

## Coronavirus Disease 2019 (COVID-19)

# What You Need to Know About mRNA Vaccines

This fact sheet provides information on the safety and effectiveness of mRNA vaccines. For more information, see Public Health Ontario's [COVID-19 Vaccines: mRNA Vaccines](#) or visit the [COVID-19 Vaccines](#) webpage.

### About mRNA COVID-19 vaccines

- Messenger ribonucleic acid (mRNA) vaccines are designed to produce an immune response that protects us against the virus that causes COVID-19.
- The two currently authorized COVID-19 mRNA vaccines available in Ontario are the Pfizer-BioNTech and Moderna vaccines.



### How do mRNA vaccines work

- The vaccine works by delivering genetic instructions, mRNA, to our cells to produce a copy of a protein that is found on the surface of the COVID-19 virus.
- These viral proteins, known as antigens, are recognized by the body which starts an immune response.
- The vaccine does not give you the virus or cause an infection. After our cells make copies of the protein, they destroy the mRNA from the vaccine.

### mRNA vaccines are safe and effective

- The mRNA vaccines were authorized by Health Canada after they were shown to be safe, effective and of high quality in clinical trials with 70,000 people.
- In clinical trials, the mRNA vaccines were more than 94% effective in preventing COVID-19 among people who had received two doses.
- The vaccines cannot give you COVID-19.
- The vaccines do not interfere with COVID-19 test results used to look for infection and do not give false positive test results.
- More research is being done to determine how long the vaccine protection lasts and if it will prevent others around you from getting sick with COVID-19.



## Like every vaccine, there may be possible side effects

- The most common side effects are pain at the injection site, fatigue and a headache.
- Other common side effects can include: fever, chills, muscle pain and joint pain.
- These side effects usually occur within 1-2 days after vaccination and go away within 1-3 days.

## Continue to protect yourself and others

- Until vaccines are widely available, it is important to continue to protect yourself and those around you from COVID-19.
- Keep practicing protective measures such as washing your hands, physical distancing, covering your mouth when you cough, wearing a mask and following local public health guidance.

## Learn about the virus

To learn more and access up-to-date information on COVID-19, visit the Ontario Ministry of Health's website: [ontario.ca/coronavirus](https://ontario.ca/coronavirus).

For more information please contact: \_\_\_\_\_

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