

COVID-19 Vaccines [Developed by Pfizer-BioNTech & Moderna]

COVID-19

[COVID-19](#) is a viral infection that mainly affects the lungs. Some people may have a mild illness. Others may get very sick, including seniors or people with a pre-existing health condition. Very rarely, some children can get a serious inflammatory condition. The long-term effects of COVID-19 are not fully known. Some people are at greater risk of getting COVID-19 because of their work or living conditions.

How these Vaccines Work

These vaccines tell the cells in our body to make a protein that is found specifically on the virus that causes COVID-19. These "spike proteins," although harmless to us, will tell our body to start making antibodies. Our new antibodies will protect us from getting sick if we are exposed to the virus. The vaccines do not contain the virus and so cannot give us COVID-19.

Both vaccines have been tested in large clinical trials to ensure they meet safety standards, and both have been licensed and approved by Health Canada.

Vaccination Process

- Pfizer vaccine is for people 16 years and older, and is given 21 days apart.
- Moderna vaccine is for people 18 years and older, and is given 28 days apart.

Both vaccines are safe for seniors and people with stable health conditions such as diabetes, heart disease, hypertension, and hepatitis B, C or HIV with good immune response. If you have food, drug, insect bite or environmental allergies you can still safely receive either vaccine. Ideally, you should complete your two-dose series with the same vaccine brand.

Vaccine Benefits

Both vaccines require two-doses for better protection. Ideally, the second dose should be given 4 to 6 weeks after the first dose. If you miss your second appointment schedule another appointment as soon as possible. You do not need to re-start the vaccine series.

After you have the second dose it may take another one to two weeks to achieve maximum protection against COVID-19. In trials, the vaccine was 95% effective. At this time, there is no information about how long the vaccine's protection will last.

There is a small chance that you may still get COVID-19 after being vaccinated. It is important to continue with public health measures such as physical distancing, wearing a mask, and staying home if you are sick. Health care and other staff must still wear personal protective equipment (PPE) even after they have been vaccinated.

Side Effects and Risks

Some people may have side effects from the vaccine, but they will likely be moderate and resolve after a few days. Some of the symptoms are part of the body's response to developing immunity.

Common side effects that have been reported in the clinical trials for this vaccine include:

very common ≥10% (more than 1 in 10 doses)	common 1%-10% (1 in 100 to 1 in 10 doses)	uncommon 1% (1 in 100 doses)	very rare
<ul style="list-style-type: none"> ○ pain at the injection site ○ headache, feeling tired ○ muscle or joint pain ○ fever or chills ○ swelling or tenderness under the armpit (Moderna vaccine only) 	<ul style="list-style-type: none"> ○ redness & swelling at the injection site ○ nausea & vomiting 	<ul style="list-style-type: none"> ○ enlarged lymph nodes 	<ul style="list-style-type: none"> ○ serious allergic reactions such as anaphylaxis

In rare cases, serious allergic reactions (anaphylaxis) can occur. Allergic reactions can be treated and are usually temporary. Seek medical attention if you have trouble breathing, have hives or swelling of the face and throat. Vaccine side effects will continue to be monitored as people receive the vaccine.

If you have a reaction to the vaccine, speak with your health care provider to report the side effect directly to public health. Public health will keep track of the reported side effects to make sure the vaccine continues to be safe.

Delay vaccination if you have:

- a fever or are sick with COVID-19 symptoms; or
- received a flu vaccine or other vaccines in the past 14 days.

Speak with your health care provider first if you:

- are pregnant, could be pregnant or are breastfeeding;
- have a bleeding disorder or weakened immunity due to illness or treatment; or
- had a mild to moderate allergic reaction after receiving your first of the COVID-19 vaccine.

Do not get this vaccine, if you have severe allergies/reactions to:

- any vaccine ingredients, including polyethylene glycol (PEG) for both vaccines;
- tromethamine (in Moderna vaccine only); or
- your first dose of the COVID-19 vaccine.

For more information, talk to your health care provider or visit our website at toronto.ca/COVID19.

Resources

National Advisory Committee on Immunization. Recommendations on the use of COVID-19 Vaccines. Dec 2020. Available at <https://www.canada.ca/en/public-health/services/immunization/national-advisory-committee-on-immunization-naci/recommendations-use-covid-19-vaccines.html>