

Booster dose considerations for those who received 1-dose Janssen vaccine January 13, 2022

The following Q&A is intended for health care professionals.

1. [Is a booster dose recommended following one dose of Janssen vaccine?](#)
2. [Why is the recommended time interval for the booster dose shorter following the 1-dose Janssen primary series than the recommended 6-month interval?](#)
3. [What if a client has a contraindication or refuses an mRNA vaccine for their booster dose?](#)
4. [How will individuals who received the Janssen vaccine be notified to book a booster dose?](#)
5. [Will those who have received a booster dose at least 8 weeks after 1-dose Janssen vaccine require another booster dose?](#)

1. Is a booster dose recommended following one dose of Janssen vaccine?

Yes, a booster dose of a COVID-19 mRNA vaccine is recommended for individuals 18 years of age and older at least 2 months after the 1-dose Janssen primary series has been completed.

2. Why is the recommended time interval for the booster dose shorter following the 1-dose Janssen primary series than the recommended 6-month interval?

Vaccine effectiveness studies indicate lower effectiveness and shorter duration of protection of the Janssen vaccine compared to the other COVID-19 vaccines. As such, individuals who have received one dose of the Janssen vaccine may be less protected against COVID-19 infections including during the current Omicron surge.

The Janssen COVID-19 vaccine has shown moderate efficacy (approximately 67%) against symptomatic confirmed moderate to severe/critical COVID-19 infection from 14 days and 28 days post-vaccination. Decreased protection against infection over time has been noted to potentially occur more quickly with the viral vector vaccines than the mRNA vaccines.ⁱ

A recent study among U.S. adults without immunocompromising conditions, showed vaccine effectiveness against COVID-19 hospitalization during March 11–August 15, 2021 for Moderna and Pfizer-BioNTech vaccines was 93% and 88%, respectively, whereas the single-dose Janssen vaccine had somewhat lower vaccine effectiveness at 71%.ⁱⁱ

3. What if a client has a contraindication or refuses an mRNA vaccine for their booster dose?

A booster dose with the Janssen COVID-19 vaccine should only be considered when other authorized COVID-19 vaccines are contraindicated, or if the individual refuses an mRNA vaccine.

In such situations, a 0.5 mL booster dose of the Janssen COVID-19 vaccine may be provided; however, such clients should be informed that vaccine effectiveness against symptomatic infection and severe COVID-19 outcomes has consistently been somewhat lower, and vaccine protection against infection and symptomatic disease decreases more quickly with viral vector vaccines compared to mRNA vaccines.ⁱⁱⁱ Informed consent for individuals opting for Janssen vaccine should include the risks of rare but serious adverse effects such as Thrombosis with Thrombocytopenia Syndrome [TTS], thrombocytopenia and Guillain-Barré syndrome which have not been seen with the mRNA vaccines.

4. How will individuals who received the Janssen vaccine be notified to book a booster dose?

Individuals who received the Janssen vaccine will receive an invitation from ImmsBC (the 'Get Vaccinated' system) 8 weeks after receiving one dose of Janssen vaccine.

These individuals will be advised that they are being offered an earlier booster dose because they received one dose of the Janssen vaccine and will be informed of the following:

- the invitation is for a COVID-19 mRNA vaccine
- those who are willing to receive a COVID-19 mRNA vaccine will be able to book their booster dose online
- those who wish to receive Janssen vaccine will need call the central call line (1-833-838-2323) to book their appointment as this vaccine will not available at all clinic sites.

5. Will those who have received a booster dose at least 8 weeks after one dose of Janssen vaccine require an additional booster dose?

At this time, no further doses are recommended for those who received a COVID-19 vaccine booster dose at least 8 weeks after one dose of Janssen vaccine regardless of the vaccine received.

In addition, those who received one dose of Janssen COVID-19 vaccine are considered fully vaccinated for the BC Vaccine Card.

ⁱ National Advisory Committee on Immunization. Canadian Immunization Guide [Internet]. Evergreen ed. Ottawa (ON). Public Health Agency of Canada. 2021 [updated 2021 Dec 23]. Part 4 – Active vaccines: COVID-19 vaccine. [Cited 2021 Jan 11]. Available from: <https://www.canada.ca/en/public-health/services/publications/healthy-living/canadian-immunization-guide-part-4-active-vaccines/page-26-covid-19-vaccine.html#a4>

ⁱⁱ Self, W., Tenforde, M., Rhoads, J., Gaglani M, Ginde AA, Douin DJ, et. al. (2021). Comparative effectiveness of Moderna, Pfizer-BioNTech, and Janssen (Johnson & Johnson) vaccines in preventing COVID-19 hospitalizations among adults without immunocompromising conditions - United States, March-August 2021. MMWR Morb Mortal Wkly Rep. 2021 Sep 24;70(38):1337-43. [Cited 2021 January 10]. Available from: <https://www.cdc.gov/mmwr/volumes/70/wr/pdfs/mm7038e1-H.pdf>

ⁱⁱⁱ Public Health Agency of Canada [Internet]. Ottawa (ON): Public Health Agency of Canada. December 3, 2021. Updated guidance on booster COVID-19 vaccine doses in Canada. [Cited 2021 January 10]. Available from: <https://www.canada.ca/en/public-health/services/immunization/national-advisory-committee-on-immunization-naci/guidance-booster-covid-19-vaccine-doses.html>