



SUMMARY OF NATIONAL ADVISORY COMMITTEE ON IMMUNIZATION (NACI) STATEMENT OF APRIL 12, 2022

Updated guidance on a first booster dose of
COVID-19 vaccines in Canada



OVERVIEW

- On April 12, 2022, the Public Health Agency of Canada (PHAC) released updated guidance from the National Advisory Committee on Immunization (NACI) on the use of first booster doses of COVID-19 vaccines in adolescents and younger adults in Canada. This guidance is based on current evidence and NACI's expert opinion.
- NACI released initial recommendations on the use of first booster doses of COVID-19 vaccines in adults 18 to 49 years of age in December 2021, and in adolescents 12 to 17 years who are at high risk of severe COVID-19 outcomes in January 2022.
- After considering additional data on the duration of protection from a primary COVID-19 vaccine series, the safety and effectiveness of a first booster dose in adolescents and adults, and the changing epidemiology of COVID-19 in Canada, NACI has updated its recommendations for booster doses in these age groups.
- **NACI has strengthened the following recommendations from 'may' to 'should,' so that now all adults 18 years of age and over are strongly recommended to receive a booster dose:**
 - **A first booster dose of an mRNA COVID-19 vaccine should be offered at least 6 months after the completion of a primary series to all adults 18 to 49 years of age and over.**
 - **A first booster dose of an mRNA COVID-19 vaccine should be offered at least 6 months after the completion of a primary series to adolescents 12 to 17 years of age who:**
 - **have an underlying medical condition that puts them at high risk of severe outcomes from COVID-19, including adolescents who are immunocompromised and have already received an additional vaccine dose;**
 - **are residents of congregate living settings;**
 - **belong to racialized and/or marginalized communities disproportionately affected by COVID-19.**
- **NACI has added a new recommendation, and now recommends that for all other adolescents 12 to 17 years of age:**
 - **A first booster dose of an mRNA COVID-19 vaccine may be offered at least 6 months after the completion of the primary series in the context of increased COVID-19 activity.**
- Recommendations for a first booster dose of a COVID-19 vaccine in adolescents 12 to 17 years of age is currently off-label. At this time, only the Pfizer-BioNTech Comirnaty and Moderna Spikevax COVID-19 vaccines are approved for use as a first booster dose in adults 18 years of age and over

- Due to the lower risk of myocarditis/pericarditis associated with the Pfizer-BioNTech Comirnaty COVID-19, the Pfizer-BioNTech Comirnaty booster dose is preferred for adolescents 12 to 17 years of age and may be preferred for younger adults 18 to 29 years of age.
- NACI continues to strongly recommend a primary mRNA COVID-19 vaccine series for everyone in the authorized age groups.

For the full statement, including supporting evidence and rationale, please see [NACI Statement: Updated guidance on a first booster dose of COVID-19 vaccines in Canada](#).

For more information on NACI's recommendations on the use of COVID-19 vaccines, please refer to the [COVID-19 vaccine chapter](#) in the [Canadian Immunization Guide](#) (CIG), as well as additional statements on the [NACI web page](#).

WHAT YOU NEED TO KNOW

- On April 12, 2022, the Public Health Agency of Canada (PHAC) released updated guidance from the National Advisory Committee on Immunization (NACI) on the use of first booster doses of COVID-19 vaccines in adolescents and younger adults in Canada.
- Previous NACI guidance on the use of COVID-19 vaccine first booster doses:
 - On December 3, 2021, NACI recommended that adults 18 to 49 years of age *may* be offered a booster dose, and that adults 50 years of age and older *should* be offered a booster dose, at least 6 months after completion of a primary vaccine series with consideration of jurisdictional and individual risks.
 - On January 28, 2022, NACI recommended that adolescents 12 to 17 years of age who are at increased risk of severe outcomes from COVID-19 infection *may* be offered a booster dose at least 6 months after the completion of a primary vaccine series.
- NACI has updated their recommendations on first booster doses of COVID-19 vaccines in these age groups after reviewing additional evidence on the duration of vaccine protection from a COVID-19 primary series and the safety and effectiveness of a first booster dose in adolescents and adults while considering the current epidemiologic context and variants of concern.
 - A primary vaccine series provides less protection against infection and symptomatic disease due to the Omicron variant compared to the original strain of the virus and earlier variants (e.g., Delta). Protection against infection and symptomatic disease from a primary vaccine series also decreases over time.

- A first booster dose following a primary series of mRNA COVID-19 vaccines provides better protection against Omicron infection and severe outcomes, including severe illness and hospitalization, than a primary series alone. While there is currently limited evidence on how long protection against severe disease from a first booster dose lasts, NACI will continue to monitor the evidence as it emerges.
- First booster doses of mRNA COVID-19 vaccines have a good safety profile and no new safety concerns have been identified. The rare risk of myocarditis and/or pericarditis after vaccination with an mRNA COVID-19 vaccine appears to be somewhat lower after a booster dose compared to after a second dose of a primary series. Most cases have been mild and have resolved quickly with medical care. The known risks of COVID-19 illness continue to outweigh the rare risk of experiencing an adverse reaction after receiving an mRNA COVID-19 vaccine.
- During the December 2021 to February 2022 Omicron wave, young adults 18 to 29 years of age experienced the highest rates of COVID-19, followed closely by adults 30 to 49 years of age. Due to the high rate of infection, number of hospitalizations in adolescents and young adults also increased during the Omicron wave. Receiving a booster dose will help protect people in these age groups from experiencing severe COVID-19 outcomes.
- Due to the lower risk of myocarditis/pericarditis with the Pfizer-BioNTech Comirnaty COVID-19 vaccine compared to the Moderna Spikevax COVID-19 vaccine, the use of the Pfizer-BioNTech Comirnaty booster dose is preferred for adolescents 12 to 17 years of age and may be preferred for young adults 18 to 29 years of age.
- NACI recommends receiving a booster dose at least 6 months after completing a primary vaccine series. For people who have experienced a COVID-19 infection after a primary vaccine series but before the booster dose, NACI suggests receiving a booster dose three months after symptoms started or testing positive (if no symptoms were experienced) or at least six months after completing a primary series, whichever interval is longer.
- Both the Pfizer-BioNTech Comirnaty and Moderna Spikevax COVID-19 vaccines are approved for use as a first booster dose in adults 18 years of age and over. Recommendations for a first booster dose of a COVID-19 vaccine in adolescents 12 to 17 years of age is currently off-label.
- NACI will continue to monitor the evidence on COVID-19 vaccine and will update guidance as needed.

For the full statement, including supporting evidence and rationale, please see [NACI Statement: Updated guidance on a first booster dose of COVID-19 vaccines in Canada.](#)

For more information on NACI's recommendations on the use of COVID-19 vaccines, please refer to the [COVID-19 vaccine chapter](#) in the [Canadian Immunization Guide \(CIG\)](#), as well as additional statements on the [NACI web page](#).

QUOTES

“Evidence continues to grow stronger about the value of a COVID-19 booster dose for all adults, and even for adolescents, especially with variants of concern. Accordingly, NACI is strengthening recommendations for first booster doses in all adults and for adolescents at the highest risk of severe disease; while also expanding booster options for all adolescents.

The question of booster timing is complex. The protection from infection that is gained from a booster dose is highest in the period following vaccination, and can fade over time. Protection against severe disease is longer lasting. It is possible that, consistent with other respiratory viruses, cases of COVID-19 may increase in the fall season.

It will be important for those who have not yet been boosted to listen to public health officials in order to understand when risk is increasing, and when is the right time to get a booster dose. For those who were recently infected with SARS-CoV-2, NACI continues to suggest that the booster dose may be deferred up to 3 months after infection.”

- Dr. Robyn Harrison, NACI Vice-chair

“NACI's updated review of the evidence is reassuring, showing that a first booster dose following a primary series of mRNA COVID-19 vaccines provides better protection against Omicron infection and severe outcomes than a primary series alone. Considered together with the latest evidence on safety and effectiveness of a first booster dose in adults and adolescents and the changing epidemiology of COVID-19 in Canada, NACI has strengthened their recommendations. NACI now strongly recommends that a first booster dose of an mRNA COVID-19 vaccine should be offered to adults 18 years of age or older, at least 6 months after the completion of a primary series. NACI likewise strongly recommends the same for certain adolescent populations, aged 12 to 17 years of age, who are at higher risk of severe outcomes or are disproportionately affected by COVID-19. Finally, NACI has made a new recommendation that a first booster dose of an mRNA COVID-19 vaccine may be considered for all adolescents, in the context of heightened epidemiological risk. Given the ongoing evolution of the SARS-CoV-2 virus, including continued spread of the more transmissible BA.2 sub-lineage of Omicron in Canada, these strengthened NACI recommendations can help guide provinces and territories in adjusting their vaccination programs toward achieving better protection across additional age groups.”

- Dr. Theresa Tam, Chief Public Health Officer