

COVID-19 vaccines – mRNA (age 6 months and older)

What are COVID-19 vaccines?

COVID-19 vaccines protect against the SARS-CoV-2 virus (also known as COVID-19). The virus causes an infection in the lungs and airways and is a type of respiratory illness. In some cases, the infection can cause problems with other organs or other parts of the body. Go to ahs.ca/covid to learn more about COVID-19.

The following COVID-19 vaccines are approved for use in Canada:

- **mRNA vaccines:** Pfizer-BioNTech (Comirnaty and Comirnaty Bivalent) and Moderna (SpikeVax and SpikeVax Bivalent)
- **viral vector-based vaccines:** AstraZeneca (Vaxzevria)/COVISHIELD and Janssen (Johnson & Johnson)
- **protein-based vaccine:** Novavax (Nuvaxovid)
- **plant-based vaccine:** Medicago (Covifenz)

The Pfizer-BioNTech, Moderna, Janssen, and Novavax vaccines are available in Alberta. For information about the protein-based and viral vector-based vaccines, read the vaccine information sheets on [ImmunizeAlberta.ca](https://immunizealberta.ca).

Who should get an mRNA COVID-19 vaccine?

Everyone is at risk of COVID-19. You should get an mRNA COVID-19 vaccine if you are age 6 months or older. COVID-19 vaccines are free.

Do I need a vaccine if I have already had COVID-19?

If you have already had COVID-19, it is not yet known how long your protection will last or how much protection you will have against variants. It is important to get a COVID-19 vaccine even if you have already had the virus.

The vaccine may give you better protection if you wait a while after having COVID-19 and then get a vaccine. How long to wait depends on your health history, the number of doses of COVID-19 vaccine you have had, and your risk of getting very sick from COVID-19.

If you have had COVID-19 in the past, check with your healthcare provider about when to get a COVID-19 vaccine.

What if my child is getting a COVID-19 vaccine?

Consent for a COVID-19 vaccine for children under age 18 years is provided by a parent or guardian. If a parent or guardian cannot be at the appointment, they can give consent in writing using the consent form at ahs.ca/VaccineUnder18. In some cases, children under age 18 years may be able to give their own consent.

How well do COVID-19 vaccines work?

How well the vaccines work against COVID-19 is different for each variant. COVID-19 vaccines are the best way to lower your risk of getting COVID-19 or getting very sick from it.

The mRNA vaccines give the best protection. The Moderna Bivalent and the Pfizer-BioNTech Bivalent vaccines are the only vaccines that are specifically made to protect against Omicron variants, which are the strains that are currently spreading. The protein-based vaccine gives more protection than the viral vector-based vaccines. However, all the vaccines work very well to lower your risk of getting seriously ill and needing to be in the hospital.

How many doses of mRNA COVID-19 vaccine do I need?

Primary series

The primary series of a vaccine is the initial number of doses you need to get protection. The number of doses in your primary series depends on your age, health, and the type of vaccine you get.

If you get the Moderna vaccine, you need at least 2 doses. If you get the Pfizer-BioNTech vaccine, you need at least 2 doses if you are age 5 years or older and at least 3 doses if you are age 6 months to 4 years.

For some people, these doses may not give enough protection. You may need an extra dose to complete your primary series if you have a health problem that weakens your immune system. For example:

- You have had or will have an organ or stem cell transplant.
- You have kidney disease and need dialysis.
- You have acquired immunodeficiency syndrome (AIDS).
- You take certain medicines that weaken your immune system.

Studies have shown that an extra dose in the primary series may give better protection to adults with a weak immune system. In babies and children with a

weak immune system, an extra dose may also give better protection, but research is still happening to learn more.

Booster doses

A booster dose will help keep you protected during times when there will likely be lots of COVID-19 virus going around, such as fall and winter.

If you are age 5 to 11 years, you can get a single booster dose 5 months after your primary series.

If you are age 12 years or older, you can get a booster dose 5 months after your last dose of a COVID-19 vaccine, whether it was a final dose of your primary series or a booster dose.

You may get your booster dose at least 3 months after your last dose if you are at high risk of getting very sick from COVID-19 because you have a health condition or you live in a seniors care facility, such as a nursing home.

Talk to your healthcare provider about when you should get your booster dose.

Go to alberta.ca/covid19-vaccine to book an appointment for your booster dose.

Can I get an mRNA COVID-19 vaccine if I am pregnant or breastfeeding?

Yes, you can get an mRNA COVID-19 vaccine if you are pregnant or breastfeeding. Research shows that mRNA vaccines are the safest type of COVID-19 vaccines to get during pregnancy, which includes the bivalent mRNA vaccines.

When you are pregnant, you have a higher risk of getting very sick from COVID-19. Getting a COVID-19 vaccine lowers your risk of getting seriously ill from the virus.

If you are pregnant or breastfeeding and have questions about getting a COVID-19 vaccine, talk to your healthcare provider.

Where can I get a COVID-19 vaccine?

Go to ahs.ca/covidvaccine to find out where and when you can get a COVID-19 vaccine.

Are there side effects from mRNA COVID-19 vaccines?

There can be side effects from mRNA COVID-19 vaccines, but they tend to be mild and go away in a few days. Side effects may include:

- redness, swelling, a hard spot, or feeling sore where you had the needle
- feeling tired or have a headache
- a fever or chills
- body aches or sore joints
- pain in your arms or legs
- feeling sick to your stomach (nausea), vomiting (throwing up), or loose stool (diarrhea)
- swollen lymph nodes
- swelling or feeling sore in your armpit or groin
- a reduced sense of touch or a feeling of numbness
- feeling dizzy
- a rash or hives

Children age 5 years and younger may also get upset easily or cry, have an earache, or may not want to eat.

Current information shows that there is similar risk of side effects after each dose of an mRNA COVID-19 vaccine. Research continues to find out more about the risk of side effects after additional doses.

It is important to stay at the clinic for 15 minutes after your vaccine. Some people may have a rare but serious allergic reaction called anaphylaxis. If anaphylaxis happens, you will get medicine to treat the symptoms.

It is rare to have a serious side effect. Call Health Link at 811 to report any serious or unusual side effects.

What rare events have been reported after getting an mRNA COVID-19 vaccine?

There have been very rare reports of myocarditis (inflammation of the heart muscle) and pericarditis (inflammation of the lining around the heart) within 7 days of getting either the Pfizer-BioNTech or the Moderna vaccine. Most reported cases were mild and got better with treatment.

The inflammation can cause shortness of breath, chest pain or pressure, or a very fast or abnormal heart rate. Get medical help **right away** if you have any of these symptoms.

Available information shows that these rare events were reported more commonly:

- after the second dose
 - in those age 12 to 29 years
 - in males
 - in those who got the original (not bivalent) Moderna vaccine
- Research has shown that children age 5 to 11 years may also have a lower risk of these events after their primary series with Pfizer-BioNTech vaccine than people age 12 to 29 years.

In clinical trials for both the Pfizer-BioNTech and Moderna vaccines, there were no reports of myocarditis or pericarditis in children age 6 months to 5 years or in adults who got the bivalent vaccines.

Research is still happening to learn more about the risk of these events after a getting a bivalent vaccine and the risks in babies and children.

It is not known if having a history of myocarditis or pericarditis puts you at higher risk of having these rare events after a COVID-19 vaccine. Talk to your doctor before you get a dose of COVID-19 vaccine if:

- You had myocarditis or pericarditis within 6 weeks of getting a COVID-19 vaccine.
- You have a history of myocarditis or pericarditis and you have questions about getting a COVID-19 vaccine.

Research is happening to learn more about the risks of these rare events. Your risk of getting seriously ill from COVID-19 is much higher than your risk of having a rare event after these vaccines.

Go to [COVID-19 vaccine – Frequently Asked Questions on ahs.ca/topics/Page17389.aspx](https://www.ahs.ca/topics/Page17389.aspx) for more information.

How can I manage side effects?

- To help with soreness and swelling, put a cool, wet cloth over the area where you had the needle.
- There is medicine to help with a fever or pain. Check with your doctor or pharmacist if you are not sure what medicine or dose to take. Follow the directions on the package.
- Children under the age of 18 years should **not** take aspirin (unless your doctor has told you to take it) because it can cause serious health problems if taken within 6 weeks of a vaccine.
- Some people with health problems, such as a weak immune system, must call their doctor if they get a fever. If you have been told to do this, call your doctor even if you think the fever is from the vaccine.

What vaccine will I get for my primary series?

You can get either the Pfizer-BioNTech or Moderna vaccines for your primary series. You need to get all the doses in your primary series to have protection.

If you are age 6 months to 4 years, it will take 16 to 20 weeks to complete your primary series with the Pfizer-BioNTech vaccine and 8 to 12 weeks with the Moderna vaccine. The Moderna vaccine is recommended for children in this age group with a weak immune system so they have protection as quickly as possible. If you are age 5 to 29 years, it is recommended to get the Pfizer-BioNTech vaccine. This vaccine has shown to have a lower risk of myocarditis and pericarditis in people age 12 to 29 years and may have a lower risk for children age 5 to 11 years.

If you can't get or don't want an mRNA vaccine, you can get the protein-based or a viral vector-based vaccine if you are age 18 years or older.

Usually you get the same vaccine for all your doses. If your first-dose vaccine is not available or you cannot have it, you can get a different COVID-19 vaccine for your next dose. Whichever vaccine you get to complete your primary series protects you against COVID-19. Talk to your healthcare provider about which vaccine is best for you. Go to [ahs.ca/seconddose](https://www.ahs.ca/seconddose) for more information.

What vaccine will I get for my booster dose?

The vaccine you can get for your booster dose depends on your age:

- Age 5 to 11 years: Pfizer-BioNTech vaccine
- Age 12 to 17 years: Pfizer-BioNTech Bivalent vaccine
- Age 18 years or older: Pfizer-BioNTech Bivalent or Moderna Bivalent vaccine

If you are eligible for a bivalent vaccine but you cannot get it or do not want it, you can get an original mRNA vaccine for your booster dose.

If you cannot get or do not want an original mRNA vaccine for a booster dose, you can get the protein-based vaccine if you are age 18 years or older.

The mRNA vaccine is not licensed (approved for use) for more than 2 doses in all cases. But vaccine experts support getting more than 2 doses of an mRNA COVID-19 vaccine in the following situations, called "off-label use":

- You get a 3-dose primary series of Moderna vaccine.
- You are age 5 years or older and get a 3-dose primary series of Pfizer-BioNTech vaccine.
- You get a 4-dose primary series of Pfizer-BioNTech vaccine.
- You are age 12 to 17 years and you get the original Moderna vaccine as a booster dose.
- You are age 12 to 15 years and you get the original Pfizer-BioNTech vaccine as a booster dose.
- You get a booster dose of an original mRNA vaccine sooner than 6 months after your last dose.
- You get a second booster dose of an original mRNA vaccine.
- You get a Moderna Bivalent booster dose sooner than 4 months after your last dose.

If you get the original Moderna vaccine for your first booster dose and you are age 65 years or older, have a weak immune system, or live in a seniors living facility, you will get a higher dose of vaccine. This is also considered off-label use but is supported by vaccine experts.

Talk to your healthcare provider about which vaccine you can get and when to have your doses.

What vaccine is recommended for people with a weak immune system?

Research has shown mRNA vaccines provide the best protection for people with a weak immune system. Talk to your healthcare provider about which vaccine is best for you.

What if I had or am getting another type of vaccine?

Age 6 months to 5 years

Children age 5 years who got the Moderna vaccine and children age 6 months to 4 years should wait 14 days before getting another vaccine. If they got another vaccine first, they should wait 14 days before getting their COVID-19 vaccine. Waiting helps to watch for any side effects from the COVID-19 vaccine.

If your child needs another vaccine on the same day or in the 14 days before or after their COVID-19 vaccine (for example, your child is due for routine childhood vaccines), there are no safety concerns. Both vaccines will still work to protect your child. Some vaccines have a longer waiting period. If your child had another vaccine in the last 4 weeks, check with your healthcare provider about when they can get their COVID-19 vaccine.

Age 5 years and older

Children age 5 years who got the Pfizer-BioNTech vaccine and anyone age 6 years or older can get most vaccines at the same time as, any time before, or any time after an mRNA COVID-19 vaccine. However, certain vaccines have a waiting period. If you had another vaccine in the last 4 weeks, check with your healthcare provider about when you can get the mRNA COVID-19 vaccine.

Who should not get an mRNA COVID-19 vaccine?

You may not be able to get an mRNA COVID-19 vaccine if you:

- have an allergy to any part of the vaccine
- had a severe (serious) or unusual side effect after this vaccine or one like it
- are under age 6 months

Always tell your healthcare provider if you have allergies or if you have had a side effect from a vaccine in the past.

Check with your healthcare provider about when you can get an mRNA COVID-19 vaccine if you:

- had COVID-19 in the past
- are under age 18 years and have a history of multisystem inflammatory syndrome (MIS-C)

Be sure to talk to your doctor **before** you get an mRNA COVID-19 vaccine if you:

- have a weak immune system (because of a medicine you take or a health problem)
- have an autoimmune disorder (like rheumatoid arthritis or lupus)
- have had a stem cell or organ transplant
- have a history of myocarditis or pericarditis within 6 weeks of getting a dose of COVID-19 vaccine