



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

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## 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. The virus can also hurt the lungs, heart, brain and other organs, increasing the risk of long-term health effects. Very rarely, some children can get a serious inflammatory condition. Some people are at greater risk of getting COVID-19 because of their work or living conditions.

### How the Vaccines Work

The vaccines gives instructions our cells to make a protein that is found only on the surface of the coronavirus. These "spike proteins," 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 mRNA quickly breaks down in our body, and is removed with the protein. The vaccines do not contain the virus and so cannot give us COVID-19.

Health Canada has approved both vaccines, which have been tested in large clinical trials to ensure that they safe, effective and meet quality standards.

### 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. COVID-19 vaccines have already been given to millions of people worldwide.

### Vaccine Benefits

Both vaccines need two-doses for better protection. Ideally, the second dose should be given 3 to 6 weeks after the first dose, depending on the vaccine. If you miss your second appointment schedule another appointment as soon as possible. You do not need to re-start the vaccine series.

After 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. There is a small chance that you may still get COVID-19 after being vaccinated. At this time, there is no information on how long the vaccine's protection will last. If vaccine protection decreases, a booster dose may be recommended in the future.



## Side Effects and Risks

Some people may have side effects from the vaccine. Common side effects include:

- redness, pain or swelling at the injection site
- headache, feeling tired, muscle aches, joint pain
- fever, chills, nausea, vomiting
- pain or swelling under the armpit (in the Moderna vaccine only)
- enlarged lymph nodes (this is less common)

More people experience side effects after the second dose. The side effects usually last one to three days. The side effects can be a sign that your body is developing an immune response to the vaccine.

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 symptoms 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 COVID-19 symptoms. COVID-19 vaccine cannot be given with other vaccines. If you have just received a vaccine, wait 14 days before getting the COVID-19 vaccine.

**Speak with a health care provider first**, if you:

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

**Do not get this vaccine**, if you:

- have known severe allergies/reactions to any vaccine ingredients, including polyethylene glycol or tromethamine (in Moderna vaccine only)
- had a severe reaction to your first dose of COVID-19 vaccine

## CONTINUE TO PROTECT YOURSELF AND OTHERS

Until we have enough vaccines for everyone, 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 vaccination.



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

### **Resources**

National Advisory Committee on Immunization. Recommendations on the use of COVID-19 Vaccines. January 12, 2021. Available at <https://www.canada.ca/en/public-health/services/immunization/national-advisory-committee-on-immunization-naci/recommendations-use-covid-19-vaccines.html>