COVID-19 Vaccines

Immunization has saved more lives in Canada in the last 50 years than any other health measure.

What are COVID-19 vaccines?
COVID-19 vaccines protect against infection from the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) that causes COVID-19. The vaccines cause your body to produce antibodies that will help protect you from getting sick if exposed to the virus. The vaccines are approved by Health Canada.

Who should get the vaccines?
COVID-19 vaccination is recommended for those 5 years of age and older. More information, including how to register for the vaccine, can be found on the BCCDC website: www2.gov.bc.ca/gov/content/covid-19/covid-19-vaccine/vaccine-registration-eligibility

If you had, or may have had, COVID-19 you should still get the vaccine. This is because you may not be immune to the virus that causes COVID-19 and could get infected and sick again.

How are the vaccines given?
The vaccines are given by injection as 1 or 2 doses. An additional dose of vaccine is recommended for some people who have a weakened immune system as they may not develop a strong immune response to the vaccine. Details of who should get an additional dose of vaccine can be found on the Government of British Columbia’s website: www2.gov.bc.ca/gov/content/covid-19/vaccine/register. A booster dose of COVID-19 vaccine is being provided to eligible people who have completed their vaccine series to strengthen and provide longer protection against COVID-19 disease. For more information see: www2.gov.bc.ca/gov/content/covid-19/vaccine/booster. Getting all of the recommended doses of vaccine is your best protection against COVID-19.

It is important to keep a record of all immunizations received. Be sure to bring your immunization record with you when returning for your next dose of vaccine.

What should I do after I get the vaccine?
After you get the vaccine, continue to follow public health recommendations, such as: washing your hands or using hand sanitizer, physical distancing and wearing a mask.

What are the benefits of the vaccines?
The vaccines are the best way to protect you against COVID-19, which is a serious and sometimes fatal disease. In clinical trials, those who received a vaccine were 63% to 95% less likely to become sick with COVID-19 and were almost completely protected against severe illness (hospitalization and death). The Moderna and Pfizer-BioNTech vaccines provide better protection against infection than the AstraZeneca and Janssen vaccines. When you get immunized, you help protect others as well, including those who are unable to get the vaccine.

What are the possible reactions after the vaccines?
Vaccines are very safe. It is much safer to get the vaccine than to get COVID-19. The vaccines are not live virus vaccines and cannot give you COVID-19. Common reactions to the vaccines may include soreness, redness, swelling and itchiness where the vaccine was given. For some people, these reactions may show up 8 or more days after getting the vaccine. Other reactions may include tiredness, headache, fever, chills, muscle or joint soreness, swollen lymph nodes under the armpit, nausea and vomiting. These reactions are mild and generally last 1 to 2 days. If you have concerns about any symptoms you develop after receiving the vaccine, speak with your healthcare provider or call 8-1-1 for advice.

The following rare events have been reported after getting the AstraZeneca and Janssen vaccines:

- Thrombosis with thrombocytopenia syndrome: serious blood clots have been seen at a rate of about 1 case in 50,000 first doses of vaccine and 1 in 600,000 second doses. Those who choose not to get a second dose of the AstraZeneca vaccine can get another vaccine (Pfizer or Moderna) to complete their vaccine series.
- Immune thrombocytopenia: a temporary drop in the blood cells that help prevent bleeding may occur in less than 1 in 10,000 people.
- Guillain Barré Syndrome: a condition that can result in weakness and paralysis of the body’s muscles may occur in 1 in 100,000 people.
- Venous thromboembolism: a blood clot that starts in a vein may occur in about 1 in 1,000 to 1 in 10,000 people after getting the Janssen vaccine.

Rare cases of inflammation of the heart (myocarditis and pericarditis) have been reported after getting the Pfizer or Moderna vaccine. In B.C., this has occurred at a rate of about 15 cases per million doses of vaccine, and is seen more often after the second dose, and in males under 40 years of age.

For more thrombocytopenia (low blood platelets) after a dose of AstraZeneca or COVISHIELD vaccine you should not get another dose of these vaccines or the Janssen vaccine. If you have a history of capillary leak syndrome you should not get the AstraZeneca or Janssen vaccines.

**Are there additional considerations to getting the vaccine?**

Speak with your health-care provider if you:

- Have received a monoclonal antibody or convalescent plasma for treatment or prevention of COVID-19
- Were diagnosed with inflammation of the heart (myocarditis or pericarditis) by a physician after your first dose of Moderna or Pfizer COVID-19 vaccine without another cause being identified
- Had cerebral venous sinus thrombosis with thrombocytopenia or heparin-induced thrombocytopenia
- Have a history of multisystem inflammatory syndrome following COVID-19
- Have symptoms of COVID-19

If you have a new illness preventing you from your regular activities, you should wait until you have recovered. This will help to distinguish side effects of the vaccine from worsening of your illness.

**What is COVID-19?**

COVID-19 is an infection of the airways and lungs caused by the SARS-CoV-2 coronavirus. Symptoms of COVID-19 can include cough, shortness of breath, fever, chills, tiredness and loss of smell or taste. While some people with COVID-19 may have no symptoms or only mild symptoms, others can require hospitalization and may die. Serious illness is more common in those who are older and those with certain chronic health conditions such as diabetes, heart disease or lung disease. For some people, symptoms of COVID-19 can last for weeks or longer. The long-term effects of COVID-19 on a person’s health are unknown.

**How is COVID-19 spread?**

The virus that causes COVID-19 is spread from person to person by coughing, sneezing, talking and singing. It can also be spread by touching an object or surface with the virus on it and then touching your eyes, nose or mouth.


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**Acetaminophen** (e.g. Tylenol®) or ibuprofen (e.g. Advil®) can be taken for fever or soreness. ASA (e.g. Aspirin®) should not be given to anyone under 18 years of age due to the risk of Reye Syndrome.

For information on Reye Syndrome, see HealthLinkBC File #84 Reye Syndrome.

It is important to stay in the clinic for 15 minutes after getting any vaccine because about 1 in a million people can have a life-threatening allergic reaction called anaphylaxis. This may include hives, difficulty breathing, or swelling of the throat, tongue or lips. Should this reaction occur, your health-care provider is prepared to treat it. Emergency treatment includes administration of epinephrine (adrenaline) and transfer by ambulance to the nearest emergency department. If symptoms develop after you leave the clinic, call 9-1-1 or your local emergency number.

Always report serious or unexpected reactions to your health-care provider.

**Who should not get the vaccine?**

You should not get the vaccine if you have a serious allergy (anaphylaxis) to:

- Polyethylene glycol (PEG) which is in both the Moderna and Pfizer COVID-19 vaccines. PEG can be found in some cosmetics, skin care products, laxatives, cough syrups, and bowel preparation products for colonoscopy. PEG can be an additive in some processed foods and drinks, but no cases of anaphylaxis to PEG in foods and drinks have been reported
- Polysorbate 80 which is in the AstraZeneca and Janssen vaccines. It is also found in medical preparations (e.g., vitamin oils, tablets and anticancer agents) and cosmetics

Speak with your health care provider if you had anaphylaxis after a previous dose of a COVID-19 vaccine or if you have had anaphylaxis with an unknown cause.

If you experienced thrombosis (blood clots) with thrombocytopenia (low blood platelets) after a dose of