

FACT SHEET: COVID-19 Vaccines (Developed by Pfizer-BioNTech & Moderna)

Last revised: January 27, 2021

COVID-19

[COVID-19](#) is a viral infection that primarily 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 THIS VACCINE WORKS

The vaccine tells 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 trigger our body to start making antibodies. Our new antibodies will protect us from getting sick if we are exposed to the virus. The vaccine does not contain the virus and so it 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.

VACCINE SCHEDULE

Both vaccines require two doses for full protection. While the ideal is to follow the vaccine manufacturers' recommendations (which is 21 days for Pfizer and 28 days for Moderna), the National Advisory Committee on Immunization (NACI) supports the extension of that time frame up to 42 days for the second dose where vaccine supply is limited, in order to allow more people to get some partial protection by receiving their first shot faster. Current estimates of protection from the first dose of the Pfizer-BioNTech vaccine vary from 52% from day 12 after the first dose to 89% from day 15 after the first dose. The protection after the first dose is not expected to decline significantly if the second dose is delayed. Full protection (95%) starts at about 1 week after the second dose. If the second Pfizer dose is delayed beyond 21 days, it is still expected that the second dose will give full protection.

VACCINE BENEFITS

Two doses of the vaccine are required for better protection. After completing the two-doses, it may take another one to two weeks to achieve maximum protection against COVID-19. At this time, there is no information on the long-term protection with this vaccine. In trials, the vaccine was 95% effective.

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

As with any vaccine or medication, some people may experience 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 these vaccines 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	<ul style="list-style-type: none">○ swelling or tenderness under the armpit (only in Moderna vaccine)	<ul style="list-style-type: none">○ redness & swelling at the injection site○ nausea & vomiting (only in Moderna vaccine)	<ul style="list-style-type: none">○ enlarged lymph nodes	<ul style="list-style-type: none">○ serious allergic reactions such as anaphylaxis

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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 get a reaction to the vaccine, contact your health care provider who will 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.

PRECAUTIONS

- Delay vaccination if you have a fever, are sick with COVID-19 symptoms, or have received a vaccine in the past 14 days.
- Avoid trying to get pregnant for at least a month after getting both doses of the vaccine.

DO NOT GET THIS VACCINE, IF YOU:

- have allergies to any vaccine ingredients, including polyethylene glycol; or
- have had a severe reaction to a previous dose of this vaccine.

TALK TO YOUR HEALTH CARE PROVIDER FIRST, IF YOU:

- are pregnant or breastfeeding; or
- have an auto-immune disorder; or
- have a weakened immune system due to illness or treatment, or
- have severe allergies to things other than a component of the vaccine, for which you have been prescribed an Epi-Pen

For more information, talk to your health care provider, or visit our website at www.smdhu.org/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>

Safety and Efficacy of the BNT162b2 mRNA Covid-19 Vaccine. Jan 2021. Available at <https://www.nejm.org/doi/full/10.1056/NEJMoa2034577?query=RP>

Optimising the COVID-19 vaccination programme for maximum short-term impact. Jan 2021. Available at <https://app.box.com/s/uwwn2dv4o2d0ena726gf4403f3p2acnu>

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