

Considerations for the 2023 COVID-19 Vaccine Program in Ontario

1st Revision: March 15, 2023

Overview

Following a request from the Ministry of Health (MOH), the Ontario Immunization Advisory Committee (OIAC) met on January 11, 2023 to discuss program planning considerations to help inform the planning for future 2023 COVID-19 booster doses, including aspects such as: the number of booster doses of COVID-19 vaccine that should be provided per year, the interval between doses, and the timing of the vaccine program. This document provides a summary and outcome of the discussion.

Summary of Considerations

The OIAC reviewed and discussed current Ontario COVID-19 epidemiology, including variants of concern (VOC); risk factors for severe infection, such as the importance of age; vaccine effectiveness and hybrid immunity. The committee also reviewed Ontario COVID-19 vaccine guidance¹ and booster dose uptake and discussed program feasibility and implementation considerations related to additional doses, as well as current recommendations across jurisdictions for post-fall 2022 booster doses. The COVID-19 vaccine program goals to minimize serious illness and deaths while minimizing societal disruption as a result of the COVID-19 pandemic outlined by the Council of Chief Medical Officers of Health (CCMOH) were also reviewed.²

- Increasing age continues to be the most important risk factor for hospitalization and death due to COVID-19.³ Age-related considerations are expected to continue to be an important component of future COVID-19 booster dose recommendations and the need to protect those at highest risk for hospitalization and death continues to be a priority.
- Emerging data from the BA.1, BA.2 and BA.4/5 periods demonstrate a difference in vaccine protection against hospitalizations due to COVID-19 in adults over 60 years of age by history of past infection.⁴ Individuals who have been vaccinated and who have evidence of a past infection (i.e., hybrid immunity) have been shown to have much greater protection against hospitalization relative to those who were vaccinated alone (i.e., without a past history of infection).⁴ Among adults in Canada, the proportion of those who have been previously infected with COVID-19 is lowest for adults over 60 years of age, relative to other age groups; this has implications for the continued importance of booster doses for older adults, in particular those who have no past history of infection.⁵

- Uptake of a fall booster dose (i.e., received after September 1, 2022) in Ontario varies considerably by age. As of January 2, 2023:
 - 2.78 million (19.3%) Ontarians over the age of 5 years have decided to receive a fall booster dose, with uptake increasing with age.⁶ Fifty-one percent of those over 80 and 39.9% of those 60-79 years of age in Ontario have received a fall booster dose. Overall in Ontario, the vast majority of fall booster doses (93.8%) were a bivalent vaccine product.⁶
- In addition to their important role in preventing hospitalizations and deaths, additional booster doses of COVID-19 vaccines continue to provide some level of protection against symptomatic COVID-19 infection. For example, the absolute effectiveness of a bivalent vaccine (for those with ≥ 2 monovalent doses) against symptomatic infection in September – November 2022 in the United States ranged from 22% in those ≥ 65 years to 43% in those 18-49 years of age, compared to those who were unvaccinated.⁷ It is noted, that the level of this protection is less than and of a shorter duration than the protection offered against severe outcomes.⁷⁻¹⁰ However, the importance of individual preferences in receiving additional doses in order to reduce the risk of infection, as well as complications related to infection, including post-COVID condition (long COVID), was also discussed.
- The impact of new and emerging VOCs on transmission and severity remains a priority to be monitored.¹¹ Increases in transmissibility and/or immune evasiveness of new variants (including XBB.1.5) may result in increases in infections, which may then lead to an increase in severe outcomes. The number of severe infections may also be influenced by changes in VOC virulence as well as vaccine performance against severe outcomes.

Outcome

- Given the number of uncertainties that exist as of January 2023, the OIAC did not feel that a detailed COVID-19 vaccine program for all of 2023 could be outlined at this time. OIAC plans to revisit this topic and will continue to monitor recommendations from the National Advisory Committee on Immunization and other advisory groups, evidence related to COVID-19 epidemiology, vaccine effectiveness, VOCs, as well as considerations related to program implementation to help inform future advice related to Ontario's ongoing COVID-19 vaccine program. OIAC will be meeting again to discuss booster dose recommendations in February 2023.
- In the interim, OIAC supports and emphasizes the following:
 - All individuals eligible for a COVID-19 vaccine primary series who have not yet been vaccinated should receive it.
 - All individuals eligible for a fall 2022 booster dose who have not yet been vaccinated with their fall 2022 booster should receive it.¹ This is especially important for older adults who are at highest risk of severe outcomes from COVID-19.

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About the Ontario Immunization Advisory Committee

The OIAC is a multidisciplinary scientific advisory body that provides evidence-based advice to Public Health Ontario (PHO) on vaccines and immunization matters including vaccine program implementation in Ontario, priority populations and clinical guidance. The focus of the OIAC's work is on publicly-funded vaccines and immunization programs in Ontario, including COVID-19 and those under consideration for new programming. For more information about the OIAC and its members contact secretariat@oahpp.ca

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Revision History

The following table shows the revision history of this document

Date	Version	Section	Summary of changes
March 2023	Version 2	OIAC Ex-Officio Members	Updating Dr. Daniel Warshafsky's name with Dr. Fareen Karachiwalla's name

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