



An Adult's Guide to *Vaccination*



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An Adult's Guide to *Vaccination*

Getting vaccinated is an important way to keep ourselves safe and healthy from serious and life-threatening diseases. The best way to protect ourselves is by making sure we get all recommended vaccines on time.





Did you know?

Many bacteria are useful and can be naturally found in and on our body without making us sick, as long as they aren't in parts of the body where they don't belong. It's part of our immune system's job to determine which bacteria can make us sick and to develop an immune response if needed.



About *vaccination*

What are *vaccines*?

Vaccines are tools that work with the body's natural defences (the immune system) to develop protection against diseases without the risks that come from getting the diseases.

What is the immune system?

The immune system is a complex network of cells, tissues and organs in our bodies that work together to help prevent diseases and keep us healthy.

Our immune system responds to things it considers unfamiliar or harmful, such as bacteria and viruses that can cause diseases. Through a series of steps called the immune response, our bodies produce antibodies and immune memory cells to fight the infection and provide protection against future infections (immunity).

Antibodies are proteins that attach to harmful bacteria or viruses and help to remove them from the body. If we encounter that specific virus or bacterium again, immune memory cells quickly produce more antibodies to help remove it from the body before we get really sick.

How does *vaccination* work?

Vaccination works by exposing our bodies to key parts of bacterium or viruses, called antigens, in a safe way so our immune system can develop an immune response. Later, if we are exposed to that same bacterium or virus, our immune system will be able to respond more quickly to:

- > prevent us from getting the disease
- > prevent us from getting seriously ill if we do get the disease

Did you know?

All adults are recommended to get a tetanus booster every 10 years to stay protected from tetanus. Tetanus is a serious infection caused by a bacterium in the environment.

Tetanus isn't spread from person to person, but you can get it if the bacterium enters a wound in your skin.





How are *vaccines* given?

Most vaccines are given by an injection (a needle) into the upper arm. Some vaccines can be given orally (by mouth) and there's a flu (influenza) vaccine that's sprayed into the nose.

Some vaccines offer life-long protection, while others require booster doses to continue providing protection.

Some vaccines protect against only one virus or bacterium, while combination vaccines protect against several at the same time. Combination vaccines are helpful as they mean fewer injections and fewer appointments, which can help reduce delays in getting vaccinated and building protection.



Did you know?

The more contagious a disease is, the more people need to be vaccinated to keep it from spreading. For example, measles is one of the most contagious diseases: even a single case of measles can spread quickly among people who aren't vaccinated. In a group of 100 people who have never had a measles infection, 95 of them need to be vaccinated to prevent measles from spreading. This is why vaccination rates have to stay high to prevent outbreaks.

Why is *vaccination* important?

Vaccination is considered one of our most important public health tools. Over the past 50 years, vaccination has saved many lives in Canada and around the world. Some diseases that were once common in Canada are now rare because of vaccines. Vaccines can even completely stop an infectious disease from occurring anywhere in the world. For example, there hasn't been a single case of naturally occurring smallpox in the entire world since 1977, thanks to vaccination.

Some vaccines can help to create community immunity (also known as herd immunity). This means that the more people who have been vaccinated against a disease, the less chance there is of the disease spreading in a community. This helps protect people who can't be vaccinated. It also helps protect those for whom the vaccine may not work as well, such as infants, older adults and people who are immunocompromised. People who are immunocompromised have a weakened immune system due to a health condition or medications they take. They may not be able to receive certain vaccines, and the vaccines that they do receive may not work as well. These people are at higher risk of getting vaccine-preventable diseases and becoming very ill.

Getting vaccinated and staying up to date with your vaccines helps protect people who are immunocompromised from vaccine-preventable diseases.

To compare the number of cases of 6 vaccine-preventable diseases before and after vaccines were introduced in Canada, check out the Vaccines Work Poster at Canada.ca/vaccines-work.



Diseases prevented by routine *vaccinations*

Routine vaccinations are recommended on a schedule based on age. Some may be provided for free by your province or territory.

These are some of the diseases that routine vaccinations can help protect you from. Some are given as combination vaccines:

- > diphtheria: Canada.ca/diphtheria
- > flu (influenza): Canada.ca/flu
- > pneumococcal: Canada.ca/pneumococcal
- > shingles (herpes zoster): Canada.ca/shingles
- > tetanus: Canada.ca/tetanus
- > whooping cough (pertussis): Canada.ca/whooping-cough

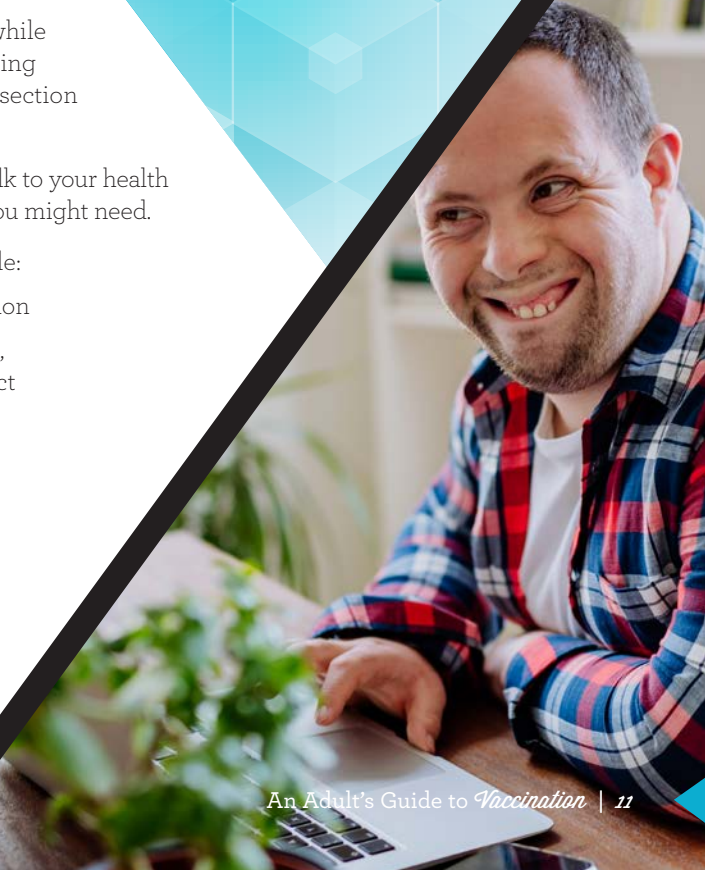
If you didn't get all recommended childhood vaccines, you may still need some as an adult.

Some diseases can be especially dangerous if someone becomes infected while pregnant, such as German measles (rubella), chickenpox (varicella), whooping cough (pertussis) and flu (influenza). See the “Vaccination and pregnancy” section for more information.

The timing of vaccines may vary depending on your province or territory. Talk to your health care provider or your local public health department about which vaccines you might need.

Other vaccines may also be recommended in certain situations. For example:

- > if you're travelling to an area where certain viruses or bacteria are common
- > if you may have been exposed to certain viruses or bacteria, for example, due to exposure to an infected person or animal or a contaminated object
- > during an outbreak of a disease
- > if you have certain health conditions or risk factors



Are you travelling?

Many diseases that aren't common in Canada are common in other parts of the world. This means that when travelling to another country, you could be exposed to viruses and bacteria that we don't routinely vaccinate against in Canada.

It is recommended that you consult a qualified travel health provider or visit a travel health clinic at least 6 weeks before your trip. They might recommend other vaccinations based on where you are traveling to.

Visit travel.gc.ca/travel-vaccinations for helpful travel advice and information.

Yearly flu (influenza) *vaccination*

Influenza is a respiratory illness that can cause fever, cough, muscle aches, headaches, sore throat and tiredness. Some people only get mildly ill, while others can get very sick.

Everyone aged 6 months and older is recommended to get an influenza vaccine every fall. This is because protection from the influenza vaccine may not last from one year to the next, and the strains in the vaccine can change from year to year. Influenza vaccines target the 3 or 4 influenza strains that are expected to cause illness in the upcoming influenza season (November to April).

Some people are at higher risk of complications or hospitalization from influenza, such as people who are older, pregnant, or living with chronic health conditions. It's important to get vaccinated if you're at higher risk or if you have close contact with anybody in those higher-risk groups. By getting your influenza vaccine, you can protect yourself and others too, since you'll be less likely to spread influenza to them.

For more information, talk to your health care provider, local public health department or visit Canada.ca/flu.

COVID-19 *vaccination*

COVID-19 is an infectious disease caused by the SARS-CoV-2 virus. It can cause no symptoms or mild to severe illness. You can help protect yourself from getting very sick with COVID-19 by getting vaccinated.

For information on COVID-19 vaccines, visit Canada.ca/covid-vaccine.





Vaccination and pregnancy

During pregnancy, vaccine-preventable diseases can make you sick and, in some cases, can be passed along to your baby. Pregnancy affects your immune system and can increase your risk of severe outcomes if you become infected. Because of this, it is particularly important for people who may become pregnant to stay up to date on recommended vaccines.

Being vaccinated can protect both you and your developing baby from serious infections. Your vaccinations also help protect your baby after birth, until they're old enough to get their own vaccinations.

For information on vaccines and pregnancy, visit Canada.ca/vaccination-pregnancy.





Planning a pregnancy

If you're planning a pregnancy, or may become pregnant, check to make sure you're up to date on all routine vaccinations. Some diseases such as rubella or chickenpox (varicella) can seriously harm the baby if a person gets infected while pregnant. These vaccines should not be given to people who are pregnant so it's important to get them before a pregnancy. If you're concerned about whether you are immune to diseases that could affect your pregnancy, talk to your health care provider.

Vaccinations during pregnancy

The Tdap (tetanus, diphtheria and pertussis) combination vaccine should be given during every pregnancy, even if you've received it before. This vaccine is ideally given between 27 and 32 weeks of pregnancy to protect your newborn from whooping cough (pertussis). Whooping cough is particularly dangerous for young infants before they're old enough to be vaccinated themselves.

The influenza vaccine is recommended during influenza season for people who are pregnant or may become pregnant. It reduces the risk of the baby being born prematurely or with a low birth weight. It helps protect the person who is pregnant and the newborn from influenza and influenza-related hospitalizations or complications. This is important because babies under 6 months of age can't get vaccinated against influenza.

Getting COVID-19 during pregnancy can cause serious illness and pregnancy-related complications. Complications may include the baby being premature, low birth weight or needing to be in a neonatal intensive care unit (NICU). It's very important to receive all recommended COVID-19 vaccines if you're pregnant.

For more information on pregnancy and COVID-19 vaccines, visit Canada.ca/vaccination-pregnancy-covid.

Depending on your risk factors, your health care provider or local public health department may recommend other vaccines during pregnancy, such as hepatitis B.

You should also make sure everyone in your household is up to date with their vaccines. Since babies can become seriously ill from vaccine-preventable diseases, and since newborns are too young to receive most vaccines, it's up to those around them to provide protection.

Talk to a health care provider for more information on which vaccines you should and shouldn't get during pregnancy.

After pregnancy

If you missed certain vaccines before or during pregnancy, your health care provider or local public health department may recommend getting them after your baby is born. This will lower the chance that you'll get a vaccine-preventable disease and spread it to your baby. For some diseases, it will also help ensure that you're protected for your next pregnancy.

For more information on your child's vaccination needs, see *A Parent's Guide to Vaccination* at Canada.ca/vaccination-guide-parents or talk to a health care provider or local public health department.

Did you know?

During the last few weeks of pregnancy, antibodies to some diseases can be transferred to your baby to temporarily help protect them against those diseases. Breastfeeding may also provide antibodies to the baby. The antibodies you share with your baby don't last long or provide complete protection, so it's important to vaccinate your child according to the recommended schedule in your province or territory.





Vaccinations for adults aged 50 and older

As we age, our immune system does not respond as well. This puts us at greater risk for certain diseases, such as shingles, pneumococcal disease and influenza, as well as complications from these diseases.

Pneumococcal *vaccination*

Invasive pneumococcal disease (IPD) is a serious infection caused by a bacterium called *Streptococcus pneumoniae*. The bacterium can spread through contact with respiratory droplets, such as those produced by sneezing, coughing or talking. It's more common among young children, older adults and people with certain health conditions, such as immunosuppression.

Pneumococcal vaccination can reduce the risk of becoming infected with *Streptococcus pneumoniae*. If you do get infected, you're less likely to get a severe disease, such as invasive pneumococcal disease.

Pneumococcal vaccines are routinely given to adults aged 65 and older. It is also given to younger adults if they have certain medical conditions that put them at a higher risk for disease. Pneumococcal vaccines are also routinely recommended for children.

There are several vaccines authorized in Canada to prevent pneumococcal disease in adults. Talk to a health care provider or local public health department to determine which vaccine is recommended for you, based on your age, vaccine history and health status.

Shingles *vaccination*

Shingles (herpes zoster) is a condition caused by the chickenpox virus (varicella zoster) from a past chickenpox infection. The chickenpox virus lives in nerve cells long after a person has recovered from chickenpox and can cause shingles many years later. Shingles can happen to anyone who has had chickenpox but is most common in adults aged 50 years and older.

Shingles can cause a very painful rash anywhere on the body. Complications can include long lasting nerve pain and vision or hearing loss.

Shingles vaccines reduce your risk of developing shingles and can reduce the length and severity of shingles if you do get it.

The shingles vaccine is recommended for those 50 years of age and over and has also been approved for adults 18 years of age and over who are immunocompromised. Talk to a health care provider or local public health department about the shingles vaccines.





Vaccine safety

When a vaccine is being considered for approval, Health Canada reviews how well the vaccine works and its safety before making a decision.

Once a vaccine has been approved, Health Canada continues to monitor its safety and its effectiveness, in cooperation with provinces and territories, other countries and international agencies.

After being vaccinated, it's common to have side effects that may last for 1 to 3 days. Common side effects of vaccines can include pain, swelling and redness where the injection was given, mild fever, tiredness, and headaches.

Some people may be afraid to receive a vaccine. Some people feel faint during or after vaccination. For tips on reducing pain, preventing fainting, and making vaccination a more positive experience, see the section: "What to expect at your vaccination appointment".

Very rarely, someone may have an allergic reaction to a vaccine. If you suspect you might be having a serious reaction after a vaccination, seek medical care right away. Serious side effects from vaccines should also be reported to the local public health department. Tell your health care provider about any serious reactions you've experienced before you receive future vaccinations.

Did you know?

You might have mild side effects for a few days after vaccination because your body is working to develop an immune response against the disease.





Staying up to date with your *vaccinations*

How do you know if you're due for a *vaccine*?

Vaccine schedules (also referred to as immunization schedules) set by provinces and territories are designed to provide protection before you're most at risk for vaccine-preventable diseases.

Staying up to date on your vaccinations is important throughout your life, as different vaccines are recommended at different ages.

Everyone should maintain a personal vaccination record. Keep it in a safe place and present it at every vaccination appointment so it can be updated. Your health care provider or local public health department can help you find your personal vaccination record or give you one if you don't already have one.

You can find out if you've had the recommended vaccines by comparing your personal vaccination record to the vaccination schedule of your province or territory of residence or by talking with a health care provider or your local public health department.

Vaccination schedules are available at Canada.ca/immunization-schedule.

What if you miss a *vaccine*?

If you haven't received all recommended vaccines, you can still catch up. It's important to get back on schedule.

Book an appointment to speak to your health care provider or contact your local public health department as soon as possible. They can help you figure out:

- > which vaccines you've already had
- > which ones you still need
- > when and where to get them





What to expect at your *vaccination* appointment

Before the appointment

- › Plan ahead to make the vaccination experience a more positive one.
 - › Consider bringing something to keep your mind off the vaccination, such as an electronic device, music or video.
 - › Wear a short sleeved or a loose-fitting top.
 - › Don't skip a meal before going to the appointment.
- › If you have fears or anxiety about vaccination, reach out to your health care provider before the appointment to talk about options that might help you.
- › Bring your personal vaccination record with you to your appointment. If you don't have one, ask for one at your appointment.

During your appointment

Your health care provider may ask you a few health questions before you get vaccinated. This is a great time to ask any questions you have about vaccines.

If you tend to faint during medical procedures or have had a serious reaction after a previous vaccination, tell the person giving you the vaccine. If you have a fear of needles or any other concerns, discuss them with the health care provider.

For a more comfortable vaccination experience, try the following strategies:

- › sit upright, or lie down if you prefer
- › try to keep your arm as relaxed as possible
- › try relaxation techniques such as deep belly breathing
 - › take deep breaths into your belly; breathe in through your nose and out through your mouth
- › distract yourself with an electronic device, music or video
- › if you feel dizzy or faint, tell the health care provider
 - › they will help you lie down on your back and bend your knees

Did you know?

You can use the CARD system (Comfort, Ask, Relax, Distract) to find more strategies to help improve the vaccination experience.

To learn more about the CARD system visit immunize.ca/card-adults.

Before leaving the clinic

Remind your health care provider to record the vaccination in your personal vaccination record. If you don't have one, ask for one now.

Make an appointment for your next vaccination if that is needed.

You'll be asked to wait for at least 15 minutes after the vaccination to make sure you don't have an allergic reaction or feel faint.

Serious allergic reactions to vaccines are very rare. Signs of a serious allergic reaction may include:

- > breathing problems (wheezing)
- > swelling of the face, tongue or throat
- > red rash on the skin (hives)

If you think you are experiencing a serious allergic reaction, alert a staff member at the clinic right away. They have medication on hand to manage allergic reactions.

After the *vaccination*

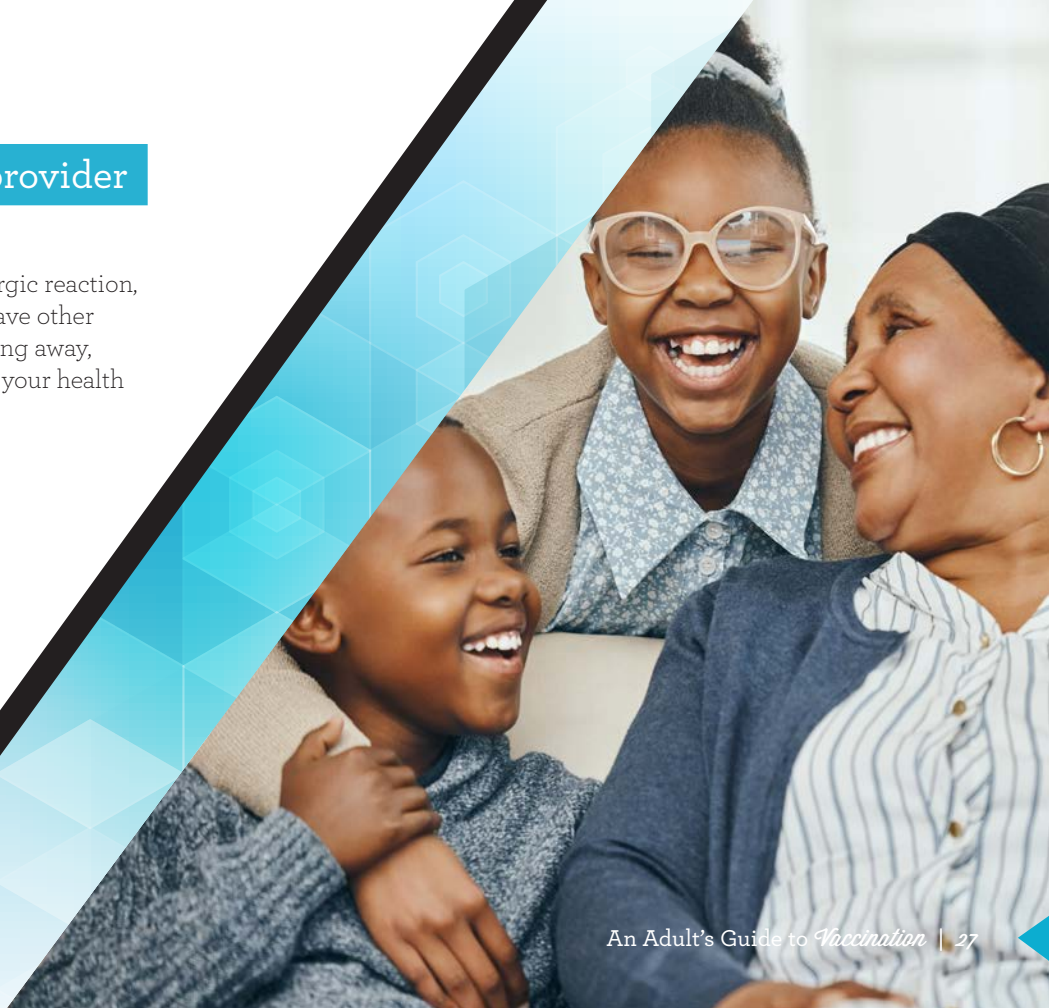
Minor side effects can occur after vaccination, including:

- > pain, swelling and redness at the injection site
- > mild fever
- > tiredness
- > headaches

These reactions are normal and usually go away within a few days. You can take medication if needed for pain or fever. Check with your health care provider if you need advice about which medication to use.

When to call a health care provider after *vaccination*

If you have symptoms that could be an allergic reaction, seek immediate medical attention. If you have other symptoms that are getting worse or not going away, or you're worried about something, contact your health care provider or seek medical attention.





Did you know?

Misinformation is false or misleading information that is presented as fact. Disinformation is misinformation that is deliberately created and spread to deceive or mislead people.

Misinformation and disinformation about vaccines are common. Be sure to get your information about vaccines only from trusted and reputable sources.



Where to find more information

Your health care provider or local public health department can provide you with more information on vaccines.

Here are some websites you can trust for vaccine information:

Government of Canada
Canada.ca/vaccines

Immunize Canada
immunize.ca

The Society of Obstetricians and Gynaecologists of Canada
sogc.org

Are you a parent?

There are other free resources on vaccines, including other vaccine guides:

A Parent's Guide to Vaccination:
Canada.ca/vaccination-guide-parents

A Teen's Guide to Vaccination:
Canada.ca/vaccination-guide-teen



Canada.ca/vaccines

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