November 9, 2021

Alberta COVID-19 Immunization Program Update

Dear colleagues,

I would like to update you with some important information about COVID-19 immunization.

Starting November 8, 2021, Alberta has expanded eligibility for booster doses of COVID-19 vaccine. A booster dose of vaccine is now available with a minimum spacing of six months between the last dose of the initial series and the additional dose for the following higher risk individuals:

- Seniors ages 70 years and older
  - This is in addition to currently eligible seniors ages 75 years and older.
- First Nations, Métis and Inuit people ages 18 and older no matter where they live in Alberta
  - This is in addition to currently eligible First Nations, Metis and Inuit adults 65 years of age and older.
- Health-care workers who provide direct patient care and received a second dose less than 8 weeks after their first dose.
- Those whose initial series was with a viral vector vaccine (AstraZeneca/COVISHIELD or Janssen vaccine):
  - People who received only two doses of AstraZeneca or one dose of Janssen can get a dose of mRNA vaccine.
  - This does not apply to viral vector vaccine recipients who have already received one or more doses of an mRNA vaccine.

Eligible Albertans whose last dose of the initial series was at least six months ago can now book their booster dose. More information on these changes is included below.

Thank you for your efforts to support the COVID-19 Immunization Program through patient counseling, vaccine provision for those involved, and immunization for you and your teams.

Yours sincerely,

Deena Hinshaw, BSc, MD, MPH, CCFP, FRCP
Chief Medical Officer of Health
Overview

• A complete COVID-19 vaccine series continues to provide strong protection against COVID-19 infection and severe outcomes, including against the Delta variant, in most of the general population.

• However, an additional dose may be needed as part of a primary series to provide stronger protection for those who may have a suboptimal response to the initial 1- or 2-dose series, which puts them at increased risk of severe COVID-19 infection. Alberta is offering an additional dose to individuals with eligible immunocompromised conditions.

• A booster dose may be needed to help restore protection for those who may have waning immunity over time that may put them at increased risk of severe COVID-19 or transmitting the infection to vulnerable populations.

• A booster dose is offered for the clinical reasons outlined above, not for travel purposes. For travelers who received AstraZeneca/COVISHIELD vaccine or a mixed schedule that is not recognized by the jurisdiction they are travelling to, may receive an additional dose. However, it is the responsibility of the traveler to know what the requirements of the travel destination are as well as the pros and cons of receiving a third dose or full series of mRNA vaccine are. Additional information for travel doses is available here.

• To continue protecting Alberta’s most vulnerable populations and to maintain health system capacity, as recommended by the Alberta Advisory Committee on Immunization following the recently updated interim guidance on booster COVID-19 vaccine doses provided by the National Advisory Committee on Immunization (NACI), the province is expanding eligibility criteria for an additional dose of the COVID-19 vaccine and making booster doses available to those who may experience decreased vaccine protection over time and who are at highest-risk of breakthrough infection and severe outcomes from breakthrough infection or who could pose increased risk of transmission to vulnerable populations.

• An mRNA vaccine should be administered as the booster dose except in the event of contraindication or refusal. When possible, it is preferred that the booster dose be the same mRNA vaccine as that received in the initial series. If the initial series was a mixed mRNA vaccine series or a viral vector vaccine series, either mRNA vaccine can be administered. See Clinical Considerations for additional information.

• Side effects and adverse events: currently available clinical evidence indicates that side effects reported after an additional dose were similar to previous doses, and mostly mild or moderate. No increase in serious adverse events has been reported after administration of a third dose.

• Alberta will continue enhanced surveillance of Adverse Events Following Immunization (AEFI) and Adverse Events of Special Interest (AESI), including those related to additional doses of COVID-19 vaccines. Health care professionals are reminded of their critical role and mandated responsibility to report adverse events following immunization that meet Alberta’s definition of an AEFI or AESI. For information on what needs to be reported and when, go to: https://www.albertahealthservices.ca/info/Page16187.aspx.
There is currently no evidence of decreasing protection over time against severe disease in the general Albertan population who have been immunized against COVID-19. Alberta will continue to monitor evidence as it becomes available and if warranted, additional doses may be recommended for other populations in future.

**Booster dose for seniors aged 70 years and older**

**Recommendation:**

- All seniors aged 70 years and older who have received two doses of a COVID-19 vaccine are now eligible for a third dose of COVID-19 vaccine at a minimum of a six month interval from the second dose.

**Current evidence and rationale**

- Age and underlying medical conditions are significant risk factors for severe COVID-19 disease outcomes such as hospitalization, ICU admission and death.
  - The proportion of individuals with at least one underlying medical condition associated with an increased risk of severe COVID-19 increases with increasing age.
- Emerging evidence suggests that vaccine effectiveness against infection appears to wane with time, particularly in the elderly population.
- Among the fully immunized, although the risk of severe outcomes remains much less than those who are not immunized, older age groups (80 years of age and over, followed by those 70 to 79 years of age) have the highest hospitalization and mortality rates from breakthrough cases of COVID-19.
- Data on breakthrough infections and COVID-19 vaccine effectiveness in Alberta can be found at [COVID-19 Alberta statistics | alberta.ca](https://www.alberta.ca/covid-19-statistics/).
- Early evidence shows that short-term vaccine effectiveness of a booster dose against infection and severe illness is very good.

**Booking a booster dose:**

- All eligible seniors can now book appointments to receive a booster dose of vaccine by calling 811 or booking online.
- Those deemed ineligible due to their age, or because less than six months has passed since receiving their second dose, will be asked to re-book when eligible.
Booster dose for First Nations, Métis and Inuit adults

Recommendation:

- All First Nations, Métis and Inuit (FNMI) aged 18 years and older who have received two doses of a COVID-19 vaccine are eligible for a third dose at a minimum of a six month interval from the second dose no matter where they live in Alberta.

Current evidence and rationale

- Throughout the COVID-19 pandemic, FNMI peoples have been disproportionately affected due to a number of intersecting equity factors and had a higher rate of severe outcomes, and a younger average age at death. They are almost twice as likely as the non-indigenous population to need hospital care for COVID-19.

- Nationally, the rate of active COVID-19 cases in First Nations communities was 4.2 times higher than the rate in the general population as of October.

- Ensuring strengthened protection from immunization in individuals in this population has the potential to reduce or prevent the exacerbation of intersecting health and social inequities.

- The proportion of Canadians who identify as Indigenous and have at least one underlying medical condition associated with severe COVID-19 is higher compared to non-Indigenous people in Canada for every age category above 20 years of age.

- FNMI people were included in the earliest stages of the COVID-19 vaccine roll-out and may be at increased risk of waning of protection because more time has elapsed since their second dose and some of them were immunized with a very short interval between doses.

- Published FN COVID-19 data can be found on the Alberta First Nations Information Governance Centre.

- All immunization decisions regarding FNMI populations are made in partnership with Indigenous leaders and communities.

Booking a booster dose:

- Off reserve: All eligible FNMI people can now book appointments to receive a booster dose of vaccine by calling 811 or booking online.

- Those deemed ineligible due to their age, or because less than six months has passed since receiving their second dose, will be asked to re-book when eligible.

- On reserve: Those living on-reserve can receive vaccine through local health care providers.
Booster dose for Health-Care Workers

Recommendation:

- All health-care workers who provide direct patient care (having direct close physical contact with patients) and who got a second dose less than 8 weeks after their first dose are now eligible for a third dose at a minimum of a six month interval from the second dose.

Current evidence and rationale

- Maintaining health system capacity is crucial to minimize serious illness and overall deaths while minimizing societal disruption as a result of the COVID-19 pandemic.
- Health care workers giving direct patient care pose increased risk of transmission to vulnerable populations if infected.
- Some healthcare workers in Alberta were included in the initial phase of the provincial immunization program roll-out and may be at increased risk of waning of protection because more time has elapsed since their second dose and they also had a shorter interval between doses.
- There is emerging evidence that longer intervals between the first and second doses of COVID-19 vaccines result in more robust and durable immune response and higher vaccine effectiveness. Current guidance from the National Advisory Committee on Immunization (NACI) suggests that the optimal interval between the first and second dose for the current COVID-19 vaccines that appears to provide optimal protection while simultaneously minimizing the time at risk of infection due to having protection from only one dose is 8 weeks for mRNA vaccines.

Booking a booster dose:

- All eligible health care workers can now book appointments to receive a booster dose of vaccine by calling 811 or booking online.
- Those deemed ineligible due to a longer than eight week interval between their first and second dose, or because less than six months has passed since receiving their second dose, will be asked to re-book when eligible.

Booster dose for recipients of a viral vector vaccine series (AstraZeneca/COVISHEILD or Janssen vaccine):

Recommendation:

- People who received two doses of AstraZeneca or one dose of Janssen are eligible for a booster dose of an mRNA vaccine, as long as they have not already received an mRNA dose for any other eligible purpose, including travel.
Current evidence and rationale

- Vaccine effectiveness against severe COVID-19 outcomes with all vaccine types (including viral vector vaccine) remains high, but it is currently unclear to what extent the duration of protection may vary by vaccine product.

- In general, mRNA vaccines (Moderna and Pfizer) have been shown to be highly efficacious in preventing infection and severe illness and death. Viral vector vaccines (AstraZeneca/COVIDSHIELD and Janssen) have been shown to be highly to moderately effective.

  - Regularly updated COVID-19 vaccine effectiveness in Alberta can be found at COVID-19 Alberta statistics | alberta.ca.

- People who received a complete vaccine series of a viral vector vaccine have somewhat lower initial vaccine effectiveness and may experience waning protection sooner than people who received a primary series that included at least one dose of an mRNA vaccine.

Booking a booster dose:

- All eligible viral vector vaccine recipients can now book appointments to receive a booster dose of vaccine by calling 811 or booking online.

- Those deemed ineligible because less than six months has passed since receiving their second dose will be asked to re-book when eligible.

Clinical considerations for administering a booster dose in all eligible populations

- Before receiving a booster dose, while it is not required to do so, eligible individuals may wish to consult with their healthcare provider about any advantages or disadvantages of receiving a booster dose of vaccine.

- As with all vaccine administration, immunizers must receive informed consent from the person requesting a booster dose prior to immunization to ensure they understand the benefits versus risks of a booster dose.

- Adults 65 years of age and older and residents of senior congregate living sites are recommended to receive the full dose (100 mcg) if being offered Moderna for a booster dose or the full dose (30 mcg) if being offered Pfizer.

  For all other individuals less than 65 years of age, if offering Moderna as a booster dose, a half dose (50 mcg) is recommended or the full dose (30 mcg) if being offered Pfizer.

- An additional dose for eligible immunocompromised individuals is considered part of their primary series. A full dose should be provided (i.e. Moderna 100 mcg or Pfizer 30mcg).

- As a precautionary measure, Alberta Health recommends that individuals who experienced myocarditis and/or pericarditis after any preceding dose of an mRNA vaccine should
discuss decisions around the third dose, including timing, with their clinician. In general, they are advised to defer receiving an additional dose until more data is available. Additional information for clinical considerations is available here.

- It is important for health care professionals to support and encourage patients/clients to continue to maintain COVID-19 disease prevention measures such as masking and physical distancing even after a booster dose. Household members and close relatives of these individuals should be encouraged to receive the primary series of COVID-19 vaccine, if they haven’t already.

- Serologic testing or cellular immunity testing to assess immune response and guide clinical care (e.g., need for a booster dose) are not recommended at this time.

- On September 28, 2021, NACI released recommendations indicating that COVID-19 vaccines may be given at the same time as, or any time before or after, other vaccines, including live, non-live, adjuvanted or unadjuvanted vaccines. The full recommendation statement can be found here: Summary of National Advisory Committee on Immunization (NACI) statement: Recommendations on the use of COVID-19 vaccines - Canada.ca