SUMMARY OF THE NATIONAL ADVISORY COMMITTEE ON IMMUNIZATION (NACI) STATEMENT OF DECEMBER 3, 2021

Guidance on booster COVID-19 vaccine doses in Canada – Update December 3, 2021
OVERVIEW

- On December 3, 2021, the Public Health Agency of Canada (PHAC) released updated guidance from the National Advisory Committee on Immunization (NACI) on booster doses of COVID-19 vaccine. These recommendations are based on current scientific evidence and NACI's expert opinion.

- Cases of COVID-19 are increasing globally and in Canada. Variants, including the Delta variant, continue to circulate and cause serious illness. A new variant of concern, Omicron, has also been detected. Evidence on this new variant is still being collected.

- In November 2021, Health Canada authorized the use of the Pfizer-BioNTech Comirnaty 30 mcg vaccine and the Moderna Spikevax 50 mcg vaccine as booster doses in those 18 years of age and older at least 6 months after completion of a primary series.

- NACI has reviewed the latest data that suggest protection against infection decreases over time since completion of a primary COVID-19 vaccine series. Protection against severe illness remains generally high, but may decrease over time for some people, such as older adults.

- Booster doses of COVID-19 mRNA vaccines can increase the immune response and are expected to offer enhanced protection against infection and severe disease and may help reduce spread of infection. Booster doses have a favourable safety profile that is comparable to the primary series.

- The Council of Chief Medical Officers of Health have updated the COVID-19 Immunization Response Goals to include preserving health system capacity and reducing transmission to protect high risk populations while minimizing serious illness and overall deaths.

After reviewing the recent evidence and the evolving COVID-19 pandemic in the Canadian context, NACI has updated its booster recommendations:

- NACI strongly recommends a booster dose of an authorized mRNA COVID-19 vaccine should be offered at least 6 months after completion of a primary COVID-19 vaccine series to the following groups:
  - People aged 50 years and older
  - Adults living in long-term care homes for seniors or other congregate living settings that provide care for seniors
  - Recipients of a viral vector vaccine series completed with only viral vector vaccines (AstraZeneca/COVISHIELD or Janssen COVID-19 vaccine)
  - Adults in or from First Nations, Inuit and Métis communities
  - All frontline healthcare workers having direct in-person contact with patients
• NACI now also recommends that a booster dose of an authorized mRNA COVID-19 vaccine may be offered to adults 18 to 49 years of age at least 6 months after completion of a primary COVID-19 vaccine series with consideration of jurisdictional and individual risks as outlined in the full NACI Statement.

To see the full guidance, including a summary of the evidence and rationale behind these recommendations, please visit NACI Guidance on booster COVID-19 vaccine doses in Canada – Update December 3, 2021.

WHAT YOU NEED TO KNOW

• Cases of COVID-19 are increasing and variants, including the Delta variant, are circulating in Canada and in various parts of the world. A new variant of concern, Omicron, has also recently been detected. Evidence on this new variant is still being collected.

• In many countries, the rate of severe COVID-19 disease and other outcomes has increased following rising infection rates. Cases have also been rising slightly in some areas of Canada.

• A complete COVID-19 vaccine series continues to provide excellent protection against serious illness for most people. Over time, some people may be less protected against serious illness, such as older adults.

• Recently, evidence suggests vaccine effectiveness against infection with SARS-CoV-2, the virus that causes COVID-19, is decreasing over time following completion of the primary series. A booster dose could help restore protection against infection that may have decreased over time.

• Clinical trial data show that a booster dose of an mRNA COVID-19 vaccine produces a robust immune response and has a favourable safety profile comparable to the second dose of the primary series. Myocarditis and/or pericarditis after mRNA vaccination remain rare. In Israel, the rates of myocarditis and/or pericarditis have been lower than what was observed with the second dose of the primary series, but higher than what was observed with the first dose.

• Real-world data suggest that a booster dose of mRNA COVID-19 vaccine provides very good short-term effectiveness against SARS-CoV-2 infection. Long-term effectiveness of booster doses will continue to be monitored.

• A longer interval between the primary series and a booster dose could improve or extend the immune response to the booster dose.
NACI continues to recommend that a complete series with an mRNA COVID-19 vaccine should be offered to individuals in the authorized age groups without contraindications to the vaccine. The Pfizer-BioNTech Comirnaty 30 mcg product is preferred for the primary series in those 12 to 29 years of age and may be preferred for the booster dose in those 18 to 29 years of age due to the lower risk of myocarditis/pericarditis with this vaccine. In people over 30 years of age, either mRNA vaccine can be used for the booster.

Adults who are moderately to severely immunocompromised who have received a three-dose primary series are included in those who may receive a booster dose. Data on a fourth dose of a COVID-19 vaccine after the recommended three-dose primary series in this population is currently limited. These individuals may receive a booster at least 6 months after receiving their last dose.

If offering the Moderna vaccine as a booster, the 100 mcg dose may be preferred for adults who are moderately to severely immunocompromised, as well as adults living in long-term care for seniors or other congregate living settings that provide care for seniors based on the discretion of healthcare providers.

Pregnant or breastfeeding individuals were excluded from clinical trials of mRNA booster doses, but no maternal or neonatal safety signals have been detected in pregnant or breastfeeding individuals who have received mRNA COVID-19 vaccines. Pregnant or breastfeeding adults are included in those who may receive a booster dose.

In addition to high vaccine coverage, public health measures continue to be essential to reduce and control transmission of the virus, especially variants.

NACI will continue to review and monitor the evidence on booster doses as it emerges and will update their recommendations as needed.

To see the full guidance, including a summary of the evidence and rationale behind these recommendations, please visit NACI Guidance on booster COVID-19 vaccine doses in Canada – Update December 3, 2021.
“NACI has continued to closely monitor the evidence on the benefit and need for booster doses in Canada, and is now providing updated advice on the use of booster COVID-19 vaccine doses. Although protection against severe disease remains high in the general population, we know that protection against infection can decrease over time. We have also seen an increase in the risk of severe disease for select groups who are vaccinated, particularly older adults. Offering booster doses will help ensure that protection against severe disease remains high, and may have an impact on spread in the community as well.

It is important to note that there is no information yet on the impact of the new variant, Omicron, on the effectiveness of the vaccine. NACI will continue to monitor and provide updated and timely advice as necessary.”

- Dr. Shelley Deeks, NACI Chair

“NACI’s review of the latest available evidence from ongoing monitoring of COVID-19 vaccines safety and effectiveness reassures us that there remains no widespread decrease in protection against severe disease in the general population in Canada. However, waning protection trends observed in other countries give us cause for concern. As such, NACI’s updated evidence-informed advice on booster doses will assist health authorities in vaccine program planning and delivery to ensure Canadians are provided with the best possible protection as the situation evolves.

Nevertheless, while booster doses provide an opportunity to maintain and enhance protection against infection and severe disease, getting more people to complete their primary series remains a key focus of the COVID-19 immunization effort in Canada. Importantly, regardless of which virus variant is circulating, public health measures and individual precautions continue to be an essential component of the pandemic response in Canada. Using layers of these non-pharmaceutical protections in conjunction with strategic use of approved COVID-19 vaccines remains our best approach to decrease the risk of infection and severe disease.”

- Dr. Theresa Tam, Chief Public Health Officer
NACI FORWARD AGENDA

NACI continues to actively review emerging evidence on COVID-19 vaccines. Upcoming recommendations may include new advice on:

- Advice on vaccination for individuals with a history of myocarditis/pericarditis after a previous dose of vaccine
- Recommendations on the use of the Moderna COVID-19 vaccine in children, pending a regulatory decision by Health Canada
- Recommendations on the use of the Novavax COVID-19 vaccine, pending a regulatory decision by Health Canada
- Recommendations on the use of the Medicago COVID-19 vaccine, pending a regulatory decision by Health Canada