



## COVID-19 Vaccines Pfizer-BioNTech, Moderna, AstraZeneca/COVISHIELD & Janssen

Updated September 30, 2021

### Risks of COVID-19

[COVID-19](#) is a viral infection that mainly affects the lungs. Older adults and people with health conditions are more likely to become really sick from COVID-19. It can damage the lungs, heart or brain. Long-term symptoms may include feeling tired, trouble breathing, trouble concentrating and muscle aches.

COVID-19 continues to change into new variants. Some variants can spread more easily and make people sicker.

### How the Vaccines Work

COVID-19 vaccines tell our body to make antibodies that protect us from the COVID-19 virus. Three of the vaccines approved in Canada need two doses. The Janssen (*Johnson & Johnson*) vaccine only needs one dose. These vaccines do not contain the COVID-19 virus and cannot give us COVID-19.

### Vaccine Benefits

COVID-19 vaccines approved in Canada are for people 12 to 18 years of age and older, including people who are pregnant or breastfeeding, seniors, and anyone with a medical condition. These vaccines protect people from getting and spreading COVID-19. They also protect against serious illness from COVID-19. It takes at least two weeks after getting the vaccine to be protected. For vaccines that require two doses, full protection occurs 1-2 weeks after the second dose.

All vaccines are safe for people with health conditions such as heart or lung problems, diabetes or high blood pressure. They are also safe for people with an auto-immune condition, or a weak immune system because of illness or treatment, but the vaccine may not work as well in people with these conditions.

There is a small chance that you may still get COVID-19 after vaccination. It is important to continue to follow public health measures until more people are vaccinated. Currently, there is little information on how long the vaccines will protect us. A booster dose may be needed in the future.

### Vaccine Ingredients and Allergies

The vaccines contain lipids (fats), salts, sugars and buffers. They do not contain eggs, gelatin (pork), gluten, latex, preservatives, antibiotics, or aluminum. Allergies to the COVID-19 vaccines are rare. The vaccines are safe, even if you have food, drug or environmental allergies. Speak with your health care provider first if you are allergic to polyethylene glycol, tromethamine or polysorbate.

Serious allergic reactions (anaphylaxis) are rare. Allergic reactions can be treated and are usually temporary. Get medical attention if you have trouble breathing, or develop hives or swelling in the face and throat.

### Side Effects and Risks

Approximately 20 per cent of people have side effects. Most are mild to moderate, and last one to three days. Side effects usually mean that the vaccine is working to stimulate your immune system.

# COVID-19 Vaccines

Pfizer-BioNTech, Moderna, AstraZeneca/COVISHIELD & Janssen



## Common side effects include:

- redness, pain, itching or swelling at the injection site
- fever
- headache
- feeling tired
- muscle aches
- joint pain
- chills
- nausea and/or vomiting

## Myocarditis and pericarditis:

- Myocarditis and pericarditis are a type of inflammation in different parts of the heart.
- The [Public Health Agency of Canada](#) is monitoring a small number of reports in adolescents and young adults following vaccination. Most cases that occurred were mild and treated with medications and rest.
- Get medical attention if you develop chest pain, shortness of breath, or palpitations after vaccination.
- Vaccination is still recommended as the benefits outweigh the risks.

## Rare side effect after viral vector vaccines (AstraZeneca, COVISHIELD, Janssen):

- Rare blood clots have been linked to the viral vector vaccines. Get medical care if you have trouble breathing, chest pain or leg swelling; new or worse abdominal (stomach) pain; severe or worsening headache, or blurred vision; or skin bruising or spots (other than where you got the vaccine), 4 to 28 days after vaccination.

If you have a serious reaction to the vaccine or the reaction does not go away after 3 days, tell your health care provider. Public health keeps track of side effects to ensure the vaccines continue to be safe.

## Delay Vaccination

- If you have a fever or any COVID-19 symptoms, wait until you are feeling better before getting vaccinated.
- If you have been advised to self-isolate because you tested positive or were in close contact with someone who has COVID-19, please reschedule your appointment for a later date, when your isolation period is over.

## Consult a Health Care Provider

Speak with your health care provider or allergist before getting the vaccine if you:

- are on medications that weaken your immune system – you may want to time your vaccination with your medications
- had an allergic reaction within four hours after receiving your first COVID-19 vaccine dose
- have severe allergies to any of the vaccine ingredients

## Continue to Protect Yourself and Others

Until more people are vaccinated, continuing public health measures including physical distancing, wearing a mask, and staying home if you are sick will help protect you against COVID-19 and the variants of concern.

**For more information:** Talk to your health care provider or visit [toronto.ca/COVID19](https://toronto.ca/COVID19).

**Resource:** National Advisory Committee on Immunization. [Recommendations on the use of COVID-19 Vaccines](#).