COVID-19 Vaccines 2024-25 (Canada)

(modified October 2024)

The first chart below provides dosing and storage information for COVID-19 vaccines approved in Canada. The product monographs can be found at https://covid-vaccine.canada.ca/. A second chart provides information and resources to help you address frequently asked questions about COVID-19 vaccination.

--Information in this chart is from the Canadian product monographs (see link in **footnote a)**, unless otherwise cited.--

Vaccine	Dosing	Storage/Stability
Comirnaty (COVID-19 vaccine, mRNA) 2024 to 2025 formula (Omicron KP.2) for patients **≥6 months of age**. Pfizer Canada	For patients **≥12 years of age** (vials have **gray** cap and label border). • Each dose is 0.3 mL (30 mcg) IM. • Administer at least three to six months after any previous COVID-19 vaccine dose. For patients **5 to 11 years of age** (vials have **blue** cap and label border). • Each dose is 0.3 mL (10 mcg) IM. • Administer ≥6 months after any previous COVID-19 vaccine dose. For patients **6 months through 4 years of age** (vials have **yellow** cap and label border). **REQUIRES DILUTION** with 1.1 mL of 0.9% sodium chloride injection, USP. • Each dose is 0.3 mL (3 mcg) IM. • No previous COVID-19 vaccine: give three doses (at week 0, at week 3, and ≥8 weeks after the 2nd dose). • If the infant/child started the series with Comirnaty XBB.1.5, they can complete the three-dose series with the KP.2 vaccine. • Patients with a history of completion of a COVID-19 primary series: administer ≥6 months after any previous COVID-19 vaccine dose. **Immunocompromised** patients: see **footnote b**.	• Prefilled syringe: ○ Store in refrigerator (2°C to 8°C). ○ Use within 4 hours of attaching needle. • Vials ○ May arrive frozen at ultra-cold temperatures in thermal containers with dry ice. May store in ultra-low temp freezer at -90°C to -60°C or transfer to refrigerator. ○ Refrigerator (2°C to 8°C): 10 weeks. ○ Room temperature (8°C to 25°C): 12 hours prior to first puncture, and 12 hours after first puncture.

Vaccine	Dosing	Storage/Stability
Spikevax COVID-19 mRNA vaccine. 2024 to 2025 formula (Omicron KP.2) for patients **≥6 months years of age**. Moderna Royal blue cap with strength printed in coral blue.	For patients **≥12 years of age.** • Dose is 0.5 mL (50 mcg) IM. • Administer ≥6 months after any previous COVID-19 vaccine dose. For patients **5 to 11 years of age**. • Dose is 0.25 mL (25 mcg) IM. • Administer ≥6 months after any previous COVID-19 vaccine dose For patients **6 months through 4 years of age.** • Previously vaccinated (≥1 previous dose): dose is 0.25 mL (25 mcg) IM. Administer ≥6 months after any previous COVID-19 vaccine dose. • Not previously vaccinated: two doses (0.25 mL [25 mcg] IM), given four weeks apart. **Immunocompromised** patients: see **footnote b**.	• Store frozen between -50ºC and -15ºC • Refrigerator (2ºC to 8ºC): 50 days (unpunctured); 24 hours (punctured) • Room temperature (8ºC to 25ºC): 12 hours (punctured or unpunctured)
Nuvaxovid COVID-19 recombinant protein vaccine, adjuvanted. 2024 to 2025 formula (Omicron JN.1) for patients **≥12 years of age** Novavax	For patients **≥12 years of age.** • Dose is 0.5 mL IM. • Non-immunocompromised patients (whether previously vaccinated or not) may receive a single dose.[19] If two doses are used, the doses should be separated by eight weeks[19] (three weeks per product monograph). **Immunocompromised** patients: see **footnote b**.	• Store in refrigerator (2ºC to 8ºC) for up to nine months (unpunctured) or 12 hours (punctured) • Room temperature (up to 25ºC): 6 hours (punctured)

Abbreviations: IM = intramuscular; NACI = National Advisory Committee on Immunization

a. Canadian product monographs used in creation of this resource: *Comirnaty* (September 24, 2024), *Spikevax* (September 17, 2024), *Nuvaxovid* (September 19, 2024). Canadian product monographs can be found in the *COVID-19 Vaccines and Treatments Portal*: https://covid-vaccine.canada.ca/.

b. **Immunocompromise**:

- For **unvaccinated** individuals **5 years of age and older** who are moderately to severely immunocompromised, NACI recommends that two doses **should** be given, and an additional dose (for a total of 3 doses, four to eight weeks apart) **may** be given.[18,19]
- For **unvaccinated** individuals **6 months up to 5 years of age** who are moderately to severely immunocompromised, NACI recommends one additional dose, with a four to eight-week interval between doses.[18]
- Examples of moderately to severely immunocompromised conditions can be found in the COVID-19 Vaccines chapter of the Canadian Immunization Guide: https://www.canada.ca/en/public-health/services/publications/healthy-living/canadian-immunization-guide-part-4-active-vaccines/page-26-covid-19-vaccine.html#a6.4.considerations.

---Continue to the next section for *Frequently Asked Questions About COVID-19 Vaccination*---

Frequently asked questions about COVID-19 vaccination

Question	Pertinent information or Suggested Resources
How do COVID-19 vaccines work?	• See "Ask the experts COVID-19 vaccine questions: how the approved vaccines work" at https://www.canada.ca/en/health-canada/services/video/ask-experts-covid-19-vaccines/how-approved-vaccines-work.html#a4.
Do mRNA vaccines affect DNA?	• No. COVID-19 vaccines do not interact with DNA in any way.[5]
Can a COVID-19 vaccine cause a COVID-19 infection?	• No. COVID-19 vaccines do not contain the COVID-19 virus.[17]
Can a patient get a COVID-19 vaccine if they have a COVID infection?	• Patients with any respiratory virus should delay vaccination to avoid exposing healthcare providers and others to COVID.[4] • Previously vaccinated patients can wait three to six months after test-confirmed COVID-19 infection to receive a COVID-19 vaccination.[16] • For patients not previously vaccinated, the interval that can be considered from infection to vaccination in the primary series is the same as the recommended intervals between COVID-19 vaccine (eight weeks for those who are not immunocompromised, and four to eight weeks for those who are moderately to severely immunocompromised[b]).[16] • When considering the suggested intervals outlined above, biological and social risk factors for exposure (e.g., local epidemiology, living settings) and severe disease should also be taken into account.[16] o Reinfection is unlikely in the first three months post-infection.[8] o Delaying vaccination for three months may improve vaccine response.[8] o Reasons to get vaccinated sooner include high personal risk of severe disease, close contact with a person at high risk of severe disease, or high COVID-19 transmission in the community.[4]
How effective are COVID-19 vaccines?	• COVID-19 vaccination is the best way to protect against serious COVID-19 illness, hospitalization, and death.[15] o Getting a COVID-19 vaccine is a safer and more reliable way to build immunity than getting a COVID-19 infection.[15] • For the most current CDC-authored vaccine effectiveness studies, see COVID-19 Vaccine Effectiveness Monthly Update at https://covid.cdc.gov/covid-data-tracker/#vaccine-effectiveness.
Can COVID-19 vaccines be given with other vaccines?	• COVID-19 vaccines may be given concurrently (i.e., same day) or any time before or after non-COVID-19 vaccines (including live and non-live vaccines).[18]

Question	Pertinent information or Suggested Resources
What are some common adverse effects of COVID-19 vaccines, and what can be done about them?	• As with other vaccines, side effects are usually mild and go away in few days, if they occur at all.[16] • Common side effects include fatigue, muscle or joint pain, headache, chills, fever, and pain, swelling, and redness at the injection site, axillary (or groin) swelling or tenderness).[16] • It is not recommended to take analgesics before vaccination to prevent side effects, but they can be taken to treat side effects if they occur.[16] • For arm pain and swelling, a clean, cool, wet washcloth can be applied over the area. The patient should keep moving their arm.[10]
Do COVID-19 vaccines cause heart problems?	• Many viruses, including COVID-19, can cause myocarditis and pericarditis.[6] o In one study, patients with COVID-19 had almost 16 times the risk of myocarditis compared with patients who did not have COVID-19.[14] • Although rare, the COVID-19 vaccine has been associated with myocarditis and pericarditis.[6] o Myocarditis associated with COVID-19 vaccination is less common and less severe than with COVID-19 infection.[7] o Most cases associated with COVID-19 vaccination are mild, transient, and resolve on their own.[7] o Among men 18 to 39 years of age, there were 65.7 cases per million doses of the second Moderna vaccine (original formulation).[9] The risk is expected to be lower with the newer vaccines (due to use of a one-dose schedule for most patients, and use of a lower dose).[16] • Whether from the virus or vaccine, males 12 to 39 years of age appear to be at highest risk.[6,9] • Waiting at least 8 weeks between doses may decrease risk (a four to eight -week dosing interval continues to be recommended for moderately or severely immunocompromised people).[8,18]
Do COVID-19 vaccines cause Bell's palsy?	• It is unclear if mRNA COVID-19 vaccines are associated with Bell's palsy.[13]
Can COVID-19 vaccines cause ischemic stroke?	• The CDC and the FDA investigated a potential for increased risk of stroke associated with the Pfizer-BioNTech COVID-19 vaccine in adults ≥65 years of age after a preliminary safety signal was detected in the Vaccine Safety Datalink (VSD) safety monitoring system. Other safety monitoring systems have not observed similar signals, and the current evidence does not support causality.[18]
Do COVID-19 vaccines cause Guillain-Barre syndrome?	• mRNA COVID-19 vaccines do not seem to be associated with Guillain-Barre syndrome.[11]
Will COVID-19 vaccination cause a positive COVID test?	• No.[8]

Question	**Pertinent information or Suggested Resources**
Can antibody testing be used to assess the need for COVID-19 vaccination?	• Serologic testing is not needed before or after immunization with COVID-19 vaccine.[16]
Do patients need to stick with the same vaccine every year?	• No. However: o **children 6 months to less than 5 years of age** who receive a mixed primary series (i.e., a primary series that includes vaccine from more than one manufacturer) with at least one dose of Pfizer-BioNTech Comirnaty vaccine should receive the total number of doses recommended for a Pfizer-BioNTech schedule.[16]
Do COVD-19 vaccines prevent "long COVID"?	• Vaccination is the best available tool to prevent long COVID.[1] • Vaccination may reduce the risk of long COVID-19 by almost 50%.[2,3]
Can patients who are pregnant or breastfeeding get a COVID vaccine?	• COVID-19 vaccination is recommended for people who are pregnant, trying to get pregnant, or who might become pregnant in the future, and for people who are breastfeeding.[12]

Users of this resource are cautioned to use their own professional judgment and consult any other necessary or appropriate sources prior to making clinical judgments based on the content of this document. Our editors have researched the information with input from experts, government agencies, and national organizations. Information and internet links in this article were current as of the date of publication.

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