COVID-19 Vaccines
Pfizer-BioNTech, Moderna, AstraZeneca/COVISHIELD & Janssen (Johnson & Johnson)
Updated April 12, 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, muscle aches, and other symptoms.

The COVID-19 virus 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 16 to 18 years of age and older, including seniors. These vaccines protect people from getting and spreading COVID-19. They also protect against serious illness from COVID-19. It takes two weeks after getting the vaccine to be protected.

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. Currently, there is no 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.

Side Effects and Risks
Approximately one in 10 people who get vaccinated have side effects – most are mild to moderate, and will usually last one to three days. Side effects usually mean that the vaccine is working to stimulate your immune system.

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

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.

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

**Delay Vaccination**

- If you recently received another vaccine (not a COVID-19 vaccine), make sure that your COVID-19 vaccine appointment is at least 14 days after you received the other vaccine.
- 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 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 pregnant, could be pregnant or are breastfeeding
- have an auto-immune condition; or weakened immune system from illness or treatment
- 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 the majority of people are vaccinated, it is important to continue physical distancing, wearing a mask, and staying home if you are sick. Health care workers and staff must wear personal protective equipment (PPE), even after vaccination.

By continuing to follow these public health measures and by getting vaccinated, it will help protect you against the COVID-19 virus and the variants of concern.

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