Studies suggest that a booster dose of an mRNA COVID-19 vaccine produces a very good immune response that is generally higher than the immune response after your initial COVID-19 vaccine series. The National Advisory Committee on Immunization (NACI) has reviewed the latest data that suggest protection against infection decreases over time after completion of a primary COVID-19 vaccine series and has made COVID-19 vaccine booster dose recommendations.

NACI recommends that mRNA vaccines (Pfizer and Moderna) are preferred for both the primary series and the booster dose because they work very well, and we are now very familiar with their safety profile. Although the Novavax COVID-19 vaccine is not currently authorized by Health Canada as a booster dose, it is an effective and safe option for adults aged 18 years of age and older who would prefer to receive this vaccine rather than an mRNA vaccine.

While breakthrough cases of COVID-19 can occur in vaccinated populations, evidence shows that the vaccine protects against severe disease and death.

Longer intervals between doses have been shown to result in a better immune response and somewhat better vaccine effectiveness than shorter intervals. However older people appear to have faster waning immunity compared to younger people.

**Who is eligible for a COVID-19 vaccine booster dose?**

The following groups are eligible to receive a booster dose of COVID-19 **168 days** following their last dose of COVID-19 vaccine:

- Adults 18-69 years of age.
- Adolescents 12 to 17 years of age.

**Pregnancy:**

People who are pregnant may receive their mRNA COVID-19 booster dose 5 months following completion of their primary series.

The following groups are eligible to receive their first booster dose of COVID-19 vaccine **120 days** following completion of their primary series:

- People who are 70 years of age or older, OR who are adult residents of long-term care facilities or senior congregate living settings
- Adults in or from First Nations communities who are 55 years of age or older
- Individuals aged 12 and older who are moderately to severely immunocompromised

**Booster doses for Adolescents 12 to 17 years of age**

NACI strongly recommends adolescents who may be at higher risk of severe outcomes from COVID-19 due to medical and/or social risk factors receive a booster dose. For more information, please visit: [novascotia.ca/coronavirus/vaccine/#booster-doses](http://novascotia.ca/coronavirus/vaccine/#booster-doses).

Adolescents aged 12 to 17 who are not considered at higher risk for severe outcomes of COVID-19 may also receive a first booster dose in light of ongoing COVID-19 activity.

Preliminary safety data from boosters in adolescents showed no additional safety concerns beyond those noted after receiving the first two doses of COVID-19 vaccine, which includes a rare risk of myocarditis and pericarditis following vaccination. Health Canada has not approved the use of a COVID-19 booster dose for people under 18 years of age at this time.

Emerging evidence shows an increased immune response and vaccine effectiveness compared to a primary series in adults following a booster dose.

**For information, visit novascotia.ca/vaccine-plan**

*Updated April 19 2022*
Second Booster Doses
Evidence is limited, but a few studies suggest that protection against severe disease from a first booster may decrease over time.

Data on the use of second booster doses of COVID-19 vaccine is emerging. Early evidence shows that a second booster dose of COVID-19 vaccine provides additional protection against COVID-19 compared to a first booster dose. The duration of protection offered by a second booster dose is currently unknown. Health Canada has not approved the use of a second COVID-19 booster dose at this time.

The following groups are eligible to receive a second booster dose of COVID-19 vaccine 120 days following their last dose of COVID-19 vaccine:

• Adults aged 70 years and older.
• Adult residents of long-term care and senior congregate living settings.
• Adults in or from First Nations communities who are 55 years of age or older.

This includes individuals who are moderately to severely immunocompromised and belong to one of the populations eligible for a second booster.

Previous COVID-19 Infection
People who have experienced COVID-19 infection after finishing their primary series or first booster are advised to wait 3 months after symptoms started or after testing positive (if no symptoms were experienced) provided it has been the minimum interval since their last dose of COVID-19 vaccine.

You may also choose to receive a COVID-19 vaccine dose after acute symptoms of COVID-19 have resolved, and you are no longer required to be isolating.

Myocarditis and Pericarditis
There have been no notable differences in side effects following a booster dose compared to that of the second dose of a primary series in adult study participants. Data on the rare risk of myocarditis (inflammation of the heart muscle) and/or pericarditis (inflammation of the lining around the heart) following a booster dose of an mRNA vaccine in adolescents are still emerging. Rare cases of myocarditis and pericarditis following vaccination with COVID-19 mRNA vaccines have been reported more commonly in males, persons under 30 and following the second dose.

For people aged 18 to 29 years who are eligible to receive a booster dose of vaccine, the use of Pfizer is preferred to Moderna. The Pfizer 30 mcg COVID-19 vaccine is available for use in adolescents 12 to 17 years of age.

As a precautionary measure, NACI recommends that people who have experienced myocarditis with or without pericarditis within 6 weeks of receiving a previous dose of a COVID-19 vaccine should wait to receive further doses of vaccine.

People with a history compatible with pericarditis and who either had no cardiac workup or had normal cardiac investigations can receive subsequent doses of mRNA vaccine once they are symptom free and at least 90 days has passed since vaccination.

Some people with confirmed myocarditis with or without pericarditis may choose to receive another dose of vaccine after discussing the risks and benefits with their healthcare provider. These individuals are recommended to receive Pfizer 30 mcg vaccine due to the lower reported rate of myocarditis with or without pericarditis following the 30 mcg vaccine compared to the Moderna 100 mcg vaccine.

For information, visit novascotia.ca/vaccine-plan

Updated April 19, 2022
People who have a history of myocarditis not related to COVID-19 vaccination and are still being followed by a health care provider should consult a health care provider for individual considerations and recommendations.

People who are no longer being followed clinically for cardiac issues following myocarditis should receive an mRNA COVID-19 vaccine.

There have been reports of myocarditis and pericarditis following vaccination with the Novavax COVID-19 vaccine which occurred during the clinical trial. It is currently unclear whether these cases have been caused by the Novavax COVID-19 vaccine. Ongoing safety monitoring will occur to assist in determining whether myocarditis/pericarditis is associated with the use of Novavax COVID-19 vaccine.

You should read Important Information about Myocarditis and Pericarditis for Pfizer and Moderna COVID-19 Vaccines