What is COVID-19?

- COVID-19 is an infectious disease caused by the 2019 coronavirus.
- COVID-19 can spread when someone who has the virus coughs, sneezes, talks or even breathes near another person.
- Some people might have the virus and not know it, and still spread it to others.
- People with COVID-19 may have the following symptoms:
  - cough
  - fever
  - tiredness
  - poor sense of taste or smell
  - trouble breathing
  - diarrhea or vomiting
  - chills
  - runny nose.
- Some people with COVID-19 have mild symptoms. Others may not feel sick at all. But some people with COVID-19 get very sick and can die.

What is a vaccine?

- A vaccine tells your immune system to make antibodies that help your body fight a germ that could hurt you.
- Scientists make vaccines to protect you and other people against germs, including bacteria and viruses such as the coronavirus.
- We already get vaccines for other illnesses, like polio, the flu and measles.
- The COVID-19 vaccine works with your body’s natural defenses to fight off COVID-19, just like other vaccines fight off other germs.
- The COVID-19 vaccine is given through a needle.
- Doctors think fewer people will get sick with COVID-19 if more people have the vaccine.
- Doctors think it is important for everyone to get the COVID-19 vaccine.
How do the COVID-19 vaccines work?

- Canada has approved four COVID-19 vaccines that were developed by four companies: Pfizer-BioNTech, Moderna, AstraZeneca and Johnson & Johnson (Janssen).
- Each vaccine was developed differently, but they are all safe and effective for protecting against COVID-19. See the FAQ info sheet in this series for information on the differences between the four vaccines.
- The COVID-19 vaccines train your immune system to make antibodies against the coronavirus. If you are exposed to the virus after getting the vaccine, the antibodies are ready to help fight it off and keep you from getting sick.
- None of the COVID-19 vaccines contain the COVID-19 virus, so they cannot give you COVID-19. Instead, the vaccines give your body a recipe to make antibodies.

How many shots of the COVID-19 vaccines do I need?

- Two shots of either the Pfizer-BioNTech or Moderna vaccines provide protection against COVID-19 for the general population (and are considered a full vaccination), but a third shot is now recommended for all people age 18 and older.
  - Vaccine protection can decrease over time.
  - People with immuno-compromising conditions require a third dose given eight weeks following their second dose and a fourth dose (booster) 168 days after their third dose.
  - Two shots are less effective against the new Omicron variant of COVID-19. A third shot provides better protection and can help stop the spread of the Omicron variant.
  - Rapidly rising case counts increase the risk of exposure and transmission.
- Check out the Ontario government’s COVID-19 vaccine website for the most up-to-date information on third doses, including the timing for the booster or third dose [https://covid-19.ontario.ca/getting-covid-19-vaccine#booster-doses](https://covid-19.ontario.ca/getting-covid-19-vaccine#booster-doses)

How do we know if the vaccines are safe?

- We know all four vaccines are effective, and they are the main way we will beat COVID-19.
- The vaccines will prevent people from dying or needing to go to the hospital because of COVID-19.
- The vaccines do not give you COVID-19. They work with your immune system so that your body will be ready to fight the virus if you come in contact with it.
- Doctors and scientists have worked to make sure that the vaccines are safe. They continue to monitor vaccine safety to identify any rare side effects. This helps to ensure that we maintain a safe and effective vaccine supply.
- Scientists tested the vaccines with many, many people. They gave all the people in the tests a needle. Some people had a vaccine in their needle and some people got a needle that didn’t have a vaccine in it.

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• Then the scientists looked at what happened to the people in both groups over time.
• Almost none the people who got a vaccine didn’t get sick. A lot more people got sick who did not get a vaccine.
• After millions of people received the vaccines, it was discovered that the AstraZeneca and Janssen vaccines can cause a rare but serious blood disorder called vaccine-induced thrombotic thrombocytopenia (VITT). It can cause blood clots, ICU admission and even death. However, safety monitoring is so strict that scientists were able to notice this rare side effect. We only use this vaccine under rare circumstances and preferentially recommend either Pfizer or Moderna vaccines.
• Please talk to your health care provider if you are worried about any of the vaccines.

What are the side effects of the vaccines?

• Common side effects include:
  - sore arm
  - redness and swelling where you got the needle
  - feeling tired
  - headache
  - mild fever or chills
  - muscle ache or joint pain.
• These side effects are usually mild or moderate and go away after a few days.

What about blood clots associated with some of the vaccines?

• VITT is a rare but serious blood disorder. It can develop in anyone four to 28 days after getting the AstraZeneca or Janssen vaccines.
  - People who have had a similar disorder called heparin-induced thrombocytopenia (HIT) or who have had cerebral sinus vein thrombosis may be at higher risk of developing VITT. The disorder can lead to certain types of blood clots, ICU admission and even death.
  - COVID-19 can also cause blood clots, ICU admission and death. In some cases, the risk of developing health problems from the AstraZeneca or Janssen vaccine may be much lower than the risk of having a serious complication from COVID-19. Speak with your health care provider to get information about your risks and to help you decide whether to get these vaccines.
  - Due to the higher risk of VITT with the AstraZeneca vaccine, the Ontario government has decided to preferentially recommend Pfizer and Moderna Vaccines as they have not been associated with VITT.
• See the FAQ info sheet in this series for more information about VITT and the AstraZeneca vaccine.
What about myocarditis and pericarditis?

- Myocarditis is inflammation of the heart muscle. Pericarditis is inflammation of the outer lining of the heart. These conditions happen in rare cases with the Pfizer and Moderna vaccines.
- These conditions occur in less than 1/10000 doses. They are more common following the second dose in people under age 30. They are more common in males than females. The conditions generally occur within seven days of receiving the shot.
- Symptoms include chest pain, shortness of breath and fluttering or pounding heart. People who have these symptoms should seek medical care.
- There have been no deaths associated with these conditions following vaccination.
- The risk of getting myocarditis or pericarditis from COVID-19 infection is about 16 times greater than from the vaccine. This means that the benefit of getting a vaccine outweighs the risk.

Who should get the vaccines?

- Everyone should get the vaccine if they can.
- This includes people who have had the virus before and people who have never had the virus.
- It is very important for certain people to get the vaccine because it is harder for them to stay safe from COVID-19. If they get the virus, they are likely to get very sick. These groups include:
  - older adults
  - First Nations, Inuit and Métis adults (see more information about the COVID-19 vaccine in these populations developed by Maad’ookiing Mshkiki — Sharing Medicine)
  - people who are staying at or working in certain high-risk places (for example, retirement homes, shelters and hospitals)
  - people who get a lot of home care visits, where someone comes in to help them
  - people with certain chronic illnesses (for example, severe mental illness, diabetes and asthma).

Who should not get the vaccines?

- There are no COVID-19 vaccines approved for anyone under age 5. More tests are being done right now to make sure the vaccines are safe for children under age of 5.
- If you have any symptoms that make you think you might have COVID-19, you might have to wait to get the vaccine.
- If you have an allergy to polyethylene glycol (PEG), you should not get an mRNA vaccine (Pfizer-BioNTech or Moderna). Polyethylene glycol is a common ingredient in products such as medication, laxatives and cough syrup.
• If you have an allergy to **tromethamine**, you should not get the Moderna vaccine. Tromethamine is a component only found in the Moderna vaccine.

• If you are allergic to **polysorbate 80**, you should not get the AstraZeneca or Janssen (Johnson & Johnson) vaccines. Polysorbate is a common ingredient in products such as medication and makeup.

• People who have had heparin-induced thrombocytopenia (HIT) or cerebral sinus vein thrombosis may be at higher risk of VITT, which could lead to blood clots, ICU admission and even death. They should not get the AstraZeneca or Janssen vaccine.

• If you had a serious allergic reaction to your first shot of a COVID-19 vaccine, ask your doctor if you should get a different type of vaccine.

### What if I am pregnant or breastfeeding?

• Many pregnant people who get COVID-19 will have mild to moderate symptoms.

• However, some pregnant people can get very sick and will need hospitalization, including ICU admission. Studies have shown that pregnant people are at higher risk of getting very sick compared with non-pregnant people of the same age.

• COVID-19 may also increase the risk of preterm birth, which is associated with medical concerns for the baby.

• The first COVID-19 vaccine trials did not include people who were pregnant or breastfeeding, but new studies are ongoing.

• Since other vaccines are safe for people who are pregnant or breastfeeding, experts think the COVID-19 vaccines should be safe too.

• For many people, getting vaccinated is the safest choice. The Society of Obstetricians and Gynecologists of Canada recommends that pregnant people get vaccinated.

• Speak with your doctor, midwife or care team before getting the vaccine. They will talk with you about the benefits and risks of vaccination and your risks of COVID-19 infection to see what is best for you.

• It is also important to tell the person giving you the vaccine that you are pregnant or breastfeeding.

### What about my medications? Will the vaccines affect them?

• Most people who take medication don’t need to worry about how their medications mix with the vaccine. This is a good question to ask your doctor or pharmacist.

- If you take anticoagulants (blood thinners), tell the person who is giving you the vaccine so they can try to reduce any bruising you might get from the needle.

### Do alcohol, cannabis or other drugs affect how the vaccines work?

• No, they do not. You do not need to stop drinking alcohol before or after the vaccine.

• However, alcohol affects the immune system and how well vaccines work, so try to avoid heavy drinking around the time of the vaccination.
• So far, there are no known problems with getting the vaccine if you use cannabis or other drugs.
• Talk to your doctor or care team about your use of alcohol, cannabis and other drugs so you can create a safety plan before you get the vaccine.

Can I be allergic to the vaccines?
• Yes, you can, but it is very unlikely. Most people will not be allergic to the vaccines.
• If you are allergic to any of the ingredients in one of the vaccines, you should consult with your allergist about how to best get your vaccine.
• PEG can be found in Moderna and Pfizer vaccine while Tromethamine is found in Moderna and the pediatric formulation of Pfizer. If you have allergy to Tromethamine or PEG please consult with your physician.
• Experts think the mRNA vaccines are safe for people with most other allergies and people who are allergic to other vaccines. That is because what is inside those vaccines is different than what is inside most other vaccines.
• If you get a mild to moderate allergic reaction (e.g., swelling, hives) within four hours of getting the vaccine, you should get assessed by an allergist before your second vaccine shot.
• There are no metals, antibiotics or food products in any of the vaccines (which means no gelatin, so the vaccines are halal and kosher).

Why is it important for people with mental illness and/or addiction to get the vaccine?
• This pandemic has been very hard for everyone, especially people with mental illness or alcohol and other drug problems.
• People with serious mental illness are more vulnerable to getting COVID-19 and becoming very sick.
• People who take drugs, or are addicted to drugs, are more vulnerable to getting COVID-19.
• Vaccines protect the people who get them, and the people around them.
• The more people who say yes and get the vaccine, the sooner our lives can return to normal.
• People who do not get the vaccine will still be worried about getting COVID-19 and passing it on to others. They won’t feel as free to do things when the pandemic is over.

How will I know when I can get one of the vaccines? How will I know where to go?
• Your doctor or care team member will let you know when you can get the vaccine and where to go.
• You can also check the Ontario government’s COVID-19 vaccine website for updates: covid-19.ontario.ca/covid-19-vaccines-ontario
Do I have to pay for the vaccine?

- You do not have to pay for the vaccine. The Canadian government is paying for everyone to get a vaccine.
- If you get the vaccine, it will not change or cause problems with money that you get from the government. That includes disability support payments from the government (ODSP).

How do I decide if I want to get the vaccine? How do I decide which one to get?

- The best person to talk to about the vaccine is your doctor. You can also talk to family, friends or other people you trust.
- They can help you understand all of the information you need to think about before you decide what to do.
- People you trust, like family and friends, can also help you talk to your doctor about the vaccine.
- These CAMH COVID-19 information sheets are also helpful: www.camh.ca/covidvaccine
- As of May 2021, AstraZeneca will no longer be available as a first dose. It may still be used as a second dose because the risk of getting VITT is much lower for people who receive it as a second dose
- In some cases, you may qualify for the Janssen vaccines before Pfizer or Moderna. Speak with you health care provider to determine which choice is best for you. Some factors to consider are:
  - the ability to get a second dose
  - the risk of getting COVID-19, which depends on where you live (hot spots are high risk) and your ability to limit interactions with other community members
  - the risk of getting really sick from COVID-19, which is higher for people with a major mental health diagnosis, developmental disability, dementia and many other health conditions

What if I don’t want to get a vaccine? What are my rights?

- Getting a COVID-19 vaccine in Ontario is voluntary. You can discuss whether getting the vaccine is right for you with your doctor, care team, family and other people you trust.
- If you decide to get the vaccine, you will first need to sign a consent form to show that you understand that you are getting the vaccine and that you agreed to get it. You can change your mind at any time before getting the vaccine. You can also ask for more information.
- Talk to your doctor if you want more information about your rights.
What if I have a substitute decision maker?

- If you have a substitute decision maker, that person will make this decision for you. They will need to consider any thoughts you have expressed in the past about vaccination. If you didn’t say anything before about getting the vaccine, your substitute decision maker will decide if getting the vaccine is in your best interest.
- Before you get the vaccine, your substitute decision maker will sign the consent form on your behalf.
- Talk to your doctor if you want more information about your rights.

Notes

If you have questions, please talk to your doctor.

This information sheet is not intended to be a resource for people who require screening for COVID-19 or who are experiencing a mental health crisis. If you are experiencing a mental health crisis, please call 911 immediately or go to your nearest emergency department.

For more information, visit www.camh.ca/covidvaccine

Adapted with permission from CAMH’s Azrieli Adult Neurodevelopmental Centre