

## COVID-19 mRNA vaccines

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

### What are COVID-19 mRNA vaccines?

The COVID-19 mRNA vaccines (Moderna (Spikevax) and Pfizer-BioNTech (Comirnaty)) 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. For more information, visit [Immunize BC: How vaccines work](#).

### Who should get the vaccines?

The vaccines are recommended for those 6 months of age and older. The vaccines are especially important for those at increased risk of infection or severe disease, including:

- People 65 years of age and older
- Residents of long-term care and assisted living facilities
- People with underlying medical conditions
- Pregnant people
- Health care workers
- First responders (police, firefighters, ambulance attendants)

Indigenous peoples may be at increased risk of serious illness from COVID-19 due to health inequities resulting from colonialism.

More information, including how to register for the vaccine, can be found on the Government of British Columbia's website: [www2.gov.bc.ca/gov/content/covid-19/vaccine/register](http://www2.gov.bc.ca/gov/content/covid-19/vaccine/register).

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 or variants of the virus that causes COVID-19 and could get infected and sick again.

### How are the vaccines given?

The vaccines are given by injection. People 5 years of age and older should get one dose. Children 6 months to 4 years of age and people with weakened immune systems may need more than one dose depending on their immunization history.

Getting all the recommended doses of vaccine is your best protection against COVID-19.

It is important to keep a record of all immunizations received.

### What are the benefits of the vaccines?

Immunization is the best way to protect you against COVID-19, which is a serious and sometimes fatal disease. The vaccines provide strong protection against severe COVID-19 illness, including hospitalization and death. 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. Babies and young children may be irritable, sleepy and have a decreased appetite. These reactions are mild and generally last one to 2 days. If you have concerns about any symptoms you develop after receiving the vaccine, speak with your health care provider or call **8-1-1** for advice.

Rare cases of inflammation of the heart (myocarditis and pericarditis) have been reported after getting the COVID-19 mRNA vaccines. These were most often seen:

- After a second dose of the vaccine when the time between doses was less than 8 weeks
- In males 12-29 years of age
- With a higher dose of the Moderna vaccine

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, visit [HealthLinkBC File #84 Reye syndrome](#).

It is important to stay in the clinic for 15 minutes after getting any vaccine. There is an extremely rare possibility of a life-threatening allergic reaction called anaphylaxis. This happens in less than one in a million people who get the vaccine. Symptoms may include hives, difficulty breathing, or swelling of the throat, tongue or lips. If this reaction occurs, 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.

After getting the COVID-19 mRNA vaccine, you might be contacted to participate in a study monitoring the safety of the vaccine. To learn more about the study, please visit <https://canvas-network.ca>.

### 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 COVID-19 mRNA 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.

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.

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

Speak with your health care provider if you:

- Were diagnosed with inflammation of the heart (myocarditis or pericarditis) by a physician after a previous dose of COVID-19 vaccine without another cause being identified
- Have a history of MIS-C (a rare multi-system inflammatory syndrome) following COVID-19
- Have symptoms of COVID-19



For more HealthLinkBC File topics, visit [www.HealthLinkBC.ca/more/resources/healthlink-bc-files](http://www.HealthLinkBC.ca/more/resources/healthlink-bc-files) or your local public health unit. For non-emergency health information and advice in B.C. visit [www.HealthLinkBC.ca](http://www.HealthLinkBC.ca) or call **8-1-1** (toll-free). For the deaf and hard of hearing, call **7-1-1**. Translation services are available in more than 130 languages on request.

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 spreads from person to person by coughing, sneezing, talking, singing and breathing. It can also be spread by touching an object or surface with the virus on it and then touching your eyes, nose or mouth.

For more information on COVID-19 vaccines, visit BCCDC's COVID-19 vaccine page [www.bccdc.ca/health-info/diseases-conditions/covid-19/covid-19-vaccine](http://www.bccdc.ca/health-info/diseases-conditions/covid-19/covid-19-vaccine).

### Mature minor consent

It is recommended that parents or guardians and their children discuss consent for immunization. Children under the age of 19, who are able to understand the benefits and possible reactions for each vaccine and the risk of not getting immunized, can legally consent to or refuse immunizations. For more information on mature minor consent see [HealthLinkBC File #119 The Infants Act, mature minor consent and immunization](#).

For more information visit <https://immunizebc.ca>.