

Vaccines in Pregnancy: What you need to know

Why should I get vaccinated if I am pregnant or planning a pregnancy?

Pregnancy causes certain changes to take place within your body that can affect your immune system, heart, and lungs. These changes can leave you **more susceptible** to catching some diseases, and to experiencing severe infection. If you catch certain communicable diseases while pregnant, such as rubella, the infection can be passed on to your baby, who **may be born with conditions that will affect them for life**. As well, there are other vaccine-preventable diseases, such as pertussis (whooping cough), that are **most severe in children too young to be immunized**.

Therefore, getting vaccinated with recommended vaccines both before and during pregnancy will help give you and your baby the **best protection possible** against harmful vaccine-preventable diseases, such as rubella, varicella (chickenpox), influenza (flu), and pertussis, to name a few.

I am planning a pregnancy. What vaccines should I get before pregnancy that I cannot receive while pregnant?

Before becoming pregnant, there are two recommended vaccines you should consider getting if you have **never received these vaccines in the past**. These vaccines are:

1. the varicella (chickenpox) vaccine
2. the measles, mumps, and rubella (MMR) vaccine



Vaccines in Pregnancy: What you need to know



Note: You cannot receive these vaccines during pregnancy as they are live vaccines and, as a result, pose a potential risk to your developing baby (please see the section **Live versus non-live vaccines** in this factsheet for more information).

The reason it is recommended that you receive the varicella and MMR vaccines **before** you become pregnant is that **if you catch varicella or rubella while pregnant**, it may cause your baby to be born with conditions that **will affect them for the rest of their life**. In fact, rubella is the **leading cause** of birth complications in the world among diseases that can be prevented through vaccination.

If you catch varicella while pregnant, your baby may be born with low birth weight, eye or limb abnormalities, skin scarring, or brain damage. Catching rubella while pregnant can lead to **congenital rubella syndrome (CRS)**, meaning your baby may be born with heart problems (i.e., congenital heart disease), eye problems (cataracts), deafness, intellectual disabilities, or diabetes, amongst others.

If you are planning a pregnancy, talk to your healthcare professional to see if you need to be immunized against varicella or rubella.

Live versus non-live vaccines

Live vaccines use a **weakened (attenuated)** version of a virus or bacteria. Non-live vaccines use a **killed (inactivated)** version of a virus or bacteria, or **parts/by-products** of viruses or bacteria.

Because non-live vaccines do not use a live virus or bacteria in the vaccine, it is **impossible** to become infected with said virus or bacteria if you receive one of these vaccines. As live vaccines use a weakened version of a virus or bacteria, they can be used **safely in people with healthy immune systems** without causing infection.

However, live vaccines are generally **not recommended** for people who have a severely weakened immune system – or for pregnant people. If you are pregnant, there is the possibility that even the weakened form of a virus or bacteria in a live vaccine could infect your unborn baby. **This is why non-live vaccines are recommended, and live vaccines are normally not recommended, during pregnancy.**

I am pregnant. What vaccines should I receive?

There are three vaccines recommended during **every pregnancy**. These vaccines are:

1. the influenza (flu) vaccine (see our factsheet on [influenza vaccines in pregnancy](#))
2. the pertussis (whooping cough) vaccine, given as the tetanus, diphtheria, and pertussis (Tdap) combination vaccine (see our infographic on the [pertussis vaccine in pregnancy](#)).
3. the COVID-19 vaccine

Getting these vaccines while pregnant allow you to pass on some **short-term protection** against these diseases to your baby (please see the section **Passing on immunity: How getting vaccinated while pregnant protects your baby** in this factsheet for more information).



Catching pertussis or influenza (flu) while pregnant can lead to giving birth prematurely, having your baby born with low birth weight, or having your baby delivered stillborn. However, if you get immunized against these diseases while pregnant and then catch either disease from someone during that same pregnancy, you are much less likely to experience these complications.

The COVID-19 vaccine is **particularly recommended** for pregnant people, as catching COVID-19 while pregnant can lead to hospitalization and may cause you to give birth prematurely. Catching COVID-19 while pregnant also increases the likelihood that your baby will be born with low birth weight and that they will need to be hospitalized. Getting immunized against COVID-19 while pregnant is the best way to protect you and your baby against the disease.

All three vaccines also have a **good safety record**, and there is **no evidence** that these vaccines harm the pregnant parent or baby.

Passing on immunity: How getting vaccinated while pregnant protects your baby



When you get vaccinated, your body creates protective proteins called **antibodies** that specifically protect against the disease you are being immunized against. When you get vaccinated while pregnant, you pass on some of these antibodies **to your baby** in the womb (*in utero*). Once your baby is born, these antibodies provide them with some **short-term protection** (a couple of months or so) against the disease you were immunized against while pregnant.

Are there any other vaccines that I should receive while pregnant?

If you are pregnant, you can typically receive **any of the non-live vaccines** approved for use in Canada (please see the section **Live versus non-live vaccines** in this factsheet for more information). Only the Tdap (tetanus, diphtheria, and pertussis), COVID-19, and influenza vaccines are recommended in every pregnancy. The list of non-live vaccines you can receive while pregnant include:

1. the hepatitis B vaccine,
2. the *Haemophilus influenzae* type b (Hib) vaccine,
3. the hepatitis A vaccine,
4. the meningococcal vaccine,
5. the pneumococcal vaccine, and
6. the non-live poliomyelitis (polio) vaccine.

Your healthcare professional may recommend that you receive **one or more** of these vaccines while you are pregnant, **depending on factors** such as your immunization history, travel plans, how likely it is that you will be exposed to one of the diseases these vaccines protect against, and if you have any chronic medical conditions, among others.



Talk to your healthcare professional to see if they recommend you receive any of these vaccines while you are pregnant.

What about the respiratory syncytial virus (RSV) vaccine? Can I get that vaccine if I am pregnant?

Yes! You can safely get the RSV vaccine if you are pregnant.

As of December 2023, a vaccine that protects against RSV was approved for use in Canada for people **32 to 36 weeks pregnant**. Getting immunized against RSV while pregnant gives your baby some **short-term** protection against severe RSV infection for up to **six months** after they have been born (please see the section *Passing on immunity: How getting vaccinated while pregnant protects your baby* in this factsheet for more information). Talk to your healthcare professional to see if you can get immunized against RSV while pregnant.

If I am planning to travel while pregnant, are there certain vaccines I should receive?

Depending on where you are travelling to, your healthcare professional may recommend you receive a vaccine to protect against one or more of the following diseases, especially if you are likely to become severely infected with one of them:

1. typhoid
2. cholera
3. enterotoxigenic *Escherichia coli* (travellers' diarrhea)

The non-live vaccines that protect against these diseases are considered safe to receive if you are pregnant, even though these vaccines have not specifically been studied in pregnant people (please see the section **Live versus non-live vaccines** in this factsheet for more information).



Vaccines in Pregnancy: What you need to know

The **yellow fever vaccine** is **not recommended** for pregnant people (it is a live vaccine). **However**, if you **absolutely must** travel to a place where yellow fever is very common/active and you will not be well protected against **mosquito bites**, your healthcare professional may recommend you receive the yellow fever vaccine.

It is also **highly recommended** that you visit a **travel health clinic** at least **six weeks before you plan to travel** outside of Canada if you are pregnant. Travel clinics can provide you with up-to-date information – such as which vaccines you may need depending on your travel destination – on how best to protect yourself and your developing baby from certain diseases found only in other countries that can be very serious if caught during pregnancy.

Can I get vaccinated if I am breastfeeding?

Yes, you can safely receive **any of the routinely recommended vaccines in Canada** if you are breastfeeding. There is **no evidence** that receiving any of these vaccines while you are breastfeeding will harm you or your baby.

However, the following vaccines are **not recommended** for people who are breastfeeding:

1. the yellow fever vaccine
2. the oral typhoid vaccine
3. the Bacille Calmette-Guérin vaccine
4. the Ebola vaccine
5. the live replicating smallpox vaccine



In **extenuating circumstances**, your healthcare professional may recommend you receive one or more of the vaccines listed above. However, as mentioned, they are typically not recommended if you are breastfeeding, as the live viruses/bacteria used in these vaccines could be transferred to your baby through your breastmilk. For some of the other listed vaccines, there is currently not enough data to determine if they can be given safely to people who are breastfeeding.

Vaccines in Pregnancy: What you need to know



Vaccines to consider if you are planning a pregnancy, pregnant, or breastfeeding

You are...	Highly recommended vaccines	Vaccines for consideration	Vaccines you should not receive
<p>Planning to become pregnant</p>	<ul style="list-style-type: none"> • measles, mumps, and rubella vaccine (MMR vaccine), specifically to protect against rubella • varicella (chickenpox) vaccine <p>Note: you need to receive these vaccines only if you have never received them in the past</p>	<ul style="list-style-type: none"> • any routine or recommended vaccines that you have never received or are not up to date on 	<ul style="list-style-type: none"> • n/a
<p>Pregnant</p>	<ul style="list-style-type: none"> • tetanus, diphtheria, and pertussis (Tdap) vaccine, specifically to protect against pertussis • influenza (flu) vaccine • COVID-19 vaccine 	<ul style="list-style-type: none"> • hepatitis B vaccine • <i>Haemophilus influenzae</i> type b (Hib) vaccine • hepatitis A vaccine • meningococcal vaccine • pneumococcal vaccine 	<ul style="list-style-type: none"> • any live vaccines, such as the measles, mumps, and rubella (MMR) vaccine, and the varicella (chickenpox) vaccine <p>(please see the section Live versus non-live vaccines in this factsheet for more information)</p>

Vaccines in Pregnancy: What you need to know

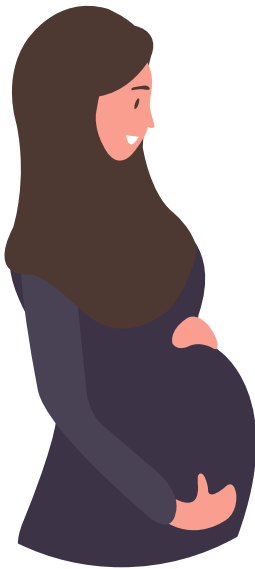


You are...	Highly recommended vaccines	Vaccines for consideration	Vaccines you should not receive
Pregnant	<p>Note: these vaccines should be received in every pregnancy, regardless of whether or not you have received these vaccines in the past</p>	<ul style="list-style-type: none"> • non-live poliomyelitis (polio) vaccine • non-live typhoid vaccine • cholera and enterotoxigenic Escherichia coli (travellers' diarrhea) vaccine 	
Breastfeeding	<ul style="list-style-type: none"> • n/a 	<p>You can safely receive any of the routinely recommended vaccines in Canada if you are breastfeeding</p>	<ul style="list-style-type: none"> • yellow fever vaccine • oral typhoid vaccine • Bacille Calmette-Guérin vaccine • Ebola vaccine • live replicating smallpox vaccine

References

Government of Canada. (2023.) Travel vaccinations.
<https://travel.gc.ca/travelling/health-safety/vaccines>

Vaccines in Pregnancy: What you need to know



Public Health Agency of Canada. (2022.) Canadian Immunization Guide. Basic immunology and vaccinology.

<https://www.canada.ca/en/public-health/services/publications/healthy-living/canadian-immunization-guide-part-1-key-immunization-information/page-14-basic-immunology-vaccinology.html>

Public Health Agency of Canada. (2023.) Canadian Immunization Guide. Immunization of immunocompromised persons.

<https://www.canada.ca/en/public-health/services/publications/healthy-living/canadian-immunization-guide-part-3-vaccination-specific-populations/page-8-immunization-immunocompromised-persons.html>

Public Health Agency of Canada. (2023.) Canadian Immunization Guide. Rubella vaccines.

<https://www.canada.ca/en/public-health/services/publications/healthy-living/canadian-immunization-guide-part-4-active-vaccines/page-20-rubella-vaccine.html>

Public Health Agency of Canada. (2023.) Canadian Immunization Guide. Varicella (chickenpox) vaccines.

<https://www.canada.ca/en/public-health/services/publications/healthy-living/canadian-immunization-guide-part-4-active-vaccines/page-24-varicella-chickenpox-vaccine.html>

Public Health Agency of Canada. (2024.) Canadian Immunization Guide. Immunization in pregnancy and breastfeeding.

<https://www.canada.ca/en/public-health/services/publications/healthy-living/canadian-immunization-guide-part-3-vaccination-specific-populations/page-4-immunization-pregnancy-breastfeeding.html>

Public Health Agency of Canada. (2024.) Canadian Immunization Guide. COVID-19 vaccines.

<https://www.canada.ca/en/public-health/services/publications/healthy-living/canadian-immunization-guide-part-4-active-vaccines/page-26-covid-19-vaccine.html>

Public Health Agency of Canada. (2024.) Canadian Immunization Guide. Respiratory syncytial virus (RSV).

<https://www.canada.ca/en/public-health/services/publications/healthy-living/canadian-immunization-guide-part-4-active-vaccines/respiratory-syncytial-virus.html>

World Health Organization. (2019.) Rubella.

<https://www.who.int/news-room/fact-sheets/detail/rubella>