

# **Questions about COVID-19 vaccines?**

**Here are some  
answers.**

**COVID-19 vaccines are safe, effective and the best way to help protect yourself, your loved ones and your community from the spread of this deadly disease.** The majority of Ontarians are now fully vaccinated. This is great news and has opened the doors for Ontarians to get back to safely doing many of the things they've missed.

We strongly encourage all eligible Ontarians to get their first and second doses as soon as they can. It is normal to have questions about COVID-19 vaccines so here are answers to some of the commonly asked questions to help you make an informed decision about getting the COVID-19 vaccine.

### **How do the COVID-19 vaccines work?**

All vaccines available in Ontario provide strong protection against COVID-19 and its variants, including the Delta variant. Vaccines tell your body to start making antibodies to fight the virus if you come in contact with it. This can reduce your risk of developing COVID-19 and make your symptoms milder if you do get it.

### **Why should I get a COVID-19 vaccine?**

The Delta variant continues to be the dominant strain in Ontario, with evolving evidence showing that it is more than two times as transmissible as previous variants and has a higher likelihood of causing severe illness, including increased hospitalization and ICU admissions in those infected. To ensure maximum protection against COVID-19 and the Delta variant, you should get vaccinated as soon as you can.

### **I've already had COVID-19 and recovered. Do I still need to get the vaccine?**

Yes, you should still get vaccinated. It's important for most of the population to get vaccinated to help stop the spread of the virus.

Even if you've recovered from COVID-19, you are not immune and can still get the virus, be contagious while not showing any symptoms, and spread it to others in your community who are not yet immunized. With the spread of new variants, including the highly transmissible Delta variant, it is important that you get vaccinated to protect yourself and those around you from serious illness, hospitalization and death.

### **What vaccine can I safely receive for my second dose?**

If your first dose was Moderna or Pfizer, you can safely take Moderna or Pfizer for your second dose at least 28 days after your first dose. If your first dose was AstraZeneca, you can safely take Moderna, Pfizer or

AstraZeneca at least eight weeks after your first dose with informed consent.

See the Ministry of Health's [COVID-19 Vaccine Information Sheet](#) for further information.

### **Are COVID-19 vaccines safe?**

Yes. Only vaccines that Health Canada has approved and determined are safe and effective will be administered in Ontario.

Health Canada has one of the most rigorous scientific review systems in the world. Health Canada only approves a vaccine if it is safe, it works, it meets manufacturing standards, and the benefits of being vaccinated outweigh the risks.

[Learn more about the vaccines from Health Canada's website.](#)

### **Should I be worried about a vaccine that was developed so quickly?**

No. Only vaccines that Health Canada has approved and determined are safe and effective will be administered in Ontario.

These vaccines were developed faster than other vaccines because of the never-before-seen levels of collaboration and funding invested in this effort around the world.

The technology behind the vaccines has been around for more than 10 years and have already been used in animal models for influenza, zika virus, rabies virus, cytomegalovirus (CMV) and others. As this advanced technology already existed, scientists were able to work quickly.

### **What was the approval process for the vaccine?**

Tremendous resources around the world were put towards developing COVID-19 vaccines which helped to advance the vaccine approval process efficiently and effectively. This includes adaptation of existing research programs, international collaboration among scientists and governments, increased dedicated

funding, quick recruitment of clinical trial participants and rapid set-up of clinical trials to demonstrate the effectiveness of the vaccine. Canada's best independent scientists thoroughly reviewed all the data before approving the vaccines as safe and effective for Canadians. All safety steps were followed in approving these vaccines.

See the Ministry of Health's [COVID-19 Vaccine Approval Process and Safety](#) for further information.

### **The mRNA vaccine is new and has never been used before. Not enough is known about how it works.**

The mRNA technology is not new. Researchers have been studying and working with mRNA vaccines for more than 10 years, which is why the mRNA technology was able to be utilized quickly to develop the COVID-19 vaccine.

mRNA vaccines don't use live virus to trigger an immune response. Instead, they teach your cells how to make a protein that will trigger your immune response to make antibodies to fight the infection if the real virus does enter your body.

[Learn more about the COVID-19 mRNA vaccines from Health Canada's website.](#)

### **Will I experience side effects?**

Similar to medications and other vaccines, the COVID-19 vaccines can cause side effects. Most side effects are mild and resolve within a few days after vaccination. The most common side effects include soreness at the injection site on your arm, a bit of tiredness, chills and/or a mild headache.

These types of side effects are expected and simply indicate the vaccine is working to produce protection.

As with any medicines and vaccines, allergic reactions are rare but can occur after receiving a vaccine. Symptoms of an allergic reaction include hives (bumps on the skin that are often very itchy),

swelling of your face, tongue or throat, or difficulty breathing. Most serious reactions will occur shortly after injection, and clinic staff are prepared to manage an allergic reaction should it occur. If you are concerned about any reactions you experience after receiving the vaccine or have a history of adverse reaction to other vaccines, please contact your health care provider. You can also contact your local public health unit to ask questions or to report an adverse reaction.

Serious side effects after receiving the vaccine are rare. However, should you develop any of the following reactions within three days of receiving the vaccine, seek medical attention right away or call 911:

- hives
- swelling of the mouth and throat
- trouble breathing, hoarseness or wheezing
- very pale colour and serious drowsiness
- high fever (over 40°C)
- convulsions or seizures
- other serious symptoms (e.g., "pins and needles" or numbness)

For additional information about side effects, please see the Ministry of Health's [COVID-19 Vaccine Information Sheet](#).

### **What are the longer-term side effects of this vaccine?**

Ongoing studies of longer-term side effects of the vaccines indicate no serious side effects found to date. People who have received the vaccine in studies continue to be monitored for any longer-term side effects.

For more information on adverse events following immunization (AEFIs) or to report an AEFI, visit [Public Health Ontario's vaccine safety web page](#).

### **Are side effects from the second dose worse than the first dose?**

Some people may experience stronger side effects after the second dose of the vaccine. Since side effects are the result of your immune system building protection, once your immune system has been primed with the first dose, there is a much stronger immune response to the second dose. This is a good thing and indicates that the vaccine is doing its job!

Common side effects can last a few hours or a couple of days after vaccination and may include redness, soreness or swelling on the arm where you got your shot, tiredness, headache, muscle and joint pain, chills or mild fever.

### **Can the vaccine give me COVID-19?**

No, you cannot get COVID-19 or any other infectious disease from the vaccine. None of the Health Canada approved vaccines are live vaccines, meaning that they do not contain the virus that causes COVID-19.

It is important to remember that it typically takes a few weeks for the body to build immunity after vaccination. That means it is possible for a person to become infected with the virus that causes COVID-19 just before or just after vaccination. This is because the vaccine has not had enough time to provide protection. Even if you receive the vaccine, please continue to follow the public health measures to keep you, your loved ones and your community safe.

### **Can I still contract COVID-19 after getting vaccinated?**

As with other immunizations, you can't fully eliminate the risk of infection, especially with ongoing community transmission of this virus. Between December 14, 2020 and August 21, 2021, unvaccinated cases accounted for the majority (94.8 per cent) of COVID-19 cases reported. Similarly, unvaccinated cases accounted for 92.4 per

cent of hospitalizations, and 92.1 per cent of deaths during the same time period.

Getting vaccinated substantially reduces your risk of severe illness, hospitalization and death, and is the best way to protect yourself and those around you from serious illness due to COVID-19.

### **What if I don't take the second dose of the vaccine?**

Full vaccination is the greatest protection you can have against COVID-19 and its variants, including the Delta variant.

Receiving only one dose of a two-dose vaccine is not sufficient, especially against the Delta variant that has increased transmissibility and disease severity compared to previous strains of COVID-19. You need your second dose of the vaccine to enable your body to develop adequate immunity. After the first dose, your body starts to build immunity and the second dose boosts your immunity to give you strong protection.

### **Mixing doses isn't recognized abroad and I won't be able to travel.**

All vaccines available in Ontario provide strong protection against COVID-19 and its variants. Mixing mRNA vaccines (Pfizer and Moderna), as well as mixing AstraZeneca and an mRNA vaccine is safe, effective and enables more Ontarians to receive their second dose sooner.

Ontario continues to follow the advice of the National Advisory Committee on Immunization (NACI) which recommends that it is safe to complete a vaccine series by using different mixes of these vaccines. This is based on studies from the UK, Spain and Germany that have found that mixing vaccines is safe and produces a strong immune response.

Ontario has requested that the federal government work with the World Health Organization to update its guidance

to recognize that completing a vaccine series with different vaccines should be internationally accepted as a complete vaccine regimen.

It is critical for the integrity and confidence in Ontario's and Canada's vaccination programs, as well as for those who have done the right thing by acting consistent with guidance, that people who have received two doses of Health Canada approved vaccine be treated as immunized both at home and abroad.

We will continue to work with NACI and the federal government to ensure that all Ontarians with a complete vaccine series are recognized as fully vaccinated.

See the Ministry of Health's [Safe and Effective Second Dose fact sheet](#) for more information.

### **Will the COVID-19 vaccine affect my fertility? What if I'm pregnant now?**

There is no evidence that the COVID-19 vaccine causes male or female infertility. People who are pregnant or trying to get pregnant can get the COVID-19 vaccine if no contradictions exist.

Individuals planning on becoming pregnant should speak with their health care provider. If after this counselling the pregnant individual feels the potential benefits of vaccination outweigh the potential harms, they can access the vaccine.

For additional information, see resources under "What if I'm breastfeeding?"

### **What if I'm breastfeeding?**

Breastfeeding individuals can get the COVID-19 vaccine if no contradictions exist.

The Ontario Society of Obstetricians & Gynaecologists and The Society of Obstetricians and Gynecologists of Canada (SOGC), supports the use of all available COVID-19 vaccines approved in Canada in any trimester of pregnancy and during breastfeeding.

For any individuals who are breastfeeding, the COVID-19 vaccine should be offered after counselling and informed consent that includes recognizing the limited evidence on the use of COVID-19 vaccine in the breastfeeding population.

For additional information:

- [COVID-19 Vaccination Recommendations for Special Populations guidance document](#)
- [Vaccination in Pregnancy and Breastfeeding information tool](#)
- [Society of Obstetricians and Gynaecologists of Canada Statement on COVID-19 Vaccination in Pregnancy](#)

### **I'm not high risk and COVID-19 seems to affect the older population. I don't need a vaccine.**

Globally, as of September 1, 2021, more than 4.5 million people have died of COVID-19. COVID-19 does not discriminate, and anyone can become sick from the virus. With the rise in variants of concern, including the Delta variant, it seems that younger individuals are now more susceptible to severe illness and hospitalization from COVID-19.

Vaccines prevent illness and disease, and save lives and livelihoods. Even if a healthy person does not die of COVID-19 infection, they may have long-term complications that impact their ability to experience normal life, such as shortness of breath, fatigue, headaches, muscle/joint pain, cognitive impairment, cough and loss of taste and/or smell. The best way to protect yourself, your loved ones and your community is to get vaccinated as soon as possible.

## What ingredients are in the COVID-19 vaccines?

Ingredients	Pfizer-BioNTech	Moderna	AstraZeneca and COVISHIELD
Medical	• mRNA	• mRNA	• Non-replicating viral vector (ChAd)
Lipids (Non-medical)	<ul style="list-style-type: none"> <li>• ALC-0315</li> <li>• ALC-0159 - a polyethylene glycol (PEG)</li> <li>• 1,2-Distearoyl-sn-glycero-3-phosphocholine (DSPC)</li> <li>• Cholesterol</li> </ul>	<ul style="list-style-type: none"> <li>• 1,2-distearoyl-sn-glycero-3-phosphocholine (DSPC)</li> <li>• Cholesterol</li> <li>• PEG2000 DMG SM-102</li> </ul>	<ul style="list-style-type: none"> <li>• Disodium edetate dihydrate (EDTA)</li> <li>• Ethanol</li> <li>• L-Histidine</li> <li>• L-Histidine hydrochloride monohydrate</li> <li>• Polysorbate 80</li> </ul>
Sugar (Non-medical)	<ul style="list-style-type: none"> <li>• Sucrose</li> <li>• Water for injection</li> </ul>	<ul style="list-style-type: none"> <li>• Sucrose</li> <li>• Water for injection</li> </ul>	<ul style="list-style-type: none"> <li>• Sucrose</li> <li>• Water for injection</li> </ul>
Salts (Non-medical)	<ul style="list-style-type: none"> <li>• Dibasic sodium phosphate dihydrate</li> <li>• Monobasic potassium phosphate</li> <li>• Potassium chloride</li> <li>• Sodium chloride</li> </ul>	<ul style="list-style-type: none"> <li>• Acetic acid</li> <li>• Sodium acetate</li> <li>• Tromethamine</li> <li>• Tromethamine hydrochloride</li> </ul>	<ul style="list-style-type: none"> <li>• Magnesium chloride hexahydrate</li> <li>• Sodium chloride</li> </ul>

COVID-19 vaccines do not contain eggs, gelatin (pork), gluten, latex, preservatives, antibiotics or aluminum.

See the Ministry of Health's [COVID-19 Vaccine Information Sheet](#) for further information.

### **I think I should wait and see what happens to others. Do I need to get vaccinated now?**

All vaccines delivered as part of Ontario's vaccine rollout provide high levels of effectiveness against severe illness, hospitalization and death from COVID-19 and its variants, including the Delta variant.

During August 2021, unvaccinated individuals were approximately eight times more likely to get infected with COVID-19 compared to those who were fully vaccinated.

Getting vaccinated will help stop the spread of the virus and allow you to safely resume many of the things you love doing.

### **The COVID-19 vaccines have been in the news for adverse effects. Are they safe?**

Yes. Only vaccines that Health Canada determines to be safe and effective following thorough review of evidence and rigorous safety, efficacy and quality

requirements are approved for use in Canada and available in Ontario.

The benefits of getting vaccinated and being protected against COVID-19 continue to outweigh the risks. COVID-19 infection is much more likely to cause longer-lasting symptoms and health problems in some people, including children.

If you have questions or concerns about the vaccine, we encourage you to please contact your health care provider.

### **Why should my child get vaccinated? Isn't COVID-19 milder for children?**

While children who get infected with COVID-19 typically experience mild symptoms, some can get very sick, require hospitalization and experience more serious and longer-lasting symptoms. Children's mental health has also been impacted by COVID-19 – they've had to attend school remotely, miss out on extra-curricular

activities, and spend extended amounts of time away from their friends and peers.

Getting youth vaccinated will provide them with a strong level of protection against COVID-19 and its variants, support a safer and sustained reopening of our schools, and get them closer to the things they love doing like hanging out with friends, playing and watching sports, and volunteering. It will also help protect other family members too, such as younger children who can't get vaccinated yet, or older individuals who may have a lower immune response to the vaccines.

*Information about the safety and efficacy of COVID-19 vaccines for youth and informed consent can be found on our [COVID-19 Vaccines for Youth](#) web page.*

### **Shouldn't I wait until more data comes out about COVID-19 vaccines for youth?**

Getting vaccinated is the most important thing you can do to protect your family, friends and community against COVID-19. The vaccine is safe and effective for youth, is manufactured to the highest quality and prepares the immune system to fight against COVID-19. Both the National Advisory Committee on Immunization (NACI) and the Canadian Paediatric Society recommends COVID-19 vaccination for those 12 years of age and older. Millions of youth have received the Pfizer vaccine without serious side effects.

*For additional information about side effects, please see the Ministry of Health's [COVID-19 Vaccine Information Sheet](#).*

### **Some Ontarians are being offered a third dose of the COVID-19 vaccine. Do I need a third dose to receive strong protection from the virus?**

A complete two-dose COVID-19 vaccine series provides strong protection against COVID-19 infection and severe outcomes, including against the Delta variant, in

the general population. However, for some populations, a third dose may be required to provide sufficient protection based on a suboptimal or waning immune response to vaccines and increased risk of COVID-19 infection.

### **Is there a microchip in the vaccine?**

No.

### **How is the COVID-19 vaccine different from the flu vaccine?**

The COVID-19 vaccine and the flu vaccine are very different and cannot be directly compared. They target different viruses: the flu vaccine targets several strains of the influenza viruses at once, while the COVID-19 vaccine targets just one virus, SARS-CoV-2.

It is important to receive both the flu vaccine and the COVID-19 vaccine as they protect against different viruses. Speak to your health care provider regarding the appropriate timing between the vaccines.

### **Am I eligible for a vaccine if I don't have an Ontario Health Insurance Plan (OHIP) card?**

Yes. Anyone who studies, works, visits for a period of 16 weeks or more, or lives in Ontario, and wants the vaccine, can get it under our phased provincial rollout of the vaccine.

If you don't have an OHIP card, contact your local public health unit where you will be asked for another form of photo ID that includes your name and date of birth. This could be your driver's licence, passport, a piece of registered mail, pay stub, student card, or government-issued identification from other jurisdictions including a foreign passport, other provincial or territorial health card or driver's license. Once your public health unit has confirmed your eligibility for vaccination, they will help book your appointment.



To find your local public health unit and contact number, visit [Ontario.ca/bookvaccine](https://ontario.ca/bookvaccine) and select the 'no Ontario health card' option from the drop down menu under Health Card Type.

**Will donating blood reduce the effectiveness of the COVID-19 vaccine?**

No, there is no suggestion or evidence in the research available that donating blood will reduce the effectiveness of the COVID-19 vaccine.

Donating does not remove the vaccine from the body and won't deplete the body

of important immune fighting cells and antibodies that are formed in response to the vaccine.

For more information, please visit [Canadian Blood Services](https://www.bloodservices.ca).

**What if I'm behind on my regular immunization schedule? Can I still get the COVID-19 vaccine?**

Yes. We also encourage those who are behind on their immunizations to contact their health care provider to get up to date.