



**Ontario Health**  
Cancer Care Ontario

## **What you need to know about COVID-19 vaccines: Information for people with cancer**

This information is accurate as of November 8, 2021. Information about the COVID-19 vaccines is changing quickly. Ontario Health will update this handout as information changes.

Read this information to learn about:

- Why people with cancer should get vaccinated
- How the vaccines work and how they are given
- Third doses of vaccine for some people with cancer
- Possible side effects from the vaccines
- Why it is important to follow public health rules after getting the vaccine

This information is meant to give you, your family and caregivers general information about the COVID-19 vaccines and what is known now.

Check the websites of Ontario's Ministry of Health and your local public health agency to find out more details. Call the Ontario Vaccine Information Line ([1-888-999-6488](tel:1-888-999-6488)) if you would like to use the phone.

### **Why should people with cancer get vaccinated?**

People with cancer may have a higher risk of:

- Getting COVID-19
- Getting very sick from COVID-19
- Dying from COVID-19

**People with cancer should get their COVID-19 vaccine as soon as they can to protect themselves from COVID-19.**

## How are the vaccines given?

The COVID-19 vaccines are a series of shots (needles) into your upper arm, like the flu shot. Everyone gets 2 doses that are given weeks apart. Some people will also need a 3<sup>rd</sup> dose of the vaccine.

## Who needs a third dose or a booster dose of COVID 19 vaccine?

### Third dose

Cancer and cancer treatments (like chemotherapy) can weaken your immune system. People with weakened immune systems may need 3 doses of COVID-19 vaccine to get enough protection.

Here are some examples of people with cancer who may need a 3<sup>rd</sup> dose of COVID 19 vaccine. People who:

- Have had a stem cell transplant or CAR-T therapy in the last 2 years
- Are getting or have recently stopped (within the last 3 months) having cancer treatments that suppress their immune system, such as:
  - Chemotherapy
  - Immune checkpoint inhibitors
  - Monoclonal antibodies (such as, rituximab)
  - Other targeted agents (such as, CD4/6 inhibitors, PARP inhibitors)

### Booster shots

Booster shots are given for a different reason than a 3-dose vaccine. Booster shots are for people whose COVID-19 vaccine protection may start to fade over time. Booster shots are usually given at least 6 months after your last COVID vaccine dose. You may need a booster shot even after a 3-dose vaccine.

Booster shots are very important for people who may get very sick from COVID-19, such as people 80 years of age and older. Check with your local public health unit for information on who may need a booster dose.

If you are at high risk of getting very sick from COVID-19, you must also be extra careful to protect yourself from getting infected. Limit your close contacts to people who are fully vaccinated.

Stay away from crowds and indoor places where you are not sure if others have been vaccinated.

## How do the COVID-19 vaccines work?

The Pfizer and Moderna messenger RNA (mRNA) vaccines are most common in Ontario. mRNA is a type of molecule (small part of a cell) that our bodies are always making. mRNA vaccines teach our bodies to make proteins that tell our immune systems to fight the COVID-19 virus.

The AstraZeneca vaccine is a viral vector vaccine. Viral vector vaccines use a harmless virus (not COVID-19) to teach your body to build up immunity to the virus without making you sick. The flu shot is also a viral vector-based vaccine.

**You cannot get COVID-19 from either type of vaccine.**

## When is the best time to get the COVID-19 vaccine?

**If you have not yet had any doses of vaccine, it is very important for you to get your first dose as soon as possible.** Talk to your healthcare team if you have questions or concerns.

If you are getting any of the treatments below, speak to your cancer care team about the best timing for your COVID-19 vaccine:

- Chemotherapy
- Immunotherapy
- Stem cell transplant
- Adoptive cell therapy
- Immunosuppressive therapy (treatments that weaken your immune system)

## Which vaccine will I get?

The vaccine you get will depend on which vaccine is available in your area at the time of your appointment, your age, sex and other factors. Your second and third dose may not be the same as your first dose. Mixing vaccine types and brands has been shown to be safe and to work well.

## How do I know that the vaccines are safe?

All vaccines in Canada meet very strict safety and efficacy (how well something works) standards before they are approved for use. Health Canada has one of the most careful review processes in the world.

The vaccines:

- Were tested on thousands of people and have already been given to millions of people across the world
- Have met all the requirements for approval, including safety
- Will continue to be watched for any issues as they are used across the world

The COVID-19 vaccines are safe for people with cancer. People with cancer should get fully vaccinated as soon as possible to avoid getting very sick from COVID-19.

## How soon does the vaccine start to work and how long does it last?

You will get protection about 2 weeks after getting each dose. Each dose you get gives you more protection. It is important that you get all doses of COVID-19 vaccine that you are eligible for.

At this time, we do not know how long protection from the vaccine will last. Since the vaccines are new, they will need to be studied over time to see how long they will work. It is possible that people with cancer will need more doses in the future.

## What are possible side effects from the vaccines?

You may have mild side effects in the days after getting their vaccine. Most side effects will go away on their own.

The most common side effects from the vaccines are:

- Pain, a change in colour, redness or swelling in your arm where the needle was given
- Fatigue (tiredness)
- Headache
- Body aches and chills
- Joint pain

- Mild fever
- Diarrhea
- Vomiting
- Swollen glands can happen for a few days after getting a COVID-19 vaccine. Talk to your cancer care team if this lasts for more than a few days.

If side effects last for more than 2-3 days, make sure you speak to your health care team.

After you get the COVID-19 vaccine, wait for at least 15 minutes before going home. This wait is to check for side effects or an allergic reaction.

### **Rare but serious side effects**

Though it is rare, the mRNA vaccines (Pfizer and Moderna) have been linked to:

- myocarditis (inflammation of the heart muscle)
- pericarditis (inflammation of the lining of the heart)

Heart inflammation has happened more in younger patients. For most people, the heart inflammation has been mild and has gone away quickly.

There have been fewer reports of myocarditis after the Pfizer vaccine. If it is available, people age 18-24 should get the Pfizer vaccine.

**Get medical help right away if you have chest pain, shortness of breath or heart palpitations (a fluttering or pounding heart) after getting an mRNA vaccine.**

The AstraZeneca vaccine has been linked to:

- a rare but serious form of blood clots
- capillary leak syndrome (a condition that causes fluid to leak from small blood vessels (capillaries) in your body).

Talk to your health care team about these side-effects if you are getting the AstraZeneca vaccine

## **Can the vaccine cause allergic reactions?**

It is possible to be allergic to ingredients in the COVID-19 vaccines. If you have any serious allergies or have had a serious allergic reaction to other vaccines, drugs, or food, talk to your cancer care team or your family health team before you get the COVID-19 vaccine.

If you had an allergic reaction to your first COVID shot you may need to see an allergist/immunologist before getting your second shot. You may also need to get your vaccine in a

hospital instead of at a clinic or pharmacy. For more information about ingredients in the vaccines, search the vaccine names on the Health Canada website or ask your health care team.

## **Do I need to keep following public health rules after getting the vaccine?**

Yes. It may still be possible for fully vaccinated people to carry and spread COVID-19. Check with your local public health unit to find out what is allowed in your area right now.

After getting the vaccine it is important for people with cancer who have a weakened immune system to:

- Keep wearing a mask when in close contact with others, especially when indoors
- Wash your hands often
- Stay apart from other people unless you know that they are fully vaccinated

You must keep following public health measures because:

- It takes time for your body to build up protection after getting the vaccine
- If you have a weakened immune system you may not get the full protection even after 2 doses of the vaccine
- It is possible for COVID-19 to spread even between people who have already gotten the vaccine
- We need to control the spread of COVID-19 in our communities until everyone has had both vaccine doses

## **Are there times when I should wait to get the vaccine?**

There are times when some people should wait to get the COVID-19 vaccine:

- **If you currently have COVID-19 you should wait** to get the vaccine until after you recover from the virus. Even if you have already had COVID-19 you need to get your vaccine because it is possible to get the virus again. Talk to your health care team about when to get the vaccine after you recover.
- **If you have symptoms of COVID-19 or are self-isolating you should wait** to get the vaccine. Talk to your health care team about your symptoms and getting a COVID-19 test. Your health care team will tell you when to get the vaccine.

**It is safe to get your flu shot at the same time as your COVID-19 vaccine.**

Speak to your surgical team about the best time to get your vaccine if you are having surgery.

## How did research teams develop the mRNA vaccines so quickly?

Researchers have been studying mRNA vaccines for many years. They were able to develop the COVID-19 vaccines quickly because:

- The COVID-19 virus is like other viruses that researchers already knew a lot about
- Research teams around the world started to work on the vaccine right away when the COVID-19 virus was found
- Research teams all over the world shared information with each other
- Many people quickly signed up for clinical trials (a research study that involves humans) to test the vaccines. For example, over 200,000 people in Britain took part in clinical trials.

## For more information

Talk to your health care team for more information about the COVID-19 vaccines.

Health Canada: <https://www.canada.ca/covid-19>

Ontario Ministry of Health: <https://covid-19.ontario.ca/covid-19-vaccines-ontario>

Public Health Unit locator: <https://www.phdapps.health.gov.on.ca/phulocator/>

Ontario Government Ethical Framework for COVID-19 Vaccine Distribution:  
<https://www.ontario.ca/page/ethical-framework-covid-19-vaccine-distribution>

## Provincial Vaccine Information Line

Call if you have questions about Ontario's COVID-19 vaccination program or booking your vaccination appointment. Information is available in multiple languages.

Telephone: 1-888-999-6488

TTY: 1-866-797-0007