

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 Original [Non-Bivalent] and Comirnaty Bivalent) and Moderna (SpikeVax Original [Non-Bivalent] and SpikeVax Bivalent)
- **viral vector-based vaccines:** AstraZeneca (Vaxzevria)
- **protein-based vaccine:** Novavax (Nuvaxovid)

The Pfizer-BioNTech Bivalent and Moderna Bivalent mRNA vaccines are available in Alberta. The Novavax vaccine may not be available in Alberta, and its availability is not guaranteed. For information about the protein-based vaccine, read the vaccine information on ahs.ca/immunize.

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 of the virus. 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 Pfizer-BioNTech Bivalent and Moderna Bivalent vaccines are the only vaccines available in Alberta made to protect against Omicron variants, which are the strains that are currently spreading. However, all the vaccines work very well to lower your risk of getting seriously ill and needing to be in the hospital.

What vaccine can I get?

Primary series

The primary series of a vaccine is the initial number of doses you need to get protection. The vaccine used for your primary series depends on your age and the health of your immune system:

- If you are age 6 months to 4 years, you can get the Moderna Bivalent vaccine for your primary series.
- If you are age 5 years or older and have a healthy immune system, you can get the Pfizer-BioNTech Bivalent vaccine for your primary series.
- If you are age 5 years or older and have a weak immune system, you can get either the Pfizer-BioNTech Bivalent vaccine or the Moderna Bivalent vaccine. Research has shown that the mRNA vaccines provide the best protection for people with a weak immune system. The Moderna Bivalent vaccine may provide more protection than the Pfizer Bivalent vaccine to people who have a weak immune system.
- If you are age 12 to 29 years, the Pfizer-BioNTech vaccine is recommended as it has been shown to have a lower risk of myocarditis and pericarditis than the Moderna vaccine in people in this age group. If you are age 12 to 29 years, and have a weak immune system, you can get the Moderna Bivalent vaccine if you prefer.

Research continues to learn more about using bivalent vaccines for a primary series. Information suggests they work the same as the original non-bivalent vaccines and vaccine experts support using them as primary series.

If you get the Moderna Bivalent vaccine as a primary series, this is considered “off-label use”. This means the vaccine is not licensed (approved for use) in this situation but is supported by vaccine experts.

Talk to your healthcare provider if you have questions about what vaccine you should get.

If you cannot get or do not want an mRNA vaccine, you can get the protein-based vaccine, if available, if you are age 12 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.

Booster doses

A booster dose will help to keep you protected for longer after your primary series. You can get the Pfizer-BioNTech Bivalent vaccine for a booster dose if you are age 5 years and older. Children under age 5 years are not eligible for a booster dose at this time.

If you cannot get or do not want a bivalent mRNA vaccine for a booster dose, you may be able to get the protein-based vaccine if you are age 12 years or older, if it is available.

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

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

Primary series

The number of doses in your primary series depends on your age, health, and the type of vaccine you get.

You need at least 2 doses of an mRNA vaccine for your primary series. If you are age 6 months to 4 years and started your primary series with the original (non-bivalent) Pfizer-BioNTech vaccine, you need at least 3 doses for your primary series.

(If you got a viral vector-based vaccine for a primary series, you need at least 2 doses if you got the AstraZeneca/COVISHIELD vaccine and 1 dose if you got the Janssen vaccine. These vaccines are no longer available in Alberta.)

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. If you get more than 2-doses of a bivalent vaccine in your primary series, or you get a bivalent vaccine as a third or fourth dose in your primary series, this is considered “off-label use”. Vaccine experts support using these vaccines in this way.

Booster doses age 5 to 11 years

If you are age 5 to 11 years, you can get 1 booster dose.

If you got the original (non-bivalent) mRNA vaccine as a booster dose, you can get a bivalent mRNA booster dose if you have certain health problems, such as:

- a weak immune system due to an illness or medicine
- kidney disease and need dialysis
- heart, lung, or liver problems
- diabetes
- a lot of extra weight
- had or will have an organ or stem cell transplant

Booster doses age 12 years and older

If you are age 12 years or older, you can get 1 bivalent mRNA booster dose on or after September 21, 2022.

If you are at high risk of severe illness from COVID-19, you can get a second bivalent mRNA booster dose. You may be at high risk if:

- You are age 65 years or older.
- You are age 18 years or older and live in a long-term care home or supportive living facility (such as a nursing home or seniors' lodge).
- You are age 18 years or older and have certain health problems such as a weak immune system due to an illness or medicine, you have had or will have an organ or stem cell transplant, or you have kidney disease and need dialysis.

When should I get my booster dose?

You need to wait 6 months after getting your last dose of COVID-19 vaccine or being infected with COVID-19 before getting a booster dose. Waiting 6 months helps the booster dose give you better protection.

If you are eligible for a second bivalent mRNA booster dose and you live in a long-term care home or supportive living facility, you can get your second bivalent booster dose 3 months after your first bivalent booster dose.

If you have had a stem cell transplant or are getting CAR T-cell therapy (a type of treatment for certain cancers), talk to your health care provider about when you can get your second bivalent booster dose.

If you get a second bivalent booster dose or you are age 5 to 11 years and get a booster dose sooner than 6 months after your last dose, this is considered "off-label use". Vaccine experts support using these vaccines in this way.

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. COVID-19 vaccines are free.

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
- feeling dizzy
- a reduced sense of touch or a feeling of numbness
- a rash or hives

At least 1 out of 100 people who got this vaccine reported 1 or more of these side effects. In some cases, it is unknown if the vaccine caused these side effects. 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 (non-bivalent) Moderna vaccine

Research has shown that children age 5 to 11 years have a lower risk of these events after their primary series than adolescents and adults. 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 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.

A possible link between the Pfizer-BioNTech Bivalent vaccine and ischemic stroke in people age 65 years and older has been found in the United States but not in Canada or other countries. At this time, we do not know if these strokes were caused by the 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.

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.
- 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 if I had or am getting another type of vaccine?

You can get most vaccines at the same time as, any time before, or any time after an mRNA COVID-19 vaccine, including routine vaccines and the influenza 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. You had a severe (serious) or unusual side effect after this vaccine or one like it.
- You are under age 6 months.

If you have allergies or have had a side effect to this vaccine, check with your doctor or a public health nurse before you get the vaccine.

Although you can get the vaccine if you have a mild illness such as a cold or fever, you should stay home until you are feeling better to prevent spreading your illness to others.

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

- You had COVID-19 in the past.
- You 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).
- You have an autoimmune disorder (like rheumatoid arthritis or lupus).
- You have had a stem cell or organ transplant.
- You have a history of myocarditis or pericarditis within 6 weeks of getting a dose of COVID-19 vaccine.

For more information about immunization



Call Health Link at 811



Scan the QR code or go to ahs.ca/immunize