

Frequently Asked Questions: COVID-19 VACCINE

Vaccine Safety and Efficacy

ARE THE COVID-19 VACCINES IS SAFE?

Both the Pfizer and Moderna vaccines have been approved by Health Canada after thorough reviews for safety, how well they protect people against the virus, and quality.

- **Patients can be confident.** Standards of safety, efficacy, and quality have not been compromised to expedite the approval of COVID-19 vaccines.
- **Health Canada oversight of COVID-19 vaccines will NOT stop at approval.** Health Canada will monitor the vaccine's safety and effectiveness now and into the future.

[Click here to read more about the COVID-19 vaccines development safety from the Government of Ontario.](#)

[Click here for clinician resources about COVID-19 vaccines.](#)

HOW EFFECTIVE ARE THE COVID-19 VACCINES?

Once the person has received both doses of the vaccine (either Pfizer or Moderna), they are expected to be 94-95% effective at protecting against the virus. People with only one dose are not as protected – two doses are required. Source: Health Canada ([Pfizer](#); [Moderna](#))

WILL THE VACCINES PROTECT AGAINST COVID-19 VARIANTS/MUTATIONS?

Viruses, especially RNA viruses like SARS-CoV-2 (the COVID-19 virus), undergo frequent mutation. Some mutations improve the virus' ability to survive and replicate and so the mutated version may become a more dominant strain of the virus.

Specifically with regards to the new variant originating in the United Kingdom, the Public Health Agency of Canada has found [no evidence to suggest the vaccines will be less effective against this variant.](#)

WILL THIS BE AN ANNUAL VACCINE, LIKE INFLUENZA?

At present, best estimates are that protective antibody responses generated by the vaccine will last for upwards of 2 years, however the T cell responses will be much longer-lasting. This will still require close observation over the next 12-18 months to understand the long-term implications of the immune response on COVID-19 transmission and vaccination.

HOW DO COVID-19 VACCINES WORK?

The current Health Canada approved vaccines (Pfizer and Moderna) are called 'mRNA' vaccines. mRNA vaccines give instructions for the cells to make a piece of what is called the "spike protein" (found on the surface of the virus that causes COVID-19) that triggers an immune response, which includes

producing antibodies and a “memory” to protect against future infection. If the real virus does enter our body in the future, our immune system recognizes the protein and can fight against it.

You can read more about these vaccines on Health Canada’s website ([Pfizer](#); [Moderna](#)).

WHAT IS THE HISTORY OF MRNA VACCINES?

Research into the value of mRNA for vaccinations has been progressing for over ten years. Though the new vaccine is the first mRNA vaccine approved for use in humans, mRNA has been successfully used in cancer treatments.

Future mRNA vaccine technology may allow for one vaccine to provide protection for multiple diseases, thus decreasing the number of injections needed for protection against common vaccine-preventable diseases.

COVID-19 Vaccine(s) Side Effects

CAN THE COVID-19 VACCINES GIVE SOMEONE COVID-19?

No. The vaccine does not contain the COVID-19 virus, so it’s not possible to get COVID-19 from the vaccine. However it is still possible to get COVID-19 after the vaccine, particularly if you’ve received the first dose but not the second. (Source: [Centre for Disease Control](#); [Government of Ontario](#))

WHAT ARE THE POSSIBLE SIDE EFFECTS OF THE COVID-19 VACCINES?

Like many vaccines, the COVID-19 vaccines can cause side effects. Side effects observed in clinical trials were usually mild or moderate and resolved within a few days.

The most common side effects of these vaccines includes pain at the injection site, and 1-2 days of body aches, malaise, or fevers. This represents the body’s immune response to the vaccine, and are common side effects of other vaccines as well.

Very common side effects (may affect more than 1 in 10 people):

- Pain/redness/swelling at injection site
- Fatigue
- Headache
- Muscle pain
- Chills
- Joint pain
- Fever
- Uncommon side effects (may affect up to 1 in 100 people)
- Enlarged lymph nodes

CAN THE VACCINES CHANGE MY DNA?

No. These vaccines do not affect or interact with our DNA in any way. mRNA never enters the nucleus of the cell, where DNA is kept. The cell breaks down and gets rid of the mRNA soon after it is finished using the instructions.

Pfizer-BioNTech COVID-19 Vaccine Eligibility

WHO SHOULD NOT RECEIVE THE COVID-19 PFIZER-BIONTECH VACCINE?

The Pfizer-BioNTech COVID-19 vaccine is contraindicated for:

- Individuals with a history of anaphylaxis after previous administration of the vaccine.
- Persons with proven immediate or anaphylactic hypersensitivity to any component of the vaccine or its container, including polyethylene glycol.

Vaccination should be deferred in symptomatic individuals with confirmed or suspected SARS-CoV-2 infection, or those with symptoms of COVID-19.

CAN I BE VACCINATED IF I AM: PREGNANT/BREASTFEEDING; IMMUNOSUPPRESSED DUE TO DISEASE OR TREATMENT; HAVE AN AUTOIMMUNE CONDITION?

There is limited evidence about the COVID-19 vaccine available for these populations.

However, you are still eligible to have the vaccine with a risk assessment and additional informed consent if you understand that insufficient evidence exists for these populations. In the near future a standardized form will assist with this discussion. Please discuss this with your family doctor.

IF I HAVE RECOVERED FROM COVID-19, AM I ELIGIBLE FOR VACCINATION? DO I HAVE TO WAIT A CERTAIN PERIOD OF TIME BEFORE I CAN GET THE VACCINE? DO I HAVE TO HAVE A NEGATIVE COVID-19 TEST IN ORDER TO GET THE VACCINE?

Yes, those who have recovered are eligible for the vaccine. (Source: [Recommendations on the use of COVID-19 vaccines – Canada.ca](https://www.canada.ca/en/health-canada/services/covid-19/vaccines/covid-19-vaccines-canada-ca.html))

You do not need a negative COVID-19 test to get the vaccine.

IF I GET COVID-19 AFTER THE FIRST DOSE, AM I STILL ELIGIBLE TO COMPLETE THE SECOND DOSE?

No. You cannot receive the COVID-19 vaccine until you are cleared of COVID-19. There is a window for the timing of the second dose if it has to be delayed.

After Vaccination Information

WHAT HAPPENS IF I DEVELOP SIDE EFFECTS AFTER I'VE RECEIVED THE VACCINE? WILL I HAVE TO SELF-ISOLATE?

Remember, you cannot get COVID-19 from the vaccine!

You may continue to work if you experience mild symptoms including:

- Headache
- Fatigue
- Muscle or joint pain
- Pain/redness/swelling at injection site

However, it is still possible to develop COVID-19 after the vaccine, especially if you have not received the second dose. If you experience any of the following, you may not work and must also be tested and self-isolate:

- Respiratory symptoms
- Severe symptoms
- Symptoms lasting > 48 hours post vaccination.

If COVID 19 is suspected with any symptoms or if symptoms last >48 hours, please schedule a COVID test.

AFTER VACCINATION, DO I STILL NEED TO WEAR A MASK?

Yes. It's important to continue wearing a mask for several reasons:

- You are not fully immune until seven days after the second dose
- The vaccines are 94-95% effective. This means that approximately 5% of people who receive the vaccine will still be susceptible to infection.
- Even if you have been vaccinated, others have not been. We do not have sufficient data to suggest that the vaccine prevents asymptomatic infection or reduces transmission

Therefore maintaining public health measures and infection control practices such as masking, eye protection and physical distancing remain important.

ONCE I GET THE VACCINE, AM I ALLOWED TO GO VISIT MY FRIENDS/FAMILY?

Please continue to follow government and public health guidelines. Right now that means no indoor gatherings with people outside your household, and outdoor gatherings are limited to five people. You also must continue to wear a mask/eye protection at work (when required), and follow the Region's mask bylaw in the community.

We do not have sufficient data to suggest that the vaccine prevents asymptomatic infection or reduces transmission, which means that even though you've been vaccinated, you could still carry COVID-19 and pass it to someone who hasn't been vaccinated.

Information adapted from Grand River Hospital

Information for Patients

Vaccines become available for the general public in phase three. Patients can find more information about the Government's vaccine roll out plan online at <https://covid-19.ontario.ca/covid-19-vaccines-ontario>.

Residents of Waterloo Region are encouraged to keep up-to-date with the local vaccine task force updates online at <https://www.regionofwaterloo.ca/en/health-and-wellness/covid-19-vaccine.aspx>.