED 2 (SKIP TO 229B)
222	CHECK 203: AGE	15-17 YEARS 1 18-49 YEARS 2 (SKIP TO 224)	NOT EM. 15 . . . . . 1 18-49 YEARS 2 (SKIP TO 224)	15-17 YEARS 1 18-49 YEARS 2 (SKIP TO 224)
223	CHECK 204: MARITAL	NEVER IN UNION . . . . 1 OTHER . . . . . 2 (SKIP TO 224)	NEVER IN UNION . . . . 1 OTHER . . . . . 2 (SKIP TO 224)	NEVER IN UNION . . . . 1 OTHER . . . . . 2 (SKIP TO 224)
223A	CHECK 204A: RELATIONSHIP	HEAD OF HH . . . . . 1 OTHER . . . . . 2 (SKIP TO 226)	HEAD OF HH . . . . . 1 OTHER . . . . . 2 (SKIP TO 226)	HEAD OF HH . . . . . 1 OTHER . . . . . 2 (SKIP TO 226)

WEIGHT AND HEIGHT MEASUREMENT, HEMOGLOBIN AND URINE (FOR IODINE) TEST FOR WOMEN AGE 15-49

		WOMAN 1	WOMAN 2	WOMAN 3
	NAME FROM COLUMN 2.	NAME _____	NAME _____	NAME _____

ADULT RESPONDENT CONSENT FOR URINARY IODINE TEST

ADULT RESPONDENT CONSENT

224	ASK CONSENT FOR IODINE TEST.	As part of this survey, we are also asking women all over the country to take test for iodine deficiency. Iodine deficiency is a health problem that usually results from poor nutrition. This survey will assist the government to develop programs to prevent and treat iodine deficiency. For the iodine test, we need a small amount of urine. The urine will be tested at the Tanzania Food and Nutrition Labaratory. The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team. Do you have any questions? You can say yes or no. It is up to you to decide.		
225	CIRCLE THE CODE AND	_____ (SIGN) GRANTED ..... 1 RESPONDENT REFUSED 2 NOT PRESENT/OTHER 3 (SKIP TO 229B)	_____ (SIGN) GRANTED ..... 1 RESPONDENT REFUSI . . 2 NOT PRESENT/OTHER 3 (SKIP TO 229B)	_____ (SIGN) GRANTED ..... 1 RESPONDENT REFUSI . . 2 NOT PRESENT/OTHER 3 (SKIP TO 229B)
226	RECORD LINE NUMBER OF PARENT/OTHER ADULT RESPONSIBLE FOR	LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT ☐☐ RECORD '00' IF NOT LISTED	LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT ☐☐ RECORD '00' IF NOT LISTED	LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT ☐☐ RECORD '00' IF NOT LISTED

PARENTAL/RESPONSIBLE ADULT CONSENT FOR URINARY IODINE TEST

PARENT — RESP ADULT CONSENT

227	ASK CONSENT FOR IODINE TEST FROM PARENT/ADULT .	As part of this survey, we are also asking women all over the country to take test for iodine deficiency. Iodine deficiency is a health problem that usually results from poor nutrition. This survey will assist the government to develop programs to prevent and treat iodine deficiency. For the iodine test, we need a small amount of urine. The urine will be tested at the Tanzania Food and Nutrition Labaratory. The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team. Do you have any questions? You can say yes or no. It is up to you to decide. Will you allow (NAME OF MINOR) to provide us with a small amount of urine?		
228	CIRCLE THE CODE AND SIGN YOUR NAME.	_____ (SIGN) GRANTE . . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED 2 NOT PRESENT/OTHER 3 SKIP TO 229B	_____ (SIGN) GRANTE . . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED 2 NOT PRESENT/OTHER 3 SKIP TO 229B	_____ (SIGN) GRANTE . . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED 2 NOT PRESENT/OTHER 3 SKIP TO 229B

WEIGHT AND HEIGHT MEASUREMENT, HEMOGLOBIN AND URINE (FOR IODINE) TEST FOR WOMEN AGE 15-49

		WOMAN 1	WOMAN 2	WOMAN 3
	NAME FROM COLUMN 2.	NAME _____	NAME _____	NAME _____
	MINOR RESPONDENT CONSENT FOR URINARY IODINE TEST			
229	ASK CONSENT FOR IODINE TEST FROM RESPONDENT.	As part of this survey, we are also asking women all over the country to take test for iodine deficiency. Iodine deficiency is a health problem that usually results from poor nutrition. This survey will assist the government to develop programs to prevent and treat iodine deficiency. For the iodine test, we need a small amount of urine. The urine will be tested at the Tanzania Food and Nutrition Labaratory. The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team. Do you have any questions? You can say yes or no. It is up to you to decide. Will you provide us with a small amount of urine?		
229A	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . . 1 MINOR RESPONDENT REFUSED . . . . . 2 NOT PRESENT/OTHER 3 (SIGN)	GRANTED . . . . . 1 MINOR RESPONDENT REFUSED . . . . . 2 NOT PRESENT/OTHER 3 (SIGN)	GRANTED . . . . . 1 MINOR RESPONDENT REFUSED . . . . . 2 NOT PRESENT/OTHER 3 (SIGN)
229B	PREPARE EQUIPMENT AND SUPPLIES ONLY FOR THE TEST(S) FOR WHICH CONSENT HAS BEEN OBTAINED AND PROCEED WITH THE TEST(S)			
230	RECORD HEMOGLOBIN LEVEL HERE AND IN ANEMIA PAMPHLET.	G/DL . . . . . □□.□ NOT PRESENT/OTHER 994 REFUSED . . . . . 995 OTHER 996	G/DL . . . . . □□.□ NOT PRESENT/OTHER 994 REFUSED . . . . . 995 OTHER 996	G/DL . . . . . □□.□ NOT PRESENT/OTHER 994 REFUSED . . . . . 995 OTHER 996
231	BAR CODE LABEL URINARY IODINE	PUT THE 1ST BAR CODE LABEL HERE PUT THE 2ND BAR CODE LABEL ON THE RESPONDENT'S COLLECTION CUP AND THE THIRD LABEL ON THE COLLECTION TUBE AND THE FOURTH LABEL ON THE TRANSMITTAL FORM.	PUT THE 1ST BAR CODE LABEL HERE PUT THE 2ND BAR CODE LABEL ON THE RESPONDENT'S COLLECTION CUP AND THE THIRD LABEL ON THE COLLECTION TUBE AND THE FOURTH LABEL ON THE TRANSMITTAL FORM.	PUT THE 1ST BAR CODE LABEL HERE PUT THE 2ND BAR CODE LABEL ON THE RESPONDENT'S COLLECTION CUP AND THE THIRD LABEL ON THE COLLECTION TUBE AND THE FOURTH LABEL ON THE TRANSMITTAL FORM.
232	OUTCOME OF URINARY IODINE TEST PROCEDURE	URINE GIVEN . . . . . 1 NOT PRESENT/OTHER . 2 REFUSED 3	URINE GIVEN . . . . . 1 NOT PRESENT/OTHER . 2 REFUSED 3	URINE GIVEN . . . . . 1 NOT PRESENT/OTHER . 2 REFUSED 3
233	GO BACK TO 203 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF AN ADDITIONAL QUESTIONNAIRE; IF NO MORE ELIGIBLE WOMEN, END THE BIOMARKER COLLECTION.			

INTERVIEWER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING BIOMARKERS

SUPERVISOR'S OBSERVATIONS

EDITOR'S OBSERVATIONS

August, 2015

CONFIDENTIAL

2015-16 TANZANIA DEMOGRAPHIC AND HEALTH SURVEY/MALARIA INDICATOR SURVEY
WOMAN'S QUESTIONNAIRE

UNITED REPUBLIC OF TANZANIA
NATIONAL BUREAU OF STATISTICS

IDENTIFICATION

PLACE NAME _____

NAME OF HOUSEHOLD HEAD _____

CLUSTER NUMBER . . . . . | | | | |

HOUSEHOLD NUMBER . . . . . | | | | |

NAME AND LINE NUMBER OF WOMAN _____ | | |

INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE	_____	_____	_____	DAY		
				MONTH		
				YEAR	2	0	1	
INTERVIEWER'S NAME	_____	_____	_____	INT. NO.				
RESULT*	_____	_____	_____	RESULT*		
NEXT VISIT: DATE	_____	_____		TOTAL NUMBER OF VISITS		
TIME	_____	_____			_____	
	_____	_____				

*RESULT CODES: 1 COMPLETED; 2 NOT AT HOME; 3 POSTPONED; 4 REFUSED; 5 PARTLY COMPLETED; 6 INCAPACITATED; 7 OTHER _____ SPECIFY

LANGUAGE OF QUESTIONNAIRE** 0 1

LANGUAGE OF INTERVIEW** | |

TRANSLATOR USED (YES = 1, NO = 2) |

LANGUAGE OF QUESTIONNAIRE** **ENGLISH**

**LANGUAGE CODES:
01 ENGLISH
02 KISWAHILI

SUPERVISOR		FIELD EDITOR		OFFICE EDITOR	KEYED BY
NAME	NUMBER	NAME	NUMBER	NUMBER	NUMBER
_____		_____			

INTRODUCTION AND CONSENT

Hello. My name is _____. I am working with the National Bureau of Statistics. We are conducting a survey about health and other topics all over the United Republic of Tanzania. The information we collect will help the government to plan health services. Your household was selected for the survey. The questions usually take about 45 to 60 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of the research team. You don't have to be in the survey, but we hope you will agree to answer the questions since your views are important. If I ask you any question you don't want to answer, just let me know and I will go on to the next question or you can stop the interview at any time.

In case you need more information about the survey, you may contact the person listed on the card that has already been given to your household.

Do you have any questions?
May I begin the interview now?

SIGNATURE OF INTERVIEWER _____ DATE _____

RESPONDENT AGREES TO BE INTERVIEWED . . 1 ↓

RESPONDENT DOES NOT AGREE TO BE INTERVIEWED . . 2 → END

SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	RECORD THE TIME.	HOURS . . . . . ☐☐ MINUTES . . . . . ☐☐ MORNING . . . . . 1 AFTERNOON . . . . . 2 EVENING 3	
102	How long have you been living continuously in (NAME OF CURRENT CITY, TOWN OR VILLAGE OF RESIDENCE)? IF LESS THAN ONE YEAR, RECORD '00' YEARS.	YEARS . . . . . ☐☐ ALWAYS . . . . . 95 VISITOR 96	→ 105
103	Just before you moved here, did you live in a city, in a town, or in a rural area?	CITY . . . . . 1 TOWN . . . . . 2 RURAL AREA 3	
104	Before you moved here, which REGION did you live in?	DODOMA . . . . . 01 ARUSHA . . . . . 02 KILIMANJARO . . . . . 03 TANGA . . . . . 04 MOROGORO . . . . . 05 PWANI . . . . . 06 DAR ES SALAAM . . . . . 07 LINDI . . . . . 08 MTWARA . . . . . 09 RUVUMA . . . . . 10 IRINGA . . . . . 11 MBEYA . . . . . 12 SINGIDA . . . . . 13 TABORA . . . . . 14 RUKWA . . . . . 15 KIGOMA . . . . . 16 SHINYANGA . . . . . 17 KAGERA . . . . . 18 MWANZA . . . . . 19 MARA . . . . . 20 MANYARA . . . . . 21 NJOMBE . . . . . 22 KATAVI . . . . . 23 SIMIYU . . . . . 24 GEITA . . . . . 25 KASKAZINI UNGUJA . . . . . 26 KUSINI UNGUJA . . . . . 27 MJINI MAGHARIBI . . . . . 28 KASKAZINI PEMBA . . . . . 29 KUSINI PEMBA . . . . . 30 OUTSIDE OF TANZANIA 96	

SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
105	In what month and year were you born?	MONTH . . . . . ☐☐ DON'T KNOW MONTH . . . . . 98 YEAR . . . . . ☐☐☐☐ DON'T KNOW YEAR 9998	
106	How old were you at your last birthday? COMPARE AND CORRECT 105 AND/OR 106 IF INCONSISTENT.	AGE IN COMPLETED YEARS . . . . . ☐☐	
107	Have you ever attended school?	YES . . . . . 1 NO 2	→ 111
108	What is the highest level of school you attended?	PRE-PRIMARY . . . . . 0 PRIMARY . . . . . 1 POST PRIMARY TRAINING . . . . . 2 SECONDARY 'O' LEVEL . . . . . 3 POST SECONDARY 'O' LEVEL TRAINING . . . . . 4 SECONDARY 'A' LEVEL . . . . . 5 POST SECONDARY 'A' LEVEL TRAINING . . . . . 6 UNIVERSITY . . . . . 7 DON'T KNOW 8	
109	What is the highest grade you completed at that level? IF COMPLETED LESS THAN ONE YEAR AT THAT LEVEL, RECORD '00'.	GRADE . . . . . ☐☐	
110	CHECK 108: CODES '0', '1', '2', '3', '4' OR '8' CIRCLED ☐ ↓ CODES '5', '6' OR '7' CIRCLED ☐ → 113		
111	Now I would like you to read this sentence to me. SHOW CARD TO RESPONDENT. IF RESPONDENT CANNOT READ WHOLE SENTENCE, PROBE: Can you read any part of the sentence to me?	CANNOT READ AT ALL . . . . . 1 ABLE TO READ ONLY PART OF THE SENTENCE . . . . . 2 ABLE TO READ WHOLE SENTENCE . . . . . 3 NO CARD WITH REQUIRED LANGUAGE _____ 4 (SPECIFY LANGUAGE) BLIND/VISUALLY IMPAIRED 5	
112	CHECK 111: CODE '2', '3' OR '4' CIRCLED ☐ ↓ CODE '1' OR '5' CIRCLED ☐ → 114		
113	Do you read a newspaper or magazine at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK . . . . . 1 LESS THAN ONCE A WEEK . . . . . 2 NOT AT ALL 3	
114	Do you listen to the radio at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK . . . . . 1 LESS THAN ONCE A WEEK . . . . . 2 NOT AT ALL 3	
115	Do you watch/listen to television at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK . . . . . 1 LESS THAN ONCE A WEEK . . . . . 2 NOT AT ALL 3	
116	Do you own a mobile telephone?	YES . . . . . 1 NO 2	→ 118
117	Do you use your mobile phone for any financial transactions?	YES . . . . . 1 NO 2	
117A	Do you use your mobile phone for any health related issues?	YES . . . . . 1 NO 2	

SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
118	Do you have an account in a bank or other financial institution that you yourself use?	YES . . . . . 1 NO 2	→ 118C
118A	Is the account shared with someone else?	YES . . . . . 1 NO 2	→ 118C
118B	Whom do you share the account with?	HUSBAND/PARTNE . . . . . 1 PARENTS . . . . . 2 RELATIVE . . . . . 3 OTHER _____ 6 (SPECIFY)	
118C	Do you use VICOBA for any financial transaction?	YES . . . . . 1 NO 2	
119	Have you ever used the internet (including e-mails, social media like Facebook, Twitter, Blogs, or instant messaging such as WhatsApp, Viber?)	YES . . . . . 1 NO 2	→ 124
120	In the last 12 months, have you used the internet? IF NECESSARY, PROBE FOR USE FROM ANY LOCATION, WITH ANY DEVICE.	YES . . . . . 1 NO 2	→ 124
121	During the last one month, how often did you use the internet: almost every day, at least once a week, less than once a week, or not at all?	ALMOST EVERY DAY . . . . . 1 AT LEAST ONCE A WEEK . . . . . 2 LESS THAN ONCE A WEEK . . . . . 3 NOT AT ALL 4	
124	In the last 12 months, how many times have you been away from home for one or more nights?	NUMBER OF TIMES . . . . . [ ][ ] NONE 00	→ 201
125	In the last 12 months, have you been away from home for more than one month at a time?	YES . . . . . 1 NO 2	

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
201	Now I would like to ask about all the births you have had during your life. Have you ever given birth?	YES . . . . . 1 NO 2	→ 206
202	Do you have any sons or daughters to whom you have given birth who are now living with you?	YES . . . . . 1 NO 2	→ 204
203	a) How many sons live with you? b) And how many daughters live with you? IF NONE, RECORD '00'.	a) SONS AT HOME . . . . . [ ][ ] b) DAUGHTERS AT HOME . . . . . [ ][ ]	
204	Do you have any sons or daughters to whom you have given birth who are alive but do not live with you?	YES . . . . . 1 NO 2	→ 206
205	a) How many sons are alive but do not live with you? b) And how many daughters are alive but do not live with you? IF NONE, RECORD '00'.	a) SONS ELSEWHERE . . . . . [ ][ ] b) DAUGHTERS ELSEWHERE . . . . . [ ][ ]	
206	Have you ever given birth to a boy or girl who was born alive but later died? IF NO, PROBE: Any baby who cried, who made any movement, sound, or effort to breathe, or who showed any other signs of life even if for a very short time?	YES . . . . . 1 NO 2	→ 208
207	a) How many boys have died? b) And how many girls have died? IF NONE, RECORD '00'.	a) BOYS DEAD . . . . . [ ][ ] b) GIRLS DEAD . . . . . [ ][ ]	
208	SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL. IF NONE, RECORD '00'.	TOTAL BIRTHS . . . . . [ ][ ]	
209	CHECK 208: Just to make sure that I have this right: you have had in TOTAL _____ births during your life. Is that correct? YES ☐ NO ☐ → PROBE AND CORRECT 201-208 AS NECESSARY.		
210	CHECK 208: ONE OR MORE BIRTHS ☐ NO BIRTHS ☐ → 226		

SECTION 2. REPRODUCTION

211 Now I would like to record the names of all your births, whether still alive or not, starting with the first one you had.
RECORD NAMES OF ALL THE BIRTHS IN 212. RECORD TWINS AND TRIPLETS ON SEPARATE ROWS. IF THERE ARE MORE THAN 10 BIRTHS, USE AN ADDITIONAL QUESTIONNAIRE, STARTING WITH THE SECOND ROW.

212 What name was given to your (first/ next) baby? RECORD NAME. BIRTH HISTORY NUMBER.	213 Is (NAME) a boy or a girl?	214 Were any of these births twins?	215 On what day, month, and year was (NAME) born?	216 Is (NAME) still alive?	217 IF ALIVE: How old was (NAME) at (NAME)'s last birthday? RECORD AGE IN COMP-LETED YEARS.	218 IF ALIVE: Is (NAME) living with you?	219 IF ALIVE: RECORD HOUSEHOLD LINE NUMBER OF CHILD. RECORD '00' IF CHILD NOT LISTED IN HOUSEHOLD.	220 IF DEAD: How old was (NAME) when (he/she) died? IF '12 MONTHS' OR '1 YR', ASK: Did (NAME) have (his/her) first birthday? THEN ASK: Exactly how many months old was (NAME) when (he/she) died? RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OR YEARS.	220A IF DEAD: In what month and year did (NAME) die?	221 Were there any other live births between (NAME OF PREVIOUS BIRTH) and (NAME), including any children who died after birth?
01	BOY 1 GIRL 2	SING 1 MULT 2	DAY ☐☐ MONTH ☐☐ ☐☐☐☐ YEAR	YES 1 NO 2 → (SKIP TO 220)	AGE IN YEARS ☐☐	YES 1 NO 2	HOUSEHOLD LINE NUMBER ☐☐ → (NEXT BIRTH)	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 ☐☐	MONTH ☐☐ YEAR ☐☐☐☐	
02	BOY 1 GIRL 2	SING 1 MULT 2	DAY ☐☐ MONTH ☐☐ ☐☐☐☐ YEAR	YES 1 NO 2 → (SKIP TO 220)	AGE IN YEARS ☐☐	YES 1 NO 2	HOUSEHOLD LINE NUMBER ☐☐ → (SKIP TO 221)	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 ☐☐	MONTH ☐☐ YEAR ☐☐☐☐	YES 1 (ADD BIRTH) ↵ NO 2 (NEXT BIRTH) ↵
03	BOY 1 GIRL 2	SING 1 MULT 2	DAY ☐☐ MONTH ☐☐ ☐☐☐☐ YEAR	YES 1 NO 2 → (SKIP TO 220)	AGE IN YEARS ☐☐	YES 1 NO 2	HOUSEHOLD LINE NUMBER ☐☐ → (SKIP TO 221)	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 ☐☐	MONTH ☐☐ YEAR ☐☐☐☐	YES 1 (ADD BIRTH) ↵ NO 2 (NEXT BIRTH) ↵
04	BOY 1 GIRL 2	SING 1 MULT 2	DAY ☐☐ MONTH ☐☐ ☐☐☐☐ YEAR	YES 1 NO 2 → (SKIP TO 220)	AGE IN YEARS ☐☐	YES 1 NO 2	HOUSEHOLD LINE NUMBER ☐☐ → (SKIP TO 221)	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 ☐☐	MONTH ☐☐ YEAR ☐☐☐☐	YES 1 (ADD BIRTH) ↵ NO 2 (NEXT BIRTH) ↵
05	BOY 1 GIRL 2	SING 1 MULT 2	DAY ☐☐ MONTH ☐☐ ☐☐☐☐ YEAR	YES 1 NO 2 → (SKIP TO 220)	AGE IN YEARS ☐☐	YES 1 NO 2	HOUSEHOLD LINE NUMBER ☐☐ → (SKIP TO 221)	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 ☐☐	MONTH ☐☐ YEAR ☐☐☐☐	YES 1 (ADD BIRTH) ↵ NO 2 (NEXT BIRTH) ↵

212 What name was given to your (first/ next) baby? RECORD NAME. BIRTH HISTORY NUMBER.	213 Is (NAME) a boy or a girl?	214 Were any of these births twins?	215 On what day, month, and year was (NAME) born?	216 Is (NAME) still alive?	217 IF ALIVE: How old was (NAME) at (NAME)'s last birthday? RECORD AGE IN COMP-LETED YEARS.	218 IF ALIVE: Is (NAME) living with you?	219 IF ALIVE: RECORD HOUSEHOLD LINE NUMBER OF CHILD. RECORD '00' IF CHILD NOT LISTED IN HOUSEHOLD.	220 IF DEAD: How old was (NAME) when (he/she) died? IF '12 MONTHS' OR '1 YR', ASK: Did (NAME) have (his/her) first birthday? THEN ASK: Exactly how many months old was (NAME) when (he/she) died? RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OR YEARS.	220A IF DEAD: In what month and year did (NAME) die?	221 Were there any other live births between (NAME OF PREVIOUS BIRTH) and (NAME), including any children who died after birth?
06	BOY 1 GIRL 2	SING 1 MULT 2	DAY ☐☐ MONTH ☐☐ ☐☐☐☐ YEAR	YES 1 NO 2 ↓ (SKIP TO 220)	AGE IN YEARS ☐☐	YES 1 NO 2	HOUSEHOLD LINE NUMBER ☐☐ ↓ (SKIP TO 221)	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 ☐☐	MONTH ☐☐ YEAR ☐☐☐☐	YES 1 (ADD BIRTH) ↵ NO 2 (NEXT BIRTH) ↵
07	BOY 1 GIRL 2	SING 1 MULT 2	DAY ☐☐ MONTH ☐☐ ☐☐☐☐ YEAR	YES 1 NO 2 ↓ (SKIP TO 220)	AGE IN YEARS ☐☐	YES 1 NO 2	HOUSEHOLD LINE NUMBER ☐☐ ↓ (SKIP TO 221)	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 ☐☐	MONTH ☐☐ YEAR ☐☐☐☐	YES 1 (ADD BIRTH) ↵ NO 2 (NEXT BIRTH) ↵
08	BOY 1 GIRL 2	SING 1 MULT 2	DAY ☐☐ MONTH ☐☐ ☐☐☐☐ YEAR	YES 1 NO 2 ↓ (SKIP TO 220)	AGE IN YEARS ☐☐	YES 1 NO 2	HOUSEHOLD LINE NUMBER ☐☐ ↓ (SKIP TO 221)	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 ☐☐	MONTH ☐☐ YEAR ☐☐☐☐	YES 1 (ADD BIRTH) ↵ NO 2 (NEXT BIRTH) ↵
09	BOY 1 GIRL 2	SING 1 MULT 2	DAY ☐☐ MONTH ☐☐ ☐☐☐☐ YEAR	YES 1 NO 2 ↓ (SKIP TO 220)	AGE IN YEARS ☐☐	YES 1 NO 2	HOUSEHOLD LINE NUMBER ☐☐ n ↓ (SKIP TO 221)	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 ☐☐	MONTH ☐☐ YEAR ☐☐☐☐	YES 1 (ADD BIRTH) ↵ NO 2 (NEXT BIRTH) ↵
10	BOY 1 GIRL 2	SING 1 MULT 2	DAY ☐☐ MONTH ☐☐ ☐☐☐☐ YEAR	YES 1 NO 2 ↓ (SKIP TO 220)	AGE IN YEARS ☐☐	YES 1 NO 2	HOUSEHOLD LINE NUMBER ☐☐ ↓ (SKIP TO 221)	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 ☐☐	MONTH ☐☐ YEAR ☐☐☐☐	YES 1 (ADD BIRTH) ↵ NO 2 (NEXT BIRTH) ↵

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
222	Have you had any live births since the birth of (NAME OF LAST BIRTH)?	YES . . . . . 1 (RECORD BIRTH(S) IN TABLE) NO 2	
223	COMPARE 208 WITH NUMBER OF BIRTHS IN BIRTH HISTORY NUMBERS ARE SAME ☐ NUMBERS ARE DIFFERENT ☐ (PROBE AND RECONCILE)		
223A	CHECK 220A: ANY DEATHS IN JANUARY 2010 OR LATER? YES ☐ NO ☐		224
223B	CHECK 220: ENTER THE NUMBER OF DEATHS THAT HAPPENED IN DAYS, MONTHS AND 2-4 YEARS (LESS THAN 5 YEARS).	☐☐	
224	CHECK 215: ENTER THE NUMBER OF BIRTHS IN 2010-2016	NUMBER OF BIRTHS . . . . . ☐☐ NONE 0	226
225	**C** FOR EACH BIRTH IN 2010-2016, ENTER 'B' IN THE MONTH OF BIRTH IN THE CALENDAR. WRITE THE NAME OF THE CHILD TO THE LEFT OF THE 'B' CODE. FOR EACH BIRTH, ASK THE NUMBER OF COMPLETED MONTHS THE PREGNANCY LASTED AND RECORD 'P' IN EACH OF THE PRECEDING MONTHS ACCORDING TO THE DURATION OF PREGNANCY. (NOTE: THE NUMBER OF 'P's MUST BE ONE LESS THAN THE NUMBER OF MONTHS THAT THE PREGNANCY LASTED.)		
226	Are you pregnant now?	YES . . . . . 1 NO . . . . . 2 UNSURE 8	230
227	How many months pregnant are you? RECORD NUMBER OF COMPLETED MONTHS. **C** ENTER 'P's IN THE CALENDAR, BEGINNING WITH THE MONTH OF INTERVIEW AND FOR THE TOTAL NUMBER OF COMPLETED MONTHS.	MONTHS . . . . . ☐☐	
228	When you got pregnant, did you want to get pregnant at that time?	YES . . . . . 1 NO 2	230
229	CHECK 208: TOTAL NUMBER OF BIRTHS ONE OR MORE ☐ a) Did you want to have a baby later on or did you not want any more children? NONE ☐ b) Did you want to have a baby later on or did you not want any children?	LATER . . . . . 1 NO MORE/NONE 2	
230	Have you ever had a pregnancy that miscarried, was aborted, or ended in a stillbirth?	YES . . . . . 1 NO 2	239
231	When did the last such pregnancy end?	MONTH . . . . . ☐☐ YEAR . . . . . ☐☐☐☐	
232	CHECK 231: LAST PREGNANCY ENDED IN 2010-2016 ☐ LAST PREGNANCY ENDED IN 2009 OR EARLIER ☐		234 239

LINE NO.	233	234	235	
	In what month and year did the preceding such pregnancy end?	How many months pregnant were you when that pregnancy ended?	Since January 2010, have you had any other pregnancies that did not result in a live birth?	

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
01		NUMBER OF MONTHS YES . . . . . 1 NO 2	→ NEXT LINE → 236
02	MONTH YEAR	NUMBER OF MONTHS YES . . . . . 1 NO 2	→ NEXT LINE → 236
03	MONTH YEAR	NUMBER OF MONTHS YES . . . . . 1 NO 2	→ NEXT LINE → 236
04	MONTH YEAR	NUMBER OF MONTHS YES . . . . . 1 NO 2	
236	**C** FOR EACH PREGNANCY THAT DID NOT END IN A LIVE BIRTH IN 2010-2016 OR LATER, ENTER 'T' IN THE CALENDAR IN THE MONTH THAT THE PREGNANCY TERMINATED AND 'P' FOR THE REMAINING NUMBER OF COMPLETED MONTHS OF PREGNANCY.IF THERE ARE MORE THAN FOUR PREGNANCIES THAT DID NOT END IN A LIVE BIRTH, USE AN ADDITIONAL QUESTIONNAIRE STARTING ON THE SECOND LINE.		
237	Did you have any miscarriages, abortions or stillbirths that ended before 2010?	YES . . . . . 1 NO 2	→ 239
238	When did the last such pregnancy that terminated before 2010 end?	MONTH . . . . . YEAR	
239	When did your last menstrual period start? (DATE, IF GIVEN)	DAYS AGO . . . . . 1 WEEKS AGO . . . . . 2 MONTHS AGO . . . . . 3 YEARS AGO . . . . . 4 IN MENOPAUSE/ HAS HAD HYSTERECTOMY . . . . . 994 BEFORE LAST BIRTH . . . . . 995 NEVER MENSTRUATED 996	
240	From one menstrual period to the next, are there certain days when a woman is more likely to become pregnant?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 242
241	Is this time just before her period begins, during her period, right after her period has ended, or halfway between two periods?	JUST BEFORE HER PERIOD BEGINS . . . . . 1 DURING HER PERIOD . . . . . 2 RIGHT AFTER HER PERIOD HAS ENDED . . . . . 3 HALFWAY BETWEEN TWO PERIODS . . . . . 4 OTHER _____ (SPECIFY) 6 DON'T KNOW 8	
242	After the birth of a child, can a woman become pregnant before her menstrual period has returned?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	

SECTION 3. CONTRACEPTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
301	Now I would like to talk about family planning - the various ways or methods that a couple can use to delay or avoid a pregnancy. Have you ever heard of (METHOD)?		
01	Female Sterilization. PROBE: Women can have an operation to avoid having any more children.	YES . . . . . 1 NO 2	
02	Male Sterilization. PROBE: Men can have an operation to avoid having any more children.	YES . . . . . 1 NO 2	
03	IUCD. PROBE: Women can have a loop or coil placed inside them by a doctor or a nurse which can prevent pregnancy for one or more years.	YES . . . . . 1 NO 2	
04	Injectables. PROBE: Women can have an injection by a health provider that stops them from becoming pregnant for one or more months.	YES . . . . . 1 NO 2	
05	Implants. PROBE: Women can have one or more small rods placed in their upper arm by a doctor or nurse which can prevent pregnancy for one or more years.	YES . . . . . 1 NO 2	
06	Pill. PROBE: Women can take a pill every day to avoid becoming	YES . . . . . 1 NO 2	
07	Male condom. PROBE: Men can put a rubber sheath on their penis before sexual intercourse.	YES . . . . . 1 NO 2	
08	Female Condom. PROBE: Women can place a sheath in their vagina before sexual intercourse.	YES . . . . . 1 NO 2	
09	Emergency Contraception. PROBE: As an emergency measure, within three to five days after they have unprotected sexual intercourse, women can take special pills to prevent pregnancy.	YES . . . . . 1 NO 2	
10	Standard Days Method. PROBE: A woman uses a string of colored beads to know the days she can get pregnant. On the days she can get pregnant, she uses a condom or does not have sexual intercourse.	YES . . . . . 1 NO 2	
11	Lactational Amenorrhea Method (LAM). PROBE: Up to six months after childbirth, before the menstrual period has returned, women use a method requiring frequent breastfeeding day and night.	YES . . . . . 1 NO 2	
12	Rhythm Method. PROBE: To avoid pregnancy, women do not have sexual intercourse on the days of the month they think they can get pregnant.	YES . . . . . 1 NO 2	
13	Withdrawal. PROBE: Men can be careful and pull out before climax.	YES . . . . . 1 NO 2	
14	Have you heard of any other ways or methods that women or men can use to avoid pregnancy? IF YES, PROBE: Which method?	YES, MODERN METHOD _____ 1 (SPECIFY) YES, TRADITIONAL METHOD _____ 2 (SPECIFY) NO 3	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
302	CHECK 226: NOT PREGNANT OR UNSURE ☐ PREGNANT ☐		→ 312
303	Are you or your partner currently doing something or using any method to delay or avoid getting pregnant?	YES . . . . . 1 NO 2	→ 312
304	Which method are you using? RECORD ALL MENTIONED. IF MORE THAN ONE METHOD MENTIONED, FOLLOW SKIP INSTRUCTION FOR HIGHEST METHOD IN LIST.	FEMALE STERILIZATION . . . . . A MALE STERILIZATION . . . . . B IUCD . . . . . C INJECTABLES . . . . . D IMPLANTS . . . . . E PILL . . . . . F MALE CONDOM G FEMALE CONDOM . . . . . H EMERGENCY CONTRACEPTION . . . . . I STANDARD DAYS METHOD . . . . . J LACTATIONAL AMENORRHEA METHOD . . . . . K RHYTHM/CALENDAR METHOD L WITHDRAWAL . . . . . M OTHER MODERN METHOD X OTHER TRADITIONAL METHOD Y	A, B → 307 C, D, E → 309 G → 306 H, I, J, K, L, M, X, Y → 309
305	What is the brand name of the pills you are using? IF DON'T KNOW THE BRAND, ASK TO SEE THE PACKAGE.	MICROGYNON . . . . . 01 LOFEMINAL . . . . . 02 MICROLUT . . . . . 03 MACROVAL . . . . . 04 FLEXI PILLS . . . . . 05 FAMILIA PILLS . . . . . 06 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	→ 309
306	What is the brand name of the condoms you are using? IF DON'T KNOW THE BRAND, ASK TO SEE THE PACKAGE.	SALAMA . . . . . 01 MSD . . . . . 02 DUME . . . . . 03 ROUGH RIDER . . . . . 05 FAMILIA . . . . . 06 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	→ 309
307	In what facility did the sterilization take place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**GOVERNMENT OR PARASTATAL** NATIONAL/ZONAL/SPECIALISED HOSPITAL 11 REGIONAL REFERRAL HOSPITAL . . . . . 12 REGIONAL HOSPITAL . . . . . 13 DISTRICT HOSPITAL . . . . . 14 HEALTH CENTRE . . . . . 15 DISPENSARY . . . . . 16 CLINIC . . . . . 17 **RELIGIOUS VOLUNTARY** REFERAL/SPECIALISED HOSPITAL . . . . . 21 DISTRICT HOSPITAL . . . . . 22 HOSPITAL . . . . . 23 HEALTH CENTRE . . . . . 24 DISPENSARY . . . . . 25 CLINIC . . . . . 26 **PRIVATE** SPECIALISED HOSPITAL . . . . . 31 HOSPITAL . . . . . 32 HEALTH CENTRE . . . . . 33 DISPENSARY . . . . . 34 CLINIC . . . . . 35 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	

SECTION 3. CONTRACEPTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
308	In what month and year was the sterilization performed?	MONTH . . . . . ☐☐ YEAR . . . . . ☐☐☐☐	
308A	Did you pay for sterilization?	YES . . . . . 1 NO 2	→ 310
308B	How much did you pay for sterilization?	TSHS . . . . . ☐☐☐☐☐☐☐☐ DON'T KNOW 99999998	→ 310
309	Since what month and year have you been using (CURRENT METHOD) without stopping? PROBE: For how long have you been using (CURRENT METHOD) now without stopping?	MONTH . . . . . ☐☐ YEAR . . . . . ☐☐☐☐	
310	CHECK 308 AND 309, 215 AND 231: ANY BIRTH OR PREGNANCY TERMINATION AFTER MONTH AND YEAR OF START OF USE OF CONTRACEPTION IN 308 OR 309 NO ☐ ↓ YES ☐ → GO BACK TO 308 OR 309, PROBE AND RECORD MONTH AND YEAR AT START OF CONTINUOUS USE OF CURRENT METHOD (MUST BE AFTER LAST BIRTH OR PREGNANCY TERMINATION).		

SECTION 3. CONTRACEPTION

311 CHECK 308 AND 309:

YEAR IS 2010-2016

C ENTER CODE FOR METHOD USED IN MONTH OF INTERVIEW IN THE CALENDAR AND IN EACH MONTH BACK TO THE DATE STARTED USING.

THEN CONTINUE

YEAR IS 2010 OR EARLIER

C ENTER CODE FOR METHOD USED IN MONTH OF INTERVIEW IN THE CALENDAR AND EACH MONTH BACK TO JANUARY 2010 .

THEN

(SKIP TO 324)

312 I would like to ask you some questions about the times you or your partner may have used a method to avoid getting pregnant during the last few years.

USE CALENDAR TO PROBE FOR EARLIER PERIODS OF USE AND NONUSE, STARTING WITH MOST RECENT USE, BACK TO JANUARY 2010. USE NAMES OF CHILDREN, DATES OF BIRTH, AND PERIODS OF PREGNANCY AS REFERENCE POINTS.

C IN **COLUMN 1**, ENTER METHOD USE CODE OR '0' FOR NONUSE IN EACH BLANK MONTH.

ILLUSTRATIVE QUESTIONS:

a) When was the last time you used a method? Which method was that?
b) When did you start using that method? How long after the birth of (NAME)?
c) How long did you use the method then?

C IN **COLUMN 2**, ENTER CODES FOR DISCONTINUATION NEXT TO THE LAST MONTH OF USE. NUMBER OF CODES IN COLUMN 2 MUST BE SAME AS NUMBER OF INTERRUPTIONS OF METHOD USE IN COLUMN 1.

ASK WHY SHE STOPPED USING THE METHOD. IF A PREGNANCY FOLLOWED, ASK WHETHER SHE BECAME PREGNANT UNINTENTIONALLY WHILE USING THE METHOD OR DELIBERATELY STOPPED TO GET PREGNANT.

ILLUSTRATIVE QUESTIONS:

d) Why did you stop using the (METHOD)? Did you become pregnant while using (METHOD), or did you stop to get pregnant, or did you stop for some other reason?
e) IF DELIBERATELY STOPPED TO BECOME PREGNANT, ASK: How many months did it take you to get pregnant after you stopped using (METHOD)? AND ENTER ‘0’ IN EACH SUCH MONTH IN COLUMN 1.

SECTION 3. CONTRACEPTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
313	CHECK THE CALENDAR FOR USE OF ANY CONTRACEPTIVE METHOD IN ANY MONTH NO METHOD USED ☐ ↓ ANY METHOD USED ☐ →		315
314	Have you ever used anything or tried in any way to delay or avoid getting pregnant?	YES . . . . . 1 NO 2	→ 326
315	CHECK 304: CIRCLE METHOD CODE: IF MORE THAN ONE METHOD CODE CIRCLED IN 304, CIRCLE CODE FOR HIGHEST METHOD IN LIST.	NO CODE CIRCLED / QUESTION NOT ASKED 00 FEMALE STERILIZATION . . . . . 01 MALE STERILIZATION . . . . . 02 IUD . . . . . 03 INJECTABLES . . . . . 04 IMPLANTS . . . . . 05 PILL . . . . . 06 MALE CONDOM 07 FEMALE CONDOM . . . . . 08 EMERGENCY CONTRACEPTION . . . . . 09 STANDARD DAYS METHOD . . . . . 10 LACTATIONAL AMENORRHEA METHOD . . . . . 11 RHYTHM/CALENDAR METHOD . . . . . 12 WITHDRAWAL . . . . . 13 OTHER MODERN METHOD . . . . . 95 OTHER TRADITIONAL METHOD 96	→ 326 → 319 → 327 → 323
316	You first started using (CURRENT METHOD) in (DATE FROM 308 OR 309). Where did you get it at that time? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**GOVERNMENT/PARASTATAL** NATIONAL/ZONAL/SPEC.HOSPITAL . . . . . 11 REGIONAL REFERRAL HOSPITAL . . . . . 12 REGIONAL HOSPITAL . . . . . 13 DISTRICT HOSPITAL . . . . . 14 HEALTH CENTRE . . . . . 15 DISPENSARY . . . . . 16 CLINIC . . . . . 17 CHW . . . . . 18 **RELIGIOUS/VOLUNTARY** REFERAL SPECIALISED HOSPITAL . . . . . 21 DISTRICT HOSPITAL . . . . . 22 HOSPITAL . . . . . 23 HEALTH CENTRE . . . . . 24 DISPENSARY . . . . . 25 CLINIC . . . . . 26 **PRIVATE MEDICAL SECTOR** SPECIALISED HOSPITAL . . . . . 31 HOSPITAL . . . . . 32 HEALTH CENTRE . . . . . 33 DISPENSARY . . . . . 34 CLINIC . . . . . 35 **OTHER** PHARMACY . . . . . 41 ACREDITED DRUG DISPENSING OUTLET (ADD(42 NGO . . . . . 43 VCT CENTRE . . . . . 44 SHOP/KIOSK . . . . . 45 BAR . . . . . 46 GUEST HOUSE/HOTEL . . . . . 47 FRIEND/RELATIVE/NEIGHBOUR . . . . . 48 OTHER _____ (SPECIFY) 96	
316A	Did you pay for (CURRENT METHOD)?	YES . . . . . 1 NO 2	→ 317
316B	How much did you pay for (CURRENT METHOD)?	TSHS . . . . . ☐☐☐☐☐☐ DON'T KNOW 999998	

SECTION 3. CONTRACEPTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES		SKIP
317	CHECK 304: CIRCLE METHOD CODE: IF MORE THAN ONE METHOD CODE CIRCLED IN 304, CIRCLE CODE FOR HIGHEST METHOD IN LIST.	IUD INJECTABLES IMPLANTS PILL MALE CONDOM FEMALE CONDOM EMERGENCY CONTRACEPTION STANDARD DAYS METHOD OTHER MODERN METHOD OTHER TRADITIONAL METHOD	03 04 05 06 07 08 09 10 95 96	 → 323 → 322 → 323
318	At that time, were you told about side effects or problems you might have with the method?	YES NO	1 2	→ 321 → 320
319	When you got sterilized, were you told about side effects or problems you might have with the method?	YES NO	1 2	→ 321
320	Were you ever told by a health or family planning worker about side effects or problems you might have with the method?	YES NO	1 2	 → 322
321	Were you told what to do if you experienced side effects or problems?	YES NO	1 2	
322	CHECK 318 AND 319: YES → a) At that time, were you told about other methods of family planning that you could use? NO / NOT ASKED → b) When you obtained (CURRENT METHOD FROM 315) from (SOURCE OF METHOD FROM 307 OR 316), were you told about other methods of family planning that you could use?	YES NO	1 2	→ 324
323	Were you ever told by a health or family planning worker about other methods of family planning that you could use?	YES NO	1 2	
324	CHECK 304: CIRCLE METHOD CODE: IF MORE THAN ONE METHOD CODE CIRCLED IN 304, CIRCLE CODE FOR HIGHEST METHOD IN LIST.	FEMALE STERILIZATION MALE STERILIZATION IUD INJECTABLES IMPLANTS PILL CONDOM FEMALE CONDOM EMERGENCY CONTRACEPTION STANDARD DAYS METHOD LACTATIONAL AMENORRHEA METHOD RHYTHM METHOD WITHDRAWAL OTHER MODERN METHOD OTHER TRADITIONAL METHOD	01 02 03 04 05 06 07 08 09 10 11 12 13 95 96	→ 327 → 327 → 327

SECTION 3. CONTRACEPTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
325	Where did you obtain (CURRENT METHOD) the last time? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**GOVERNMENT/PARASTATAL** NATIONAL/ZONAL/SPEC.HOSPITAL . . . . . 11 REGIONAL REFERRAL HOSPITAL . . . . . 12 REGIONAL HOSPITAL . . . . . 13 DISTRICT HOSPITAL . . . . . 14 HEALTH CENTRE . . . . . 15 DISPENSARY . . . . . 16 CLINIC . . . . . 17 CHW . . . . . 18 **RELIGIOUS/VOLUNTARY** REFERAL SPEC.HOSPITAL . . . . . 21 DISTRICT HOSPITAL . . . . . 22 HOSPITAL . . . . . 23 HEALTH CENTRE . . . . . 24 DISPENSARY . . . . . 25 CLINIC . . . . . 26 **PRIVATE** SPECIALIZED HOSPITAL . . . . . 31 HOSPITAL . . . . . 32 HEALTH CENTRE . . . . . 33 DISPENSARY . . . . . 34 CLINIC . . . . . 35 **OTHER** PHARMACY . . . . . 41 ADDO . . . . . 42 NGO . . . . . 43 VCT CENTRE . . . . . 44 SHOP/KIOSK . . . . . 45 BAR . . . . . 46 GUEST HOUSE/HOTEL . . . . . 47 FRIEND/RELATIVE/NEIGHBO . . . . . 48 OTHER _____ (SPECIFY) 96	→ 327
326	Do you know of a place where you can obtain a method of family planning?	YES . . . . . 1 NO 2	
327	In the last 12 months, were you visited by a fieldworker?	YES . . . . . 1 NO 2	→ 329
328	Did the fieldworker talk to you about family planning?	YES . . . . . 1 NO 2	
329	CHECK 202: LIVING CHILDREN YES ☐ NO ☐ a) In the last 12 months, have you visited a health facility for care for yourself or your children? b) In the last 12 months, have you visited a health facility for care for yourself?	YES . . . . . 1 NO 2	→ 401
330	Did any staff member at the health facility speak to you about family planning methods?	YES . . . . . 1 NO 2	

SECTION 4. PREGNANCY AND POSTNATAL CARE

401	CHECK 224: ONE OR MORE BIRTHS IN 2010-2016 ☐ ↓ NO BIRTHS IN 2010-2016 ☐ → 648		
402	CHECK 215. RECORD THE BIRTH HISTORY NUMBER IN 403 AND THE NAME AND SURVIVAL STATUS IN 404 FOR EACH BIRTH IN 2010-2016. ASK THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH.IF THERE ARE MORE THAN 2 BIRTHS, USE LAST COLUMN OF ADDITIONAL QUESTIONNAIRE(S).		
403	BIRTH HISTORY NUMBER FROM 212 IN BIRTH HISTORY.	LAST BIRTH BIRTH HISTORY NUMBER . . . . . ☐☐	NEXT-TO-LAST BIRTH BIRTH HISTORY NUMBER . . . . . ☐☐
404	FROM 212 AND 216:	NAME _____ LIVING ☐ ↓ DEAD ☐ ↓	NAME _____ LIVING ☐ ↓ DEAD ☐ ↓
405	When you got pregnant with (NAME), did you want to get pregnant at that time?	YES . . . . . 1 (SKIP TO 408) ← NO 2	YES . . . . . 1 (SKIP TO 426) ← NO 2
406	CHECK 208: ONLY ONE BIRTH ☐ ↓ / MORE THAN ONE BIRTH ☐ ↓ a) Did you want to have a baby later on, or did you not want any children? b) Did you want to have a baby later on, or did you not want any more children?	LATER . . . . . 1 NO MORE/NONE . . . . . 2 (SKIP TO 408) ←	LATER . . . . . 1 NO MORE/NONE . . . . . 2 (SKIP TO 426) ←
407	How much longer did you want to wait?	MONTHS . . . . . 1 ☐☐ YEARS . . . . . 2 ☐☐ DON'T KNOW 998	MONTHS . . . . . 1 ☐☐ YEARS . . . . . 2 ☐☐ DON'T KNOW 998
408	Did you see anyone for antenatal care for this pregnancy?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 414) ←	
409	Whom did you see? Anyone else? PROBE TO IDENTIFY EACH TYPE OF PERSON AND RECORD ALL	**HEALTH PERSONNEL** DOCTOR/AMO . . . . . A CLINICAL OFFICER . . . . . B ASS. CLINICAL OFFICER . . . C NURSE/MIDWIFE . . . . . D ASS. NURSE . . . . . E MCH AIDE . . . . . F **OTHER PERSON** COMMUNITY HEALTH WORKE G TRAINED TBA/TBA . . . . . H OTHER _____ X (SPECIFY)	

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
410	Where did you receive antenatal care for this pregnancy? Anywhere else? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**GOVERNMENT OR PARASTATAL** NATIONAL/ZONAL/REFERAL/ SPECIALISED HOSPITAL . . . . . A REGIONAL REFERAL HOSPITAL B REGIONAL HOSPITAL . . . . . C DISTRICT HOSPITAL . . . . . D HEALTH CENTRE . . . . . E DISPENSARY . . . . . F CLINIC . . . . . G CHW . . . . . H **RELIGIOUS VOLUNTARY** REFERAL/SPECIALISED HOSP . . I DISTRICT HOSPITAL . . . . . J HOSPITAL . . . . . K HEALTH CENTRE . . . . . L DISPENSARY . . . . . M CLINIC . . . . . N **PRIVATE** SPECIALISED HOSPITAL . . . . . O HOSPITAL . . . . . P HEALTH CENTRE . . . . . Q DISPENSARY . . . . . R CLINIC . . . . . S OTHER _____ X (SPECIFY)	
410A	Did you pay for antenatal care?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 411)	
410B	How much did you pay for Antenatal care?	TSHS [ ][ ][ ][ ][ ] DON'T KNOW 98	
411	How many months pregnant were you when you first received antenatal care for this pregnancy?	MONTHS . . . . . [ ][ ] DON'T KNOW 98	
412	How many times did you receive antenatal care during this pregnancy?	NUMBER OF TIMES . . . . . [ ][ ] DON'T KNOW 98	
412A	During this pregnancy, did your husband did any of the following? a) Stoped you from receiving ANC? b) Encouraged you to receive ANC? c) Had no interest in you receiving ANC?	YES NO a) STOP . . . . . 1 2 b) ENCOURAGE . . 1 2 c) NO INTEREST . . 1 2	
413	As part of your antenatal care during this pregnancy, were any of the following done at least once: a) Was your blood pressure measured? b) Did you give a urine sample? c) Did you give a blood sample?	YES NO a) BP . . . . . 1 2 b) URINE . . . . . 1 2 c) BLOOD 1 2	
414	During this pregnancy, were you given an injection in the arm to prevent the baby from getting tetanus, that is, convulsions after birth?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 417) DON'T KNOW 8	
415	During this pregnancy, how many times did you get a tetanus injection?	TIMES . . . . . [ ] DON'T KNOW 8	

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
416	CHECK 415:	2 OR MORE TIMES → (SKIP TO 420) OTHER ↓	
417	At any time before this pregnancy, did you receive any tetanus injections?	YES . . . . . 1 NO . . . . . 2 → (SKIP TO 420) DON'T KNOW 8	
418	Before this pregnancy, how many times did you receive a tetanus injection? IF 7 OR MORE TIMES, RECORD '7'.	TIMES . . . . . ☐☐ DON'T KNOW 8	
419	How many years ago did you receive the last tetanus injection before this pregnancy?	YEARS AGO . . . . . ☐☐ DON'T KNOW 8	
420	During this pregnancy, were you given or did you buy any iron tablets or iron syrup? SHOW TABLETS/SYRUP.	YES . . . . . 1 NO . . . . . 2 → (SKIP TO 422) DON'T KNOW 8	
421	During the whole pregnancy, for how many days did you take the tablets or syrup? IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER OF DAYS.	DAYS . . . . . ☐☐☐ DON'T KNOW 998	
422	During this pregnancy, did you take any drug for intestinal worms?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
423	During this pregnancy, did you take SP/Fansidar to prevent you from getting malaria?	YES . . . . . 1 NO . . . . . 2 → (SKIP TO 426) DON'T KNOW 8	
424	How many times did you take SP/Fansidar during this pregnancy?	TIMES . . . . . ☐☐	
425	Did you get the SP/Fansidar during any antenatal care visit, during another visit to a health facility or from another source? IF MORE THAN ONE SOURCE, RECORD THE HIGHEST SOURCE ON THE LIST.	ANTENATAL VISIT . . . . . 1 ANOTHER FACILITY VISIT . . . . . 2 OTHER SOURCE 6	
426	When (NAME) was born, was (NAME) very large, larger than average, average, smaller than average, or very small?	VERY LARGE . . . . . 1 LARGER THAN AVERAGE . . . . . 2 AVERAGE . . . . . 3 SMALLER THAN AVERAGE . . . . . 4 VERY SMALL . . . . . 5 DON'T KNOW 8	VERY LARGE . . . . . 1 LARGER THAN AVERAGE . . . . . 2 AVERAGE . . . . . 3 SMALLER THAN AVERAGE . . . . . 4 VERY SMALL . . . . . 5 DON'T KNOW 8
427	Was (NAME) weighed at birth?	YES . . . . . 1 NO . . . . . 2 → (SKIP TO 429) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 → (SKIP TO 429) DON'T KNOW 8

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
428	How much did (NAME) weigh? RECORD WEIGHT IN KILOGRAMS FROM HEALTH CARD, IF AVAILABLE.	KG FROM CARD 1 ☐☐.☐☐☐ KG FROM RECALL 2 ☐☐.☐☐☐ DON'T KNOW 99998	KG FROM CARD 1 ☐☐.☐☐☐ KG FROM RECALL 2 ☐☐.☐☐☐ DON'T KNOW 99998
429	Who assisted with the delivery of (NAME)? Anyone else? PROBE FOR THE TYPE(S) OF PERSON(S) AND RECORD ALL MENTIONED. IF RESPONDENT SAYS NO ONE ASSISTED, PROBE TO DETERMINE WHETHER ANY ADULTS WERE PRESENT AT THE DELIVERY.	**HEALTH PERSONNEL** DOCTOR/AMO . . . . . A CLINICAL OFFICER . . . . . B ASS. CLINICAL OFFICER . . C NURSE/MIDWIFE . . . . . D ASS. NURSE . . . . . E MCH AIDE . . . . . F **OTHER PERSON** CHW . . . . . G TRAINED TBA/TBA . . . . . H RELATIVE/FRIED . . . . . I OTHER _____ X (SPECIFY) NO ONE ASSISTED . . . . . Y	**HEALTH PERSONNEL** DOCTOR/AMO . . . . . A CLINICAL OFFICER . . . . . B ASS. CLINICAL OFFICER . . C NURSE/MIDWIFE . . . . . D ASS. NURSE . . . . . E MCH AIDE . . . . . F **OTHER PERSON** CHW . . . . . G TRAINED TBA/TBA . . . . . H RELATIVE/FRIEND . . . . . I OTHER _____ X (SPECIFY) NO ONE ASSISTED . . . . . Y
429A	Did you have a companion during labor and delivery of (NAME)?	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2
429B	Did you pay for delivery of (NAME)?	YES . . . . . 1 NO . . . . . 2 → (SKIP TO 430)	YES . . . . . 1 NO . . . . . 2 → (SKIP TO 430)
429C	How much did you pay for delivery of (NAME)?	TSHS ☐☐☐☐☐☐☐☐ DON'T KNOW 99999998	TSHS ☐☐☐☐☐☐☐☐ DON'T KNOW 99999998
430	Where did you give birth to (NAME)? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**HOME** HER HOME . . . . . 11 OTHER HOME . . . . . 12 → (SKIP TO 434) TBA PREMISES . . . . . 13 **GOVERNMENT OR PARASTATAL** NATIONAL/ZONAL/ SPECIALISED HOSPITAL . . . 21 REGIONAL REFERAL HOSPITAL 22 REGIONAL HOSPITAL . . . . . 23 DISTRICT HOSPITAL . . . . . 24 HEALTH CENTRE . . . . . 25 DISPENSARY . . . . . 26 CLINIC . . . . . 27 **RELIGIOUS VOLUNTARY** REFERAL/SPECALIZE HOSPITAL 31 DISTRICT HOSPITAL . . . . . 32 HOSPITAL . . . . . 33 HEALTH CENTRE . . . . . 34 DISPENSARY . . . . . 35 CLINIC . . . . . 36 **PRIVATE** SPECIALISED HOSPITAL . . . . . 41 HOSPITAL . . . . . 42 HEALTH CENTRE . . . . . 43 DISPENSARY . . . . . 44 CLINIC . . . . . 45 OTHER _____ 96 (SPECIFY) → (SKIP TO 434)	**HOME** HER HOME . . . . . 11 OTHER HOME . . . . . 12 → (SKIP TO 434) TBA PREMISES . . . . . 13 **GOVERNMENT OR PARASTATAL** NATIONAL/ZONAL/ SPECIALISED HOSPITAL . . . 21 REGIONAL REFERAL HOSPITAL 22 REGIONAL HOSPITAL . . . . . 23 DISTRICT HOSPITAL . . . . . 24 HEALTH CENTRE . . . . . 25 DISPENSARY . . . . . 26 CLINIC . . . . . 27 **RELIGIOUS VOLUNTARY** REFERAL/SPECALIZE HOSPITAL 31 DISTRICT HOSPITAL . . . . . 32 HOSPITAL . . . . . 33 HEALTH CENTRE . . . . . 34 DISPENSARY . . . . . 35 CLINIC . . . . . 36 **PRIVATE** SPECIALISED HOSPITAL . . . . . 41 HOSPITAL . . . . . 42 HEALTH CENTRE . . . . . 43 DISPENSARY . . . . . 44 CLINIC . . . . . 45 OTHER _____ 96 (SPECIFY) → (SKIP TO 434)

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
431	How long after (NAME) was delivered did you stay there? IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS . . . . . 1 ☐☐ DAYS . . . . . 2 ☐☐ WEEKS . . . . . 3 ☐☐ DON'T KNOW 998	
432	Was (NAME) delivered by caesarean, that is, did they cut your belly open to take the baby out?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 434)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 434)
433	When was the decision made to have the caesarean section? Was it before or after your labor pains started?	BEFORE . . . . . 1 AFTER 2	BEFORE . . . . . 1 AFTER 2
434	Immediately after the birth, was (NAME) put directly on the bare skin of your chest?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
434A	CHECK Q430:	CODE 11, 12, 13 or 96 ☐ OTHER ☐ (SKIP TO 449)	CODE 11, 12,13 or 96 ☐ OTHER ☐ (SKIP TO 459)
434B	After you delivered, did the health facility give you a birth notification form for (NAME)?	YES . . . . . 1 (SKIP TO 435) NO 2	YES . . . . . 1 (SKIP TO 459) NO 2
434C	Did you get a birth notification from any other place?	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2
435	I would like to talk to you about checks on your health after delivery, for example, someone asking you questions about your health or examining you. Did anyone check on your health while you were still in the facility?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 438)	
436	How long after delivery did the first check take place? IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS . . . . . 1 ☐☐ DAYS . . . . . 2 ☐☐ WEEKS . . . . . 3 ☐☐ DON'T KNOW 998	
437	Who checked on your health at that time? PROBE FOR MOST QUALIFIED PERSON.	**HEALTH PERSONNEL** DOCTOR/AMO . . . . . 11 CLINICAL OFFICER . . . . . 12 ASS. CLINICAL OFFICER . . 13 NURSE/MIDWIFE . . . . . 14 ASS. NURSE . . . . . 15 MCH AIDE . . . . . 16 **OTHER PERSON** CHW . . . . . 21 TRAINED TBA/TE . . . . . 22 RELATIVE/FRIEND . . . . . 23 OTHER _____ 96 (SPECIFY)	

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
438	Now I would like to talk to you about checks on (NAME)'s health after delivery – for example, someone examining (NAME), checking the cord, or seeing if (NAME) is OK. Did anyone check on (NAME)'s health while you were still in the facility?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 441) DON'T KNOW 8	
439	How long after delivery was (NAME)'s health first checked? IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS . . . . . 1 ☐☐ DAYS . . . . . 2 ☐☐ WEEKS . . . . . 3 ☐☐ DON'T KNOW 998	
440	Who checked on (NAME)'s health at that time? PROBE FOR MOST QUALIFIED PERSON.	**HEALTH PERSONNEL** DOCTOR/AMO . . . . . 11 CLINICAL OFFICER . . . . . 12 ASS. CLINICAL OFFICER . . 13 NURSE/MIDWIFE . . . . . 14 ASS. NURSE . . . . . 15 MCH AIDE . . . . . 16 **OTHER PERSON** CHW . . . . . 21 TRAINED TBA/TBA . . . . . 22 RELATIVE/FRIEND . . . . . 23 OTHER _____ 96 (SPECIFY)	
441	Now I want to talk to you about what happened after you left the facility. Did anyone check on your health after you left the facility?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 445)	
442	How long after delivery did that check take place? IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS . . . . . 1 ☐☐ DAYS . . . . . 2 ☐☐ WEEKS . . . . . 3 ☐☐ DON'T KNOW 998	
443	Who checked on your health at that time? PROBE FOR MOST QUALIFIED PERSON.	**HEALTH PERSONNEL** DOCTOR/AMO . . . . . 11 CLINICAL OFFICER . . . . . 12 ASS. CLINICAL OFFICER . . 13 NURSE/MIDWIFE . . . . . 14 ASS. NURSE . . . . . 15 MCH AIDE . . . . . 16 **OTHER PERSON** CHW . . . . . 21 TRAINED TBA/TE . . . . . 22 RELATIVE/FRIEND . . . . . 23 OTHER _____ 96 (SPECIFY)	

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
444	Where did the check take place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**HOME** HER HOME . . . . . 11 OTHER HOME . . . . . 12 TBA PREMISES . . . . . 13 **GOVERNMENT/PARASTATAL** ZONAL/REFERAL/SPEC.H(. . 21 REFERAL REGIONAL HOSP. . 22 REGIONAL HOSPITAL . . . . . 23 DISTRICT HOSPITAL . . . . . 24 HEALTH CENTRE . . . . . 25 DISPENSARY . . . . . 26 CLINIC . . . . . 27 **RELIGIOUS/VOLUNTARY** REFERAL/SPEC. HOSPITAL 31 DISTRICT HOSPITAl . . . . . 32 HOSPITAL . . . . . 33 HEALTH CENTRE . . . . . 34 DISPENSARY . . . . . 35 CLINIC . . . . . 36 **PRIVATE** SPECIALISED HOSPITAL . . . . 41 HOSPTAL . . . . . 42 HEALTH CENTRE . . . . . 43 DISPENSARY . . . . . 44 CLINIC . . . . . 45 OTHER _____ 96 (SPECIFY)	
444A	Did you pay for your health check at that time?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 444C)	
444B	How much did you pay for the health check?	TSHS ☐☐☐☐☐☐ DON'T KNOW 999998	
444C	Among other checks after delivery, did any health care provider do the following: a) Check or ask about vaginal bleeding? b) Examine your abdomen i.e uterine contraction, fundal height ? c) Check your blood pressure?	YES NO DK a) VAG. BLEEDING 1 2 8 b) ABDOMEN . . . . . 1 2 8 c) BP 1 2 8	
444D	In total, how many times was your health checked after delivery	NBRE CHECKS . . . . . ☐☐	
445	I would like to talk to you about checks on (NAME)'s health after you left (FACILITY IN 430). Did any health care provider or a traditional birth attendant check on (NAME)'s health in the two months after you left (FACILITY IN 430)?	YES . . . . . 1 NO . . . . . 2 DIED AT THE FACIL . . . . . 3 DON'T KNOW . . . . . 8 (SKIP TO 457)	
446	How many hours, days or weeks after the birth of (NAME) did that check take place? IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS . . . . . 1 ☐☐ DAYS . . . . . 2 ☐☐ WEEKS . . . . . 3 ☐☐ DON'T KNOW 998	

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
447	Who checked on (NAME)'s health at that time? PROBE FOR MOST QUALIFIED PERSON.	**HEALTH PERSONNEL** DOCTOR/AMO . . . . . 11 CLINICAL OFFICER . . . . . 12 ASS. CLINICAL OFFICER . . . 13 NURSE/MIDWIFE . . . . . 14 ASS.NURSE . . . . . 15 MCH AIDE . . . . . 16 **OTHER PERSON** CHW . . . . . 21 TRAINED TBA/TBA . . . . . 22 RELATIVE/FRIEND . . . . . 23 OTHER _____ 96 (SPECIFY)	
448	Where did this check of (NAME) take place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**HOME** HER HOME . . . . . 11 OTHER HOME . . . . . 12 TBA PREMISES . . . . . 13 **GOVERNMENT/PARASTATAL** ZONAL/SPEC.HOSPITAL 21 REFERAL REGIONAL HOSP. 22 REGIONAL HOSPITAL . . . . . 23 DISTRICT HOSPITAL . . . . . 24 HEALTH CENTRE . . . . . 25 DISPENSARY . . . . . 26 CLINIC . . . . . 27 **RELIGIOUS/VOLUNTARY** REFERAL/SPEC. HOSPITAL 31 DISTRICT HOSPITAL . . . . . 32 HOSPITAL . . . . . 33 HEALTH CENTRE . . . . . 34 DISPENSARY . . . . . 35 CLINIC . . . . . 36 **PRIVATE** SPECIALISED HOSPITAL . . . 41 HOSPITAL . . . . . 42 HEALTH CENTRE . . . . . 43 DISPENSARY . . . . . 44 CLINIC . . . . . 45 OTHER _____ 96 (SPECIFY)	
448A	Did you pay for the health checks of (NAME)?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 457)	
448B	How much did you pay for the health checks?	TSHS ☐☐☐☐☐☐ DON'T KNOW 999998 (SKIP TO 457)	
449	I would like to talk to you about checks on your health after delivery, for example, someone asking you questions about your health or examining you. Did anyone check on your health after you gave birth to (NAME)?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 453)	
450	How long after delivery did the first check take place? IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS . . . . . 1 ☐☐ DAYS . . . . . 2 ☐☐ WEEKS . . . . . 3 ☐☐ DON'T KNOW 999998	

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
451	Who checked on your health at that time? PROBE FOR MOST QUALIFIED PERSON.	**HEALTH PERSONNEL** DOCTOR/AMO . . .. 11 CLINICAL OFFICER . . .. 12 ASS. CLINICAL OFFICE . . . . . 13 NURSE/MIDWIFE . . . . . 14 ASS. NURSE 15 MCH AIDE . . . . . 16 **OTHER PERSON** CHW . . . . . 21 TRAINED TBA/TBA . . . . . 22 RELATIVE/FRIEND . . . . . 23 OTHER _____ 96 (SPECIFY)	
452	Where did this first check take place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**HOME** HER HOME . . . . . 11 OTHER HOME . . . . . 12 TBA PREMISES . . . . 13 **GOVERNMENT/PARASTATAL** ZONAL/REFERAL/SPEC.HOSP 21 REFERAL REGIONAL HOSP. 22 REGIONAL HOSPITAL . . . . . 23 DISTRICT HOSPITAL . . . . . 24 HEALTH CENTRE . . . . . 25 DISPENSARY . . . . . 26 CLINIC . . . . . 27 **RELIGIOUS/VOLUNTARY** REFERAL/SPEC. HOSPITAL 31 DISTRICT HOSPITAL . . . . . 32 HOSPITAL . . . . . 33 HEALTH CENTRE . . . . . 34 DISPENSARY . . . . . 35 CLINIC . . . . . 36 **PRIVATE** SPECIALISED HOSPITAL . . . 41 HOSPITAL . . . . . 42 HEALTH CENTRE . . . . . 43 DISPENSARY . . . . . 44 CLINIC . . . . . 45 OTHER _____ 96 (SPECIFY)	
452A	Did you pay for this first check of your health?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 452C) ←	
452B	How much did you pay for the health check?	TSHS ☐☐☐☐☐☐ DON'T KNOW 999998	
452C	Among other checks after delivery, did any health care provider do the following: a) Check or ask about vaginal bleeding? b) Examine your abdomen i.e uterine contraction, fundal height? c) Check your blood pressure?	YES NO DK a) VAG. BLEEDING 1 2 8 b) ABDOMEN . . . . . 1 2 8 c) BP 1 2 8	
452D	In total, how many times was your health checked after delivery?	NBRE CHECKS . . . ☐☐	

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
453	I would like to talk to you about checks on (NAME)'s health after delivery – for example, someone examining (NAME), checking the cord, or seeing if (NAME) is OK. In the two months after (NAME) was born, did any health care provider or a traditional birth attendant check on (NAME)'s health?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 457) ← DON'T KNOW 8	
454	How many hours, days or weeks after the birth of (NAME) did the first check take place? IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS AFTER BIRTH . . . . . 1 ☐☐ DAYS AFTER BIRTH . . . . . 2 ☐☐ WEEKS AFTER BIRTH . . . . . 3 ☐☐ DON'T KNOW 998	
455	Who checked on (NAME)'s health at that time? PROBE FOR MOST QUALIFIED PERSON.	**HEALTH PERSONNEL** DOCTOR/AMO . . . . . 11 CLINICAL OFFICER . . . . . 12 ASS. CLINICAL OFFICER . . 13 NURSE/MIDWIFE . . . . . 14 ASS. NURSE 15 MCH AIDE . . . . . 16 **OTHER PERSON** CHW 21 TRAINED TBA/TBA . . . . . 22 RELATIVE/FRIEND . . . . . 23 OTHER _____ 96 (SPECIFY)	
456	Where did this first check of (NAME) take place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**HOME** HER HOME . . . . . 11 OTHER HOME . . . . . 12 TBA PREMISES . . . . . 13 **GOVERNMENT/PARASTATAL** ZONAL/REFERAL/SPEC.HOSP 21 REFERAL REGIONAL HOSP. 22 REGIONAL HOSPITAL . . . . . 23 DISTRICT HOSPITAL . . . . . 24 HEALTH CENTRE . . . . . 25 DISPENSARY . . . . . 26 CLINIC . . . . . 27 **RELIGIOUS/VOLUNTARY** REFERAL/SPEC. HOSPITAL 31 DISTRICT HOSPITAL . . . . . 32 HOSPITAL . . . . . 33 HEALTH CENTRE . . . . . 34 DISPENSARY . . . . . 35 CLINIC . . . . . 36 **PRIVATE** SPECIALISED HOSPITAL . . . 41 HOSPITAL . . . . . 42 HEALTH CENTRE . . . . . 43 DISPENSARY . . . . . 44 CLINIC . . . . . 45 OTHER _____ 96 (SPECIFY)	
456A	Did you pay for your health check at that time?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 457) ←	
456B	How much did you pay for the health check?	TSHS ☐☐☐☐☐☐ DON'T KNOW 999998	

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
457	During the first two days after (NAME)'s birth, did any health care provider do the following: a) Examine the cord? b) Measure (NAME)'s temperature? c) Counsel you on danger signs for newborns? d) Counsel you on breastfeeding? e) Observe (NAME) breastfeeding?	YES NO DK a) CORD . . . . . 1 2 8 b) TEMP. . . . . 1 2 8 c) SIGNS . . . . . 1 2 8 d) COUNSEL BREAST-FEED 1 2 8 e) OBSERVE BREAST-FEED 1 2 8	
457A	After (NAME) was born, were you given or did you buy any iron and folic acid tablets or syrup?	YES . . . . . 1 NO 2	
458	Has your menstrual period returned since the birth of (NAME)?	YES . . . . . 1 (SKIP TO 460) NO . . . . . 2 (SKIP TO 461)	
459	Did your period return between the birth of (NAME) and your next pregnancy?		YES . . . . . 1 NO . . . . . 2 (SKIP TO 463)
460	For how many months after the birth of (NAME) did you not have a period?	MONTHS . . . . . ☐☐ DON'T KNOW 98	MONTHS . . . . . ☐☐ DON'T KNOW 98
461	CHECK 226: IS RESPONDENT PREGNANT?	NOT PREGNANT ☐ PREGNANT OR UNSURE ☐ (SKIP TO 463)	
462	Have you had sexual intercourse since the birth of (NAME)?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 464)	
463	For how many months after the birth of (NAME) did you not have sexual intercourse?	MONTHS . . . . . ☐☐ DON'T KNOW 98	MONTHS . . . . . ☐☐ DON'T KNOW 98
464	Did you ever breastfeed (NAME)?	YES . . . . . 1 (SKIP TO 466) NO 2	YES . . . . . 1 NO 2
465	CHECK 404: IS CHILD LIVING?	LIVING ☐ (SKIP TO 470) DEAD ☐ (GO TO 471)	
466	How long after birth did you first put (NAME) to the breast? IF LESS THAN 1 HOUR, RECORD '00' HOURS; IF LESS THAN 24 HOURS, RECORD HOURS; OTHERWISE, RECORD DAYS.	IMMEDIATELY . . . . . 000 HOURS . . . . . 1 ☐☐ DAYS . . . . . 2 ☐☐	
467	In the first three days after delivery, was (NAME) given anything to drink other than breast milk?	YES . . . . . 1 NO 2	

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
468	CHECK 404: IS CHILD LIVING?	LIVING ☐ DEAD ☐ (GO TO 471)	LIVING ☐ DEAD ☐ (GO TO 471)
469	Are you still breastfeeding (NAME)?	YES . . . . . 1 NO 2	
469A	How old was (NAME) when she/he was first fed something other than breast milk? INCLUDES: JUICE, COW'S MILK, WATER, SUGAR, SOLID FOODS OR ANYTHING ELSE IF LESS THAN ONE MONTH, RECORD 00	MONTHS . . . . . ☐☐ NOT STARTED GIVING ANYTHING . . . . . 96 DON'T KNOW 98	
470	Did (NAME) drink anything from a bottle with a nipple yesterday or last night?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
470A	Do you have birth certificate for (NAME)? ASK TO SEE CERTIFICATE	YES, OBSERVED . . . . . 1 YES, NOT OBSERVED . . . . . 2 NO 3	YES, OBSERVED . . . . . 1 YES, NOT OBSERVED . . . . . 2 NO 3
471		GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 501A.	GO BACK TO 405 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 501A.

SECTION 5A. CHILD IMMUNIZATION (LAST BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
501A	CHECK 215 IN THE BIRTH HISTORY: ANY BIRTHS IN 2012-2016? ONE OR MORE BIRTHS IN 2012-2016 ☐ NO BIRTHS IN 2012-2016 ☐		→ 601
502A	RECORD THE NAME AND BIRTH HISTORY NUMBER FROM 212 OF THE LAST CHILD BORN IN 2012-2016. NAME OF LAST BIRTH _____ BIRTH HISTORY NUMBER . . . . . ☐☐		
503A	CHECK 216 FOR CHILD: LIVING ☐ DEAD ☐		→ 501B
504A	Do you have a card or other document where (NAME)'s vaccinations are written down?	YES, HAS ONLY A CARD . . . . . 1 YES, HAS ONLY AN OTHER DOCUMENT . . . . . 2 YES, HAS CARD AND OTHER DOCUMENT . . . . . 3 NO, NO CARD AND NO OTHER DOCUMENT . . 4	→ 507A → 507A
505A	Did you ever have a vaccination card for (NAME)?	YES . . . . . 1 NO 2	
506A	CHECK 504A: CODE '2' CIRCLED ☐ CODE '4' CIRCLED ☐		→ 511A
507A	May I see the card or other document where (NAME)'s vaccinations are written down?	YES, ONLY CARD SEEN . . . . . 1 YES, ONLY OTHER DOCUMENT SEEN . . . . . 2 YES, CARD AND OTHER DOCUMENT SEEN . . 3 NO CARD AND NO OTHER DOCUMENT SEEN . . 4	 → 511A

SECTION 5A. CHILD IMMUNIZATION (LAST BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
	NAME OF LAST BIRTH _____	BIRTH HISTORY NUMBER	
508A	COPY DATES FROM THE CARD. WRITE '44' IN 'DAY' COLUMN IF CARD SHOWS THAT A DOSE WAS GIVEN, BUT NO DATE IS RECORDED.		

	DAY		MONTH		YEAR			
BCG								
ORAL POLIO VACCINE (OPV) 0 (BIRTH DOSE)								
ORAL POLIO VACCINE (OPV) 1								
ORAL POLIO VACCINE (OPV) 2								
ORAL POLIO VACCINE (OPV) 3								
DPT-HEP.B-HIB (PENTAVALENT) 1								
DPT-HEP.B-HIB (PENTAVALENT) 2								
DPT-HEP.B-HIB (PENTAVALENT) 3								
PNEUMOCOCCAL 1								
PNEUMOCOCCAL 2								
PNEUMOCOCCAL 3								
ROTAVIRUS 1								
ROTAVIRUS 2								
[MEASLES CONTAINING VACCINE] 1								
[MEASLES CONTAINING VACCINE] 2								
VITAMIN A (MOST RECENT)								

509A	CHECK 508A: 'BCG' TO '[MEASLES CONTAINING VACCINE] 2' ALL RECORDED? NO ☐ YES ☐ → 524A1		
510A	In addition to what is recorded on (this document/these documents), did (NAME) receive any other vaccinations, including vaccinations received in campaigns or immunization days or child health days?	YES . . . . . 1 (PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 508A) (THEN SKIP TO 525A)	
	RECORD 'YES' ONLY IF THE RESPONDENT MENTIONS AT LEAST ONE OF THE VACCINATIONS IN 508A THAT ARE NOT RECORDED AS HAVING BEEN GIVEN.	NO . . . . . 2 DON'T KNOW 8	→ 524A1
511A	Did (NAME) ever receive any vaccinations to prevent (NAME) from getting diseases, including vaccinations received in campaigns or immunization days or child health days?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 524A1

SECTION 5A. CHILD IMMUNIZATION (LAST BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
	NAME OF LAST BIRTH _____	BIRTH HISTORY NUMBER	
512A	Has (NAME) ever received a BCG vaccination against tuberculosis, that is, an injection in the right shoulder that usually causes a scar?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
514A	Has (NAME) ever received oral polio vaccine, that is, about two drops in the mouth to prevent polio?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 517A
515A	Did (NAME) receive the first oral polio vaccine in the first two weeks after birth or later?	FIRST TWO WEEKS . . . . . 1 LATER 2	
516A	How many times did (NAME) receive the oral polio vaccine?	NUMBER OF TIMES	
517A	Has (NAME) ever received a pentavalent vaccination, that is, an injection given in the left thigh sometimes at the same time as polio drops?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 519A
518A	How many times did (NAME) receive the pentavalent vaccine?	NUMBER OF TIMES	
519A	Has (NAME) ever received a pneumococcal vaccination, that is, an injection in the right thigh to prevent pneumonia?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 521A
520A	How many times did (NAME) receive the pneumococcal vaccine?	NUMBER OF TIMES	
521A	Has (NAME) ever received a rotavirus vaccination, that is, a white liquid in the mouth to prevent diarrhea?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 523A
522A	How many times did (NAME) receive the rotavirus vaccine?	NUMBER OF TIMES	
523A	Has (NAME) ever received a measles vaccination, that is, an injection in the left shoulder or thight to prevent measles?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 524A1
524A	How many times did (NAME) receive the measles vaccine?	NUMBER OF TIMES	
524A1	Did you pay for any vaccination for (NAME)?	YES . . . . . 1 NO 2	→ 525A
524A2	How much did you pay for the vaccination?	TSHS . . . . . DON'T KNOW 999998	
525A	In the last 7 days was (NAME) given: a) Virutubishi vya nyongeza? b) Chakula dawa?	YES NO DK a) VIR.NYONGEZA . . . . . 1 2 8 b) CHAKULA DAWA 1 2 8	
526A	CONTINUE WITH 501B.		

SECTION 5B. CHILD IMMUNIZATION (NEXT-TO-LAST BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
501B	CHECK 215 IN THE BIRTH HISTORY: ANY MORE BIRTHS IN 2012-2016? MORE BIRTHS IN 2012-2016 ☐ NO MORE BIRTHS IN 2012-2016 ☐		→ 601
502B	RECORD THE NAME AND BIRTH HISTORY NUMBER FROM 212 OF THE NEXT-TO-LAST CHILD BORN IN 2012-2016. NAME OF NEXT-TO-LAST BIRTH _____ BIRTH HISTORY NUMBER . . . . . ☐☐		
503B	CHECK 216 FOR CHILD: LIVING ☐ DEAD ☐		→ 526B
504B	Do you have a card or other document where (NAME)'s vaccinations are written down?	YES, HAS ONLY A CARD . . . . . 1 YES, HAS ONLY AN OTHER DOCUMENT . . . . . 2 YES, HAS CARD AND OTHER DOCUMENT . . . . . 3 NO, NO CARD AND NO OTHER DOCUMENT . . 4	→ 507B → 507B
505B	Did you ever have a vaccination card for (NAME)?	YES . . . . . 1 NO 2	
506B	CHECK 504B: CODE '2' CIRCLED ☐ CODE '4' CIRCLED ☐		→ 511B
507B	May I see the card or other document where (NAME)'s vaccinations are written down?	YES, ONLY CARD SEEN . . . . . 1 YES, ONLY OTHER DOCUMENT SEEN . . . . . 2 YES, CARD AND OTHER DOCUMENT SEEN . . 3 NO CARD AND NO OTHER DOCUMENT SEEN . . 4	 → 511B

SECTION 5B. CHILD IMMUNIZATION (NEXT-TO-LAST BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
	NAME OF NEXT-TO-LAST BIRTH _____	BIRTH HISTORY NUMBER	

508B COPY DATES FROM THE CARD.
WRITE '44' IN 'DAY' COLUMN IF CARD SHOWS THAT A DOSE WAS GIVEN, BUT NO DATE IS RECORDED.

	DAY		MONTH		YEAR			
BCG								
ORAL POLIO VACCINE (OPV) 0 (BIRTH DOSE)								
ORAL POLIO VACCINE (OPV) 1								
ORAL POLIO VACCINE (OPV) 2								
ORAL POLIO VACCINE (OPV) 3								
DPT-HEP.B-HIB (PENTAVALENT) 1								
DPT-HEP.B-HIB (PENTAVALENT) 2								
DPT-HEP.B-HIB (PENTAVALENT) 3								
PNEUMOCOCCAL 1								
PNEUMOCOCCAL 2								
PNEUMOCOCCAL 3								
ROTAVIRUS 1								
ROTAVIRUS 2								
[MEASLES CONTAINING VACCINE] 1								
[MEASLES CONTAINING VACCINE] 2								
VITAMIN A (MOST RECENT)								

509B CHECK 508B: 'BCG' TO '[MEASLES CONTAINING VACCINE] 2' ALL RECORDED?

NO ☐ YES ☐ → 524B1

510B In addition to what is recorded on (this document/these documents), did (NAME) receive any other vaccinations, including vaccinations received in campaigns or immunization days or child health days?

YES 1
(PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 508B)
(THEN SKIP TO 525B)

RECORD 'YES' ONLY IF THE RESPONDENT MENTIONS AT LEAST ONE OF THE VACCINATIONS IN 508B THAT ARE NOT RECORDED AS HAVING BEEN GIVEN.

NO . . . . . 2 → 524B1
DON'T KNOW . . . . . 8 → 524B1

511B Did (NAME) ever receive any vaccinations to prevent (NAME) from getting diseases, including vaccinations received in campaigns or immunization days or child health days?

YES 1
NO . . . . . 2 → 524B1
DON'T KNOW . . . . . 8 → 524B1

SECTION 5B. CHILD IMMUNIZATION (NEXT-TO-LAST BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
	NAME OF NEXT-TO-LAST BIRTH _____	BIRTH HISTORY NUMBER	
512B	Has (NAME) ever received a BCG vaccination against tuberculosis, that is, an injection in the right shoulder that usually causes a scar?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
514B	Has (NAME) ever received oral polio vaccine, that is, about two drops in the mouth to prevent polio?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 517B
515B	Did (NAME) receive the first oral polio vaccine in the first two weeks after birth or later?	FIRST TWO WEEKS . . . . . 1 LATER 2	
516B	How many times did (NAME) receive the oral polio vaccine?	NUMBER OF TIMES	
517B	Has (NAME) ever received a pentavalent vaccination, that is, an injection given in the left thigh sometimes at the same time as polio drops?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 519B
518B	How many times did (NAME) receive the pentavalent vaccine?	NUMBER OF TIMES	
519B	Has (NAME) ever received a pneumococcal vaccination, that is, an injection in the right thigh to prevent pneumonia?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 521B
520B	How many times did (NAME) receive the pneumococcal vaccine?	NUMBER OF TIMES	
521B	Has (NAME) ever received a rotavirus vaccination, that is, a white liquid in the mouth to prevent diarrhea?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 523B
522B	How many times did (NAME) receive the rotavirus vaccine?	NUMBER OF TIMES	
523B	Has (NAME) ever received a measles vaccination, that is, an injection in the left shoulder or thight to prevent measles?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 524B1
524B	How many times did (NAME) receive the measles vaccine?	NUMBER OF TIMES	
524B1	Did you pay for any vaccination for [ANME]?	YES . . . . . 1 NO 2	→ 525B
524B2	How much did you pay for the vaccination?	TSHS . . . . . DON'T KNOW 999998	
525B	In the last 7 days was (NAME) given: a) Virutubishi vya nyongeza? b) Chakula dawa?	YES NO DK a) VIR.NYONGEZA . . . . . 1 2 8 b) CHAKULA DAWA 1 2 8	
526B	CHECK 215 IN BIRTH HISTORY: ANY MORE BIRTHS IN 2012-2016? MORE BIRTHS IN 2012-2016 → (GO TO 502B IN AN ADDITIONAL QUESTIONNAIRE) NO MORE BIRTHS IN 2012-2016	→ 601	

SECTION 6. CHILD HEALTH AND NUTRITION

601	CHECK 224: ONE OR MORE BIRTHS IN 2010-2016 ☐ ↓ NO BIRTHS IN 2010-2016 ☐ → 648		
602	CHECK 215: RECORD THE BIRTH HISTORY NUMBER IN 603 AND THE NAME AND SURVIVAL STATUS IN 604 FOR EACH BIRTH IN 2010-2016. ASK THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH.IF THERE ARE MORE THAN 2 BIRTHS, USE LAST COLUMN OF ADDITIONAL QUESTIONNAIRE(S). Now I would like to ask some questions about your children born in the last five years. (We will talk about each separately.)		
603	BIRTH HISTORY NUMBER FROM 212 IN BIRTH HISTORY.	LAST BIRTH BIRTH HISTORY NUMBER . . . . . ☐☐	NEXT-TO-LAST BIRTH BIRTH HISTORY NUMBER . . . . . ☐☐
604	FROM 212 AND 216:	NAME _____ LIVING ☐ ↓ DEAD ☐ → (SKIP TO 646)	NAME _____ LIVING ☐ ↓ DEAD ☐ → (SKIP TO 646)
605	In the last six months, was (NAME) given a vitamin A dose like [this/any of these]? SHOW COMMON TYPES OF AMPULES/CAPSULES/SYRUPS.	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
606	In the last seven days, was (NAME) given iron pills, sprinkles with iron, or iron syrup like [this/any of these]? SHOW COMMON TYPES OF PILLS/SPRINKLES/SYRUPS.	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
607	Was (NAME) given any drug for intestinal worms in the last six months?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
608	Has (NAME) had diarrhea in the last 14 days? PROBE: Did (NAME) had at least 3 loose or liquid stools per day?	YES . . . . . 1 NO . . . . . 2 → (SKIP TO 618) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 → (SKIP TO 618) DON'T KNOW 8

SECTION 6. CHILD HEALTH AND NUTRITION

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
609	CHECK 464: EVER BREASFED? YES ☐ ↓ a) Now I would like to know how much (NAME) was given to drink during the diarrhea including breastmilk. Was (NAME) given less than usual to drink, about the same amount, or more than usual to drink? IF LESS, PROBE: Was (NAME) given much less than usual to drink or somewhat less? NO ☐ ↓ b) Now I would like to know how much (NAME) was given to drink during the diarrhea. Was (NAME) given less than usual to drink, about the same amount, or more than usual to drink? IF LESS, PROBE: Was (NAME) given much less than usual to drink or somewhat less?	MUCH LESS . . . . . 1 SOMEWHAT LESS . . . . . 2 ABOUT THE SAME . . . . . 3 MORE . . . . . 4 NOTHING TO DRINK . . . . . 5 DON'T KNOW 8	MUCH LESS . . . . . 1 SOMEWHAT LESS . . . . . 2 ABOUT THE SAME . . . . . 3 MORE . . . . . 4 NOTHING TO DRINK . . . . . 5 DON'T KNOW 8

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
610	When (NAME) had diarrhea, was (NAME) given less than usual to eat, about the same amount, more than usual, or nothing to eat? IF LESS, PROBE: Was (NAME) given much less than usual to eat or somewhat less?	MUCH LESS . . . . . 1 SOMEWHAT LESS . . . . . 2 ABOUT THE SAME . . . . . 3 MORE . . . . . 4 STOPPED FOOD . . . . . 5 NEVER GAVE FOOD . . . . . 6 DON'T KNOW 8	MUCH LESS . . . . . 1 SOMEWHAT LESS . . . . . 2 ABOUT THE SAME . . . . . 3 MORE . . . . . 4 STOPPED FOOD . . . . . 5 NEVER GAVE FOOD . . . . . 6 DON'T KNOW 8
611	Did you seek advice or treatment for the diarrhea from any source?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 615) ←	YES . . . . . 1 NO . . . . . 2 (SKIP TO 615) ←
612	Where did you seek advice or treatment? Anywhere else? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE(S). _____ (NAME OF PLACE(S))	**GOVERNMENT/PARASTATAL** ZON/REFERRAL/SPEC.HOSP A REFERRAL REGIONAL HOSP B REGIONAL HOSPITAL . . . . . C DISTRICT HOSPITAL . . . . . D HEALTH CENTRE . . . . . E DISPENSARY . . . . . F CLINIC . . . . . G CHW . . . . . H **RELIGIOUS/VOLUNTARY** REFERAL SPEC.HOSPITA . . . I DISTRICT HOSPITAL . . . . . J HOSPITAL . . . . . K HEALTH CENTRE . . . . . L DISPENSARY . . . . . M CLINIC . . . . . N **PRIVATE** SPECIALISED HOSPITAL O HOSPITAL . . . . . P HEALTH CENTRE . . . . . Q DISPENSARY . . . . . R CLINIC . . . . . S **OTHER** PHARMACY . . . . . T ADDO . . . . . U NGO . . . . . V OTHER _____ (SPECIFY) X	**GOVERNMENT/PARASTATAL** ZON/REFERRAL/SPEC.HOSP A REFERRAL REGIONAL HOSP B REGIONAL HOSPITAL . . . . . C DISTRICT HOSPITAL . . . . . D HEALTH CENTRE . . . . . E DISPENSARY . . . . . F CLINIC . . . . . G CHW . . . . . H **RELIGIOUS/VOLUNTARY** REFERAL SPEC.HOSPITA . . . I DISTRICT HOSPITAL . . . . . J HOSPITAL . . . . . K HEALTH CENTRE . . . . . L DISPENSARY . . . . . M CLINIC . . . . . N **PRIVATE** SPECIALISED HOSPITAL O HOSPITAL . . . . . P HEALTH CENTRE . . . . . Q DISPENSARY . . . . . R CLINIC . . . . . S **OTHER** PHARMACY . . . . . T ADDO . . . . . U NGO . . . . . V OTHER _____ (SPECIFY) X
612A	Did you pay for advice or treatment for the diarrhea?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 613) ←	YES . . . . . 1 NO . . . . . 2 (SKIP TO 613) ←
612B	How much did you pay?	TSHS ☐☐☐☐☐☐ DON'T KNOW 999998	TSHS ☐☐☐☐☐☐ DON'T KNOW 999998
613	CHECK 612:	TWO OR MORE CODES CIRCLED ↓ ONLY ONE CODE CIRCLED → (SKIP TO 615)	TWO OR MORE CODES CIRCLED ↓ ONLY ONE CODE CIRCLED → (SKIP TO 615)
614	Where did you first seek advice or treatment? USE LETTER CODE FROM 612.	FIRST PLACE . . . . . ☐	FIRST PLACE . . . . . ☐
615	Was (NAME) given any of the following at any time since (NAME) started having the diarrhea: a) A fluid made from a special packet called MA-ORAL? b) A pre-packaged ORS liquid? c) A government-recommended homemade fluid? d) Zinc tablets or syrup?	YES NO DK a) FLUID FROM ORS PACKET . . 1 2 8 b) ORS LIQUID . . 1 2 8 c) HOMEMADE FLUID . . . . . 1 2 8 d) ZINC 1 2 8	YES NO DK a) FLUID FROM ORS PACKET . . 1 2 8 b) ORS LIQUID . . 1 2 8 c) HOMEMADE FLUID . . . . . 1 2 8 d) ZINC 1 2 8

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
616	CHECK 615: ANY 'YES' ☐ → a) Was anything else given to treat the diarrhea? ALL 'NO' OR 'DK' ☐ → b) Was anything given to treat the diarrhea?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 618) ← DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 618) ← DON'T KNOW 8
617	CHECK 615: ANY 'YES' ☐ → a) What else was given to treat the diarrhea? Anything else? ALL 'NO' OR 'DK' ☐ → b) What was given to treat the diarrhea? Anything else? RECORD ALL TREATMENTS GIVEN.	**PILL OR SYRUP** ANTIBIOTIC . . . . . A ANTIMOTILITY . . . . . B OTHER (NOT ANTIBIOTIC OR ANTIMOTILITY) . . . . . C UNKNOWN PILL OR SYRUP . . . . . D **INJECTION** ANTIBIOTIC . . . . . E NON-ANTIBIOTIC . . . . . F UNKNOWN INJECTION . . . . . G (IV) INTRAVENOUS . . . . . H HOME REMEDY/ HERBAL MEDICINE . . . . . I OTHER _____ X (SPECIFY)	**PILL OR SYRUP** ANTIBIOTIC . . . . . A ANTIMOTILITY . . . . . B OTHER (NOT ANTIBIOTIC OR ANTIMOTILITY) . . . . . C UNKNOWN PILL OR SYRUP . . . . . D **INJECTION** ANTIBIOTIC . . . . . E NON-ANTIBIOTIC . . . . . F UNKNOWN INJECTION . . . . . G (IV) INTRAVENOUS . . . . . H HOME REMEDY/ HERBAL MEDICINE . . . . . I OTHER _____ X (SPECIFY)
618	Has (NAME) been ill with a fever at any time in the last 14 days?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 620) ← DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 620) ← DON'T KNOW 8
619	At any time during the illness, did (NAME) have blood taken from (NAME)'s finger or heel for testing?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
620	Has (NAME) had an illness with a cough at any time in the last 14 days?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
621	Has (NAME) had fast, short, rapid breaths or difficulty breathing at any time in the last 14 days?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 623) ← DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 623) ← DON'T KNOW 8
622	Was the fast or difficult breathing due to a problem in the chest or to a blocked or runny nose?	CHEST ONLY . . . . . 1 NOSE ONLY . . . . . 2 BOTH . . . . . 3 OTHER _____ 6 (SPECIFY) DON'T KNOW . . . . . 8 (SKIP TO 624) ←	CHEST ONLY . . . . . 1 NOSE ONLY . . . . . 2 BOTH . . . . . 3 OTHER _____ 6 (SPECIFY) DON'T KNOW . . . . . 8 (SKIP TO 624) ←
623	CHECK 618: HAD FEVER?	YES ☐ → NO OR DK ☐ → (SKIP TO 646) ←	YES ☐ → NO OR DK ☐ → (SKIP TO 646) ←
624	Did you seek advice or treatment for the illness from any source?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 629) ←	YES . . . . . 1 NO . . . . . 2 (SKIP TO 629) ←

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
625	Where did you seek advice or treatment? Anywhere else? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE(S). _____ (NAME OF PLACE(S))	**GOVERNMENT/PARASTATAL** ZON/REFERRAL/SPEC.HOSP A REFERRAL REGIONAL HOSP B REGIONAL HOSPITAL . . . . . C DISTRICT HOSPITAL . . . . . D HEALTH CENTRE . . . . . E DISPENSARY . . . . . F CLINIC . . . . . G CHW . . . . . H **RELIGIOUS/VOLUNTARY** REFERAL SPEC.HOSPITA . . . I DISTRICT HOSPITAL . . . . . J HOSPITAL . . . . . K HEALTH CENTRE . . . . . L DISPENSARY . . . . . M CLINIC . . . . . N **PRIVATE** SPECIALISED HOSPITAL O HOSPITAL . . . . . P HEALTH CENTRE . . . . . Q DISPENSARY . . . . . R CLINIC . . . . . S **OTHER** PHARMACY . . . . . T ADDO . . . . . U NGO . . . . . V OTHER _____ (SPECIFY) X	**GOVERNMENT/PARASTATAL** ZON/REFERRAL/SPEC.HOSP A REFERRAL REGIONAL HOSP B REGIONAL HOSPITAL . . . . . C DISTRICT HOSPITAL . . . . . D HEALTH CENTRE . . . . . E DISPENSARY . . . . . F CLINIC . . . . . G CHW . . . . . H **RELIGIOUS/VOLUNTARY** REFERAL SPEC.HOSPITA . . . I DISTRICT HOSPITAL . . . . . J HOSPITAL . . . . . K HEALTH CENTRE . . . . . L DISPENSARY . . . . . M CLINIC . . . . . N **PRIVATE** SPECIALISED HOSPITAL O HOSPITAL . . . . . P HEALTH CENTRE . . . . . Q DISPENSARY . . . . . R CLINIC . . . . . S **OTHER** PHARMACY . . . . . T ADDO . . . . . U NGO . . . . . V OTHER _____ (SPECIFY) X
625A	Did you pay for the advice or treatment for this illness?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 626)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 626)
625B	How much did you pay?	TSHS ☐☐☐☐☐☐ DON'T KNOW 999998	TSHS ☐☐☐☐☐☐ DON'T KNOW 999998
626	CHECK 625:	TWO OR MORE CODES CIRCLED ☐ ONLY ONE CODE CIRCLED ☐ (SKIP TO 628)	TWO OR MORE CODES CIRCLED ☐ ONLY ONE CODE CIRCLED ☐ (SKIP TO 628)
627	Where did you first seek advice or treatment? USE LETTER CODE FROM 625.	FIRST PLACE . . . . . ☐	FIRST PLACE . . . . . ☐
628	How many days after the illness began did you first seek advice or treatment for (NAME)? IF THE SAME DAY RECORD '00'.	DAYS . . . . . ☐☐	DAYS . . . . . ☐☐
629	At any time during the illness, did (NAME) take any drugs for the illness?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 646) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 646) DON'T KNOW 8

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
630	What drugs did (NAME) take? Any other drugs? RECORD ALL MENTIONED.	**ANTIMALARIAL DRUGS** ARTEMISININ COMBINATION THERAPY (ACT) ..... A SP/FANSIDAR ..... B CHLOROQUINE ..... C AMODIAQUINE ..... D QUININE PILLS ..... E INJECTION/IV ..... F ARTESUNATE RECTAL ..... G INJECTION/IV ..... H OTHER ANTIMALARIAL _____ I (SPECIFY) **ANTIBIOTIC DRUGS** PILL/SYRUP ..... J INJECTION/IV ..... K AMOXICILLIN L **OTHER DRUGS** ASPIRIN ..... M ACETAMINOPHEN ..... N IBUPROFEN ..... O OTHER _____ X (SPECIFY) DON'T KNOW ..... Z	**ANTIMALARIAL DRUGS** ARTEMISININ COMBINATION THERAPY (ACT) ..... A SP/FANSIDAR ..... B CHLOROQUINE ..... C AMODIAQUINE ..... D QUININE PILLS ..... E INJECTION/IV ..... F ARTESUNATE RECTAL ..... G INJECTION/IV ..... H OTHER ANTIMALARIAL _____ I (SPECIFY) **ANTIBIOTIC DRUGS** PILL/SYRUP ..... J INJECTION/IV ..... K AMOXICILLIN L **OTHER DRUGS** ASPIRIN ..... L ACETAMINOPHEN ..... M IBUPROFEN ..... N OTHER _____ X (SPECIFY) DON'T KNOW ..... Z
630A	Where did you get these drugs from? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE(S). _____ (NAME OF PLACE(S))	**GOVERNMENT/PARASTATAL** ZON/REFERRAL/SPEC.HOSP A REFERRAL REGIONAL HOSP B REGIONAL HOSPITAL ..... C DISTRICT HOSPITAL ..... D HEALTH CENTRE ..... E DISPENSARY ..... F CLINIC ..... G CHW ..... H **RELIGIOUS/VOLUNTARY** REFERAL SPEC.HOSPITA ... I DISTRICT HOSPITAL ..... J HOSPITAL ..... K HEALTH CENTRE ..... L DISPENSARY ..... M CLINIC ..... N **PRIVATE** SPECIALISED HOSPITAL O HOSPITAL ..... P HEALTH CENTRE ..... Q DISPENSARY ..... R CLINIC ..... S **OTHER** PHARMACY ..... T ADDO ..... U NGO ..... V OTHER (SPECIFY) X	**GOVERNMENT/PARASTATAL** ZON/REFERRAL/SPEC.HOSP A REFERRAL REGIONAL HOSP B REGIONAL HOSPITAL ..... C DISTRICT HOSPITAL ..... D HEALTH CENTRE ..... E DISPENSARY ..... F CLINIC ..... G CHW ..... H **RELIGIOUS/VOLUNTARY** REFERAL SPEC.HOSPITA ... I DISTRICT HOSPITAL ..... J HOSPITAL ..... K HEALTH CENTRE ..... L DISPENSARY ..... M CLINIC ..... N **PRIVATE** SPECIALISED HOSPITAL O HOSPITAL ..... P HEALTH CENTRE ..... Q DISPENSARY ..... R CLINIC ..... S **OTHER** PHARMACY ..... T ADDO ..... U NGO ..... V OTHER (SPECIFY) X
631	CHECK 630: ANY CODE A-I CIRCLED?	YES ☐ NO ☐ (SKIP TO 645A)	YES ☐ NO ☐ (SKIP TO 645A)
632	CHECK 630: ARTEMISININ COMBINATION THERAPY ('A') GIVEN	CODE 'A' CIRCLED ☐ CODE 'A' NOT CIRCLED ☐ (SKIP TO 634)	CODE 'A' CIRCLED ☐ CODE 'A' NOT CIRCLED ☐ (SKIP TO 634)

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
633	How long after the fever started did (NAME) first take an artemisinin combination therapy?	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . . 3 DON'T KNOW 8	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . . 3 DON'T KNOW 8
634	CHECK 630: SP/FANSIDAR ('B') GIVEN	CODE 'B' CIRCLED CODE 'B' NOT CIRCLED (SKIP TO 636)	CODE 'B' CIRCLED CODE 'B' NOT CIRCLED (SKIP TO 636)
635	How long after the fever started did (NAME) first take SP/Fansidar?	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . . 3 DON'T KNOW 8	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . . 3 DON'T KNOW 8
636	CHECK 630: CHLOROQUINE ('C') GIVEN	CODE 'C' CIRCLED CODE 'C' NOT CIRCLED (SKIP TO 638)	CODE 'C' CIRCLED CODE 'C' NOT CIRCLED (SKIP TO 638)
637	How long after the fever started did (NAME) first take chloroquine?	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . . 3 DON'T KNOW 8	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . . 3 DON'T KNOW 8
638	CHECK 630: AMODIAQUINE ('D') GIVEN	CODE 'D' CIRCLED CODE 'D' NOT CIRCLED (SKIP TO 640)	CODE 'D' CIRCLED CODE 'D' NOT CIRCLED (SKIP TO 640)
639	How long after the fever started did (NAME) first take amodiaquine?	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . . 3 DON'T KNOW 8	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . . 3 DON'T KNOW 8
640	CHECK 630: QUININE ('E' OR 'F') GIVEN	CODE 'E' OR 'F' CIRCLED CODE 'E' OR 'F' NOT CIRCLED (SKIP TO 642)	CODE 'E' OR 'F' CIRCLED CODE 'E' OR 'F' NOT CIRCLED (SKIP TO 642)
641	How long after the fever started did (NAME) first take quinine?	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . . 3 DON'T KNOW 8	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . . 3 DON'T KNOW 8

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
642	CHECK 630: ARTESUNATE ('G' OR 'H') GIVEN	CODE 'G' OR 'H' CIRCLED ☐ CODE 'G' OR 'H' NOT CIRCLED ☐ → (SKIP TO 644)	CODE 'G' OR 'H' CIRCLED ☐ CODE 'G' OR 'H' NOT CIRCLED ☐ → (SKIP TO 644)
643	How long after the fever started did (NAME) first take artesunate?	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . . 3 DON'T KNOW 8	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . . 3 DON'T KNOW 8
644	CHECK 630: OTHER ANTIMALARIAL ('I') GIVEN	CODE 'I' CIRCLED ☐ CODE 'I' NOT CIRCLED ☐ → (SKIP TO 645A)	CODE 'I' CIRCLED ☐ CODE 'I' NOT CIRCLED ☐ → (SKIP TO 645A)
645	How long after the fever started did (NAME) first take (OTHER ANTIMALARIAL)?	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . . 3 DON'T KNOW 8	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . . 3 DON'T KNOW 8
645A	CHECK 630: AMOXICILLIN ('L') GIVEN	CODE 'L' CIRCLED ☐ CODE 'L' NOT CIRCLED ☐ → (SKIP TO 646)	CODE 'L' CIRCLED ☐ CODE 'L' NOT CIRCLED ☐ → (SKIP TO 646)
645B	CHECK 622	CODE '1' OR '3' CIRCLED ☐ CODE '2', '6' OR '8' CIRCLED/ Q. NOT ASKED ☐ → (SKIP TO 646)	CODE '1' OR '3' CIRCLED ☐ CODE '2', '6' OR '8' CIRCLED/ Q. NOT ASKED ☐ → (SKIP TO 646)
645C	How long after the fast, short, rapid breaths or difficulty breathing did (NAME) take Amoxicillin?	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER SYMPTOMS . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . . 3 DON'T KNOW 8	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER SYMPTOMS . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . . 3 DON'T KNOW 8
645D	For how many days did (NAME) take Amoxicillin?	NBRE DAYS ☐☐	NBRE DAYS ☐☐
646		GO BACK TO 604 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 646A.	GO TO 604 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 646A.

SECTION 6. CHILD HEALTH AND NUTRITION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
646A	Who usually makes decisions about health care for your child/children: you, your (husband/partner), you and your (husband/partner) jointly, or someone else?	RESPONDENT . . . . . 1 HUSBAND/PARTNER . . . . . 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY . . . . . 3 SOMEONE ELSE . . . . . 4 OTHER 6	
647	CHECK 615(a) AND 615(b), ALL COLUMNS: NO CHILD RECEIVED FLUID FROM ORS PACKET OR PRE-PACKAGED ORS LIQUID ☐ ANY CHILD RECEIVED FLUID FROM ORS PACKET OR PRE-PACKAGED ORS LIQUID ☐ →		649
648	Have you ever heard of a special product called MA-ORAL you can get for the treatment of diarrhea?	YES . . . . . 1 NO 2	
649	CHECK 215 AND 218, ALL ROWS: NUMBER OF CHILDREN BORN IN 2013-2016 LIVING WITH THE RESPONDENT ONE OR MORE ☐ NONE ☐ →		701
	_____ (NAME OF YOUNGEST CHILD LIVING WITH HER)		

SECTION 6. CHILD HEALTH AND NUTRITION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
650	Now I would like to ask you about liquids or foods that (NAME FROM 649) had yesterday during the day or at night. I am interested in whether your child had the item I mention even if it was combined with other foods. Did (NAME FROM 649) drink or eat:	YES NO DK	
	a) Plain water?	a) 1 2 8	
	b) Juice or juice drinks?	b) 1 2 8	
	c) Clear soup?	c) 1 2 8	
	d) Milk such as tinned, powdered, or fresh animal milk? IF YES: How many times did (NAME) drink milk? IF 7 OR MORE TIMES, RECORD '7'.	d) . . . . . 1 2 8 NUMBER OF TIMES DRANK ☐	
	e) Infant formula? IF YES: How many times did (NAME) drink infant formula? IF 7 OR MORE TIMES, RECORD '7'.	e) . . . . . 1 2 8 NUMBER OF TIMES DRANK ☐	
	f) Any other liquids?	f) 1 2 8	
	g) Yogurt? IF YES: How many times did (NAME) eat yogurt? IF 7 OR MORE TIMES, RECORD '7'.	g) . . . . . 1 2 8 NUMBER OF TIMES ATE ☐	
	h) Cerelac and Unga wa lishe?	h) 1 2 8	
	i) Bread, rice, spagheti/noodles,chapati, mandazi, porridge, or other foods made from grains?	i) 1 2 8	
	j) Pumpkin, carrots, squash or sweet potatoes that are yellow or orange inside?	j) 1 2 8	
	k) White potatoes, white yams, manioc, cassava,cocoyams, white sweet potatoes, plantains or any other foods made from roots?	k) 1 2 8	
	l) Any dark green, leafy vegetables such as amaranth,cassava leaves, sweet potato leaves, beans leaves,chinese cabbage and spinach?	l) 1 2 8	
	m) Ripe mangoes, papayas, water melon, red quava?	m) 1 2 8	
	n) Any other fruits or vegetables?	n) 1 2 8	
	o) Liver, kidney, heart, or other organ meats?	o) 1 2 8	
	p) Any meat, such as beef, pork, lamb, goat, chicken, or duck?	p) 1 2 8	
	q) Eggs?	q) 1 2 8	
	r) Fresh or dried fish or shellfish?	r) 1 2 8	
	s) Any foods made from beans, peas, lentils, or nuts?	s) 1 2 8	
	t) Cheese or other food made from milk?	t) 1 2 8	
	u) Any other solid, semi-solid, or soft food?	u) 1 2 8	
651	CHECK 650 (CATEGORIES 'g' THROUGH 'u'): NOT A SINGLE 'YES' ☐ ↓ AT LEAST ONE 'YES' ☐ →		653

SECTION 6. CHILD HEALTH AND NUTRITION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
652	Did (NAME FROM 649) eat any solid, semi-solid, or soft foods yesterday during the day or at night? IF 'YES' PROBE: What kind of solid, semi-solid or soft foods did (NAME) eat?	YES . . . . . 1 (GO BACK TO 650 TO RECORD FOOD EATEN YESTERDAY) (THEN CONTINUE TO 653) NO 2	→ 654
653	How many times did (NAME FROM 649) eat solid, semi-solid, or soft foods yesterday during the day or at night? IF 7 OR MORE TIMES, RECORD '7'.	NUMBER OF TIMES . . . . . ☐ DON'T KNOW 8	
654	The last time (NAME FROM 649) passed stools, what was done to dispose of the stools?	CHILD USED TOILET OR LATRINE . . . . . 01 PUT/RINSED INTO TOILET OR LATRINE . . . . . 02 PUT/RINSED INTO DRAIN OR DITCH . . . . . 03 THROWN INTO GARBAGE . . . . . 04 BURIED . . . . . 05 LEFT IN THE OPEN . . . . . 06 OTHER _____ 96 (SPECIFY)	

SECTION 7. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
701	Are you currently married or living together with a man as if married?	YES, CURRENTLY MARRIED . . . . . 1 YES, LIVING WITH A MAN . . . . . 2 NO, NOT IN UNION 3	→ 704
702	Have you ever been married or lived together with a man as if married?	YES, FORMERLY MARRIED . . . . . 1 YES, LIVED WITH A MAN . . . . . 2 NO 3	→ 712
703	What is your marital status now: are you widowed, divorced, or separated?	WIDOWED . . . . . 1 DIVORCED . . . . . 2 SEPARATED 3	→ 709
704	Is your (husband/partner) living with you now or is he staying elsewhere?	LIVING WITH HER . . . . . 1 STAYING ELSEWHERE 2	
705	RECORD THE HUSBAND'S/PARTNER'S NAME AND LINE NUMBER FROM THE HOUSEHOLD QUESTIONNAIRE. IF HE IS NOT LISTED IN THE HOUSEHOLD, RECORD '00'.	NAME _____ LINE NO.	
706	Does your (husband/partner) have other wives or does he live with other women as if married?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 709
707	Including yourself, in total, how many wives or live-in partners does he have?	TOTAL NUMBER OF WIVES AND LIVE-IN PARTNERS . . . . . DON'T KNOW 98	
708	Are you the first, second, ... wife/live in partner?	RANK	
709	Have you been married or lived with a man only once or more than once?	ONLY ONCE . . . . . 1 MORE THAN ONCE 2	
710	CHECK 709: MARRIED/ LIVED WITH A MAN ONLY ONCE → a) In what month and year did you start living with your (husband/partner)? MARRIED/ LIVED WITH A MAN MORE THAN ONCE → b) Now I would like to ask about your first (husband/partner). In what month and year did you start living with him?	MONTH . . . . . DON'T KNOW MONTH . . . . . 98 YEAR . . . . . DON'T KNOW YEAR 9998	→ 712
711	How old were you when you first started living with him?	AGE	
712	**CHECK FOR PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE**		
713	Now I would like to ask some questions about sexual activity in order to gain a better understanding of some important life issues. Let me assure you again that your answers are completely confidential and will not be told to anyone. If we should come to any question that you don't want to answer, just let me know and we will go to the next question. How old were you when you had sexual intercourse for the very first time?	NEVER HAD SEXUAL INTERCOURSE . . . . . 00 AGE IN YEARS	→ 731
713A	The very first time you had sexual intercourse, would you say that you willingly wanted to have it?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
714	I would like to ask you about your recent sexual activity. When was the last time you had sexual intercourse? IF LESS THAN 12 MONTHS, ANSWER MUST BE RECORDED IN DAYS, WEEKS OR MONTHS. IF 12 MONTHS (ONE YEAR) OR MORE, ANSWER MUST BE RECORDED IN YEARS.	DAYS AGO . . . . . 1 WEEKS AGO . . . . . 2 MONTHS AGO . . . . . 3 YEARS AGO 4	→ 731

SECTION 7. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
716	The last time you had sexual intercourse with this person, was a condom used?	YES . . . . . 1 NO 2	→ 731
729	You told me that a condom was used the last time you had sex. What is the brand name of the condom used at that time? IF BRAND NOT KNOWN, ASK TO SEE THE PACKAGE.	SALAMA . . . . . 01 DUME . . . . . 02 ROUGH RIDER . . . . . 03 FAMILIA . . . . . 04 CARE . . . . . 05 LADY PEPETA . . . . . 06 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	
730	From where did you obtain the condom the last time? PROBE TO IDENTIFY TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**GOVERNMENT/PARASTATAL** ZON/REFERRAL/SPEC.HOSPITAL 11 REFERRAL REGIONAL HOSP. 12 REGIONAL HOSPITAL . . . . . 13 DISTRICT HOSPITAL . . . . . 14 HEALTH CENTRE . . . . . 15 DISPENSARY . . . . . 16 CLINIC . . . . . 17 CHW . . . . . 18 **RELIGIOUS/VOLUNTARY** REFERAL SPEC.HOSPITA . . . 21 DISTRICT HOSPITAL . . . . . 22 HOSPITAL . . . . . 23 HEALTH CENTRE . . . . . 24 DISPENSARY . . . . . 25 CLINIC . . . . . 26 **PRIVATE** SPECIALISED HOSPITAL 31 HOSPITAL . . . . . 32 HEALTH CENTRE . . . . . 33 DISPENSARY . . . . . 34 CLINIC . . . . . 35 **OTHER** PHARMACY . . . . . 41 ADDO . . . . . 42 NGO . . . . . 43 VCT CENTRE . . . . . 44 SHOP/KIOSK . . . . . 45 BAR . . . . . 46 GUEST HOUSE/HOTEL . . . . . 47 FRIEND/RELATIVE/NEIGHBO . . . . . 48 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	
731	PRESENCE OF OTHERS DURING THIS SECTION.	YES NO CHILDREN <10 . . . . . 1 2 MALE ADULTS . . . . . 1 2 FEMALE ADULTS 1 2	

SECTION 8. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
801	CHECK 304: NEITHER STERILIZED ☐ HE OR SHE STERILIZED ☐		→ 813
802	CHECK 226: PREGNANT ☐ NOT PREGNANT OR UNSURE ☐		→ 804
803	Now I have some questions about the future. After the child you are expecting now, would you like to have another child, or would you prefer not to have any more children?	HAVE ANOTHER CHILD . . . . . 1 NO MORE . . . . . 2 UNDECIDED/DON'T KNOW 8	→ 805 → 812
804	Now I have some questions about the future. Would you like to have (a/another) child, or would you prefer not to have any (more) children?	HAVE (A/ANOTHER) CHILD . . . . . 1 NO MORE/NONE . . . . . 2 SAYS SHE CAN'T GET PREGNANT . . . . . 3 UNDECIDED/DON'T KNOW 8	→ 807 → 813 → 811
805	CHECK 226: NOT PREGNANT OR UNSURE ☐ a) How long would you like to wait from now before the birth of (a/another) child? PREGNANT ☐ b) After the birth of the child you are expecting now, how long would you like to wait before the birth of another child?	MONTHS . . . . . 1 ☐☐ YEARS . . . . . 2 ☐☐ SOON/NOW . . . . . 993 SAYS SHE CAN'T GET PREGNANT . . . . . 994 AFTER MARRIAGE . . . . . 995 OTHER _____ (SPECIFY) 996 DON'T KNOW 998	→ 811 → 813 → 811
806	CHECK 226: NOT PREGNANT OR UNSURE ☐ PREGNANT ☐		→ 812
807	CHECK 303: USING A CONTRACEPTIVE METHOD? NOT CURRENTLY USING ☐ CURRENTLY USING ☐		→ 813
808	CHECK 805: '24' OR MORE MONTHS OR '02' OR MORE YEARS ☐ NOT ASKED ☐ '00-23' MONTHS OR '00-01' YEAR ☐		→ 812
809	CHECK 714: DAYS, WEEKS OR MONTHS AGO ☐ YEARS AGO ☐ NOT ASKED ☐		→ 811 → 811

SECTION 8. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
810	CHECK 804: WANTS TO HAVE A/ANOTHER CHILD ☐ → a) You have said that you do not want (a/another) child soon. Can you tell me why you are not using a method to prevent pregnancy? Any other reason? WANTS NO MORE/ NONE ☐ → b) You have said that you do not want any (more) children. Can you tell me why you are not using a method to prevent pregnancy? Any other reason? RECORD ALL REASONS MENTIONED.	NOT MARRIED . . . . . A **FERTILITY-RELATED REASONS** NOT HAVING SEX . . . . . B INFREQUENT SEX . . . . . C MENOPAUSAL/HYSTERECTOMY . . . . . D CAN'T GET PREGNANT . . . . . E NOT MENSTRUATED SINCE LAST BIRTH . . . . . F BREASTFEEDING . . . . . G UP TO GOD/FATALISTIC . . . . . H **OPPOSITION TO USE** RESPONDENT OPPOSED . . . . . I HUSBAND/PARTNER OPPOSED . . . . . J OTHERS OPPOSED . . . . . K RELIGIOUS PROHIBITION . . . . . L **LACK OF KNOWLEDGE** KNOWS NO METHOD . . . . . M KNOWS NO SOURCE . . . . . N **METHOD-RELATED REASONS** SIDE EFFECTS/HEALTH CONCERNS . . . . . O LACK OF ACCESS/TOO FAR . . . . . P COSTS TOO MUCH . . . . . Q PREFERRED METHOD NOT AVAILABLE . . . . . R NO METHOD AVAILABLE . . . . . S INCONVENIENT TO USE . . . . . T INTERFERES WITH BODY'S NORMAL PROCESSES . . . . . U OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	
811	CHECK 303: USING A CONTRACEPTIVE METHOD? NOT ASKED ☐ → NO, NOT CURRENTLY USING ☐ → YES, CURRENTLY USING ☐		→ 813
812	Do you think you will use a contraceptive method to delay or avoid pregnancy at any time in the future?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
813	CHECK 216: HAS LIVING CHILDREN ☐ → a) If you could go back to the time you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be? NO LIVING CHILDREN ☐ → b) If you could choose exactly the number of children to have in your whole life, how many would that be? PROBE FOR A NUMERIC RESPONSE.	NONE . . . . . 00 NUMBER . . . . . ☐☐ OTHER _____ 96 (SPECIFY)	→ 815 → 815
814	How many of these children would you like to be boys, how many would you like to be girls and for how many would it not matter if it's a boy or a girl?	BOYS GIRLS EITHER NUMBER . . ☐☐ ☐☐ ☐☐ OTHER _____ 96 (SPECIFY)	

SECTION 8. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
815	In the last few months have you:	YES NO	
	a) Heard about family planning on the radio?	a) RADIO 1 2	
	b) Seen anything about family planning on the television?	b) TELEVISION 1 2	
	c) Read about family planning in a newspaper or magazine?	c) NEWSPAPER OR MAGAZINE 1 2	
	d) Received a voice or text message about family planning on a mobile phone?	d) MOBILE PHONE 1 2	
	e) Seen anything about family planning on a poster?	e) POSTER 1 2	
	f) Seen anything about family planning on a billboard?	f) BILLBOARDS 1 2	
	g) Heard about family planning at community events?	g) COMMUNITY EVENTS 1 2	
	h) Seen anything about family planning on a live drama?	h) LIVE DRAMA 1 2	
	i) Head about family planning from a doctor or a nurse?	i) DOCTOR/NURSI 1 2	
	j) Head about family planning from a community health worker?	j) COMMUNITY HEALTH WORK 1 2	
	k) Read about family planning on internet?	k) INTERNET 1 2	
815A	Have you ever heard or seen the campaign:	YES NO	
	a) Wazazi nipendeni?	a) WAZAZI NIPENDEN 1 2	
	b) Fuata nyota ya kijana upate mafanikio?	b) NYOTA YA KIJANI 1 2	
	c) Siyo kila homa ni malaria?	c) MALARIA 1 2	
815B	CHECK 815A (a,b AND c) AT LEAST ONE 'YES' ☐	NOT A SINGLE 'YES' ☐ →	816
815C	Where did you see or hear the campaign? RECORD ALL RESPONSES MENTIONED	RADIO . . . . . A TELEVISION . . . . . B POSTER/MAGAZINE/NEWSPAPER/ BILLBOARD . C INTERNET . . . . . D MOBILE PHONE . . . . . E CHW . . . . . F FAMILY FRIEND . . . . . G OTHER _____ (SPECFY) X	
816	If you wanted to get information on family planning, who would you like to talk to most.	CBD WORKER . . . . . 01 CLINC STAFI . . . . . 02 TBA . . . . . 03 HUSBAND/PARTNER . . . . . 04 FRIEND . . . . . 05 RELATIVE . . . . . 06 RELIGIOUS LEADERS . . . . . 07 OTHER _____ (SPECIFY) 96	
816A	If you wanted to get information on family planning, would you like to get the information from:	YES NO	
	a) The Radio?	a) RADIO 1 2	
	b) The Television?	b) TELEVISION 1 2	
	c) In a newspaper or a magazine?	c) NEWSPAPER OR MAGAZINE 1 2	

SECTION 8. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
817	CHECK 701: YES, CURRENTLY MARRIED ☐ ↓ YES, LIVING WITH A MAN ☐ ↓ NO, NOT IN A UNION ☐ → 901		
818	CHECK 303: USING A CONTRACEPTIVE METHOD? CURRENTLY USING ☐ ↓ NOT CURRENTLY USING ☐ → 820 NOT ASKED ☐ → 822		
818A	CHECK 304: WHAT METHOD? OTHER ☐ ↓ CODE B, G, OR M CIRCLED ☐ → 819		
818B	Does your husband/partner know that you are using a method of family planning?	YES . . . . . 1 NO 2	
819	Would you say that using contraception is mainly your decision, mainly your (husband's/partner's) decision, or did you both decide together?	MAINLY RESPONDENT . . . . . 1 MAINLY HUSBAND/PARTNER . . . . . 2 JOINT DECISION . . . . . 3 OTHER _____ 6 (SPECIFY)	
819A	Has your husband/partner ever refused to use a method or tried to stop you from using a method to avoid getting pregnant?	YES . . . . . 1 NO . . . . . 2 → 821	
820	Would you say that not using contraception is mainly your decision, mainly your (husband's/partner's) decision, or did you both decide together?	MAINLY RESPONDENT . . . . . 1 MAINLY HUSBAND/PARTNER . . . . . 2 JOINT DECISION . . . . . 3 OTHER _____ 6 (SPECIFY)	
821	CHECK 304: NEITHER ARE STERILIZED ☐ ↓ HE OR SHE ARE STERILIZED ☐ → 901		
822	Does your (husband/partner) want the same number of children that you want, or does he want more or fewer than you want?	SAME NUMBER . . . . . 1 MORE CHILDREN . . . . . 2 FEWER CHILDREN . . . . . 3 DON'T KNOW 8	

SECTION 9. HUSBAND'S BACKGROUND AND WOMAN'S WORK

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
901	CHECK 701: CURRENTLY MARRIED/ LIVING WITH A MAN ☐ ↓ NOT IN UNION ☐		→ 909
902	How old was your (husband/partner) on his last birthday?	AGE IN COMPLETED YEARS . . . . . ☐☐	
903	Did your (husband/partner) ever attend school?	YES . . . . . 1 NO 2	→ 906
904	What was the highest level of school he attended ?	PRE-PRIMARY . . . . . 0 PRIMARY . . . . . 1 POST PRIMARY TRAINING . . . . . 2 SECONDARY 'O' LEVEL . . . . . 3 POST SECONDARY 'O' LEVEL TRAINING . . . . . 4 SECONDARY 'A' LEVEI . . . . . 5 POST SECONDARY 'A' LEVEL TRAININ(. . . . . 6 UNIVERSITY . . . . . 7 DON'T KNOW 8	→ 906
905	What was the highest grade he completed at that level? IF COMPLETED LESS THAN ONE YEAR AT THAT LEVEL, RECORD '00'.	GRADE . . . . . ☐☐ DON'T KNOW 98	
906	Has your (husband/partner) done any work in the last 7 days?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 908
907	Has your (husband/partner) done any work in the last 12 months?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 909
908	What is your (husband's/partner's) occupation? That is, what kind of work does he mainly do?	_____ _____ ☐☐ _____	
909	Aside from your own housework, have you done any work in the last seven days?	YES . . . . . 1 NO 2	→ 913
910	As you know, some women take up jobs for which they are paid in cash or kind. Others sell things, have a small business or work on the family farm or in the family business. In the last seven days, have you done any of these things or any other work?	YES . . . . . 1 NO 2	→ 913
911	Although you did not work in the last seven days, do you have any job or business from which you were absent for leave, illness, vacation, maternity leave, or any other such reason?	YES . . . . . 1 NO 2	→ 913
912	Have you done any work in the last 12 months?	YES . . . . . 1 NO 2	→ 917
913	What is your occupation? That is, what kind of work do you mainly do?	_____ _____ ☐☐ _____	

SECTION 9. HUSBAND'S BACKGROUND AND WOMAN'S WORK

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
914	Do you do this work for a member of your family, for someone else, or are you self-employed?	FOR FAMILY MEMBER . . . . . 1 FOR SOMEONE ELSE . . . . . 2 SELF-EMPLOYED 3	
915	Do you usually work throughout the year, or do you work seasonally, or only once in a while?	THROUGHOUT THE YEAR . . . . . 1 SEASONALLY/PART OF THE YEAR . . . . . 2 ONCE IN A WHILE 3	
916	Are you paid in cash or kind for this work or are you not paid at all?	CASH ONLY . . . . . 1 CASH AND KIND . . . . . 2 IN KIND ONLY . . . . . 3 NOT PAID 4	
917	CHECK 701: CURRENTLY MARRIED/LIVING WITH A MAN ☐ ↓ NOT IN UNION ☐ →		925
918	CHECK 916: CODE '1' OR '2' CIRCLED ☐ ↓ ANY OTHER CODE ☐ →		921
919	Who usually decides how the money you earn will be used: you, your (husband/partner), or you and your (husband/partner) jointly?	RESPONDENT . . . . . 1 HUSBAND/PARTNER . . . . . 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY . . . . . 3 OTHER _____ 6 (SPECIFY)	
920	Would you say that the money that you earn is more than what your (husband/partner) earns, less than what he earns, or about the same?	MORE THAN HIM . . . . . 1 LESS THAN HIM . . . . . 2 ABOUT THE SAME . . . . . 3 HUSBAND/PARTNER HAS NO EARNINGS . . . . . 4 DON'T KNOW 8	→ 922
921	Who usually decides how your (husband's/partner's) earnings will be used: you, your (husband/partner), or you and your (husband/partner) jointly?	RESPONDENT . . . . . 1 HUSBAND/PARTNER . . . . . 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY . . . . . 3 HUSBAND/PARTNER HAS NO EARNINGS . . . . . 4 OTHER _____ 6 (SPECIFY)	
922	Who usually makes decisions about health care for yourself: you, your (husband/partner), you and your (husband/partner) jointly, or someone else?	RESPONDENT . . . . . 1 HUSBAND/PARTNER . . . . . 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY . . . . . 3 SOMEONE ELSE . . . . . 4 OTHER 6	
923	Who usually makes decisions about making major household purchases?	RESPONDENT . . . . . 1 HUSBAND/PARTNER . . . . . 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY . . . . . 3 SOMEONE ELSE . . . . . 4 OTHER 6	

SECTION 9. HUSBAND'S BACKGROUND AND WOMAN'S WORK

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
924	Who usually makes decisions about visits to your family or relatives?	RESPONDENT . . . . . 1 HUSBAND/PARTNER . . . . . 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY . . . . . 3 SOMEONE ELSE . . . . . 4 OTHER 6	
925	Do you own this or any other house either alone or jointly with someone else?	ALONE ONLY . . . . . 1 JOINTLY ONLY . . . . . 2 BOTH ALONE AND JOINTLY . . . . . 3 DOES NOT OWN 4	→ 928
926	Do you have a title deed for any house you own?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 928
927	Is your name on the title deed?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
928	Do you own any agricultural or non-agricultural land either alone or jointly with someone else?	ALONE ONLY . . . . . 1 JOINTLY ONLY . . . . . 2 BOTH ALONE AND JOINTLY . . . . . 3 DOES NOT OWN 4	→ 931
929	Do you have a title deed for any land you own?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 931
930	Is your name on the title deed?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
931	PRESENCE OF OTHERS AT THIS POINT (PRESENT AND LISTENING, PRESENT BUT NOT LISTENING, OR NOT PRESENT)	PRES./ LISTEN. / PRES./ NOT LISTEN. / NOT PRES. CHILDREN < 10 . . . . . 1 2 3 HUSBAND . . . . . 1 2 3 OTHER MALES . . . . . 1 2 3 OTHER FEMALES 1 2 3	
932	In your opinion, is a husband justified in hitting or beating his wife in the following situations: a) If she goes out without telling him? b) If she neglects the children? c) If she argues with him? d) If she refuses to have sex with him? e) If she burns the food?	YES / NO / DK a) GOES OUT . . . . . 1 2 8 b) NEGLECTS CHILDREN . . 1 2 8 c) ARGUES . . . . . 1 2 8 d) REFUSES SEX . . . . . 1 2 8 e) BURNS FOOD 1 2 8	

SECTION 10. MALARIA

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1001	In your opinion, what is the most serious health problem in your community?	HIV/AIDS . . . . . 01 TUBERCULOSIS . . . . . 02 MALARIA . . . . . 03 MALNUTRITION . . . . . 04 DIABETES . . . . . 05 CANCER . . . . . 06 FLU . . . . . 07 ROAD TRAFFIC ACCIDENTS . . . . . 08 DIARRHEA . . . . . 09 HEART DISEASE . . . . . 10 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	
1002	Can you tell me the signs or symptoms of malaria in a young child? RECORD ALL MENTIONED.	FEVER . . . . . A FEELING COLD . . . . . B CHILLS . . . . . C PERSPIRATION/SWEATIN . . . . . D HEADACHE . . . . . E BODY ACHES . . . . . F POOR APPETITI . . . . . G VOMITING . . . . . H DIARRHEA . . . . . I WEAKNESS . . . . . J COUGHING . . . . . K OTHER _____ X (SPECIFY) DOES NOT KNOW ANY Z	
1003	Are there ways to avoid getting malaria?	YES . . . . . 1 NO 2	→ 1005
1004	What are the ways to avoid getting malaria? RECORD ALL MENTIONED.	SLEEP UNDER MOSQUITO N . . . . . A USE MOSQUITO COILS . . . . . B USE INSECTICIDE SPRAY . . . . . C INDOOR RESIDUAL SPRAYING (IRS . . D KEEP DOORS/WINDOWS CLOSE . . . . . E USE INSECT REPELLANT . . . . . F KEEP SURROUNDINGS CLEA . . . . . G CUT THE GRASS . . . . . H REMOVE STANDING WATER . . . . . I INTERMITTENT PREVENTIVE TREAT- MENT (IPTP) . . . . . J HOUSE SCREENIN . . . . . K OTHER _____ X (SPECIFY) DOES NOT KNOW ANY . . . . . Z	
1005	Can ACTs be obtained at your nearest health facility or pharmacy (duka la dawa muhimu)?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1006A	In the past year, have you seen or heard any messages about malaria prevention?	YES . . . . . 1 NO 2	
1006B	In the past year, have you seen or heard any messages about malaria treatment?	YES . . . . . 1 NO 2	

SECTION 10. MALARIA

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1007	LOCATION OF INTERVIEW: MAINLAND TANZANIA ☐ ↓ ZANZIBAR ☐ → 1008B		
1008A	In the past year, have you ever heard or seen the phrase "Malaria Haikubaliki"?	YES . . . . . 1 NO 2	→ 1009 → 1010
1008B	In the past year, have you ever heard or seen the phrase "Maliza Malaria"?	YES . . . . . 1 NO 2	→ 1010
1009	Where did you hear or see this phrase? RECORD ALL MENTIONED.	RADIO . . . . . A BILLBOARD . . . . . B POSTER . . . . . C T-SHIRT . . . . . D LEAFLET/FACT SHEET/ BROCHURE . . E TELEVISION . . . . . F MOBILE VIDEO UNI . . . . . G SCHOOL . . . . . H HEALTH CARE WORKER . . . . . I COMMUNITY EVENT/PRESENTATIC . . J FRIEND/NEIGHBOR/FAMILY MEMBE . . K OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	
1010	In the past six months, were you visited by a health worker or volunteer who talked to you about malaria?	YES . . . . . 1 NO 2	
1011	Now I am going to read some statements and I would like you to tell me how much you agree or disagree with them. After I read each statement, please tell me whether you strongly agree with it, somewhat agree with it, somewhat disagree with it or strongly disagree with it.		
1012	I can easily protect myself and my children from malaria. Do you strongly agree, somewhat agree, somewhat disagree, or strongly disagree?	STRONGLY AGREE . . . . . 1 SOMEWHAT AGRE . . . . . 2 SOMEWHAT DISAGRE . . . . . 3 STRONGLY DISAGREE 4	
1013	I can ensure that my children sleep under a treated net every single night of the year. Do you strongly agree, somewhat agree, somewhat disagree, or strongly disagree?	STRONGLY AGREE . . . . . 1 SOMEWHAT AGRE . . . . . 2 SOMEWHAT DISAGRE . . . . . 3 STRONGLY DISAGREE 4	
1014	I can easily hang my children's mosquito nets. Do you strongly agree, somewhat agree, somewhat disagree, or strongly disagree?	STRONGLY AGREE . . . . . 1 SOMEWHAT AGRE . . . . . 2 SOMEWHAT DISAGRE . . . . . 3 STRONGLY DISAGREE 4	
1015	It is important to sleep under a net every single night. Do you strongly agree, somewhat agree, somewhat disagree, or strongly disagree?	STRONGLY AGREE . . . . . 1 SOMEWHAT AGRE . . . . . 2 SOMEWHAT DISAGRE . . . . . 3 STRONGLY DISAGREE 4	
1016	Pregnant women are at high risk of getting malaria. Do you strongly agree, somewhat agree, somewhat disagree, or strongly disagree?	STRONGLY AGREE . . . . . 1 SOMEWHAT AGRE . . . . . 2 SOMEWHAT DISAGRE . . . . . 3 STRONGLY DISAGREE 4	
1017	Women should attend antenatal care early in their pregnancy. Do you strongly agree, somewhat agree, somewhat disagree, or strongly disagree?	STRONGLY AGREE . . . . . 1 SOMEWHAT AGRE . . . . . 2 SOMEWHAT DISAGRE . . . . . 3 STRONGLY DISAGREE 4	

SECTION 11. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1101	Now I would like to ask you some other questions relating to health matters. Have you had an injection for any reason in the last 12 months? IF YES: How many injections have you had? IF NUMBER OF INJECTIONS IS 90 OR MORE, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'. IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.	NUMBER OF INJECTIONS . . . . . [ ][ ] NONE 00	→ 1104
1102	Among these injections, how many were administered by a doctor, a nurse, a pharmacist, a dentist, or any other health worker? IF NUMBER OF INJECTIONS IS 90 OR MORE, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'. IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.	NUMBER OF INJECTIONS . . . . . [ ][ ] NONE 00	→ 1104
1103	The last time you got an injection from a health worker, did he/she take the syringe and needle from a new, unopened package?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1104	Do you currently smoke cigarettes every day, some days, or not at all?	EVERY DAY . . . . . 1 SOME DAYS . . . . . 2 NOT AT ALL 3	→ 1106
1105	On average, how many cigarettes do you currently smoke each day?	NUMBER OF CIGARETTES . . . . . [ ][ ]	
1106	Do you currently smoke or use any other type of tobacco every day, some days, or not at all?	EVERY DAY . . . . . 1 SOME DAYS . . . . . 2 NOT AT ALL 3	→ 1107A
1107	What other type of tobacco do you currently smoke or use? RECORD ALL MENTIONED.	KRETEKS . . . . . A PIPES FULL OF TOBACCO . . . . . B CIGARS, CHEROOTS, OR CIGARILLOS . . . . . C WATER PIPE . . . . . D SNUFF BY MOUTH . . . . . E SNUFF BY NOSE . . . . . F CHEWING TOBACCO . . . . . G BETEL QUID WITH TOBACCO . . . . . H OTHER _____ X (SPECIFY)	
1107A	Have you ever consumed a drink that contain alcohol such as beer,wine,spirit,fermented cider or local brewers such as mbege,ulanzi, gongo/chang'aa etc?	YES . . . . . 1 NO 2	→ 1108
1107B	In the past 12 months, how frequently have you had at least one drink?	DAILY . . . . . 1 WEEKLY . . . . . 2 MONTHLY 3 LESS THAN ONCE A MONTH . . . . . 4 NEVER DRUNK 5	
1108	Many different factors can prevent women from getting medical advice or treatment for themselves. When you are sick and want to get medical advice or treatment, is each of the following a big problem or not: a) Getting permission to go to the doctor? b) Getting money needed for advice or treatment? c) The distance to the health facility? d) Not wanting to go alone?	BIG PROBLEM / NOT A BIG PROBLEM a) PERMISSION TO GO . . . . . 1 2 b) GETTING MONEY . . . . . 1 2 c) DISTANCE . . . . . 1 2 d) GO ALONE 1 2	

SECTION 11. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1109	Are you covered by any health insurance?	YES . . . . . 1 NO 2	→ 1201
1110	What type of health insurance are you covered by? RECORD ALL MENTIONED.	MUTUAL HEALTH ORGANIZATION/ COMMUNITY-BASED HEALTH INSURANCE . . . . . A HEALTH INSURANCE THROUGH EMPLOYER . . . . . B SOCIAL SECURITY . . . . . C OTHER PRIVATELY PURCHASED COMMERCIAL HEALTH INSURANCE . . . . . D OTHER _____ X (SPECIFY)	

SECTION 12: FEMALE GENITAL CUTTING/MUTILATION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1201	Now I would like to ask some questions about a practice known as female circumcision. Have you ever heard of female circumcision?	YES . . . . . 1 NO 2	→ 1203
1202	In some countries, there is a practice in which a girl may have part of her genitals cut. Have you ever heard about this practice?	YES . . . . . 1 NO 2	→ 1301
1203	Have you yourself ever been circumcised?	YES . . . . . 1 NO 2	→ 1209
1204	Now I would like to ask you what was done to you at that time. Was any flesh removed from the genital area?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 1206
1205	Was the genital area just nicked without removing any flesh?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1206	Was your genital area sewn closed?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1207	How old were you when you were circumcised? IF THE RESPONDENT DOES NOT KNOW THE EXACT AGE, PROBE TO GET AN ESTIMATE.	AGE IN COMPLETED YEARS . . . . . [ ][ ] AS A BABY/DURING INFANCY . . . . . 95 DON'T KNOW 98	
1208	Who performed the circumcision?	**TRADITIONAL** TRAD. CIRCUMCISER . . . . . 11 TRAD. BIRTH ATTENDANT . . . . . 12 OTHER TRAD. _____ 16 (SPECIFY) **HEALTH PROFESSIONAL** DOCTOR . . . . . 21 TRAINED NURSE/MIDWIFE . . . . . 22 OTHER HEALTH PROFESSIONAL _____ 26 (SPECIFY) DON'T KNOW 98	
1209	CHECK 213, 215 AND 216: HAS ONE OR MORE LIVING DAUGHTERS BORN IN 2000 OR LATER ☐ ↓ HAS NO LIVING DAUGHTERS BORN IN 2000 OR LATER ☐ →		1216

1209A	CHECK 213, 215 AND 216: ENTER IN THE TABLE THE BIRTH HISTORY NUMBER AND NAME OF EACH LIVING DAUGHTER BORN IN 2000 OR LATER. ASK THE QUESTIONS ABOUT ALL OF THESE DAUGHTERS. BEGIN WITH THE YOUNGEST DAUGHTER. (IF THERE ARE MORE THAN 3 DAUGHTERS, USE ADDITIONAL QUESTIONNAIRES). Now I would like to ask you some questions about your (daughter/daughters).			
1210	BIRTH HISTORY NUMBER AND NAME OF EACH LIVING DAUGHTER BORN IN 2000 OR LATER.	YOUNGEST LIVING DAUGHTER BIRTH HISTORY NUMBER . . [ ][ ] NAME _____	NEXT-TO-YOUNGEST LIVING DAUGHTER BIRTH HISTORY NUMBER . . [ ][ ] NAME _____	SECOND-TO-YOUNGEST LIVING DAUGHTER BIRTH HISTORY NUMBER . . [ ][ ] NAME _____
1211	Is (NAME OF DAUGHTER) circumcised?	YES . . . . . 1 NO . . . . . 2 (GO TO 1211 IN NEXT COLUMN; OR IF NO MORE DAUGHTERS, GO TO 1216)	YES . . . . . 1 NO . . . . . 2 (GO TO 1211 IN NEXT COLUMN; OR IF NO MORE DAUGHTERS, GO TO 1216)	YES . 1 NO . 2 (GO TO 1211 IN FIRST COLUMN OF NEW QUESTIONNAIRE; OR IF NO MORE DAUGHTERS, GO TO 1216)
1212	How old was (NAME OF DAUGHTER) when she was circumcised? IF THE RESPONDENT DOES NOT KNOW THE AGE, PROBE TO GET AN ESTIMATE.	AGE IN COMPLE-TED YRS . . [ ][ ] DON'T KNOW 98	AGE IN COMPLE-TED YRS . . [ ][ ] DON'T KNOW 98	AGE IN COMPLE-TED YRS . . [ ][ ] DON'T KNOW 98
1213	Was her genital area sewn closed?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
1214	Who performed the circumcision?	**TRADITIONAL** TRADITIONAL CIRCUMCISER . . 11 TRAD. BIRTH ATTENDANT . . 12 OTHER TRAD. _____ 16 (SPECIFY) **HEALTH PROFESSIONAL** DOCTOR . . . . . 21 TRAINED NURSE/MIDWIFI 22 OTHER HEALTH PROFESSIONAL _____ 26 (SPECIFY) DON'T KNOW 98	**TRADITIONAL** TRADITIONAL CIRCUMCISER . . 11 TRAD. BIRTH ATTENDANT . . 12 OTHER TRAD. _____ 16 (SPECIFY) **HEALTH PROFESSIONAL** DOCTOR . . . . . 21 TRAINED NURSE/MIDWIFI 22 OTHER HEALTH PROFESSIONAL _____ 26 (SPECIFY) DON'T KNOW 98	**TRADITIONAL** TRADITIONAL CIRCUMCISER . . 11 TRAD. BIRTH ATTENDANT . . 12 OTHER TRAD. _____ 16 (SPECIFY) **HEALTH PROFESSIONAL** DOCTOR . . . . . 21 TRAINED NURSE/MIDWIFI 22 OTHER HEALTH PROFESSIONAL _____ 26 (SPECIFY) DON'T KNOW 98
1215		GO BACK TO 1211 IN NEXT COLUMN; OR, IF NO MORE DAUGHTERS, GO TO 1216.	GO BACK TO 1211 IN NEXT COLUMN; OR, IF NO MORE DAUGHTERS, GO TO 1216.	GO TO 1211 IN FIRST COLUMN OF NEW QUESTIONNAIRE; OR IF NO MORE DAUGHTERS, GO TO 1216.

FEMALE GENITAL CUTTING/MUTILATION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1216	Do you believe that female circumcision is required by your religion?	YES . . . . . 1 NO . . . . . 2 NO RELIGION . . . . . 3 DON'T KNOW 8	
1216A	Do you believe that female circumcision is requiered by your culture?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1217	Do you think that female circumcision should be continued, or should it be stopped?	CONTINUED . . . . . 1 STOPPED . . . . . 2 DEPENDS . . . . . 3 DON'T KNOW 8	

SECTION 13. MATERNAL MORTALITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1301	Now I would like to ask you some questions about your brothers and sisters, that is, all of the children born to your natural mother, including those who are living with you, those living elsewhere and those who have died. How many children did your mother give birth to, including you?	NUMBER OF BIRTHS TO NATURAL MOTHER . . . . . ☐☐	
1302	CHECK 1301: TWO OR MORE BIRTHS ☐ ↓ ONLY ONE BIRTH (RESPONDENT ONLY) ☐ → 1400		
1303	How many births did your mother have before you were born?	NUMBER OF PRECEDING BIRTHS . . . . . ☐☐	

1304	What was the name given to your (oldest/ next oldest) brother or sister?	(1) _____	(2) _____	(3) _____	(4) _____	(5) _____	(6) _____
1305	Is (NAME) male or female?	MALE . . . . 1 FEMALE . 2	MALE . . . . 1 FEMALE . 2	MALE . . . . 1 FEMALE . 2	MALE . . . . 1 FEMALE . 2	MALE . . . . 1 FEMALE . 2	MALE . . . . 1 FEMALE . 2
1306	Is (NAME) still alive?	YES . . . . . 1 NO . . . . . 2 → GO TO 1308 DK . . . . . 8 → GO TO (2)	YES . . . . . 1 NO . . . . . 2 → GO TO 1308 DK . . . . . 8 → GO TO (3)	YES . . . . . 1 NO . . . . . 2 → GO TO 1308 DK . . . . . 8 → GO TO (4)	YES . . . . . 1 NO . . . . . 2 → GO TO 1308 DK . . . . . 8 → GO TO (5)	YES . . . . . 1 NO . . . . . 2 → GO TO 1308 DK . . . . . 8 → GO TO (6)	YES . . . . . 1 NO . . . . . 2 → GO TO 1308 DK . . . . . 8 → GO TO (7)
1307	How old is (NAME)?	☐☐ GO TO (2)	☐☐ GO TO (3)	☐☐ GO TO (4)	☐☐ GO TO (5)	☐☐ GO TO (6)	☐☐ GO TO (7)
1308	How many years ago did (NAME) die?	☐☐	☐☐	☐☐	☐☐	☐☐	☐☐
1309	How old was (NAME) when (he/she) died?	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (2)	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (3)	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (4)	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (5)	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (6)	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (7)
1310	Was (NAME) pregnant when she died?	YES . . . . . 1 → GO TO 1313 NO 2	YES . . . . . 1 → GO TO 1313 NO 2	YES . . . . . 1 → GO TO 1313 NO 2	YES . . . . . 1 → GO TO 1313 NO 2	YES . . . . . 1 → GO TO 1313 NO 2	YES . . . . . 1 → GO TO 1313 NO 2
1311	Did (NAME) die during childbirth?	YES . . . . . 1 → GO TO 1313 NO 2	YES . . . . . 1 → GO TO 1313 NO 2	YES . . . . . 1 → GO TO 1313 NO 2	YES . . . . . 1 → GO TO 1313 NO 2	YES . . . . . 1 → GO TO 1313 NO 2	YES . . . . . 1 → GO TO 1313 NO 2
1312	Did (NAME) die within two months after the end of a pregnancy or childbirth?	YES . . . . . 1 NO 2	YES . . . . 1 NO 2	YES . . . . 1 NO 2	YES . . . . 1 NO 2	YES . . . . 1 NO 2	YES . . . . 1 NO 2
1313	How many live born children did (NAME) give birth to during her lifetime?	☐☐	☐☐	☐☐	☐☐	☐☐	☐☐

IF NO MORE BROTHERS OR SISTERS, GO TO NEXT SECTION.

1304	What was the name given to your (oldest/ next oldest) brother or sister?	(7) _____	(8) _____	(9) _____	(10) _____	(11) _____	(12) _____
1305	Is (NAME) male or female?	MALE . . . . 1 FEMALE . 2	MALE . . . . 1 FEMALE . 2	MALE . . . . 1 FEMALE . 2	MALE . . . . 1 FEMALE . 2	MALE . . . . 1 FEMALE . 2	MALE . . . . 1 FEMALE . 2
1306	Is (NAME) still alive?	YES . . . . . 1 NO . . . . . 2 → GO TO 1308 DK . . . . . 8 → GO TO (8)	YES . . . . . 1 NO . . . . . 2 → GO TO 1308 DK . . . . . 8 → GO TO (9)	YES . . . . . 1 NO . . . . . 2 → GO TO 1308 DK . . . . . 8 → GO TO (10)	YES . . . . . 1 NO . . . . . 2 → GO TO 1308 DK . . . . . 8 → GO TO (11)	YES . . . . . 1 NO . . . . . 2 → GO TO 1308 DK . . . . . 8 → GO TO (12)	YES . . . . . 1 NO . . . . . 2 → GO TO 1308 DK . . . . . 8 → GO TO (13)
1307	How old is (NAME)?	☐☐ GO TO (8)	☐☐ GO TO (9)	☐☐ GO TO (10)	☐☐ GO TO (11)	☐☐ GO TO (12)	☐☐ GO TO (13)
1308	How many years ago did (NAME) die?	☐☐	☐☐	☐☐	☐☐	☐☐	☐☐
1309	How old was (NAME) when (he/she) died?	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (8)	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (9)	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (10)	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (11)	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (12)	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (13)
1310	Was (NAME) pregnant when she died?	YES . . . . . 1 → GO TO 1313 NO 2	YES . . . . . 1 → GO TO 1313 NO 2	YES . . . . . 1 → GO TO 1313 NO 2	YES . . . . . 1 → GO TO 1313 NO 2	YES . . . . . 1 → GO TO 1313 NO 2	YES . . . . . 1 → GO TO 1313 NO 2
1311	Did (NAME) die during childbirth?	YES . . . . . 1 → GO TO 1313 NO 2	YES . . . . . 1 → GO TO 1313 NO 2	YES . . . . . 1 → GO TO 1313 NO 2	YES . . . . . 1 → GO TO 1313 NO 2	YES . . . . . 1 → GO TO 1313 NO 2	YES . . . . . 1 → GO TO 1313 NO 2
1312	Did (NAME) die within two months after the end of a pregnancy or childbirth?	YES . . . . . 1 NO 2	YES . . . . 1 NO 2	YES . . . . 1 NO 2	YES . . . . 1 NO 2	YES . . . . 1 NO 2	YES . . . . 1 NO 2
1313	How many live born children did (NAME) give birth to during her lifetime?	☐☐	☐☐	☐☐	☐☐	☐☐	☐☐
IF NO MORE BROTHERS OR SISTERS, GO TO NEXT SECTION.							

DOMESTIC VIOLENCE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1400	CHECK HOUSEHOLD QUESTIONNAIRE, Q 313 WOMAN SELECTED FOR THIS SECTION ↓ WOMAN NOT SELECTED →		1433
1401	CHECK FOR PRESENCE OF OTHERS: DO NOT CONTINUE UNTIL PRIVACY IS ENSURED. PRIVACY OBTAINED . . . . . 1 ↓ PRIVACY NOT POSSIBLE . . . . . 2 →		1432
1401A	READ TO THE RESPONDENT: Now I would like to ask you questions about some other important aspects of a woman's life. You may find some of these questions very personal. However, your answers are crucial for helping to understand the condition of women in TANZANIA. Let me assure you that your answers are completely confidential and will not be told to anyone and no one else in your household will know that you were asked these questions.		
1402	CHECK 701 AND 702: CURRENTLY MARRIED/ LIVING WITH A MAN ↓ FORMERLY MARRIED/ LIVED WITH A MAN (READ IN PAST TENSE AND USE 'LAST' WITH 'HUSBAND/PARTNER') ↓ NEVER MARRIED/ NEVER LIVED WITH A MAN →		1416
1403	First, I am going to ask you about some situations which happen to some women. Please tell me if these apply to your relationship with your (last) (husband/partner)? a) He (is/was) jealous or angry if you (talk/talked) to other men? b) He frequently (accuses/accused) you of being unfaithful? c) He (does/did) not permit you to meet your female friends? d) He (tries/tried) to limit your contact with your family? e) He (insists/insisted) on knowing where you (are/were) at all times?	YES NO DK JEALOUS . . . . . 1 2 8 ACCUSES . . . . . 1 2 8 NOT MEET FRIENDS . . 1 2 8 NO FAMILY . . . . . 1 2 8 WHERE YOU ARE 1 2 8	

1404	Now I need to ask some more questions about your relationship with your (last) (husband/partner).					
	A. Did your (last) (husband/partner) ever:	EVER		B. How often did this happen during the last 12 months: often, only sometimes, or not at all?		
				OFTEN	SOME-TIMES	NOT IN LAST 12 MONTHS
	a) say or do something to humiliate you in front of others?	YES 1 → NO 2 ↓		1	2	3
	b) threaten to hurt or harm you or someone you care about?	YES 1 → NO 2 ↓		1	2	3
	c) insult you or make you feel bad about yourself?	YES 1 → NO 2 ↓		1	2	3

DOMESTIC VIOLENCE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1405	A. Did your (last) (husband/partner) ever do any of the following things to you: B. How often did this happen during the last 12 months: often, only sometimes, or not at all?		

	EVER		OFTEN	SOME-TIMES	NOT IN LAST 12 MONTHS
a) push you, shake you, or throw something at you?	YES NO	1 2	1	2	3
b) slap you?	YES NO	1 2	1	2	3
c) twist your arm or pull your hair?	YES NO	1 2	1	2	3
d) punch you with his fist or with something that could hurt you?	YES NO	1 2	1	2	3
e) kick you, drag you, or beat you up?	YES NO	1 2	1	2	3
f) try to choke you or burn you on purpose?	YES NO	1 2	1	2	3
g) threaten or attack you with a knife, gun, or other weapon?	YES NO	1 2	1	2	3
h) physically force you to have sexual intercourse with him when you did not want to?	YES NO	1 2	1	2	3
i) physically force you to perform any other sexual acts you did not want to?	YES NO	1 2	1	2	3
j) force you with threats or in any other way to perform sexual acts you did not want to?	YES NO	1 2	1	2	3

1406	CHECK 1405A (a-j): AT LEAST ONE 'YES' ☐ NOT A SINGLE 'YES' ☐ →		1409
1407	How long after you first (got married/started living together) with your (last) (husband/partner) did (this/any of these things) first happen? IF LESS THAN ONE YEAR, RECORD '00'.	NUMBER OF YEARS . . . . . ☐☐ BEFORE MARRIAGE/BEFORE LIVING TOGETHER 95	
1408	Did the following ever happen as a result of what your (last) (husband/partner) did to you: a) You had cuts, bruises, or aches? b) You had eye injuries, sprains, dislocations, or burns? c) You had deep wounds, broken bones, broken teeth, or any other serious injury? d) You had thought of ending your life or attempted to end your life? e) You had an abortion or miscarriage?	YES . . . . . 1 NO . . . . . 2 YES . . . . . 1 NO . . . . . 2 YES . . . . . 1 NO . . . . . 2 YES . . . . . 1 NO . . . . . 2 YES . . . . . 1 NO . . . . . 2 NEVER BEEN PREGNANT 3	
1409	Have you ever hit, slapped, kicked, or done anything else to physically hurt your (last) (husband/partner) at times when he was not already beating or physically hurting you?	YES . . . . . 1 NO . . . . . 2 →	1411

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1410	In the last 12 months, how often have you done this to your (last) (husband/partner): often, only sometimes, or not at all?	OFTEN . . . . . 1 SOMETIMES . . . . . 2 NOT AT ALL 3	
1411	Does (did) your (last) (husband/partner) drink alcohol?	YES . . . . . 1 NO 2	→ 1413
1412	How often does (did) he get drunk: often, only sometimes, or never?	OFTEN . . . . . 1 SOMETIMES . . . . . 2 NEVER 3	
1413	Are (Were) you afraid of your (last) (husband/partner): most of the time, sometimes, or never?	MOST OF THE TIME AFRAID . . . . . 1 SOMETIMES AFRAID . . . . . 2 NEVER AFRAID 3	
1414	CHECK 709: MARRIED MORE THAN ONCE ↓ MARRIED ONLY ONCE →		→ 1416
1415	A. So far we have been talking about the behavior of your (current/last) (husband/partner). Now I want to ask you about the behavior of any previous (husband/partner). a) Did any previous (husband/partner) ever hit, slap, kick, or do anything else to hurt you physically? b) Did any previous (husband/partner) physically force you to have intercourse or perform any other sexual acts against your will?	EVER: YES 1 / NO 2 B. How long ago did this last happen? 0 - 11 MONTHS AGO / 12+ MONTHS AGO / DON'T REMEMBER a) 1 2 3 b) 1 2 3	
1416	CHECK 701 AND 702: EVER MARRIED/EVER LIVED WITH A MAN ↓ a) From the time you were 15 years old has anyone other than (your/any) (husband/partner) hit you, slapped you, kicked you, or done anything else to hurt you physically? NEVER MARRIED/NEVER LIVED WITH A MAN ↓ b) From the time you were 15 years old has anyone hit you, slapped you, kicked you, or done anything else to hurt you physically?	YES . . . . . 1 NO . . . . . 2 REFUSED TO ANSWER/ NO ANSWER 3	→ 1419
1417	Who has hurt you in this way? Anyone else? RECORD ALL MENTIONED.	MOTHER/STEP-MOTHER . . . . . A FATHER/STEP-FATHER . . . . . B SISTER/BROTHER . . . . . C DAUGHTER/SON . . . . . D OTHER RELATIVE . . . . . E FORMER HUSBAND/LIVE-IN PARTNER F CURRENT BOYFRIEND . . . . . G FORMER BOYFRIEND . . . . . H MOTHER-IN-LAW . . . . . I FATHER-IN-LAW . . . . . J OTHER IN-LAW . . . . . K TEACHER . . . . . L EMPLOYER/SOMEONE AT WORK . . . . . M POLICE/SOLDIER . . . . . N OTHER _____ (SPECIFY) X	
1418	In the last 12 months, how often has (this person/have these persons) physically hurt you: often, only sometimes, or not at all?	OFTEN . . . . . 1 SOMETIMES . . . . . 2 NOT AT ALL 3	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1419	CHECK 201, 226, AND 230: EVER BEEN PREGNANT ('YES' ON 201 OR 226 OR 230) ↓ NEVER BEEN PREGNANT → 1422		
1420	Has any one ever hit, slapped, kicked, or done anything else to hurt you physically while you were pregnant?	YES . . . . . 1 NO 2	→ 1422
1421	Who has done any of these things to physically hurt you while you were pregnant? Anyone else? RECORD ALL MENTIONED.	CURRENT HUSBAND/PARTNER . . . . . A MOTHER/STEP-MOTHER . . . . . B FATHER/STEP-FATHEI . . . . . C SISTER/BROTHER . . . . . D DAUGHTER/SON . . . . . E OTHER RELATIVE . . . . . F FORMER HUSBAND/LIVE-IN-PARTNER G CURRENT BOYFRIENC . . . . . H FORMER BOYFRIEND . . . . . I MOTHER-IN-LAW . . . . . J FATHER-IN-LAW . . . . . K OTHER IN-LAW . . . . . L TEACHER . . . . . M EMPLOYER/SOMEONE AT WORI . . . . . N POLICE/SOLDIER . . . . . O OTHER _____ X (SPECIFY)	
1422	CHECK 701 AND 702: EVER MARRIED/EVER LIVED WITH A MAN ↓ NEVER MARRIED/NEVER LIVED WITH A MAN → 1422B		
1422A	Now I want to ask you about things that may have been done to you by someone other than (your/any) (husband/partner). At any time in your life, as a child or as an adult, has anyone ever forced you in any way to have sexual intercourse or perform any other sexual acts when you did not want to?	YES . . . . . 1 NO . . . . . 2 REFUSED TO ANSWER/ NO ANSWER 3	→ 1423 → 1424A
1422B	At any time in your life, as a child or as an adult, has anyone ever forced you in any way to have sexual intercourse or perform any other sexual acts when you did not want to?	YES . . . . . 1 NO . . . . . 2 REFUSED TO ANSWER/ NO ANSWER 3	→ 1426
1423	Who was the person who was forcing you the very first time this happened?	CURRENT HUSBAND/PARTNER . . . . . 01 FORMER HUSBAND/PARTNE . . . . . 02 CURRENT/FORMER BOYFRIENC . . . . . 03 FATHER/STEP-FATHEI . . . . . 04 BROTHER/STEP-BROTHE . . . . . 05 OTHER RELATIVE . . . . . 06 IN-LAW . . . . . 07 OWN FRIEND/ACQUAINTANC . . . . . 08 FAMILY FRIEND . . . . . 09 TEACHER . . . . . 10 EMPLOYER/SOMEONE AT WORI . . . . . 11 POLICE/SOLDIER . . . . . 12 PRIEST/RELIGIOUS LEADER . . . . . 13 STRANGER . . . . . 14 OTHER _____ 96 (SPECIFY)	

DOMESTIC VIOLENCE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1424	CHECK 701 AND 702: EVER MARRIED/EVER LIVED WITH A MAN ☐ ↓ / NEVER MARRIED/NEVER LIVED WITH A MAN ☐ ↓ a) In the last 12 months, has anyone other than (your/any) (husband/partner) physically forced you to have sexual intercourse when you did not want to? b) In the last 12 months has anyone physically forced you to have sexual intercourse when you did not want to?	YES . . . . . 1 NO 2	→ 1425
1424A	CHECK 1405A (h-j) and 1415A(b) AT LEAST ONE 'YES' ☐ ↓ / NOT A SINGLE 'YES' ☐ →		→ 1426
1425	CHECK 701 AND 702: EVER MARRIED/EVER LIVED WITH A MAN ☐ ↓ / NEVER MARRIED/NEVER LIVED WITH A MAN ☐ ↓ a) How old were you the first time you were forced to have sexual intercourse or perform any other sexual acts by anyone, including (your/any) husband/partner? b) How old were you the first first time you were forced to have sexual intercourse or perform any other sexual acts?	AGE IN COMPLETED YEARS . . . . . ☐☐ DON'T KNOW 98	
1426	CHECK 1405A (a-j), 1415A (a,b), 1416, 1420, 1422A, AND 1422B: AT LEAST ONE 'YES' ☐ ↓ / NOT A SINGLE 'YES' ☐ →		→ 1430
1427	Thinking about what you yourself have experienced among the different things we have been talking about, have you ever tried to seek help?	YES . . . . . 1 NO 2	→ 1429
1428	From whom have you sought help? Anyone else? RECORD ALL MENTIONED.	OWN FAMILY . . . . . A HUSBAND'S/PARTNER'S FAMILY . . . . . B CURRENT/FORMER HUSBAND/PARTNER . . . . . C CURRENT/FORMER BOYFRIEND . . . . . D FRIEND . . . . . E NEIGHBOR . . . . . F RELIGIOUS LEADER . . . . . G DOCTOR/MEDICAL PERSONNEL . . . . . H POLICE . . . . . I LAWYER . . . . . J SOCIAL SERVICE ORGANIZATION . . . . . K OTHER _____ X (SPECIFY)	
1428A	Did you effectively get help from the persons listed above?	YES . . . . . 1 NO 2	→ 1430
1429	Have you ever told any one about this?	YES . . . . . 1 NO 2	
1430	As far as you know, did your father ever beat your mother?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	

DOMESTIC VIOLENCE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
	THANK THE RESPONDENT FOR HER COOPERATION AND REASSURE HER ABOUT THE CONFIDENTIALITY OF HER ANSWERS. FILL OUT THE QUESTIONS BELOW WITH REFERENCE TO THE DOMESTIC VIOLENCE I would like to thank you very much for helping us. I appreciate the time you have taken. I realize that these questions may have been difficult for you to answer, but it is only by hearing from women themselves that we can really understand about women's health and experiences in life In case you ever hear of another woman who needs help, here is a list of organizations that provide support. Legal advice and counseling services to women in study location. Please do contact them if you or any of your friends or relatives needs help. Their services are free, and they will keep anything that anyone says to them private.		
1431	DID YOU HAVE TO INTERRUPT THE INTERVIEW BECAUSE SOME ADULT WAS TRYING TO LISTEN, OR CAME INTO THE ROOM, OR INTERFERED IN ANY OTHER WAY?	YES, ONCE / YES, MORE THAN ONCE / NO HUSBAND . . . . . 1 2 3 OTHER MALE ADULT . . . . . 1 2 3 FEMALE ADULT 1 2 3	
1432	INTERVIEWER'S COMMENTS/EXPLANATION FOR NOT COMPLETING THE DOMESTIC VIOLENCE MODULE. _____ _____ _____		
1433	CHECK 223A: ONE OR MORE DEATHS → NO DEATHS →		1435
1434	**READ TO THE RESPONDENT:** I would like to inform you that detailed information on the circumstances surrounding the deaths of children under the age of 5 years will be collected in the near future so that the federal government of Tanzania can provide health services to help reduce these deaths. If you don't mind, another team will be coming at a later date to interview members of the household about the death (s) you have told me about. Is this okay?	YES . . . . . 1 NO 2	
1435	RECORD THE TIME.	HOURS . . . . . [ ][ ] MINUTES . . . . . [ ][ ] MORNING . . . . . 1 AFTERNOON . . . . . 2 EVENING 3	

INSTRUCTIONS:

ONLY ONE CODE SHOULD APPEAR IN ANY BOX.
COLUMN 1 REQUIRES A CODE IN EVERY MONTH.

CODES FOR EACH COLUMN:

COLUMN 1: BIRTHS, PREGNANCIES, CONTRACEPTIVE USE

- B BIRTHS
- P PREGNANCIES
- T TERMINATIONS

- 0 NO METHOD
- 1 FEMALE STERILIZATION
- 2 MALE STERILIZATION
- 3 IUD
- 4 INJECTABLES
- 5 IMPLANTS
- 6 PILL
- 7 CONDOM
- 8 FEMALE CONDOM
- 9 EMERGENCY CONTRACEPTION
- J STANDARD DAYS METHOD
- K LACTATIONAL AMENORRHEA METHOD
- L RHYTHM METHOD

- M WITHDRAWAL
- X OTHER MODERN METHOD
- Y OTHER TRADITIONAL METHOD

COLUMN 2: DISCONTINUATION OF CONTRACEPTIVE USE

- 0 INFREQUENT SEX/HUSBAND AWAY
- 1 BECAME PREGNANT WHILE USING
- 2 WANTED TO BECOME PREGNANT
- 3 HUSBAND/PARTNER DISAPPROVED
- 4 WANTED MORE EFFECTIVE METHOD
- 5 SIDE EFFECTS/HEALTH CONCERNS

- 6 LACK OF ACCESS/TOO FAR
- 7 COSTS TOO MUCH
- 8 INCONVENIENT TO USE
- F UP TO GOD/FATALISTIC
- A DIFFICULT TO GET PREGNANT/MENOPAUSAL
- D MARITAL DISSOLUTION/SEPARATION
- X OTHER

_____
(SPECIFY)

- Z DON'T KNOW

				COL. 1	COL. 2	
2016	06	JUN	01			2016
	05	MAY	02			
	04	APR	03			
	03	MAR	04			
	02	FEB	05			
	01	JAN	06			
	12	DEC	07			
	11	NOV	08			
	10	OCT	09			
2015	09	SEP	10			2015
	08	AUG	11			
	07	JUL	12			
	06	JUN	13			
	05	MAY	14			
	04	APR	15			
	03	MAR	16			
	02	FEB	17			
	01	JAN	18			
	12	DEC	19			
	11	NOV	20			
	10	OCT	21			
2014	09	SEP	22			2014
	08	AUG	23			
	07	JUL	24			
	06	JUN	25			
	05	MAY	26			
	04	APR	27			
	03	MAR	28			
	02	FEB	29			
	01	JAN	30			
	12	DEC	31			
	11	NOV	32			
	10	OCT	33			
2013	09	SEP	34			2013
	08	AUG	35			
	07	JUL	36			
	06	JUN	37			
	05	MAY	38			
	04	APR	39			
	03	MAR	40			
	02	FEB	41			
	01	JAN	42			
	12	DEC	43			
	11	NOV	44			
	10	OCT	45			
2012	09	SEP	46			2012
	08	AUG	47			
	07	JUL	48			
	06	JUN	49			
	05	MAY	50			
	04	APR	51			
	03	MAR	52			
	02	FEB	53			
	01	JAN	54			
	12	DEC	55			
	11	NOV	56			
	10	OCT	57			
2011	09	SEP	58			2011
	08	AUG	59			
	07	JUL	60			
	06	JUN	61			
	05	MAY	62			
	04	APR	63			
	03	MAR	64			
	02	FEB	65			
	01	JAN	66			
	12	DEC	67			
	11	NOV	68			
	10	OCT	69			
2010	09	SEP	70			2010
	08	AUG	71			
	07	JUL	72			
	06	JUN	73			
	05	MAY	74			
	04	APR	75			
	03	MAR	76			
	02	FEB	77			
	01	JAN	78			

INTERVIEWER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING INTERVIEW

COMMENTS ABOUT INTERVIEW:

COMMENTS ON SPECIFIC QUESTIONS:

ANY OTHER COMMENTS:

SUPERVISOR'S OBSERVATIONS

EDITOR'S OBSERVATIONS

2015-16 TANZANIA DEMOGRAPHIC AND HEALTH AND MALARIA INDICATORS SURVEYS
MAN'S QUESTIONNAIRE

UNITED REPUBLIC OF TANZANIA
NATIONAL BUREAU OF STATISTICS

IDENTIFICATION

PLACE NAME _____

NAME OF HOUSEHOLD HEAD _____

CLUSTER NUMBER . . . . . | | | | |

HOUSEHOLD NUMBER . . . . . | | | | | |

NAME AND LINE NUMBER OF MAN _____ | | |

INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE				DAY		| MONTH		| YEAR				
INTERVIEWER'S NAME				INT. NO.				
RESULT*				RESULT*	
NEXT VISIT: DATE				TOTAL NUMBER OF VISITS	
TIME				

*RESULT CODES: 1 COMPLETED; 2 NOT AT HOME; 3 POSTPONED; 4 REFUSED; 5 PARTLY COMPLETED; 6 INCAPACITATED; 7 OTHER _____ (SPECIFY)

LANGUAGE OF QUESTIONNAIRE** | 0 | 1 |

LANGUAGE OF INTERVIEW** | | |

TRANSLATOR USED (YES = 1, NO = 2) | |

LANGUAGE OF QUESTIONNAIRE** ENGLISH

**LANGUAGE CODES:
01 ENGLISH
02 KISWAHILI

SUPERVISOR		FIELD EDITOR		OFFICE EDITOR	KEYED BY
NAME	NUMBER	NAME	NUMBER	NUMBER	NUMBER

INTRODUCTION AND CONSENT

Hello. My name is _____. I am working with the NATIONAL BUREAU OF STATISTICS. We are conducting a survey about health and other topics all over the UNITED REPUBLIC OF TANZANIA. The information we collect will help the government to plan health services. Your household was selected for the survey. The questions usually take about 20 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of our survey team. You don't have to be in the survey, but we hope you will agree to answer the questions since your views are important. If I ask you any question you don't want to answer, just let me know and I will go on to the next question or you can stop the interview at any time.

In case you need more information about the survey, you may contact the person listed on the card that has already been given to your household.

Do you have any questions?
May I begin the interview now?

SIGNATURE OF INTERVIEWER _____ DATE _____

RESPONDENT AGREES TO BE INTERVIEWED . . 1 ↓

RESPONDENT DOES NOT AGREE TO BE INTERVIEWED . . 2 → END

SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	RECORD THE TIME.	HOURS . . . . . ☐☐ MINUTES . . . . . ☐☐ MORNING . . . . . 1 AFTERNOON . . . . . 2 EVENING 3	
102	How long have you been living continuously in (NAME OF CURRENT CITY, TOWN OR VILLAGE OF RESIDENCE)? IF LESS THAN ONE YEAR, RECORD '00' YEARS.	YEARS . . . . . ☐☐ ALWAYS . . . . . 95 VISITOR 96	→ 105
103	Just before you moved here, did you live in a city, in a town, or in a rural area?	CITY . . . . . 1 TOWN . . . . . 2 RURAL AREA 3	
104	Before you moved here, which region did you live in?	DODOMA . . . . . 01 ARUSHA . . . . . 02 KILIMANJARO . . . . . 03 TANGA . . . . . 04 MOROGORO . . . . . 05 PWANI . . . . . 06 DAR ES SALAAM . . . . . 07 LINDI . . . . . 08 MTWARA . . . . . 09 RUVUMA . . . . . 10 IRINGA . . . . . 11 MBEYA . . . . . 12 SINGIDA . . . . . 13 TABORA . . . . . 14 RUKWA . . . . . 15 KIGOMA . . . . . 16 SHINYANGA . . . . . 17 KAGERA . . . . . 18 MWANZA . . . . . 19 MARA . . . . . 20 MANYARA . . . . . 21 NJOMBE . . . . . 22 KATAVI . . . . . 23 SIMIYU . . . . . 24 GEITA . . . . . 25 KASKAZINI UNGUJA . . . . . 26 KUSINI UNGUJA . . . . . 27 MJINI MAGHARIBI . . . . . 28 KASKAZINI PEMBA . . . . . 29 KUSINI PEMBA . . . . . 30 OUTSIDE OF TANZANIA 96	
105	In what month and year were you born?	MONTH . . . . . ☐☐ DON'T KNOW MONTH . . . . . 98 YEAR . . . . . ☐☐☐☐ DON'T KNOW YEAR 9998	

SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
106	How old were you at your last birthday? COMPARE AND CORRECT 105 AND/OR 106 IF INCONSISTENT.	AGE IN COMPLETED YEARS . . . . . [ ][ ]	
107	Have you ever attended school?	YES . . . . . 1 NO 2	→ 111
108	What is the highest level of school you attended?	PRE-PRIMARY . . . . . 0 PRIMARY . . . . . 1 POST PRIMARY TRAINING . . . . . 2 SECONDARY 'O' LEVEL . . . . . 3 POST SECONDARY 'O' LEVEL TRAINING . . . . . 4 SECONDARY 'A' LEVEL . . . . . 5 POST SECONDARY 'A' LEVEL TRAINING . . . . . 6 UNIVERSITY . . . . . 7 DON'T KNOW 8	

SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
109	What is the highest grade you completed at that level? IF COMPLETED LESS THAN ONE YEAR AT THAT LEVEL, RECORD '00'.	GRADE . . . . . [ ][ ]	
110	CHECK 108: CODES "0", "1", "2", "3", 4', or '8' CIRCLED ↓ / CODES '5', '6', OR '7' CIRCLED →		113
111	Now I would like you to read this sentence to me. SHOW CARD TO RESPONDENT. IF RESPONDENT CANNOT READ WHOLE SENTENCE, PROBE: Can you read any part of the sentence to me?	CANNOT READ AT ALL . . . . . 1 ABLE TO READ ONLY PART OF THE SENTENCE . . . . . 2 ABLE TO READ WHOLE SENTENCE . . . . . 3 NO CARD WITH REQUIRED LANGUAGE _____ 4 (SPECIFY LANGUAGE) BLIND/VISUALLY IMPAIRED 5	
112	CHECK 111: CODE '2', '3' OR '4' CIRCLED ↓ / CODE '1' OR '5' CIRCLED →		114
113	Do you read a newspaper or magazine at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK . . . . . 1 LESS THAN ONCE A WEEK . . . . . 2 NOT AT ALL 3	
114	Do you listen to the radio at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK . . . . . 1 LESS THAN ONCE A WEEK . . . . . 2 NOT AT ALL 3	
115	Do you watch/listen to television at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK . . . . . 1 LESS THAN ONCE A WEEK . . . . . 2 NOT AT ALL 3	
116	Do you own a mobile telephone?	YES . . . . . 1 NO 2	→ 118
117	Do you use your mobile phone for any financial transactions?	YES . . . . . 1 NO 2	
117A	Do you use your mobile phone for any health related issues?	YES . . . . . 1 NO 2	
118	Do you have an account in a bank or other financial institution that you yourself use?	YES . . . . . 1 NO 2	
118A	Do you use VICOBA as financial scheme?	YES . . . . . 1 NO 2	
119	Have you ever used the internet?	YES . . . . . 1 NO 2	→ 124
120	In the last 12 months, have you used the internet? IF NECESSARY, PROBE FOR USE FROM ANY LOCATION, WITH ANY DEVICE.	YES . . . . . 1 NO 2	→ 124
121	During the last one month, how often did you use the internet: almost every day, at least once a week, less than once a week, or not at all?	ALMOST EVERY DAY . . . . . 1 AT LEAST ONCE A WEEK . . . . . 2 LESS THAN ONCE A WEEK . . . . . 3 NOT AT ALL 4	
124	In the last 12 months, how many times have you been away from home for one or more nights?	NUMBER OF TIMES . . . . . [ ][ ] NONE 00	→ 201
125	In the last 12 months, have you been away from home for more than one month at a time?	YES . . . . . 1 NO 2	

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
201	Now I would like to ask about any children you have had during your life. I am interested in all of the children that are biologically yours, even if they are not legally yours or do not have your last name. Have you ever fathered any children with any woman?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 206
202	Do you have any sons or daughters that you have fathered who are now living with you?	YES . . . . . 1 NO 2	→ 204
203	a) How many sons live with you? b) And how many daughters live with you? IF NONE, RECORD '00'.	a) SONS AT HOME . . . . . [ ][ ] b) DAUGHTERS AT HOME . . . . . [ ][ ]	
204	Do you have any sons or daughters that you have fathered who are alive but do not live with you?	YES . . . . . 1 NO 2	→ 206
205	a) How many sons are alive but do not live with you? b) And how many daughters are alive but do not live with you? IF NONE, RECORD '00'.	a) SONS ELSEWHERE . . . . . [ ][ ] b) DAUGHTERS ELSEWHERE . . . . . [ ][ ]	
206	Have you ever fathered a son or a daughter who was born alive but later died? IF NO, PROBE: Any baby who cried, who made any movement, sound, or effort to breathe, or who showed any other signs of life even if for a very short time?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 208
207	a) How many boys have died? b) And how many girls have died? IF NONE, RECORD '00'.	a) BOYS DEAD . . . . . [ ][ ] b) GIRLS DEAD . . . . . [ ][ ]	
208	SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL. IF NONE, RECORD '00'.	TOTAL CHILDREN . . . . . [ ][ ]	
209	CHECK 208: HAS HAD MORE THAN ONE CHILD HAS HAD ONLY ONE CHILD → 211 HAS NOT HAD ANY CHILDREN → 301		
210	Did all of the children you have fathered have the same biological mother?	YES . . . . . 1 NO 2	
211	CHECK 208: HAS HAD MORE THAN ONE CHILD a) How old were you when your first child was born? HAS HAD ONLY ONE CHILD b) How old were you when your child was born?	AGE IN YEARS . . . . . [ ][ ]	
212	CHECK 203 AND 205: AT LEAST ONE LIVING CHILD NO LIVING CHILDREN → 301		

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
213	CHECK 203 AND 205: MORE THAN ONE LIVING CHILD → a) How old is your youngest child? ONLY ONE LIVING CHILD → b) How old is your child?	AGE IN YEARS . . . . . [ ][ ]	
214	CHECK 213: (YOUNGEST) CHILD IS AGE 0-2 YEARS (YOUNGEST) CHILD IS AGE 3 YEARS OR OLDER		→ 301
215	CHECK 203 AND 205: MORE THAN ONE LIVING CHILD → a) What is the name of your youngest child? ONLY ONE LIVING CHILD → b) What is the name of your child?	_____ (NAME OF (YOUNGEST) CHILD)	
216	When (NAME)'s mother was pregnant with (NAME), did she have any antenatal check-ups?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 218
217	Were you ever present during any of those antenatal check-ups?	PRESENT . . . . . 1 NOT PRESENT 2	
218	Was (NAME) born in a hospital or health facility?	HOSPITAL/HEALTH FACILITY . . . . . 1 OTHER 2	
219	When a child has diarrhea, how much should he or she be given to drink: more than usual, about the same as usual, less than usual, or nothing to drink at all?	MORE THAN USUAL . . . . . 1 ABOUT THE SAME . . . . . 2 LESS THAN USUAL . . . . . 3 NOTHING TO DRINK . . . . . 4 DON'T KNOW 8	

SECTION 3. CONTRACEPTION

301	Now I would like to talk about family planning - the various ways or methods that a couple can use to delay or avoid a pregnancy. Have you ever heard of (METHOD)?	
01	Female Sterilization. PROBE: Women can have an operation to avoid having any more children.	YES . . . . . 1 NO 2
02	Male Sterilization. PROBE: Men can have an operation to avoid having any more children.	YES . . . . . 1 NO 2
03	IUD. PROBE: Women can have a loop or coil placed inside them by a doctor or a nurse which can prevent pregnancy for one or more years.	YES . . . . . 1 NO 2
04	Injectables. PROBE: Women can have an injection by a health provider that stops them from becoming pregnant for one or more months.	YES . . . . . 1 NO 2
05	Implants. PROBE: Women can have one or more small rods placed in their upper arm by a doctor or nurse which can prevent pregnancy for one or more years.	YES . . . . . 1 NO 2
06	Pill. PROBE: Women can take a pill every day to avoid becoming pregnant.	YES . . . . . 1 NO 2
07	Condom. PROBE: Men can put a rubber sheath on their penis before sexual intercourse.	YES . . . . . 1 NO 2
08	Female Condom. PROBE: Women can place a sheath in their vagina before sexual intercourse.	YES . . . . . 1 NO 2
09	Emergency Contraception. PROBE: As an emergency measure, within three to five days after they have unprotected sexual intercourse, women can take special pills to prevent pregnancy.	YES . . . . . 1 NO 2
10	Standard Days Method. PROBE: A woman uses a string of colored beads to know the days she can get pregnant. On the days she can get pregnant, she uses a condom or does not have sexual intercourse.	YES . . . . . 1 NO 2
11	Lactational Amenorrhea Method (LAM). PROBE: Up to six months after childbirth, before the menstrual period has returned, women use a method requiring frequent breastfeeding day and night.	YES . . . . . 1 NO 2
12	Rhythm Method. PROBE: To avoid pregnancy, women do not have sexual intercourse on the days of the month they think they can get pregnant.	YES . . . . . 1 NO 2
13	Withdrawal. PROBE: Men can be careful and pull out before climax.	YES . . . . . 1 NO 2
14	Have you heard of any other ways or methods that women or men can use to avoid pregnancy? PROBE TO KNOW IF IT IS MODERN METHOD OR TRADITIONAL METHOD	YES, MODERN METHOD _____ 1 (SPECIFY) YES, TRADITIONAL METHOD _____ 2 (SPECIFY) NO 3

SECTION 3. CONTRACEPTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
302	In the last few months have you:	YES NO	
	a) Heard about family planning on the radio?	a) RADIO 1 2	
	b) Seen anything about family planning on the television?	b) TELEVISION 1 2	
	c) Read about family planning in a newspaper or magazine?	c) NEWSPAPER OR MAGAZINE 1 2	
	d) Received a voice or text message about family planning on a mobile phone?	d) MOBILE PHONE 1 2	
	e) Seen anything about family planning on the Poster?	e) POSTER 1 2	
	f) Seen anything about family planning on the billboards?	f) BILLBOARDS 1 2	
	g) Heard about family planning at the community events?	g) COMMUNITY EVENTS 1 2	
	h) Seen anything about family planning on the live drama?	h) LIVE DRAMA 1 2	
	i) Head about family planning from a doctor or nurse?	i) DOCTOR/NURSI 1 2	
	j) Head about family planning from a community health worker?	j) COMMUNITY HEALTH WORKER . . . 1 2	
	k) Read about family planning from internet?	k) INTERNET 1 2	
303	In the last few months, have you discussed family planning with a health worker or health professional?	YES . . . . . 1 NO 2	
304	Now I would like to ask you about a woman's risk of pregnancy. From one menstrual period to the next, are there certain days when a woman is more likely to become pregnant when she has sexual relations?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 306
305	Is this time just before her period begins, during her period, right after her period has ended, or halfway between two periods?	JUST BEFORE HER PERIOD BEGIN . . . . . 1 DURING HER PERIOD . . . . . 2 RIGHT AFTER HER PERIOD HAS ENDE . . . . . 3 HALFWAY BETWEEN TWO PERIOD . . . . . 4 OTHER _____ 6 (SPECIFY) DON'T KNOW 8	
306	After the birth of a child, can a woman become pregnant before her menstrual period has returned?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
307	I will now read you some statements about contraception. Please tell me if you agree or disagree with each one.	AGREE / DISAGREE / DK	
	a) Contraception is a woman's concern and a man should not have to worry about it.	a) CONTRACEPTION WOMAN'S CONCERN 1 2 8	
	b) Women who use contraception may become promiscuous.	b) WOMEN MAY BECOME PROMISCUOUS 1 2 8	

SECTION 4. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
401	Are you currently married or living together with a woman as if married?	YES, CURRENTLY MARRIED . . . . . 1 YES, LIVING WITH A WOMAN . . . . . 2 NO, NOT IN UNION 3	→ 404
402	Have you ever been married or lived together with a woman as if married?	YES, FORMERLY MARRIED . . . . . 1 YES, LIVED WITH A WOMAN . . . . . 2 NO 3	→ 413
403	What is your marital status now: are you widowed, divorced, or separated?	WIDOWED . . . . . 1 DIVORCED . . . . . 2 SEPARATED 3	→ 410
404	Is your (wife/partner) living with you now or is she staying elsewhere?	LIVING WITH HIM . . . . . 1 STAYING ELSEWHERE 2	
405	Do you have other wives or do you live with other women as if married?	YES (MORE THAN ONE WIFE) . . . . . 1 NO (ONLY ONE WIFE) 2	→ 407
406	Altogether, how many wives or live-in partners do you have?	TOTAL NUMBER OF WIVES AND LIVE-IN PARTNERS	
407	CHECK 405: ONE WIFE/ PARTNER → a) Please tell me the name of (your wife/the woman you are living with as if married). MORE THAN ONE WIFE/ PARTNER → b) Please tell me the name of each of your wives or each woman you are living with as if married. RECORD THE NAME AND THE LINE NUMBER FROM THE HOUSEHOLD QUESTIONNAIRE FOR EACH WIFE AND LIVE-IN PARTNER. IF A WOMAN IS NOT LISTED IN THE HOUSEHOLD, RECORD '00'. ASK 408 FOR EACH PERSON.	NAME / LINE NUMBER 408: How old was (NAME) on her last birthday? AGE	
409	CHECK 407: ONE WIFE/ PARTNER MORE THAN ONE WIFE/ PARTNER →		→ 411
410	Have you been married or lived with a woman only once or more than once?	MORE THAN ONCE . . . . . 1 ONLY ONCE 2	
411	CHECK 405 AND 410: BOTH ARE CODE '2' → a) In what month and year did you start living with your (wife/partner)? OTHER → b) Now I would like to ask about your first (wife/partner). In what month and year did you start living with her?	MONTH . . . . . . DON'T KNOW MONTH . . . . . 98 YEAR . . . . . . DON'T KNOW YEAR 9998	→ 413
412	How old were you when you first started living with her?	AGE	

SECTION 4. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
413	**CHECK FOR PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.**		
414	I would like to ask some questions about sexual activity in order to gain a better understanding of some important life issues. Let me assure you again that your answers are completely confidential and will not be told to anyone. If we should come to any question that you don't want to answer, just let me know and we will go to the next question. How old were you when you had sexual intercourse for the very first time?	NEVER HAD SEXUAL INTERCOURSE . . . . . 00 AGE IN YEARS	→ 501
415	I would like to ask you about your recent sexual activity. When was the last time you had sexual intercourse? IF LESS THAN 12 MONTHS, ANSWER MUST BE RECORDED IN DAYS, WEEKS OR MONTHS. IF 12 MONTHS (ONE YEAR) OR MORE, ANSWER MUST BE RECORDED IN YEARS.	DAYS AGO . . . . . 1 WEEKS AGO . . . . . 2 MONTHS AGO . . . . . 3 YEARS AGO 4	→ **501**

SECTION 4. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
416	The last time you had sexual intercourse with this person, was a condom used?	YES . . . . . 1 NO 2	→ 438
435	You told me that a condom was used the last time you had sex. What is the brand name of the condom used at that time? IF BRAND NOT KNOWN, ASK TO SEE THE PACKAGE.	SALAMA . . . . . 01 DUME . . . . . 02 ROUGH RIDEF . . . . . 03 FAMILIA . . . . . 04 CARE . . . . . 05 LADY PEPETA . . . . . 06 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	

SECTION 4. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
436	From where did you / your partner obtain the condom the last time? PROBE TO IDENTIFY TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**GOVERNMENT/PARASTATAL** ZONAL/REFERRAL/SPEC.HOSPITAL . . . . . 11 REFERRAL REGIONAL HOSP . . . . . 12 REGIONAL HOSPITAL . . . . . 13 DISTRICT HOSPITA . . . . . 14 HEALTH CENTR . . . . . 15 DISPENSAR` . . . . . 16 CLINIC . . . . . 17 CHW . . . . . 18 **RELIGIOUS/VOLUNTARY** REFERAL SPEC.HOSPITA . . . . . 21 DISTRICT HOSPITA . . . . . 22 HOSPITAL 23 HEALTH CENTRE . . . . . 24 DISPENSARY . . . . . 25 CLINIC . . . . . 26 **PRIVATE** SPECIALISED HOSPIT/ . . . . . 31 HOSPITAL 32 HEALTH CENTR . . . . . 33 DISPENSAR` . . . . . 34 CLINIC . . . . . 35 **OTHER** PHARMACY . . . . . 41 ADDO . . . . . 42 NGO . . . . . 43 VCT CENTRE . . . . . 44 SHOP/KIOSK . . . . . 45 BAR . . . . . 46 GUEST HOUSE/HOTEL . . . . . 47 FRIEND/RELATIVE/NEIGHBO . . . . . 48 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	
437	The last time you had sex did you or your partner use any method other than a condom to avoid or prevent a pregnancy?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 439 → 440
438	The last time you had sex did you or your partner use any method to avoid or prevent a pregnancy?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 440
439	What method did you or your partner use? PROBE: Did you or your partner use any other method to prevent pregnancy? RECORD ALL MENTIONED.	FEMALE STERILIZATION . . . . . A MALE STERILIZATION . . . . . B IUD . . . . . C INJECTABLES . . . . . D IMPLANTS . . . . . E PILL . . . . . F CONDOM . . . . . G FEMALE CONDOM . . . . . H EMERGENCY CONTRACEPTION . . . . . I STANDARD DAYS METHOD . . . . . J LACTATIONAL AMENORRHEA METHOD . . . . . K RHYTHM METHOD . . . . . L WITHDRAWAL . . . . . M OTHER MODERN METHOD . . . . . X OTHER TRADITIONAL METHOD . . . . . Y	→ 501
440	Do you know of a place where you can obtain a method of family planning?	YES . . . . . 1 NO 2	

SECTION 5. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
501	CHECK 401: CURRENTLY MARRIED OR LIVING WITH A PARTNER ☐↓ NOT CURRENTLY MARRIED AND NOT LIVING WITH A PARTNER ☐	→ 514	
502	CHECK 439: MAN NOT STERILIZED/ QUESTION NOT ASKED ☐↓ MAN STERILIZED ☐	→ 514	
503	CHECK 407: ONE WIFE/ PARTNER ☐↓ MORE THAN ONE WIFE/ PARTNER ☐	→ 509	
504	Is your (wife/partner) currently pregnant?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 507
505	Now I have some questions about the future. After the child you and your (wife/partner) are expecting now, would you like to have another child, or would you prefer not to have any more children?	HAVE ANOTHER CHILD . . . . . 1 NO MORE . . . . . 2 UNDECIDED/DON'T KNOW 8	→ 514
506	After the birth of the child you are expecting now, how long would you like to wait before the birth of another child?	MONTHS . . . . . 1 ☐☐ YEARS . . . . . 2 ☐☐ SOON/NOW . . . . . 993 OTHER _____ 996 (SPECIFY) DON'T KNOW 998	→ 514
507	CHECK 208: HAS FATHERED CHILDREN ☐↓ a) Now I have some questions about the future. Would you like to have another child, or would you prefer not to have any more children? HAS NOT FATHERED CHILDREN ☐↓ b) Now I have some questions about the future. Would you like to have a child, or would you prefer not to have any children?	HAVE (A/ANOTHER) CHILD . . . . . 1 NO MORE/NONE . . . . . 2 SAYS COUPLE CAN'T GET PREGNANT . . . . . 3 WIFE/PARTNER STERILIZED . . . . . 4 UNDECIDED/DON'T KNOW 8	→ 514
508	CHECK 208: HAS FATHERED CHILDREN ☐↓ a) How long would you like to wait from now before the birth of another child? HAS NOT FATHERED CHILDREN ☐↓ b) How long would you like to wait from now before the birth of a child?	MONTHS . . . . . 1 ☐☐ YEARS . . . . . 2 ☐☐ SOON/NOW . . . . . 993 SAYS COUPLE CAN'T GET PREGNANT . . . . . 994 OTHER _____ 996 (SPECIFY) DON'T KNOW 998	→ 514
509	Are any of your (wives/partners) currently pregnant?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 512

SECTION 5. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
510	Now I have some questions about the future. After the (child/children) you and your (wives/partners) are expecting now, would you like to have another child, or would you prefer not to have any more children?	HAVE ANOTHER CHILD . . . . . 1 NO MORE . . . . . 2 UNDECIDED/DON'T KNOW 8	→ 514
511	After the birth of the child you are expecting now, how long would you like to wait before the birth of another child?	MONTHS . . . . . 1 [ ][ ] YEARS . . . . . 2 [ ][ ] SOONER/NOW . . . . . 993 OTHER _____ 996 (SPECIFY) DON'T KNOW 998	→ 514
512 **(1)**	CHECK 208: HAS FATHERED CHILDREN ☐ ↓ a) Now I have some questions about the future. Would you like to have another child, or would you prefer not to have any more children? HAS NOT FATHERED CHILDREN ☐ ↓ b) Now I have some questions about the future. Would you like to have a child, or would you prefer not to have any children?	HAVE (A/ANOTHER) CHILD . . . . . 1 NO MORE/NONE . . . . . 2 SAYS COUPLE CAN'T GET PREGNANT . . . . . 3 WIFE/PARTNER STERILIZED . . . . . 4 UNDECIDED/DON'T KNOW 8	→ 514
513	CHECK 208: HAS FATHERED CHILDREN ☐ ↓ a) How long would you like to wait from now before the birth of another child? HAS NOT FATHERED CHILDREN ☐ ↓ b) How long would you like to wait from now before the birth of a child?	MONTHS . . . . . 1 [ ][ ] YEARS . . . . . 2 [ ][ ] SOONER/NOW . . . . . 993 SAYS COUPLE CAN'T GET PREGNANT . . . . . 994 OTHER _____ 996 (SPECIFY) DON'T KNOW 998	
514	CHECK 203 AND 205: HAS LIVING CHILDREN ☐ ↓ a) If you could go back to the time you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be? NO LIVING CHILDREN ☐ ↓ b) If you could choose exactly the number of children to have in your whole life, how many would that be? PROBE FOR A NUMERIC RESPONSE.	NONE . . . . . 00 → 601 NUMBER . . . . . [ ][ ] OTHER _____ 96 → 601 (SPECIFY)	
515	How many of these children would you like to be boys, how many would you like to be girls and for how many would it not matter if it's a boy or a girl?	BOYS GIRLS EITHER NUMBER . . [ ][ ][ ][ ][ ][ ] OTHER _____ 96 (SPECIFY)	

SECTION 6. EMPLOYMENT AND GENDER ROLES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
601	Have you done any work in the last seven days?	YES . . . . . 1 NO 2	→ 604
602	Although you did not work in the last seven days, do you have any job or business from which you were absent for leave, illness, vacation, or any other such reason?	YES . . . . . 1 NO 2	→ 604
603	Have you done any work in the last 12 months?	YES . . . . . 1 NO 2	→ 607
604	What is your occupation? That is, what kind of work do you mainly do?	_____ _____ ☐☐ _____	
605	Do you usually work throughout the year, or do you work seasonally, or only once in a while?	THROUGHOUT THE YEAR . . . . . 1 SEASONALLY/PART OF THE YEAR . . . . . 2 ONCE IN A WHILE 3	
606	Are you paid in cash or kind for this work or are you not paid at all?	CASH ONLY . . . . . 1 CASH AND KIND . . . . . 2 IN KIND ONLY . . . . . 3 NOT PAID 4	
607	CHECK 401: CURRENTLY MARRIED OR LIVING WITH A PARTNER ☐ ↓ NOT CURRENTLY MARRIED AND NOT LIVING WITH A PARTNER ☐ →		612
608	CHECK 606: CODE '1' OR '2' CIRCLED ☐ ↓ ANY OTHER CODE ☐ →		610
609	Who usually decides how the money you earn will be used: you, your (wife/partner), or you and your (wife/partner) jointly?	RESPONDENT . . . . . 1 WIFE/PARTNER . . . . . 2 RESPONDENT AND WIFE/PARTNER JOINTLY . . 3 OTHER _____ 6 (SPECIFY)	
610	Who usually makes decisions about health care for yourself: you, your (wife/partner), you and your (wife/partner) jointly, or someone else?	RESPONDENT . . . . . 1 WIFE/PARTNER . . . . . 2 RESPONDENT AND WIFE/PARTNER JOINTLY . . 3 SOMEONE ELSE . . . . . 4 OTHER 6	
611	Who usually makes decisions about making major household purchases?	RESPONDENT . . . . . 1 WIFE/PARTNER . . . . . 2 RESPONDENT AND WIFE/PARTNER JOINTLY . . 3 SOMEONE ELSE . . . . . 4 OTHER 6	

SECTION 6. EMPLOYMENT AND GENDER ROLES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
612	Do you own this or any other house either alone or jointly with someone else?	ALONE ONLY . . . . . 1 JOINTLY ONLY . . . . . 2 BOTH ALONE AND JOINTLY . . . . . 3 DOES NOT OWN 4	→ 615
613	Do you have a title deed for any house you own?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 615
614	Is your name on the title deed?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
615	Do you own any agricultural or non-agricultural land either alone or jointly with someone else?	ALONE ONLY . . . . . 1 JOINTLY ONLY . . . . . 2 BOTH ALONE AND JOINTLY . . . . . 3 DOES NOT OWN 4	→ 618
616	Do you have a title deed for any land you own?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 618
617	Is your name on the title deed?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
618	In your opinion, is a husband justified in hitting or beating his wife in the following situations: a) If she goes out without telling him? b) If she neglects the children? c) If she argues with him? d) If she refuses to have sex with him? e) If she burns the food?	YES NO DK a) GOES OUT . . . . . 1 2 8 b) NEGLECTS CHILDREN . . 1 2 8 c) ARGUES . . . . . 1 2 8 d) REFUSES SEX . . . . . 1 2 8 e) BURNS FOOD 1 2 8	

SECTION 8. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
801	Some men are circumcised, that is, the foreskin is completely removed from the penis. Are you circumcised?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 805
802	How old were you when you got circumcised?	AGE IN COMPLETED YEARS . . . . . [ ][ ] DURING CHILDHOOD (<5 YEARS) . . . . . 95 DON'T KNOW 98	
803	Who did the circumcision?	TRADITIONAL PRACTITIONER/FAMILY/FRIEN . . 1 HEALTH WORKER/PROFESSIONAL . . . . . 2 OTHER . . . . . 3 DON'T KNOW 8	
804	Where was it done?	HEALTH FACILITY . . . . . 1 HOME OF A HEALTH WORKER/PROFESSION . . 2 CIRCUMCISION DONE AT HOME . . . . . 3 RITUAL SITE . . . . . 4 OTHER HOME/PLACE . . . . . 5 DON'T KNOW 8	
805	Now I would like to ask you some other questions relating to health matters. Have you had an injection for any reason in the last 12 months? IF YES: How many injections have you had? IF NUMBER OF INJECTIONS IS 90 OR MORE, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'. IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.	NUMBER OF INJECTIONS . . . . . [ ][ ] NONE 00	→ 808
806	Among these injections, how many were administered by a doctor, a nurse, a pharmacist, a dentist, or any other health worker? IF NUMBER OF INJECTIONS IS 90 OR MORE, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'. IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.	NUMBER OF INJECTIONS . . . . . [ ][ ] NONE 00	→ 808
807	The last time you got an injection from a health worker, did he/she take the syringe and needle from a new, unopened package?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
808	Do you currently smoke tobacco every day, some days, or not at all?	EVERY DAY . . . . . 1 SOME DAYS . . . . . 2 NOT AT ALL 3	→ 811 → 810
809	In the past, have you smoked tobacco every day?	YES . . . . . 1 NO 2	→ 812
810	In the past, have you ever smoked tobacco every day, some days, or not at all?	EVERY DAY . . . . . 1 SOME DAYS . . . . . 2 NOT AT ALL 3	→ 813

SECTION 8. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
811	On average, how many of the following products do you currently smoke each day? Also, let me know if you use the product, but not every day. IF RESPONDENT REPORTS USING THE PRODUCT BUT NOT EVERY DAY, RECORD '888'. IF THE PRODUCT IS NOT USED AT ALL, RECORD '000'.	NUMBER DAILY	
	a) Manufactured cigarettes?	a) MANUFACTURED CIGARETTES	
	b) Hand-rolled cigarettes?	b) HAND-ROLLED CIGARETTES	
	c) Kreteks?	c) KRETEKS	
	d) Pipes full of tobacco?	d) PIPES FULL OF TOBACCO	→ 813
	e) Cigars, cheroots, or cigarillos?	e) CIGARS, CHEROOTS, OR CIGARILLOS	
	f) Number of water pipe sessions?	f) PIPE SESSIONS NUMBER OF WATER . .	
	g) Any others? _____ (SPECIFY)	g) OTHERS	
812	On average, how many of the following products do you currently smoke each week? Also, let me know if you use the product, but not every week. IF RESPONDENT REPORTS USING THE PRODUCT BUT NOT EVERY WEEK, RECORD '888'. IF THE PRODUCT IS NOT USED AT ALL, RECORD '000'.	NUMBER WEEKLY	
	a) Manufactured cigarettes?	a) MANUFACTURED CIGARETTES	
	b) Hand-rolled cigarettes?	b) HAND-ROLLED CIGARETTES	
	c) Kreteks?	c) KRETEKS	
	d) Pipes full of tobacco?	d) PIPES FULL OF TOBACCO	
	e) Cigars, cheroots, or cigarillos?	e) CIGARS, CHEROOTS, OR CIGARILLOS	
	f) Number of water pipe sessions?	f) PIPE SESSIONS NUMBER OF WATER . .	
	g) Any others? _____ (SPECIFY)	g) OTHERS	
813	Do you currently use smokeless tobacco every day, some days, or not at all?	EVERY DAY . . . . . 1 SOME DAYS . . . . . 2 → 815 NOT AT ALL . . . . . 3 → 815A	

SECTION 8. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
814	On average, how many times a day do you use the following products? Also, let me know if you use the product, but not every day. IF RESPONDENT REPORTS USING THE PRODUCT BUT NOT EVERY DAY, RECORD '888'. IF THE PRODUCT IS NOT USED AT ALL, RECORD '000'. a) Snuff, by mouth? b) Snuff, by nose? c) Chewing tobacco? d) Betel quid with tobacco? e) Any others? _____ (SPECIFY)	TIMES DAILY a) SNUFF, BY MOUTH . . . . . [ ][ ][ ] b) SNUFF, BY NOSE . . . . . [ ][ ][ ] c) CHEWING TOBACCO . . . . . [ ][ ][ ] d) BETEL QUID WITH TOBACCO . . . . . [ ][ ][ ] e) ANY OTHERS . . . . . [ ][ ][ ]	→ 815A
815	On average, how many times a week do you use the following products? Also, let me know if you use the product, but not every week. IF RESPONDENT REPORTS USING THE PRODUCT BUT NOT EVERY WEEK, RECORD '888'. IF THE PRODUCT IS NOT USED AT ALL, RECORD '000'. a) Snuff, by mouth? b) Snuff, by nose? c) Chewing tobacco? d) Betel quid with tobacco? e) Any others? _____ (SPECIFY)	TIMES WEEKLY a) SNUFF, BY MOUTH . . . . . [ ][ ][ ] b) SNUFF, BY NOSE . . . . . [ ][ ][ ] c) CHEWING TOBACCO . . . . . [ ][ ][ ] d) BETEL QUID WITH TOBACCO . . . . . [ ][ ][ ] e) ANY OTHERS . . . . . [ ][ ][ ]	
815A	Have you ever consumed a drink that contain alcohol such as beer,wine,spirit,fermented cider or local brewers such as mbege,ulanzi, gongo/chang'aa etc?	YES . . . . . 1 NO 2	→ 816
815B	In the past 12 months, how frequently have you had at least one drink?	DAILY . . . . . 1 WEEKLY . . . . . 2 MONTHLY 3 LESS THAN ONCE A MONTH . . . . . 4 NEVER DRUNK 5	
816	Are you covered by any health insurance?	YES . . . . . 1 NO 2	→ 1001
817	What type of health insurance are you covered by? RECORD ALL MENTIONED.	MUTUAL HEALTH ORGANIZATION/ COMMUNITY-BASED HEALTH INSURANCE . . . . . A HEALTH INSURANCE THROUGH EMPLOYER . . . . . B SOCIAL SECURITY . . . . . C OTHER PRIVATELY PURCHASED COMMERCIAL HEALTH INSURANCE . . . . . D OTHER _____ (SPECIFY) X	

SECTION 10. MALARIA

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1001	In your opinion, what is the most serious health problem in your community?	HIV/AIDS . . . . . 01 TUBERCULOSIS . . . . . 02 MALARIA . . . . . 03 MALNUTRITION . . . . . 04 DIABETES . . . . . 05 CANCER . . . . . 06 FLU . . . . . 07 ROAD TRAFFIC ACCIDENTS . . . . . 08 DIARRHEA . . . . . 09 HEART DISEASE . . . . . 10 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	
1002	Can you tell me the signs or symptoms of malaria in a young child? RECORD ALL MENTIONED.	FEVER . . . . . A FEELING COLD . . . . . B CHILLS . . . . . C PERSPIRATION/SWEATIN . . . . . D HEADACHE . . . . . E BODY ACHES . . . . . F POOR APPETITE . . . . . G VOMITING . . . . . H DIARRHEA . . . . . I WEAKNESS . . . . . J COUGHING . . . . . K OTHER _____ X (SPECIFY) DOES NOT KNOW ANY Z	
1003	Are there ways to avoid getting malaria?	YES . . . . . 1 NO 2	→ 1005
1004	What are the ways to avoid getting malaria? RECORD ALL MENTIONED.	SLEEP UNDER MOSQUITO N . . . . . A USE MOSQUITO COILS . . . . . B USE INSECTICIDE SPRAY . . . . . C INDOOR RESIDUAL SPRAYING (IRS . . D KEEP DOORS/WINDOWS CLOSE . . . . . E USE INSECT REPELLANT . . . . . F KEEP SURROUNDINGS CLEA . . . . . G CUT THE GRASS . . . . . H REMOVE STANDING WATER . . . . . I INTERMITTENT PREVENTIVE TREAT- MENT (IPTP) . . . . . J HOUSE SCREENIN . . . . . K OTHER _____ X (SPECIFY) DOES NOT KNOW ANY . . . . . Z	
1005	Can ACTs be obtained at your nearest health facility or pharmacy (duka la dawa muhimu)?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1006A	In the past year, have you seen or heard any messages about malaria prevention?	YES . . . . . 1 NO 2	
1006B	In the past year, have you seen or heard any messages about malaria treatment?	YES . . . . . 1 NO 2	

SECTION 10. MALARIA

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1007	LOCATION OF INTERVIEW: MAINLAND TANZANIA ☐ ↓ ZANZIBAR ☐ →		1008B
1008A	In the past year, have you ever heard or seen the phrase "Malaria Haikubaliki"?	YES . . . . . 1 NO 2	→ 1009 → 1010
1008B	In the past year, have you ever heard or seen the phrase "Maliza Malaria"?	YES . . . . . 1 NO 2	→ 1010
1009	Where did you hear or see this phrase? RECORD ALL MENTIONED.	RADIO . . . . . A BILLBOARD . . . . . B POSTER . . . . . C T-SHIRT . . . . . D LEAFLET/FACT SHEET/ BROCHURE . . E TELEVISION . . . . . F MOBILE VIDEO UNI . . . . . G SCHOOL . . . . . H HEALTH CARE WORKER . . . . . I COMMUNITY EVENT/PRESENTATIC . . J FRIEND/NEIGHBOR/FAMILY MEMBE . . K OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	
1010	In the past six months, were you visited by a health worker or volunteer who talked to you about malaria?	YES . . . . . 1 NO 2	
1011	Now I am going to read some statements and I would like you to tell me how much you agree or disagree with them. After I read each statement, please tell me whether you strongly agree with it, somewhat agree with it, somewhat disagree with it or strongly		
1012	I can easily protect myself and my children from malaria. Do you strongly agree, somewhat agree, somewhat disagree, or strongly disagree?	STRONGLY AGREE . . . . . 1 SOMEWHAT AGRE . . . . . 2 SOMEWHAT DISAGRE . . . . . 3 STRONGLY DISAGREE 4	
1013	I can ensure that my children sleep under a treated net every single night of the year. Do you strongly agree, somewhat agree, somewhat disagree, or strongly disagree?	STRONGLY AGREE . . . . . 1 SOMEWHAT AGRE . . . . . 2 SOMEWHAT DISAGRE . . . . . 3 STRONGLY DISAGREE 4	
1014	I can easily hang my children's mosquito nets. Do you strongly agree, somewhat agree, somewhat disagree, or strongly disagree?	STRONGLY AGREE . . . . . 1 SOMEWHAT AGRE . . . . . 2 SOMEWHAT DISAGRE . . . . . 3 STRONGLY DISAGREE 4	
1015	It is important to sleep under a net every single night. Do you strongly agree, somewhat agree, somewhat disagree, or strongly disagree?	STRONGLY AGREE . . . . . 1 SOMEWHAT AGRE . . . . . 2 SOMEWHAT DISAGRE . . . . . 3 STRONGLY DISAGREE 4	
1016	Pregnant women are at high risk of getting malaria. Do you strongly agree, somewhat agree, somewhat disagree, or strongly disagree?	STRONGLY AGREE . . . . . 1 SOMEWHAT AGRE . . . . . 2 SOMEWHAT DISAGRE . . . . . 3 STRONGLY DISAGREE 4	
1017	Women should attend antenatal care early in their pregnancy. Do you strongly agree, somewhat agree, somewhat disagree, or strongly disagree?	STRONGLY AGREE . . . . . 1 SOMEWHAT AGRE . . . . . 2 SOMEWHAT DISAGRE . . . . . 3 STRONGLY DISAGREE 4	

SECTION 10. MALARIA

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1018	RECORD THE TIME.	HOURS . . . . . ☐☐ MINUTE . . . . . ☐☐ MORNING . . . . . 1 AFTERNOON . . . . . 2 EVENING 3	

INTERVIEWER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING INTERVIEW

COMMENTS ABOUT INTERVIEW:

COMMENTS ON SPECIFIC QUESTIONS:

ANY OTHER COMMENTS:

SUPERVISOR'S OBSERVATIONS

EDITOR'S OBSERVATIONS

ADDITIONAL DHS PROGRAM RESOURCES *Appendix F*

The DHS Program Website – Download free DHS reports, standard documentation, key indicator data, and training tools, and view announcements.	DHSprogram.com	
STATcompiler – Build custom tables, graphs, and maps with data from 90 countries and thousands of indicators.	Statcompiler.com	
DHS Program Mobile App – Access key DHS indicators for 90 countries on your mobile device (Apple, Android, or Windows).	Search DHS Program in your iTunes or Google Play store	
DHS Program User Forum – Post questions about DHS data, and search our archive of FAQs.	userforum.DHSprogram.com	
Tutorial Videos – Watch interviews with experts and learn DHS basics, such as sampling and weighting, downloading datasets, and How to Read DHS Tables.	www.youtube.com/DHSProgram	
Datasets – Download DHS datasets for analysis.	DHSprogram.com/Data	
Spatial Data Repository – Download geographically linked health and demographic data for mapping in a geographic information system (GIS).	spatialdata.DHSprogram.com	

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