Protecting Vulnerable Populations from Climate Hazards:

A Referral Guide

Populations at particular risk from climate-related health hazards—including extreme heat, wildfires, hurricanes, and drought—often experience multiple unmet social needs. In healthcare settings, addressing social determinants of health should include referrals and resources that increase protection from climate-related hazards. This referral guide is intended to inform care coordination in clinical settings for patients who are vulnerable to climate change's health impacts, and to equip other health and human services providers with resources for addressing climate-related threats to their clients' well-being. This guide can be used as a reference to assist patients and clients with preparedness and protection over the summer and beyond. It includes resources for patient education, data and tools for providers, and information about federal programs that patients can use. This is not intended to be a fully comprehensive list but rather a practical and targeted set of resources for use in clinical settings, relevant to providing focused health protection for vulnerable patients from climate-related hazards.

Inequitable health impacts of climate hazards

Climate change affects the frequency, severity, and distribution of extreme weather events such as heat waves, wildfires, drought, hurricanes, and flooding. Exposure to these events can cause direct harm, exacerbate underlying medical conditions, and affect mental and behavioral health.

Harm from climate-related impacts is unequally distributed due to differences in populations' exposure, sensitivity, and adaptive capacity. Low-income communities and communities of color, for example, are likely to experience disproportionate exposure to poor environmental conditions and climate-related hazards. People with chronic medical conditions, children, pregnant women, and older adults can be physiologically more susceptible to environmental exposures. Systemically marginalized populations have diminished adaptive capacity to respond and recover from exposure to hazards because of limitations in access to resources.

Clinical teams in healthcare settings routinely identify and care for patients with unmet health-related social needs and medical vulnerabilities that put these patients at higher risk from climate-related hazards. They can play a critical role in informing themselves and patients about how to mitigate these risks, helping them to connect to protective programs and services through referrals and care coordination.

Referrals

The summer season brings risks of climate-related exposures such as heat and wildfires. The following are federal programs which can provide year-round relief to eligible individuals, and are protective for those at particular risk of health harms from climate-related exposures. These programs increase access to cooling, weatherization, air filtration, and mold remediation, while also reducing the costs of related utility bills (e.g., electricity and water). This section can be used as a reference for providers to assist patients and clients in accessing these nonmedical resources to mitigate climate-related health risks.

LIHEAP

The Low-Income Home Energy Assistance Program (LIHEAP) helps keep families safe and healthy through initiatives that assist families with home energy costs. LIHEAP benefits target households with low incomes, particularly those that have a high home energy burden (percentage of income that goes to heating and cooling bills) and/or have members who are elderly, disabled or young children. LIHEAP provides federal funds to reduce the costs associated with home energy bills, energy crises, weatherization, and minor energy-related home repairs. Depending on where households live, LIHEAP may be able to help with summer cooling costs. To find their local LIHEAP office and to access benefits, households should visit energyhelp.us or call the National Energy Assistance Referral hotline at 1-866-674-6327.

LIHWAP

The Low-Income Household Water Assistance Program (LIHWAP) provides funds to assist low-income households with water and wastewater bills. LIHWAP benefits target households with low incomes that have high home water burdens, meaning they pay the greatest proportion of their income towards their home drinking water and/or wastewater services. Households or referring provides should check with their state, territory, or tribe to confirm eligibility rules in their area. To find local offices and access LIHWAP benefits, visit Waterhelp.info.

Weatherization Assistance Program

The U.S. Department of Energy's (DOE) Weatherization Assistance Program (WAP) reduces energy costs for low-income households by increasing the energy efficiency of their homes. Under DOE guidelines, households at or below 200% of the poverty income guidelines, or households receiving Supplemental Security Income or Aid to Families with Dependent Children, are considered eligible for weatherization services. (In addition, each state or territory may elect to use the U.S. Department of Health & Human Services (HHS) Low-Income Energy Assistance Program (LIHEAP) criteria of 60% of state-median income.) WAP grantees (organizations responsible for disbursing these funds) also give priority to the elderly, families with one or more members with a disability, families with children or high-energy users. These steps outline how to apply for WAP services.

Cooling Centers

Access to air conditioning can prevent harm related to extreme heat exposure. Low-income populations may have limited access to air conditioning or may be hesitant to operate air conditioning and cooling units due to potentially high electricity costs during peak heat hours. Cooling centers can provide a cool environment for these individuals.

Finding and accessing resources for cooling centers differs at the state and county level. Calling or visiting the website of a state's 2-1-1 program (a guide to local community services) can connect individuals with resources for extreme heat, including Extreme Heat Cooling Programs. This information is sometimes located at the county or city level. Select local cooling centers may also open temporarily for extreme heat events. Information on these centers can also often be found through local news sources. Find cooling centers by state.

Medicaid

Using state plan amendments, demonstrations and other authorities, states have been able to use Medicaid funds to address environmental health concerns, as well as the social determinants of health that have significant influence over how populations experience climate stresses. In some states, Medicaid can provide air conditioning and/or air filters as a medically necessary treatment option for people with certain chronic conditions. For example, the Centers for Medicare & Medicaid Services approved a Medicaid 1115 waiver from the Oregon Health Plan to allow coverage of medically necessary air conditioners when certain requirements are met.

For more information about Medicaid coverage, contact your state's Medicaid office or directly reach out to your client's managed care organization.

Medicare Advantage

Medicare Advantage Plans, sometimes called "Part C" or "MA Plans," are offered by Medicare-approved private companies. Select Medicare Advantage plans offer benefits that address the social and environmental factors associated with improved health. Plans can tailor their benefit packages to offer these benefits to certain chronically-ill enrollees. These packages will provide benefits customized to treat specific conditions, such as air conditioning for enrollees with asthma. Plans may also include installation and servicing of equipment as part of the benefit. Learn more about what Medicare Advantage Plans cover.

Disaster Supplemental Nutrition Assistance Program (D-SNAP)

The Disaster Supplemental Nutrition Assistance Program (D-SNAP) gives food assistance to low-income households with food loss or damage caused by a natural disaster. Before operating D-SNAP in a disaster area, a state must receive an Individual Assistance declaration from the President. The state must then request and receive approval from USDA's Food and Nutrition Service (FNS) to operate a D-SNAP. Households that normally do not qualify for SNAP benefits may qualify for D-SNAP, and SNAP recipients may receive increased benefits under D-SNAP.

Planning and Preparedness

These references may be useful sources of information about climate hazards to help patients and clients monitor and anticipate potential threats to their health.

Climate and Health Outlook

The Climate and Health Outlook is a seasonal forecast from the HHS Office of Climate Change and Health Equity (OCCHE) to inform health professionals and the public on how health may be affected by climate events and seasonal weather changes in the coming months. It also includes resources that providers and patients can use to proactively manage climate-related threats.

HEAT.gov

HEAT.gov is the web portal for the interagency National Integrated Heat Health Information System (NIHHIS). This website was launched in 2022 to provide the public and decision-makers with clear, timely and science-based information to understand and reduce the health risks of extreme heat. Heat-related illnesses and death are largely preventable with proper planning, education, and action. Heat.gov serves as the premier source of heat and health information for the nation to reduce the health, economic, and infrastructural impacts of extreme heat.

Tips for People Who Take Medication: Coping with Hot Weather

The impacts of climate change, such as hotter weather, may have negative effects on physical and mental health. Those taking certain medications, such as medications to treat mental health conditions (psychotropic medications), are more at risk from heat exposure than people not taking these medications. This resource from the Substance Abuse and Mental Health Services Administration (SAMHSA) offers relevant strategies for addressing such challenges.

Ready.gov

Ready is a national public service campaign designed to educate and empower the American people to prepare for, respond to and mitigate emergencies, including natural and man-made disasters. Its pages on Extreme Heat, Floods, Wildfires, and Severe Weather contain helpful information for individuals and families to prepare for and respond to climate-related hazards.

Climate Change and Extreme Heat: What You Can Do to Prepare

The U.S. Environmental Protection Agency (EPA) and the Centers for Disease Control and Prevention (CDC) developed this booklet to identify steps that individuals can take now to prepare for an extreme heat event—and to help families, friends, and neighbors. This booklet answers some of the key questions about extreme heat in a changing climate: why extreme heat is on the rise, how it might affect health, and how to reduce health risk before and during an extreme heat event.

Background Resources and Data

These links may give providers' additional background information and population-level data relevant to climate-related health hazards and planning tools in their area.

Environmental Justice Index

The Environmental Justice Index (EJI) is a national, place-based tool designed to measure the cumulative impacts of environmental burden through the lens of human health and health equity. It provides community level scores and analysis to help states, providers and public health officials understand where they should focus attention and assistance.

emPOWER Map

The HHS emPOWER Map can show where Medicare beneficiaries or those who rely upon electricity-dependent medical and assistive equipment reside.

Extreme Heat Vulnerability Mapping Tool

This tool overlays National Oceanic and Atmospheric Administration (NOAA) projected heat events on the CDC's Social Vulnerability Index (SVI) to determine county-level vulnerability. The SVI ranks each county on 15 social factors, including poverty, lack of vehicle access, and crowded housing, and groups them into four related themes.

Heat & Health Tracker

The CDC Heat & Health Tracker provides local heat and health information so communities can better prepare for and respond to extreme heat events. Use the tool to explore how extreme heat affects your county, populations who are at risk, and response resources.

The National Risk Index

The National Risk Index is a dataset and online tool to help identify the United States communities most at risk for 18 natural hazards. The Risk Index leverages available source data for natural hazard and community risk factors to develop a baseline relative risk measurement for each United States county and Census tract.

OSHA-NIOSH Heat Safety Tool

The Occupational Health and Safety Administration (OSHA)/National Institute for Occupational Safety and Health (NIOSH) Heat Safety Tool is a useful resource for planning outdoor work activities based on how hot it feels throughout the day. The tool features real-time location-specific heat index and hourly forecasts, as well as occupational safety and health recommendations from OSHA and NIOSH.

SAMHSA's Disaster Technical Assistance Center (DTAC)

The Substance Abuse and Mental Health Services Administration (SAMHSA) Disaster Technical Assistance Center helps states, U.S. territories, tribes, and local entities deliver an effective mental health and substance use-related response to disasters.

In addition to the resources noted here, the landmark Inflation Reduction Act (IRA) makes significant new resources available to healthcare providers and communities to support investments in resilience and renewable infrastructure; we encourage you to monitor the OCCHE website (linked below) to stay up to date on the latest opportunities.

Case Story:

Nasson Health Care is a Federally Qualified Health Center embedded in a Community Action Agency in Southern Maine, serving about 8000 patients annually, and offering primary care, dental, and behavioral health services. All patients are screened for social drivers of health (SDOH) needs, and are connected to a case manager to address their needs.

The programs described in this referral guide are among those to which Nasson Health Care refers patients as part of their SDOH care coordination program. A typical example is of patient Mrs. Lee, who shares in her SDOH screening that she is struggling with her energy bills and housing costs, and she reports dilapidated conditions in her home. She is seeing her primary care provider to help manage her chronic obstructive pulmonary disease (COPD), diabetes, and depression. Her doctor is concerned about how poor air quality in her home and her utility insecurity may impact her medical conditions, and refers Mrs. Lee to Nasson's SDOH case worker. The case worker helps Mrs. Lee to connect with LIHEAP, and to home weatherization assistance. Through LIHEAP, she receives assistance with her energy bills. The energy- and safety-related home repairs for which she is eligible include insulation, window repair, and cleaning and tuning of her heating system. These interventions improve her home's safety and comfort, including its air quality.

Discussion:

This story illustrates how programs to address SDOH in clinical settings can include referrals to federal resources that protect vulnerable patients from climate-related exposures including, in this case, extreme weather events and poor air quality. Southern Maine experiences days of poor outdoor air quality, and Mrs. Lee's home is now a safer haven for her on those days. In this case, Mrs. Lee was referred to LIHEAP for help with heating costs, but LIHEAP referrals can also help with cooling costs in many locations, which is worth noting in anticipation of summer heat waves. Resources from this guide that could also be helpful to Mrs. Lee and her provider might include the Climate & Health Outlook, and in the event of unusually hot weather, guidance about how her psychotropic medications can increase her risk from heat exposure (and how she can protect herself, including information about regional cooling centers).

Non-Governmental Resources

This referral guide focuses on federal programs and resources for clinical care coordination to protect vulnerable patients from climate-related health hazards. There are many additional resources available from a host of additional organizations. For example, the Americares Climate Resilience for Frontline Clinics Toolkit provides useful resources for health care providers, patients and administrators at free clinics and community health centers to meet climate-related health care challenges. Providers are encouraged to research further information from such organizations, as well as local programs available to patients and clients.

About OCCHE:

The Office of Climate Change and Health Equity addresses the impact of climate change on the health of the American people, particularly the most vulnerable individuals and communities. We encourage you to visit the OCCHE website and subscribe to the OCCHE email list.

OCCHE Website

OCCHE Resources to Support Resilience and Emissions Reduction

How to join OCCHE listserv

OASH | Office of Climate Change and Health Equity