

Psst!

Plan to Stay in Shape Today



ADULT **VACCINATION**

When, why, and how



ADULT VACCINATION

**TODAY, VACCINATION IS A PART OF OUR LIVES,
BUT IT HASN'T ALWAYS BEEN!**

We need to go back several hundred years, to the discovery of vaccination by Dr. Edward Jenner, followed by the development of the very first vaccine by his more famous successor, Dr. Louis Pasteur. At that time, thousands of people were dying every year from infections such as smallpox, a disease that has now completely disappeared, thanks largely to vaccines.

Fast forward to today, when advances in science and extensive research have given us an array of vaccines that protect against **more than twenty infectious diseases**.

Although we get most of our vaccines as young children, it's important to continue vaccination throughout our lives, even as adults!

But how do we know if we need a vaccine?

That's what you'll find out in this guide, designed to answer your questions about vaccination for adults.

According to estimates by the World Health Organization (WHO), vaccines **save two to three million lives** every year!

TABLE OF CONTENTS

Our immune system—the basics	4
Why get a shot?	6
Myth or reality?	8
Specific situations	10
Vaccination for all!	12
> Pertussis (whooping cough)	18
> Diphtheria	20
> Flu (influenza)	22
> Hepatitis B	25
> Herpes zoster (shingles)	28
> Mumps	30
> Pneumococcus (pneumonia)	32
> Poliomyelitis (polio)	34
> Measles	36
> Rubella	38
> Tetanus	40
> Chickenpox	42
> Human papilloma virus (HPV)	44



OUR IMMUNE SYSTEM — THE BASICS

Our bodies have their own defence mechanism, known as the **immune system**. Its role is to protect the human body against invaders such as bacteria and viruses that cause infectious diseases. To do this effectively, the immune system produces and trains its own small army: **antibodies**. These soldiers can be produced in two ways: when we contract the disease or when we receive the vaccine. If we contract the disease once, antibodies are ready to attack when it comes back!

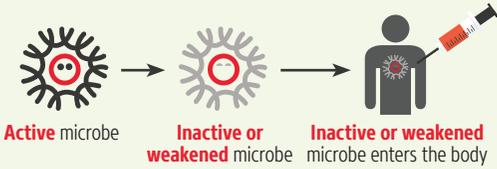
Vaccination is the safest way to produce an army of antibodies. It involves injecting into the human body, an **inactive or weakened** version of the microbe of the the disease, so the soldiers can get ready to defend us without us having to contract the disease and suffer the effects, which can be very serious.

Antibodies can stay in our system for a very long time and remember previous attacks. This phenomenon, called **“immunologic memory,”** helps the soldiers identify the invader more quickly and stop it before any damage is done.

Sometimes the soldiers may need a reminder before they can provide full protection. This is why some vaccines must be repeated after a certain period of time. For example, the tetanus vaccine must be given again after ten years.

The vaccination principle

1



The **vaccine** introduces an **inactive or weakened form of the microbe** into the body.

2



The body **produces its defence (antibodies)**.

3



When the real microbe enters the body, **the defenders recognize and eliminate it**. The disease does not develop.

Did you know?

Fever is a natural defence mechanism used by our immune system. When we get an infection, our body temperature goes up, creating an unfavourable environment for foreign attackers while alerting our antibodies to come to the rescue!





WHY GET A SHOT?

Vaccine-preventable diseases

To date, vaccines have been developed to combat more than **25 diseases**. From smallpox to hepatitis B to chickenpox, these diseases can be prevented with a simple injection. Although vaccines don't provide complete 100% protection, they are the most **effective** and **safest** way to prevent an infectious disease.

Did you know?

Smallpox officially became the first disease to be completely eradicated worldwide in 1989.

To vaccinate or not to vaccinate? That is the question!

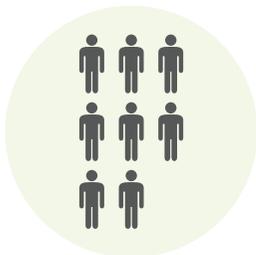
While the decision to get a vaccine is a personal choice, the benefits extend to society as a whole. In addition to offering individual protection, vaccines also protect our parents, children, friends, coworkers, and everyone else who might be too young or too sick to get a vaccine themselves, or for whom vaccines have not been effective in the past. When the vast majority of individuals within a community have been vaccinated against a certain disease, the risks of an epidemic or outbreak are much, much lower. This is the very foundation of **herd immunity**.



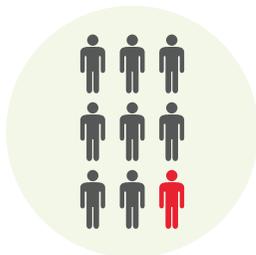
Vaccination mechanisms at the community level

1. No one is vaccinated

Group of people



A new infected person joins the group



Result:



2. Some people are vaccinated

If some people are vaccinated



What will happen?



The vaccinated people are protected

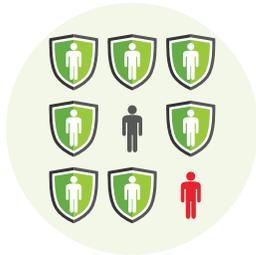


3. Enough people are vaccinated

If enough people are vaccinated



What will happen?



There won't be an epidemic



Conclusion: When we're vaccinated, we protect others too!



VACCINATION— **MYTH OR REALITY?**

MYTH: Some diseases no longer exist or have almost disappeared, so we don't need vaccines for these diseases anymore.

REALITY. The reason we don't hear about these diseases anymore is because of vaccination. But microbes don't stop at the border. Some diseases are still present in certain countries, notably polio in certain Asian and African countries. Vaccination is still essential to prevent a reappearance in people who have not been vaccinated or have not completed the full course of shots.

MYTH: I've never been sick so I don't need to get a shot.

REALITY. It's important to understand that vaccine-preventable diseases can show up any time, because the bacteria or viruses that cause them haven't been completely eradicated yet. So you are still at risk of contracting one of these diseases any time.

MYTH: Some vaccines can lead to severe illness.

REALITY. Because vaccination safety standards are so strict, vaccines are some of the most reliable tools developed by modern medicine. To date, scientific studies from all over the world have shown that serious risks linked to vaccines are much less common than risks linked to the diseases they protect against.

MYTH: Shots can cause the disease they protect against.

REALITY. Although our immune systems are stimulated when we're vaccinated, the shot can't cause the disease. Most vaccines contain a small amount of an **inactive or weakened** version of the bacterium or virus, or even a portion of these microbes that have been treated so they can't transmit diseases.

MYTH: Multiple vaccines put too much strain on our immune system.

REALITY. Our immune system can handle numerous attacks at the same time. Every day, our body is exposed to large numbers of microbes. Scientists estimate that our immune system can recognize and react to several hundred thousand microbes at once. Shots don't make it weaker or lower its capabilities in any way.

Careful!

Be wary of any information you see about vaccination on communication channels—social networks, websites, discussion forums, magazines, TV shows, and more. Always check that the source is credible and that the information is backed up by references or reputable scientific studies.





SPECIFIC SITUATIONS

Pregnancy and breastfeeding

Because of the theoretical risk of passing the disease to the foetus, **live attenuated vaccines** (containing live but weakened parts of the virus) such as vaccines against measles, rubella, mumps, chickenpox, and yellow fever are not recommended during pregnancy.

If you are pregnant or breastfeeding, ask your healthcare professional which vaccines are not recommended, as well as when you can get them, if necessary.

Egg allergies

Some vaccines contain miniscule quantities of egg proteins, studies have shown that people who are allergic to eggs can receive most vaccines without special precautions. Contact your healthcare professional for more information.



What about side effects?

Most vaccines have very few side effects, and even when reactions do occur, they are often mild and short lived (less than two days).

LOCAL REACTIONS (at the injection site)

- Pain
- Swelling
- Redness
- Itching



The most common

GENERALIZED REACTIONS

- Fever
- Nausea
- Vomiting
- Allergic reaction
(hives, anaphylactic shock)



Fairly rare

As a precaution, your healthcare professional will ask you stay for **15 minutes** after you get your shot.

Remember

If your side effects last more than two days, it is strongly recommended to consult your healthcare professional right away.



VACCINATION FOR ALL!

When we think about vaccination, most of the time we think about those given to babies and children.

But although we get most of our shots when we're very young, it's possible to get a vaccine-preventable disease at any age. So immunization shouldn't end with our last vaccine at primary school! Even if you had all the recommended shots when you were a child, some vaccines need a booster to maintain their effectiveness while others can only be given to adults.

Adults are offered the vaccines they need depending on the risks that may be associated with their job, lifestyle, general health, or age. The recommendations won't be the same for a healthcare worker, someone who travels a lot, and someone with chronic health problems.

Did you know?

It's never too late to start getting your shots!

Provincial vaccination programs

In Canada, vaccination programs are managed by the public health bodies that draw them up. Each province has its own subsidized vaccination program. For this reason, the recommendations and vaccines offered in each program can vary slightly from one province to the next.

For example, in Quebec, the local program is called Quebec Immunization Program. Vaccines are given to children and adults according to a schedule specifying at what age they should be administered and in how many doses, if applicable.

The vaccines on the schedule are recommended for everyone and given free of charge. The vaccination schedule is reviewed each year and is based on the principle that vaccines must be given at the age when the risk of catching the disease is greatest, when it will be most effective, and when it will have the least side effects. In addition, the number of doses and the timing of and need for a booster are assessed to ensure long-term protection.





Regular vaccination schedule

Vaccines protecting against:	At 2 months	At 4 months	At 6 months	At 12 months
Diphtheria-tetanus-whooping cough-hepatitis B-polio-Hib	✓	✓	✓ (without hepatitis B)	
Pneumococcus	✓	✓		✓
Rotavirus	✓	✓		
Flu (fall/winter)			✓*	
Meningococcus C				✓
Measles-mumps-rubella				✓
Chicken pox				
Diphtheria-tetanus-whooping cough-polio**				
Hepatitis B				
Human papillomavirus				

* At the age of 6 months or as soon as the vaccine is available (fall/winter), then each year until the age of 2.

** A dose of Tdap vaccine is also indicated for all adults.



At 18 months	Between 4 and 6 years old	Elementary 4	Secondary 3	After 60
✓				
				✓ (65 and over)
				✓
			✓	
✓				
✓	✓ (since April 1 st 2016)			
	✓		✓ (without polio)	
		✓ (the vaccine used protects also against hepatitis A)		
		✓ (addition of boys from September 1 st 2016)		

Source: <http://publications.msss.gouv.qc.ca/msss/document-000324/>
May 31st 2016 version.

For more information: www.sante.gouv.qc.ca/vaccination



Which vaccines do I need?

On the following pages you'll find a description of each disease for which **an adult** vaccination is recommended.

- Pertussis (whooping cough)
- Diphtheria
- Flu (influenza)
- Hepatitis B
- Herpes zoster (shingles)
- Mumps
- Pneumococcus (pneumonia)
- Poliomyelitis (polio)
- Measles
- Rubella
- Tetanus
- Chickenpox
- Human papilloma virus (HPV)

Please note:

The following recommendations are from Quebec Immunization Program. As the protocol is updated regularly, it's current version may differ from the information presented in the following pages. Also, the following content is provided for information purposes only and should never replace the advice of a healthcare professional.



RECOMMENDED VACCINES FOR ADULTS



PERTUSSIS

(WHOOPIING COUGH)

What is it?

Pertussis, most commonly called whooping cough, is a highly contagious lung and respiratory infection caused by a bacterium called *Bordella pertussis*.

Whooping cough is more serious in babies under the age of one and can lead to complications such as pneumonia, convulsions, and in rare cases, brain damage and even death.

Transmission

The whooping cough bacterium can be transmitted through contact with secretion from the nose or throat of an infected person (coughing or sneezing). The bacterium can also survive for two to five days on inert objects like clothes, drinking glasses, or paper.

Incubation period

In general the incubation period for whooping cough is **seven to ten days** but can be **as long as 21 days**.

Symptoms

In general whooping cough starts as a runny nose and cough. After 7 to 14 days the cough intensifies and becomes more frequent.

Symptoms may be less severe in older children and adults: cold symptoms with a constant cough. In some cases, whooping cough can develop into pneumonia.



The main symptoms of whooping cough are:

- Frequent and prolonged coughing fits
- Shortness of breath or vomiting after coughing
- Loss of appetite
- Difficulty breathing

Duration of the disease

Whooping cough lasts from **six to ten weeks** but can last longer in teenagers.

Contagious period

A person with whooping cough who has not taken antibiotics is contagious for **up to three weeks after** coughing starts.

A person with whooping cough who has taken antibiotics is contagious for **up to five days after** starting treatment.

A person who has stopped coughing can also be contagious and spread the disease.

Vaccination

Adults: A single dose as an adult is recommended (usually given in combination with diphtheria and tetanus). The booster is **free of charge**.



DIPHTHERIA

What is it?

Diphtheria is a contagious disease caused by toxins from a bacterium called *Corynebacterium diphtheriae* that affects the mucous membranes, especially in the respiratory tract, as well as the skin.

Transmission

The toxins from the bacterium can be spread through:

- Direct contact with secretions from the nose or throat or with skin lesions in an infected person or carrier (coughing or sneezing)
- Contact with objects that were recently exposed to the bacteria, e.g., utensils, drinking glasses, or shared toys, and then touching the eyes, nose, or mouth

Incubation period

The incubation period for diphtheria is **about two to five days** but **can vary between one and ten days**.

Symptoms

Diphtheria patients are often asymptomatic, but early symptoms can include:

Respiratory diphtheria: Severe sore throat, high fever and chills, difficulty swallowing, weakness, discomfort, and headache.

Cutaneous diphtheria: Rashes or painful ulcers.

Left untreated, diphtheria can lead to complications such as respiratory disorders and problems associated with the heart and central nervous system.

Duration of the disease

With proper treatment at an early stage, most diphtheria patients survive complications, but recovery is often slow.

Long-term effects can include paralysis, notably of the face, as well as heart rate problems.

Contagious period

A person with untreated diphtheria is usually contagious **for two weeks**. In rare cases, the contagious period can last up to four weeks.

An infected person can be contagious even without symptoms.

Vaccination

Adults: A booster is recommended about every ten years (usually given in combination with tetanus). The booster is **free of charge**.





FLU (INFLUENZA)

What is it?

Commonly called the flu, influenza is an infectious respiratory tract disease caused by the influenza virus. It can lead to severe complications in anyone whose health is compromised (e.g., the elderly, pregnant women, young children, those with a chronic illness).

Transmission

As the flu virus is highly contagious, it can quickly spread from one person to the next through:

- Airborne droplets from the nose or mouth of an infected person when they cough or sneeze
- Direct contact with secretions from the nose or throat of an infected person (through kissing, for example)
- Touching your nose, mouth, or eyes after shaking hands with an infected person or touching contaminated objects

The flu virus can survive for up to two days on contaminated objects and up to five minutes on the skin.

Incubation period

The incubation period for the flu is **about two days**.

Symptoms

Many people are a little hazy on the difference between a cold and the flu. Although the symptoms are similar, colds are more common and frequent than the flu.

The table below explains the difference.



The flu or a cold?

Symptoms*	Flu	Cold
Fever	<ul style="list-style-type: none">- Common- Sudden onset- Temperature between 38°C and 40°C (100.4°F to 104°F)	Rare
Cough	Common with sudden onset	Common, but light to moderate with expectoration (phlegm)
Headache	Common and often severe	Rare
Aches and pains	Common and often severe	Rare
Fatigue	<ul style="list-style-type: none">- Common and severe- Duration: A few days or more	Common, but mild
Nausea and vomiting	<ul style="list-style-type: none">- Common, particularly among children- Often accompanied by stomach pain and diarrhea in children	Common, but mild
Stuffy and runny nose	Rare	Common
Sneezing	Rare	Common
Sore throat	Common	Common

* Symptoms may vary depending on age and general health.
For more information: <http://sante.gouv.qc.ca/en/conseils-et-prevention/differences-entre-la-grippe-et-le-rhume/>
September 27, 2016 version

Duration of the disease

Most healthy people recover from the flu without treatment after **five to seven days** of rest and eating as their appetite dictates. Fatigue and coughing can last **up to two weeks** or more.



Contagious period

An infected person may be contagious **24 hours before** symptoms appear and for up to **seven days** thereafter. Young children and the elderly may be contagious for **up to 14 days** after the onset of symptoms.

Vaccination

The vaccine is recommended annually, in fall, **for everyone** but particularly the following groups, who can be vaccinated at **no cost**:

- Infants age 6 to 23 months
- Children and adolescents (under 18) being treated with acetylsalicylic acid
- People age 60 or more
- Pregnant women (with certain chronic illnesses and/or in their second or third trimester)
- Anyone age 6 months or more with certain chronic illnesses (e.g., diabetes, asthma, cognitive disorders, etc.¹)
- Anyone living in a nursing home or long-term care facility
- Healthcare workers
- Those in close contact with anyone listed above
- Families and caregivers of babies younger than 6 months

Did you know?

Strains of the flu virus are constantly changing. For this reason, a new vaccine is produced each year. This is why it's important to get the shot annually, in the fall.

¹ The full list of chronic illnesses eligible for free vaccines is available here: <http://sante.gouv.qc.ca/en/programmes-et-mesures-daide/programme-de-vaccination-contre-la-grippe/admissibilite/#maladies-chroniques>

HEPATITIS B

What is it?

Hepatitis B is caused by a virus that infects the liver. The word “hepatitis” means “inflammation of the liver.” It is one of the most common vaccine-preventable diseases.

Transmission

Hepatitis B is highly contagious. It can spread from person to person when mucous membranes (e.g., in the mouth or genitals) come into contact with infected bodily fluids, in particular during sexual intercourse or when sharing needles used for drugs, tattoos, piercing, or acupuncture, personal items (e.g., a toothbrush, razor, nail clipper), or unsterilized medical or dental instruments. Pregnant women who carry the disease can also pass the infection to their baby when giving birth.

The hepatitis B virus can survive outside the body for **at least seven days**.

Incubation period

The incubation period for hepatitis B **averages 75 days**, but **can vary between 30 and 180 days**.

Symptoms

Hepatitis B symptoms can take between **two and six months** to appear. Some people will have very few or no symptoms.





The most common symptoms include:

- Fatigue
- Loss of appetite
- Joint pain
- Stomach pain
- Nausea
- Vomiting
- Fever
- Dark urine

Some people may also experience jaundice (yellowing of the skin and eyes).

Duration of the disease

Acute hepatitis B usually lasts **three to six months**.

Although most people recover from hepatitis B on their own, the virus may remain in the body, making the person a chronic carrier.

Chronic carriers are at risk of developing cirrhosis or liver cancer.

Contagious period

People who are infected must be tested to see if they are still contagious (carriers). Until a healthcare professional can confirm that the virus has been eliminated, these people are contagious and can still spread the virus to others.

Vaccination

Adults: Immunization against hepatitis B is recommended for **those at risk** of contracting the disease, e.g.:

- Healthcare students and workers likely to be exposed through their jobs
- Anyone whose lifestyle exposes them to a risk of infection (using injectable drugs, having unprotected sex or multiple sexual partners, and so on)
- Anyone with a chronic liver disease (e.g., hepatitis C carrier, cirrhosis)
- Frequent travellers

Note: Not everyone qualifies for a free vaccine.

Did you know?

Hepatitis B affects many travellers each year. This risk of catching the disease during a trip can vary by destination, length of stay, and participation in certain activities while away. Talk to your healthcare professional before you leave for more information about your destination and to find out if you are protected against hepatitis B.





HERPES ZOSTER

(SHINGLES)

What is it?

Shingles is the reactivation of the chickenpox virus, varicella-zoster. Initial infection with the virus causes chickenpox. The virus then remains dormant in the sensory nerve nodes and **can be** reactivated later in certain people with a weakened immune system due to age or illness, resulting in shingles.

Shingles is more common in people over the age of 60 because the immune system gets weaker with age, allowing the virus to multiply more quickly.

Transmission

The shingles virus can be spread by direct contact with the skin lesions of a shingles patient.

Incubation period

The incubation period for shingles is **about 10 to 21 days** (the average is 14 days).

Symptoms

The main symptom is a painful rash in the form of blisters that usually appear on a part of one side of the body (left or right). The rash often appears as a band (called “belt of fire” in medical lingo).

Shingles patients may experience pain, tingling, or itching before the blisters appear.

Complications from shingles can be severe: Eye infection that can cause loss of vision, paralysis, secondary bacterial infections, postherpetic neuralgia (invasive pain that continues even after the rash is gone).

Duration of the disease

Shingles typically lasts from a **few weeks to a month**. But pain can continue long after the rash disappears.

Contagious period

The virus is transmissible **one to two days before** the rash appears and about **three to four days thereafter**, until all the blisters have scabbed over. Although it's the same virus, shingles is less contagious than chickenpox.

Vaccination

Adults: The vaccine is recommended for adults age 60 and over with no contraindications. It can also be given to adults age 50 and over.

Note: This vaccine is not free of charge.

Did you know?

You can get shingles more than once in your lifetime. Know, however, that you can still get the vaccine even if you have already had shingles. Specialists recommend waiting at least a year between the last episode and getting the shot.





MUMPS



What is it?

Mumps is a highly contagious infection caused by a virus that can live in the nose, mouth, eyes, and on the skin.

Transmission

The virus can be transmitted through:

- Direct contact (such as kissing an infected person)
- The air (when an infected person talks, coughs, or sneezes)
- Touching anything that has been exposed to contaminated mucus or saliva droplets and then rubbing your eyes, mouth, or nose

Incubation period

The incubation period is usually **between 16 and 18 days**.

Symptoms

The main symptom is painful swelling of the cheeks and neck (on one or both sides).

Other symptoms may include:

- Fever
- Headaches
- Pain in the ear
- Difficulty talking, chewing, or swallowing
- Muscle pain
- Dry mouth
- Fatigue
- Loss of appetite

Duration of the disease

Typically **10 to 12 days**.

Contagious period

An infected person can be contagious **up to six days before** symptoms appear and **up to six days after** they disappear.

Vaccination

Adults: A single dose of the mumps vaccine (combined with measles and rubella) is recommended for adults born after 1970 who have never had the shot or been in contact with the disease. These people qualify for the **free** vaccine.





PNEUMOCOCCUS (PNEUMONIA)

What is it?

Pneumococcus is a disease caused by pneumococcal bacteria and that causes infections in the ears, sinuses, or lungs.

There are several types of pneumococci. About 40 cause infections in humans, known as “pneumococcal infections.”

Transmission

Pneumococcal bacteria can be spread through:

- Contact with infected mucus or saliva (from coughing or sneezing)
- Contact with objects that have been exposed to infected mucus or saliva (such as utensils, drinking glasses, shared toys, and so on) and then touching the eyes, nose, or mouth

Many people carry the bacterium (in the nose or throat) without getting sick.

Incubation period

From **one to three days up to a few weeks.**

Symptoms

People who carry the bacterium in the nose or throat often have no symptoms.

In some cases, the bacterium can cause infections such as:

- Otitis (ear infection): Pain in one or both ears, fever
- Sinusitis (sinus infection): Stuffy nose and headaches
- Pneumonia (lung infection): Cough with thick mucus, respiratory problems

Duration of the disease

The duration of a pneumococcal infection **can vary** depending on the type and when treatment starts.

Contagious period

The contagious period lasts until the bacterium disappears from nose or mouth secretions and lasts **up to 24 hours after** treatment with antibiotics starts.

Vaccination

Adults: The vaccine is recommended and **free of charge** for those with a high risk of pneumococcal infections between the ages of 19 and 64 as well as everyone age 65 and over.

Did you know?

The risk of contracting a pneumococcal infection increases if you get the flu. That's why it's important to get your flu shot every year, especially if you are in a high-risk group.





POLIOMYELITIS (POLIO)

What is it?

Poliomyelitis, more commonly known as polio, is a highly contagious infectious disease caused by poliovirus. It can lead to severe complications such as irreversible paralysis.

Transmission

Poliovirus spreads from person to person via the mouth (contact with food or water contaminated with fecal matter).

Incubation period

The incubation period for polio is generally **7 to 14 days** but can vary **between 3 and 35 days**.

Symptoms

Most infected people have no symptoms. When symptoms occur, they can include:

- Fever
- Nausea
- Muscle pain
- Fatigue
- Loss of appetite
- Stiff neck or back

Duration of the disease

The initial infection might last for just a few days. But complications such as paralysis can last a lifetime.

In addition, those infected with poliovirus are at risk of **post-polio syndrome**. This nervous system disorder can appear 15 to 40 years after the initial infection. It gradually weakens the muscles and causes extreme fatigue with muscle and joint pain.

Contagious period

Symptoms may not appear for **between 4 and 21 days**. An infected person can transmit the virus to someone else **even before** symptoms appear.

Vaccination

Adults: The polio vaccine is recommended and **free of charge** if you are visiting a country where the disease is endemic.

Did you know?

Previously called “infantile paralysis” or “thecrippler,” polio has been eradicated in Canada for over 20 years thanks to immunization.





MEASLES



What is it?

Measles is a highly contagious infection caused by a virus that can live in the nose, mouth, eyes, and on the skin.

Children old enough to go to daycare or school are most at risk of developing the disease. Unvaccinated adults can also catch it.

Transmission

The measles virus can be transmitted through:

- Direct contact (such as kissing an infected person)
- The air (when an infected person talks, coughs, or sneezes)
- Touching anything that has been exposed to contaminated mucus or saliva droplets and then rubbing your eyes, mouth, or nose

Incubation period

About **7 to 14 days** before the onset of symptoms.

Symptoms

Measles symptoms can include:

- Fever
- Cough
- Runny nose
- Rash (in the form of red bumps) on the face and body
- Red eyes
- Drowsiness
- Bad mood (irritability)

Complications include bronchitis, pneumonia, otitis, and febrile seizures. They are all rare but must be treated promptly.

Duration of the disease

When there are no complications, measles typically lasts **one to two weeks**. Rashes disappear in three or four days.

Contagious period

Those infected could be contagious from **four days before** the rash appears to **four days afterwards**.

Vaccination

Adults:

The following groups qualify for the **free** vaccine (combined with rubella and mumps):

- Adults born between 1970 and 1979 who are healthcare workers or interns, frequent travellers, military recruits, or workers in a daycare, school, or similar setting **who have never had the measles vaccine** should get one or two doses depending on which category they belong to.
- Adults born after 1980 **who have never had the measles vaccine** should get two doses.





RUBELLA

What is it?

Rubella is a highly contagious disease caused by the rubella virus.

It is usually more prevalent in children and is generally harmless. However, rubella can cause a miscarriage or birth defects if a woman is infected early in her pregnancy.

Transmission

Rubella can be transmitted through:

- Direct contact (such as kissing an infected person)
- The air (when an infected person talks, coughs, or sneezes)

Incubation period

From **two to three weeks**.

Symptoms

Some infected people have no symptoms.

Symptoms in adults:

- Swollen glands behind the ears and neck
- Cold-like symptoms (before a rash appears)
- Rash (small, slightly raised red or pink spots)
- Joint pain

Duration of the disease

About **three days**.

Contagious period

Infected people may be contagious from about **one week before** the rash appears until **one week thereafter**.

Vaccination

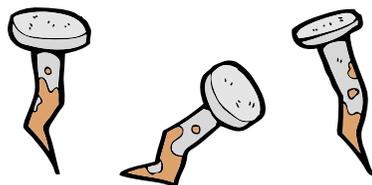
Adults:

The vaccine (combined with mumps and measles) is recommended and **free of charge** for those who have never had the shot, especially women of reproductive age and healthcare workers.





TETANUS



What is it?

Tetanus is an infection spread by the bacterium *Clostridium tetani*, found in mud, soil, dust, and human and animal excrement. It can also be present in animal saliva.

Transmission

The toxin can enter the body through an injury, small wound, or puncture wound from a dirty object (such as a rusty nail).

Incubation period

Typically, the incubation period for tetanus is between **3 and 21 days**.

Symptoms

The toxin attacks the nerves and causes stiffness, cramps, and muscle pain. It may also lead to difficulty swallowing and breathing.

The other symptoms are:

- Headaches
- Intense trembling or shaking of the body
- Fever
- Sweating
- High blood pressure
- Fast heart rate

Duration of the disease

The duration depends on the type of wound.

Contagious period

Tetanus cannot be spread from person to person.

Vaccination

Adults: A booster is recommended every ten years. This booster is **free of charge**.

Did you know?

Manual workers, gardeners, and hunters should always keep their tetanus immunization up-to-date, as they are more at risk.





CHICKENPOX

What is it?

Chickenpox is a disease caused by the varicella-zoster virus.

Transmission

As with shingles, the virus can be spread through direct contact with fluids from skin lesions.

Incubation period

The incubation period is **10 to 21 days**, with an average of 14 days.

Symptoms

Chickenpox symptoms include:

- Fever
- Headaches
- Runny nose
- General discomfort
- Blisters all over the body (including the scalp, mucous membranes in the mouth, and upper respiratory tract)

Duration of the disease

About **seven to ten days**. The blisters typically disappear after **two weeks**.

Contagious period

Chickenpox is transmissible **one to two days before** the blisters appear and about **three to four days thereafter**, until all the blisters have scabbed over.



Vaccination

Adults: The vaccine is **free of charge** and recommended for those who have never had chickenpox and never been vaccinated before. Anyone who has had chickenpox after the age of one or shingles at any age is considered to be protected against chickenpox.

Remember

After the age of 50, it's best to get the shingles vaccine.





HUMAN PAPILOMA VIRUS (HPV)

What is it?

HPV is the most common sexually transmitted infection. It is caused by certain types of human papilloma virus.

There are over 100 types of human papilloma virus and only some, when transmitted sexually, can cause warts or even cancer (e.g., of the cervix, penis, or anus). The viruses can also infect other parts of the body such as the hands and face.

Transmission

People with HPV can transmit the virus even if they have no symptoms.

The virus can be spread sexually through:

- Vaginal sex (penetration of the penis in the vagina)
- Anal sex (penetration of the penis in the anus)
- Oral sex (contact between the mouth and the penis, vulva, vagina, or anus)
- Contact between the partners' genitals
- Shared sex toys

Sexual transmission can occur without penetration, orgasm, or ejaculation.

In rare cases, a mother can pass the infection to her baby when giving birth.

Incubation period

The incubation period can vary from one month to several years but typically lasts between **three weeks and eight months**.

Symptoms

Most HPV infections don't produce any symptoms.

- Certain types of high-risk HPV can cause cervical and anogenital cancer and certain cancers of the brain and neck.
- Other low-risk types of HPV can cause genital warts (condylomas).

Duration of the disease

Half of all condylomas disappear **within four months** and most will be gone **within two years**, even if untreated

Contagious period

Unknown after condylomas disappear (with or without treatment).





Vaccination

Ideally, the HPV vaccine should be given before a person becomes sexually active. However it can be administered even if the patient already has an HPV infection or lesion (e.g., condylomas or an abnormal screening test).

Adults:

The vaccine is recommended and offered **free of charge** for:

- Women age 18 to 26 with a weakened immune system due to illness (e.g., Crohn's disease) or treatment (e.g., chemotherapy) or already has an HPV infection
- Men age 9 to 26 with a weakened immune system due to illness (e.g., Crohn's disease) or treatment (e.g., chemotherapy) or already has an HPV infection
- Men age 26 and under who are sexually active with other men

The vaccine is recommended but not offered free of charge for:

- Women age 18 to 45
- Men age 9 to 26

Remember to ask your healthcare professional for a immunization record! This valuable tool will help you keep track of which vaccines you've had and whether you're up-to-date.



What if I take a trip?

Vaccinations against **hepatitis A, Japanese encephalitis, yellow fever, rabies, ETEC diarrhoea and cholera**, and **typhoid** can be given as a preventive measure before travelling.

There is no set immunization schedule recommended for all travellers, and recommendations may change regularly depending on outbreaks, newly discovered diseases, or the season.

For travellers, recommendations depend on vaccinations already received, the traveller's age and health, destination country, type of trip, and itinerary, as well as the time remaining before departure. You should talk to a travel health specialist before you leave to make sure your immunizations are up-to-date and get the latest information about health and safety at your destination.

Visit the Public Health Agency of Canada website to find a travel clinic near you. Some pharmacies also offer consultation and vaccination services for travellers. Ask your pharmacist for more information.

Did you know?

You should talk to your travel health specialist at least four to eight weeks before departure to allow for any intervals between doses and ensure the best possible protection while you are away.





Booster doses: It's never too late!

Some vaccines don't provide lifelong protection. The protection period varies from one vaccine to the next. Over time, the number of antibodies in our body can go down, leaving us vulnerable to infection.

We need booster doses to ensure continuous protection against disease.

Even if you think you've missed a vaccination, typically you won't need to start all over again. In most cases, you can simply pick up where you left off!



Conclusion

The discovery of the very first vaccine marked a revolution in healthcare, and since then, new vaccines have continued to be developed.

Although the topic of vaccination can be controversial these days, vaccines offer the most **effective long-term protection** against diseases for all ages.

And remember—getting vaccinated also protects other people.

Your healthcare professional will be happy to help you make an informed decision about vaccination.

Some pharmacies also offer vaccination services. Talk to your pharmacist today!





Sources and useful links:

For more information about vaccination in general

- Association of Allergists and Immunologists of Quebec:
http://www.allerg.qc.ca/Information_allergique/5_5_vaccins_en.html
- Immunize Canada:
<http://www.immunize.cpha.ca/en/default.aspx>
- Ministère de la Santé et des Services sociaux:
<http://sante.gouv.qc.ca/en/dossiers/vaccination/>
- Public Health Agency of Canada:
<http://healthycanadians.gc.ca/healthy-living-vie-saine/immunization-immunisation/index-eng.php>
- World Health Organization (WHO):
<http://www.who.int/topics/immunization/en/>

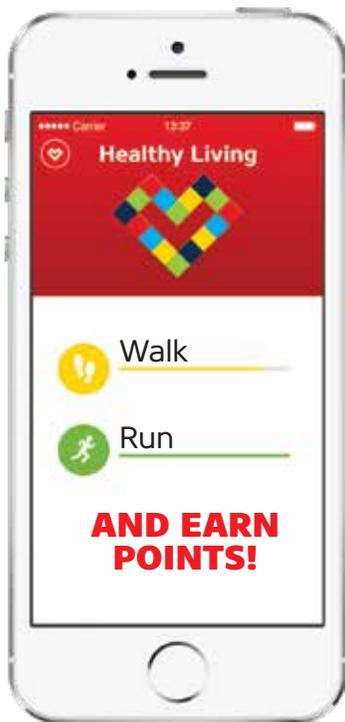
For more information about vaccination for travellers

- Centers for Disease Control and Prevention:
<http://www.cdc.gov/vaccines/index.html>
- Government of Canada:
https://travel.gc.ca/travelling/health-safety/vaccines?_ga=1.73406865.2056334960.1478709041
- Health Canada:
<http://www.hc-sc.gc.ca/hl-vs/travel-voyage/index-eng.php>

Consult the following to find out where to get vaccinated:

- The Info-santé hotline (dial 811)
- Your CLSC
- Your doctor
- 411 Vaccines at <https://vaccines411.ca/en/>

The free app that
REWARDS
YOUR HEALTHY LIFESTYLE



Download
My Familiplus



familiplus

familiprix.com/myfamiliplus

 **familiprix**

IN THIS **GUIDE**

Our immune system—the basics

Why get a shot?

Myth or reality?

Specific situations

Vaccination for all!

- Pertussis (whooping cough)
- Diphtheria
- Flu (influenza)
- Hepatitis B
- Herpes zoster (shingles)
- Mumps
- Pneumococcus (pneumonia)
- Poliomyelitis (polio)
- Measles
- Rubella
- Tetanus
- Chickenpox
- Human papilloma virus (HPV)

Only pharmacists are responsible for the professional activities of the pharmacy practice. They use various tools such as the Psst! (Plan to Stay in Shape Today) program.