

# COVID-19 Viral Vector Vaccine

AstraZeneca/COVISHIELD<sup>1</sup> Vaccine

Public Health Factsheet

March 2021

Manitoba 

Immunization is one of the most important accomplishments in public health. Over the past 50 years, immunization has led to the elimination, containment and control of diseases that were once very common in Canada.<sup>2</sup> Vaccines help the immune system recognize and fight bacteria and viruses that cause diseases.

After getting vaccinated, continue to focus on the fundamentals including practicing physical distancing, wearing a mask, washing your hands, staying home if you're sick and keep practicing good cough and hand hygiene. Continue to help prevent the spread of COVID-19. For more information, visit <https://www.gov.mb.ca/covid19/updates/prepareandprevent.html#fundamentals>.

## What is the COVID-19 viral vector vaccine?

The COVID-19 non-replicating viral vector vaccine is used to prevent COVID-19. Viral vector vaccines use a harmless virus (the vector) as a delivery system. After vaccination, the genetic material contained within the vaccine produces the SARS-CoV-2 spike protein. This protein is found on the surface of the virus that causes COVID-19. Our immune system recognizes that the protein does not belong there and begins to build an immune response by making antibodies. **You cannot get COVID-19 from the viral vector vaccine and it cannot change a person's DNA.**

Scientists and pharmaceutical companies have developed these vaccines because of the urgent need to combat the worldwide spread of COVID-19. The AstraZeneca/COVISHIELD COVID-19 vaccine (ChAdOx1-S recombinant) is the third COVID-19 vaccine to receive Health Canada approval in individuals 18 years of age and older.

Health Canada issued the AstraZeneca/COVISHIELD vaccine a market authorization with conditions to support early access to the COVID-19 vaccines. Health Canada can do this for promising health products when the potential benefits outweigh the potential risks. The approval of the vaccine is supported by evidence that it is safe, effective and of good quality. Early results from clinical trial data suggests that the AstraZeneca/COVISHIELD vaccine has been shown to be 81.6 per cent effective in the short term in preventing adults up to 64 years old from getting lab-confirmed COVID-19 following administration of the second dose at least 12 weeks after the first dose. There is limited information from clinical trials on the effectiveness of the vaccine in individuals 65 years of age and older however, new real-world studies demonstrate high levels of effectiveness against COVID-19 infection as well as effectiveness from serious outcomes including hospitalizations.

Health Canada conducted a thorough scientific review of the available medical evidence to assess the safety of the COVID-19 viral vector vaccine. Health Canada did not identify any major safety concerns. Health Canada will continue to monitor post-marketing studies, additional research and clinical trial data to identify potential safety signals as quickly as possible.

**Vaccine effectiveness against COVID-19 variants of concern is evolving and will be reported on as available.**

The COVID-19 viral vector vaccine being offered in Manitoba is given by injection (needle) into a muscle in the upper arm. Details about the COVID-19 vaccines are subject to change as the evidence continues to evolve. Talk to your immunizer or health care provider about any questions you may have about the COVID-19 viral vector vaccine. Closely follow your immunizer or health care provider's guidance, especially around timing of second doses and other important health-related information, to get the most benefit from your immunization.

**The COVID-19 vaccine cannot offer protection against the flu or other viruses or bacteria.**

<sup>1</sup> COVISHIELD (manufactured by the Serum Institute of India) and AstraZeneca COVID-19 vaccine (manufactured by AstraZeneca) are ChAdOx1-S recombinant vaccines developed by AstraZeneca and the University of Oxford. Health Canada has reviewed the manufacturing information for these vaccines and found them to be comparable.

<sup>2</sup> The Public Health Agency of Canada

## Why has the Manitoba government moved to delaying the second dose of COVID-19 vaccines?

The National Advisory Committee on Immunization (NACI)<sup>3</sup> has provided guidance to provinces and territories to extend the spacing between the first and second doses to four months. This decision is based on what public health officials are seeing in real-world conditions about the effectiveness of the vaccines currently authorized for use in Canada. These vaccines are providing a significant level of protection, meaning there is a clear advantage to getting vaccine to more people, sooner. This approach will allow more Manitobans to be immunized sooner.

## Who should get the COVID-19 viral vector vaccine?

COVID-19 vaccines will eventually be available for all Manitobans. There are multiple COVID-19 vaccines in various stages of development worldwide, with some already approved and available for public use. Each Health Canada-approved COVID-19 vaccine, particularly those using different technology (e.g., mRNA vaccines vs. viral vector vaccines), will vary with their own indications for use.

While supplies are limited, Manitoba has identified the following priority populations to get a COVID-19 vaccine first, based on recommendations made by the NACI and working with public health experts across the country:

- health care workers, focusing first on those who provide direct patient care
- congregate living facility staff, such as those who work in shelters or group homes
- congregate living facility residents, starting with licensed personal care homes
- First Nation people
- the general population, starting with older adults

Health Canada authorized the use of AstraZeneca/COVISHIELD in individuals 18 years of age and older on February 26, 2021. At this time, however, the NACI does not recommend people older than 65 years of age get the AstraZeneca/COVISHIELD vaccine due to limited information on vaccine efficacy in this age group. In clinical trials, AstraZeneca/COVISHIELD showed an effectiveness of 81.6% in preventing adults younger than 64 years old from getting lab-confirmed COVID-19 following their second dose given at least 12 weeks after the first dose.

AstraZeneca/COVISHIELD is being offered to eligible individuals who would otherwise have to wait for the mRNA vaccine. Being vaccinated now with the viral vector vaccine will not affect future eligibility for another COVID-19 vaccine, if the evolving evidence supports re-vaccination at a later time.

Adults in the authorized age category, starting with those aged 50 to 64 years in the general population and 30 to 64 year old First Nation people will be the first group eligible to receive the AstraZeneca/COVISHIELD COVID-19 vaccine, with priority given to those who are at increased risk of experiencing serious illness requiring hospitalization. People with high-risk medical conditions, as determined by their doctor or pharmacist, will be prioritized. In addition, some groups of people at increased risk of being exposed to COVID-19 may also be eligible. Eligibility criteria is subject to change as we learn more about the vaccines available and as supply increases; visit: <https://www.gov.mb.ca/covid19/vaccine/eligibility-criteria.html> for up-to-date eligibility criteria and details on priority groups (e.g., high-risk medical conditions).

**Individuals living with a medical condition (e.g., heart failure, liver disease, chronic kidney disease) can get the vaccine. If you are immunosuppressed due to disease or treatment, have an autoimmune condition, are pregnant and/or breastfeeding, see the appropriate fact sheet for information about the risks and benefits of immunization available at: [www.manitoba.ca/covid19/vaccine/resources.html](http://www.manitoba.ca/covid19/vaccine/resources.html).**

<sup>3</sup> The National Advisory Committee on Immunization (NACI) makes recommendations for the use of vaccines currently or newly approved for use in people in Canada, including the COVID-19 vaccines. For more information, please visit <https://www.canada.ca/en/public-health/services/immunization/national-advisory-committee-on-immunization-naci/>.

Talk to your immunizer or health care provider if you have any questions about your medical conditions, or if you aren't sure if you are immunosuppressed or have an autoimmune condition. Your immunizer can give you more information, based on what we know now from early clinical trial data and post-marketing studies.

People who have gotten sick with COVID-19, and have recovered, may still benefit from getting the vaccine. Currently, there is limited data on the use of COVID-19 vaccines in people who have gotten sick with COVID-19 and recovered. In the context of limited vaccine supplies, NACI recommends waiting three months before getting immunized. Talk to your health care provider about the best time for you to get vaccinated.

## Who should NOT get the COVID-19 viral vector vaccine?

Babies and children under the age of 18.

People who have had their first dose of COVID-19 vaccine with the COVID-19 mRNA vaccine (Pfizer-BioNTech or Moderna), should not get their second dose with the viral vector vaccine. At this time, NACI recommends the same COVID-19 vaccine product be used for a two-dose COVID-19 vaccine series.

The COVID-19 viral vector vaccine should not be given to people who are allergic to an active substance, or any ingredient of the vaccine, or if you have had a severe allergic reaction after the first dose of a viral vector vaccine. An allergic reaction can be life-threatening. For information about any of the COVID-19 vaccine's ingredients, please review the vaccine manufacturer's product monograph, available at: [www.manitoba.ca/vaccine](http://www.manitoba.ca/vaccine) or talk to your immunizer or health care provider.

Polysorbate 80 is an ingredient of the viral vector vaccine. It is a potential allergen known to cause possible allergic reactions, including serious reactions. Polysorbate 80 may be found in some medication preparations (e.g., vitamin oils, tablets, and anticancer agents) and cosmetics. Individuals with polysorbate 80 allergies may also be allergic to polyethylene glycol (PEG), another potential allergen found in many products (e.g., bowel preparation products for colonoscopy, laxatives, cough syrup, cosmetics, contact lens care solutions, skin care products, and as an additive in some food or drinks). If you are allergic to polysorbate 80 or PEG, speak with your health care provider before immunization.

NACI recommends that COVID-19 vaccines should not be given at the same time as other (live or inactivated) vaccines. Wait 14 days after any other vaccine before receiving your COVID-19 vaccine. After receiving a dose of COVID-19 vaccine, wait 28 days before receiving any other vaccine, unless a vaccine is required urgently, due to an exposure to a virus such as Hepatitis B.

If you have a fever or any symptoms that could be due to COVID-19, you should wait to be vaccinated. Talk with your health care provider about your symptoms and getting a COVID-19 test. Your health care provider will advise you when you may be able to receive the vaccine.

## Possible side effects from the COVID-19 viral vector vaccine

In general, the side effects observed during the clinical trials were similar to those of other vaccines. The side effects were generally mild or moderate, and went away a few days after vaccination. They included pain, redness, itchiness, swelling and a warm feeling at the injection site, body chills, feeling tired and feverish, headache, muscle and joint pain, as well as nausea and vomiting. Over-the-counter medicines, such as acetaminophen (e.g., Tylenol®) or ibuprofen (e.g., Advil®) may be considered to help manage these symptoms (like pain or fever, respectively), if they occur **after vaccination**.

These are common side effects of vaccines and are not a risk to your health.

For a full list of possible side effects, please review the vaccine manufacturer's product monograph, which is available at: [www.manitoba.ca/vaccine](http://www.manitoba.ca/vaccine) or speak with your immunizer or health care provider.

As with all vaccines, more serious side effects such as allergic reactions are possible. However, these are rare.

It is important to stay in the immunization clinic for 15 minutes after getting any vaccine in the unlikely event of a severe allergic reaction. You may need to stay in the clinic for 30 minutes if you have had a serious allergic reaction to a vaccine in the past or have a history of severe allergies to food, medicine, environmental agents or other known allergens. Symptoms of a severe allergic reaction can include hives, difficulty breathing,

or swelling of the throat, tongue or lips. This can happen up to an hour after you get vaccinated. If this happens after you leave the immunization clinic, **call 911 or go to the nearest emergency department or health centre for immediate attention.**

**Report any serious or unexpected adverse reactions to a health care provider, or call Health Links – Info Santé at 204-788-8200 or 1-888-315-9257 (toll free).**

## Preparing for your vaccination

Be sure to follow the signs and instructions at the immunization clinic (e.g., stay two metres away from other people), and remember to stay home if you are sick.

- Wear a short-sleeved shirt.
- Be sure you have eaten regularly that day.
- Bring and wear your mask.
- Bring any personal identification required by the immunization clinic, such as your Manitoba Health Family Registration Card.

**After getting vaccinated, continue to focus on the fundamentals to help prevent the spread of COVID-19. For more information, visit: <https://www.gov.mb.ca/covid19/updates/prepareandprevent.html#fundamentals>.**

## Your record of protection

All immunizations, including the COVID-19 vaccine, are recorded on your immunization record in Manitoba's immunization registry. This registry:

- allows health care providers to find out which immunizations you (or the people you care for) have received or need to have.
- may be used to produce immunization records or notify you or your health care provider if a particular immunization has been missed.
- allows Manitoba Health and Seniors Care as well as public health officials, to monitor how well vaccines work in preventing disease.

The Personal Health Information Act protects your information and/or the information about any people you provide care for. You can choose to have this personal health information hidden from health care providers. For additional information, please contact your local public health office or talk to a health care provider.

An official Government of Manitoba COVID-19 Immunization Record can be obtained online at: <https://sharedhealthmb.ca/covid19/test-results/>. You will need your Manitoba Health Family Registration Card to register and access your record.

If you need information on the other immunizations that you or the people you care for have received, contact your health care provider, or contact your local public health office for a copy of your immunization records.

For a listing of public health offices, visit: [www.manitoba.ca/health/publichealth/offices.html](http://www.manitoba.ca/health/publichealth/offices.html).

## For more information

For more information about COVID-19 or the COVID-19 vaccines, talk to your health care provider. You can also call Health Links – Info Santé in Winnipeg at 204-788-8200 or 1-888-315-9257 (toll free in Manitoba). Or visit:

**Manitoba Government:**

[www.manitoba.ca/covid19/index.html](http://www.manitoba.ca/covid19/index.html)

**Government of Canada:**

<https://www.canada.ca/en/public-health/services/diseases/coronavirus-disease-covid-19.html>

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