Updates to the *Canadian Immunization Guide*: April 2015 to October 2016

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Abstract

The *Canadian Immunization Guide* (CIG) is a trusted, reader-friendly summary of information and advice on immunization that has been used by health care providers and policy makers for decades. It is continuously updated based on new recommendations from the National Advisory Committee on Immunization (NACI) and the Committee to Advise on Tropical Medicine and Travel (CATMAT), two external advisory bodies to the Public Health Agency of Canada. In September 2016, the CIG moved to a new web platform that has improved navigability and is more mobile friendly. Between April 2015 and October 2016, five new NACI statements were published and are reflected in the CIG. The objective of this article is to provide readers with highlights of recent key changes to active vaccine recommendations in the CIG. For example, Hepatitis (HA) vaccine may now be administered to persons six months of age and older and considered for all individuals receiving repeated replacement of plasma-derived clotting factors. There are now new recommendations for the use of HA immunoglobulin post-exposure prophylaxis. For Human papillomavirus (HPV) vaccine, any of the authorized HPV vaccines in Canada, including HPV9 vaccine, can be used according to the recommended HPV immunization schedules. For influenza vaccine, adults with neurologic or neurodevelopment conditions have been added to the group for whom influenza vaccination is particularly recommended, high-dose influenza vaccine has been approved for use in Canada in adults ≥65 years of age and live attenuated influenza vaccine (LAIV) is no longer a preferentially recommended product for use in children and adolescents. On an individual basis, pneumococcal conjugate 13-valent (PNEU-C-13) vaccine may be recommended to immunocompetent adults aged 65 years and older if not previously immunized against pneumococcal disease. When it is given, it should precede the pneumococcal polysaccharide 23-valent (PNEU-P-23) vaccine. Varicella immune globulin may now be administered up to 10 days since last exposure for the purpose of disease attenuation and there were a number of minor changes to the criteria for assessing varicella immunity.

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Suggested citation: Jensen C, Lerch R on behalf of the National Advisory Committee on Immunization (NACI). Updates to the *Canadian Immunization Guide*: April 2015 to October 2016. Can Comm Dis Rep 2016;42(12):256-9. https://doi.org/10.14745/ccdr.v42i12a04

Introduction

Since 1979, the *Canadian Immunization Guide* (CIG) has provided a trusted, reader-friendly summary of information on immunization and has been used by health care providers who administer vaccines to their patients and by policy makers for the delivery of immunization programs. The CIG, published by the Public Health Agency of Canada (PHAC), translates recommendations and guidance from the National Advisory Committee on Immunization (NACI) and the Committee to Advise on Tropical Medicine and Travel (CATMAT), into a single resource. NACI is a PHAC advisory body that makes recommendations for the use of vaccines currently or newly approved for use in humans in Canada, including the identification of groups at risk for vaccine-preventable diseases for whom vaccination should be targeted (1). CATMAT is an expert advisory body that assists PHAC with travel health-related advice for travellers and health care professionals. Both NACI and CATMAT recommendations are published by PHAC and summarized in the CIG (2).

The CIG is divided into five parts, covering key immunization information, vaccine safety, special populations, active vaccines and passive immunization agents. Part 4 on Active Vaccines, is organized into disease-specific chapters and provides information about disease characteristics and epidemiology, as well as vaccine-specific information and recommendations for use. It is the part of CIG that is most often updated in relation to new recommendations.

The CIG is maintained by NACI. Chapters are updated as new evidence about vaccines and vaccine preventable diseases becomes available and as NACI and CATMAT statements and updates are published. Since 2012, the CIG has been published online in an electronic format (2). A Table of Updates summarizes key changes as they are made to individual chapters. The date on which a chapter has last been reviewed or updated is noted on the respective webpage. In September 2016, the CIG moved to a new web platform and is now mobile friendly with increased navigability for users.

The objective of this article is to provide highlights of recent key changes to active vaccine recommendations in the CIG that have been made since the last CIG update, specifically from April 2015 to October 2016 (3).

Approach

When developing recommendations, NACI conducts comprehensive knowledge syntheses and analyses incorporating scientific reviews, evolving practices and national and international recommendations. The recommendations are then translated into the corresponding chapters of the CIG. Detailed recommendations concerning immunization and the use of vaccines available in Canada can be found in the relevant statements and statement updates (1).

Summary of updates

Table 1 provides a summary of recent changes and additions to the CIG, noting what recommendations are now outdated.

Table 1: Highlights of key changes to active vaccine recommendations in the *Canadian Immunization Guide*, April 2015 to October 2016

Active vaccine	Previous recommendations	New recommendations
Hepatitis A (HA)	Hepatitis A (HA) vaccine may be administered to persons twelve months of age and older.	HA vaccine may be administered to persons six months of age and older (4).
	Immunization with HA vaccine may be considered for people with haemophilia A or B receiving plasma-derived replacement clotting factors.	Immunization with HA vaccine may be considered for all individuals receiving repeated replacement of plasma-derived clotting factors (4).
	No previous recommendation.	For post-exposure prophylaxis within 14 days of exposure of susceptible adults 60 years of age and older who are household or close contacts of a case, standard human immune globulin (Ig) may be provided in addition to HA vaccine (4).
	HA immunization is recommended for persons with chronic liver disease, including those infected with hepatitis C and chronic hepatitis B carriers, because they are at risk of more severe disease if infection occurs.	For post-exposure prophylaxis of susceptible individuals with chronic liver disease, Ig should be provided within 14 days of exposure in addition to HA vaccine (4).
Human papillomavirus (HPV)	Vaccination with HPV2 or HPV4 according to the recommended HPV immunization schedules.	Any of the currently authorized HPV vaccines in Canada, including the recently authorized HPV9 vaccine (Gardasil®9) can be used according to the recommended HPV immunization schedules (5).
Influenza	Influenza vaccine was indicated only for children with neurologic or neurodevelopment conditions.	Adults with neurologic or neurodevelopment conditions have been added to the group for whom influenza vaccination is particularly recommended (6).
	No previous recommendation.	Fluzone® High-Dose influenza vaccine has been approved for use in Canada in adults ≥65 years of age (6). There is evidence that high-dose trivalent inactivated influenza vaccine for older adults should provide superior protection compared with the standard dose intramuscular vaccine.
	Live attenuated influenza vaccine (LAIV) was a preferentially recommended product for use in children and adolescents 2–17 years of age.	LAIV is no longer a preferentially recommended product for use in children and adolescents 2–17 years of age (7).
	Data are not currently available to support the safe administration of LAIV to egg-allergic individuals; therefore, this practice is not currently recommended.	Egg-allergic individuals may be vaccinated against influenza using LAIV (8).
Pneumococcal	No previous recommendation for PNEU-C-13 for immunocompetent adults aged 65 years and older.	On an individual basis, pneumococcal conjugate 13-valent (PNEU-C-13) vaccine may be recommended to immunocompetent adults aged 65 years and older not previously immunized against pneumococcal disease, for the prevention of community acquired pneumonia (CAP) and invasive pneumococcal disease (IPD) caused by the 13 pneumococcal serotypes included in the conjugate vaccine. When it is given, it should precede the pneumococcal polysaccharide 23-valent (PNEU-P-23) vaccine (9).
Varicella	Previous recommendations for minimum intervals were provided for specific products.	Although an interval between two varicella-containing vaccines of at least three months for children less than 13 years of age and six weeks for individuals 13 years of age and older continues to be recommended, a four week interval may be considered in exceptional circumstances. If the second dose of varicella-containing vaccine is administered at an interval of less than four weeks, it should be repeated (10).
	Varicella immune globulin (VarIg) is of maximal benefit if administered within 96 hours after first exposure. If more than 96 hours have elapsed since the last exposure, the benefit of administering VarIg is uncertain.	Varicella immune globulin may be administered up to 10 days since last exposure for the purpose of disease attenuation (11).

In addition to the changes identified in the table for varicella vaccine, further clarification was provided to the criteria for assessing susceptibility for varicella immunity, the use of self-reported history and healthcare provider diagnosis as well as guidance for health care workers, pregnant women and immunocompromised individuals (12).

Conclusion

The CIG is continuously updated to incorporate new science and practices as reflected in the most recent NACI and CATMAT statements and statement updates. PHAC is committed to providing information on immunization and vaccines available for use in Canada in an easily accessible, reader-friendly format, through timely and ongoing CIG updates.

Questions or comments related to the CIG, statements or literature reviews can be directed through the NACI Contact Us feature (13).

To receive information regarding new NACI recommendations, statements and updates and/or updates to CIG chapters, please subscribe to the NACI mailing list (14).

Acknowledgements

The authors would like to thank the extremely dedicated NACI members and the staff of PHAC who support the CIG update process.

Conflict of interest

None.

Funding

PHAC supports the activities of NACI as an external advisory body.

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