Updates to the *Canadian Immunization Guide*: March 2014 to March 2015

Gemmill I^{1,2} and Quach C^{3,4}, on behalf of the National Advisory Committee on Immunization*

¹Chair, National Advisory Committee on Immunization

²Kington, Frontenac and Lennox & Addington, Public Health, Kingston, ON

³NACI Co-Chair and Pneumococcal Working Group Chair, Montréal, QC

⁴Vaccine Study Centre, McGill University Health Centre, Montréal, QC

*Correspondence: naci-ccni@phac-aspc.gc.ca

Abstract

The National Advisory Committee on Immunization (NACI) develops recommendations for the use of vaccines for Canadians, which are summarized in the *Canadian Immunization Guide* (the Guide) and which is updated on a regular basis. Between March 2014 and February 2015 recommendations on five vaccines have been issued. Updates to the Guide include recommendations made for the alternative dosing administration of the human papillomavirus (HPV) vaccine in adolescents, timing of varicella zoster immune globulin (Varlg) following exposure to varicella, and the meningococcal and quadrivalent influenza vaccines, recently authorized for use in Canada. A change in recommendations for the use of pneumococcal vaccines in adults and individuals with asthma has also been made. The chapter on tick-borne encephalitis vaccine has now been removed from the Guide as this vaccine is no longer available in Canada.

Introduction

The National Advisory Committee on Immunization (NACI) develops recommendations for the use of vaccines for Canadians and is the scientific advisory body on immunization for the Public Health Agency of Canada (PHAC) (1). These recommendations and other immunization information are published in the *Canadian Immunization Guide* (the Guide) (2).

Since 1979, the Guide has been a trusted, reader-friendly summary of information that has been used by health care providers to give advice on immunization to their patients, and by policy makers for the delivery of immunization programs. The document consists of five parts, covering key immunization information, vaccine safety, special populations, active vaccines, and passive immunization agents. Since the 2006 edition, the Guide has undergone extensive revisions. In 2012, it began to be published online in an evergreen electronic format (2). The objective of this article is to highlight updates to the Guide, which have been made between March 1, 2014, and March 31, 2015.

Approach

When developing its statements, NACI conducts comprehensive knowledge syntheses and analyses incorporating scientific reviews, evolving practices, and national and international recommendations. NACI then reflects its recommendations in a summarized format in the corresponding chapters of the Guide. Detailed recommendations concerning immunization and the use of vaccines available in Canada can be found in the NACI Statements and Statement Updates, which are available on the PHAC website (1).

Summary of updates

Table 1 provides a summary of recent changes and additions to the Guide.

Table 1: Highlights of key changes to active vaccine recommendations in the *Canadian Immunization Guide*, March 2014 to March 2015

Human papillomavirus	For immunocompetent, non-HIV infected, adolescents 9 to 14 years of age, NACI now recommends either a two- (HPV2 or HPV4 at months 0 and 6–12) or three- (HPV2 vaccine at months 0, 1, and 6 or HPV4 vaccine at months 0, 2, and 6) dose schedule.
	A three-dose schedule of the HPV vaccine (HPV4 for males and females—0, 2, 6 months; or HPV2 for females—0, 1, 6 months) is recommended for individuals who are immunocompromised and immunocompetent HIV-infected individuals.
Influenza	Two quadrivalent inactivated influenza vaccines (QIV) have been authorized for use in Canada (Flulaval™ Tetra and Fluzone® Quadrivalent).
	Egg-allergic individuals may be vaccinated against influenza in any settings where vaccines are routinely administered using trivalent inactivated influenza (TIV) or QIV without a prior influenza vaccine skin test and with the full dose.
	NACI recommends preferential use of live attenuated influenza vaccine (LAIV), where available, in children younger than 6 years of age based on evidence of superior efficacy of LAIV compared to TIV in these children, with weaker evidence of superior efficacy in older children. Although it is anticipated that the superior efficacy for LAIV over TIV extends beyond age 6 years, the evidence does not indicate at which specific age the efficacies of LAIV and TIV become equivalent. If LAIV is not available for those for whom it is considered superior, TIV should be used.
Meningococcal	Two new meningococcal inactivated vaccines have been authorized for use in Canada: multicomponent meningococcal serogroup B (4CMenB, Bexsero™) and meningococcal A, C, Y, and W-135 conjugate (Nimenrix™) vaccine.
	NACI recommends immunization with 4CMenB vaccine for individuals 2 months of age and older who are: <ul style="list-style-type: none"> at high risk of invasive meningococcal disease (IMD) caused by serogroup B <i>Neisseria meningitidis</i> in close contact with a case of IMD caused by serogroup B <i>Neisseria meningitidis</i> at risk during IMD outbreaks caused by serogroup B <i>Neisseria meningitidis</i>
	For high-risk individuals 2 years of age and older or for travellers 2 years of age and older going to areas where the meningococcal vaccine is recommended, any of the conjugate quadrivalent (A, C, Y, and W-135) products can be used.
Pneumococcal	NACI recommends vaccination with an age-appropriate pneumococcal vaccine for individuals who required medical attention for asthma in the past 12 months.
	Individuals with medical conditions putting them at high risk of IPD should receive one lifetime booster dose of Pneu-P-23 5 years after the previous one, regardless of age at first dose.

	One dose of pneumococcal polysaccharide (Pneu-P-23) vaccine is recommended for all adults 65 years of age and older as long as 5 years has passed since any previous Pneu-P-23 dose, and for immunocompetent adults less than 65 years of age in long-term care facilities, or who have conditions putting them at increased risk of pneumococcal disease.
	All individuals who have previously received Pneu-P-23 vaccine and require re-immunization with pneumococcal conjugate (Pneu-C-13) vaccine should receive Pneu-C-13 vaccine no sooner than five years after the most recent dose of Pneu-P-23.
	Pneu-C-13 should be administered to adults with immunocompromising conditions, followed by Pneu-P-23 at least eight weeks after—if not already administered.
Tick-borne encephalitis	Tick-borne encephalitis vaccine is no longer available in Canada.
Varicella	For maximal benefit, varicella zoster immune globulin (Varlg) should be administered as soon as possible after exposure, ideally within 96 hours after first exposure, but can be administered up to 10 days after last exposure.

Conclusion

Since 2012, the Guide has been continuously updated to incorporate new science and practices as reflected in the most recent NACI Statements and NACI Statement Updates. NACI and the Public Health Agency of Canada are committed to providing information on immunization and vaccines available for use in Canada in an easily accessible, reader-friendly format, through timely and ongoing updates of the Guide.

Acknowledgements

The authors would like to thank the extremely dedicated members of National Advisory Committee on Immunization and the Public Health Agency of Canada staff who are supporting the *Canadian Immunization Guide* update process.

Conflict of interest

None

References

- (1) National Advisory Committee on Immunization. NACI Statements, Recommendations and Updates. 2015. <http://www.phac-aspc.gc.ca/naci-ccni>.
- (2) National Advisory Committee on Immunization. Canadian Immunization Guide. 2015. <http://www.phac-aspc.gc.ca/publicat/cig-gci/>.