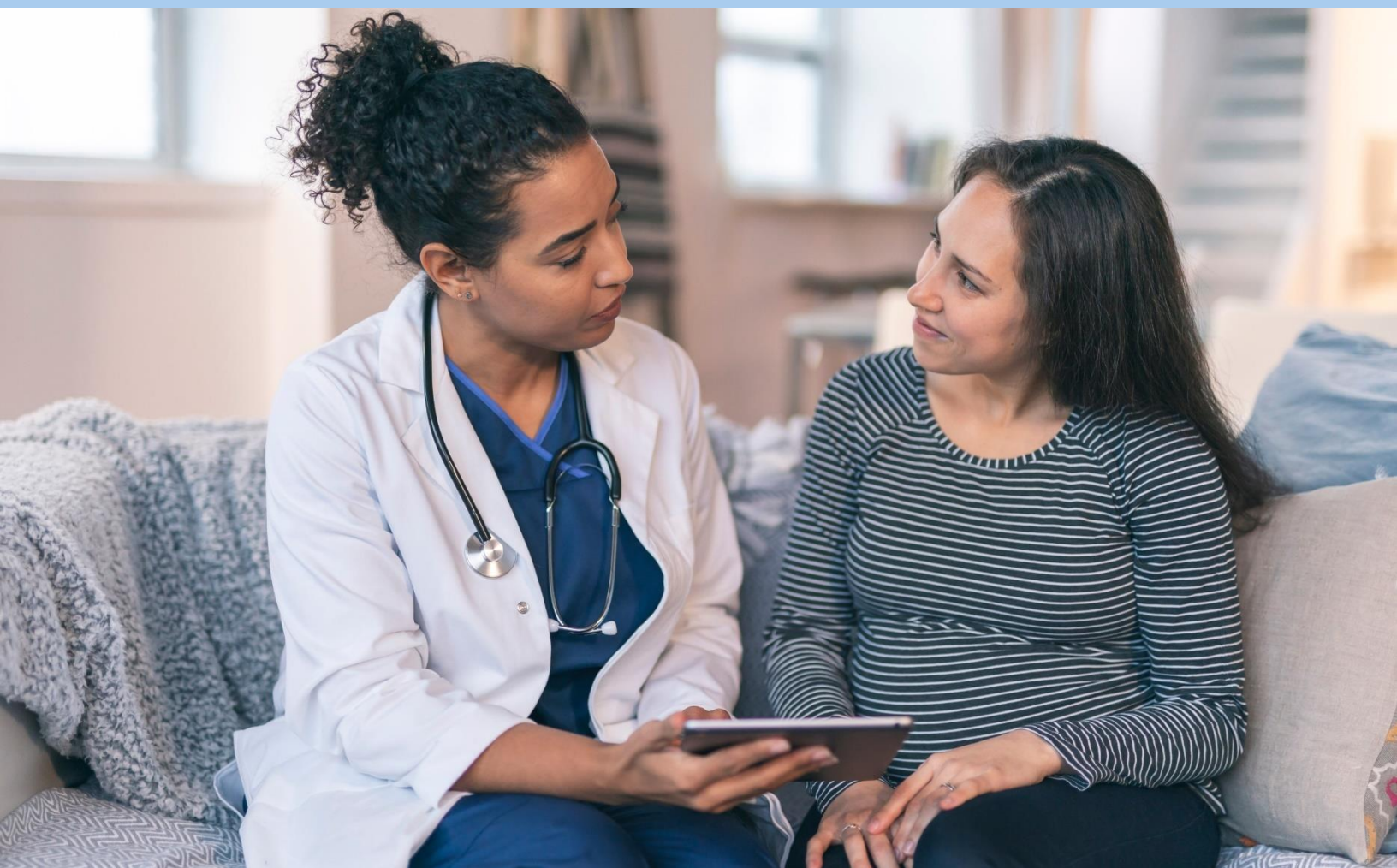




Improving vaccine confidence and uptake in pregnant Canadians: A toolkit for health professionals

Quality Improvement (QI) Toolkit | April 2024





Improving vaccine confidence and uptake in pregnant Canadians: A toolkit for health professionals

Immunize Canada (housed and operated within the Canadian Public Health Association) has a specific interest in promoting the understanding and use of vaccines to the public and health professionals: vaccines recommended by the National Advisory Committee on Immunization (NACI) and vaccines approved for use in Canada. The goal of the coalition is to provide evidence-based immunization information about, and to contribute to the control, elimination, and eradication of, vaccine-preventable diseases in Canada.

Production of this toolkit has been made possible through an unrestricted educational grant from Pfizer Canada. All financial support (including educational grants) is used to cover the development of this document, and Immunize Canada retains control over all aspects of these materials. Please see Immunize Canada's Ethical Guidelines for Sponsorship at immunize.ca.

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Summary

Vaccination protects the pregnant person from infectious diseases that may complicate the pregnancy or be passed on to the unborn child. Protective antibodies can be passed to the fetus or newborn both transplacentally and through breast milk respectively, conferring additional immune protection to the child at a time when they are too young to be immunized or to mount an optimal immune response from the vaccines directly. Ensuring that all pregnant people are adequately immunized with all recommended vaccines is the best way to protect the good health of both the pregnant person and the child, both before and after birth. This has become standard of care.

This toolkit provides health professionals (as well as community and patient groups) with evidence-based resources to support constructive dialogue and to help pregnant patients make informed choices about vaccination. It offers direct, easy-to-understand answers expressed in non-technical language that meets the needs of a non-specialist audience, helping remove the need for health professionals to adapt complex evidence-based information into language that can be understood by their patients. Overall, this toolkit gives health professionals clear messaging that they can rely on when discussing issues on vaccination in pregnancy with their patients one-on-one.

The toolkit will consist of the following evidence-based resources:

- [Resources for Health Professionals](#)
 - [Pocket Guide for Immunizers: Pregnancy and Breastfeeding](#)
 - [Videos for Immunizers on How to Recommend Vaccines in Pregnancy](#)
- [Resources to Share with Community and Patient Groups](#)
 - [Factsheets and Infographic on Vaccines in Pregnancy](#)
 - ["Vaccines in Pregnancy" factsheet in multiple languages](#)
 - [Video Shorts about Vaccines in Pregnancy](#)
 - [Posters on Vaccines in Pregnancy](#)
- [Questions and Answers on Vaccination in Pregnancy](#)

Check out the resources in this toolkit and share with your network!

Resources for Health Professionals

Pocket Guide for Immunizers: Pregnancy and Breastfeeding

Pocket Guide for Immunizers: Pregnancy and Breastfeeding



The purpose of this pocket guide is to serve as a tool for health care providers to learn more about the administration of vaccines during pregnancy and breastfeeding, enabling them to make strong recommendations to their patients.



The risks associated with vaccine-preventable diseases are particularly serious during pregnancy and in the early postnatal months. Pregnancy is associated with an altered immune state – along with changes that affect the heart and lungs – that can increase susceptibility to some infectious diseases, and the transmission of infection to the fetus or infant can cause severe life-threatening complications and even death.

Vaccination protects the pregnant person from infectious diseases that may complicate the pregnancy or be passed on to the unborn child. Protective antibodies can be passed to the fetus or newborn both transplacentally and through breast milk, conferring additional immune protection to the child at a time when they are too young to be immunized or to mount an optimal immune response from the vaccines directly. This additional protection is especially important as certain vaccine-preventable diseases, such as pertussis, are most severe in young infants.

The benefits of vaccination during pregnancy and breastfeeding have been well studied and documented in the scientific literature. Further, there is no published data or theoretical model that predicts any adverse effect on the fetus or infant from the administration of currently authorized non-live vaccines during pregnancy.

Ensuring that all pregnant people are adequately immunized with all recommended vaccines is the best way to protect the good health of both the pregnant person and the child, both before and after birth. This has become standard of care.

This pocket guide references recommendations made in the *Canadian Immunization Guide Chapter on Immunization in Pregnancy and Breastfeeding* from the National Advisory Committee on Immunization (NACI). Supplementary documents referenced in this guide also include: *Updated guidance on COVID-19 vaccines for individuals who are pregnant or breastfeeding*, *Recommendations on the use of Novavax NuvaXovid COVID-19 vaccine*, *Respiratory syncytial virus (RSV)*, *Canadian Immunization Guide*, and *Product Monograph: ABRYSVO™*

March 2024

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Videos on How to Recommend Vaccines in Pregnancy for Immunizers

How to recommend vaccines to patients who are planning a pregnancy with Dr. Anne Pham-Huy

Pregnancy is associated with an altered immune state that can increase susceptibility to some infectious diseases. Every medical encounter is a great opportunity to review immunizations, especially for a patient planning a pregnancy. Any vaccines that your patient is missing or not up to date with should be recommended. However, there are two main vaccines, that, if missing, should be discussed – the MMR vaccine and the varicella (or chickenpox) vaccine.

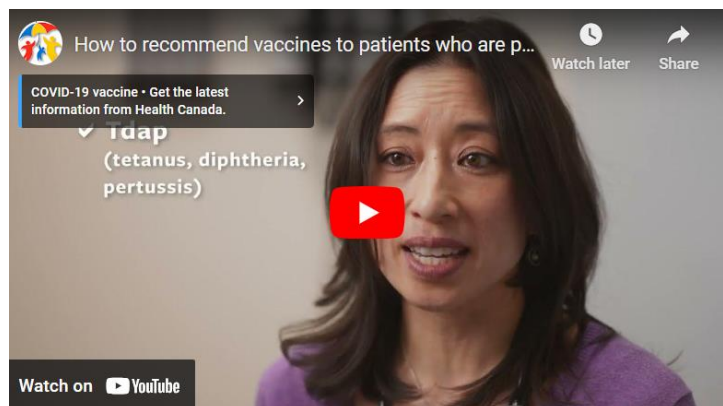


When discussing the MMR and varicella vaccines with your patient, ensure they are aware that these vaccines help protect against two diseases – rubella and varicella, respectively – that can cause serious birth complications if contracted during pregnancy

[WATCH HERE](#)

How to recommend vaccines to patients who are pregnant with Dr. Anne Pham-Huy

When recommending vaccines for a pregnant patient, you can typically recommend any of the non-live vaccines approved for use in Canada if you believe that your patient needs to receive one or more of them. However, there are three main vaccines that you should recommend in every pregnancy – the Tdap vaccine, to protect specifically against pertussis, the COVID-19 vaccine, and the influenza vaccine.



[WATCH HERE](#)

How to recommend the RSV vaccine for patients who are pregnant with Dr. Anne Pham-Huy

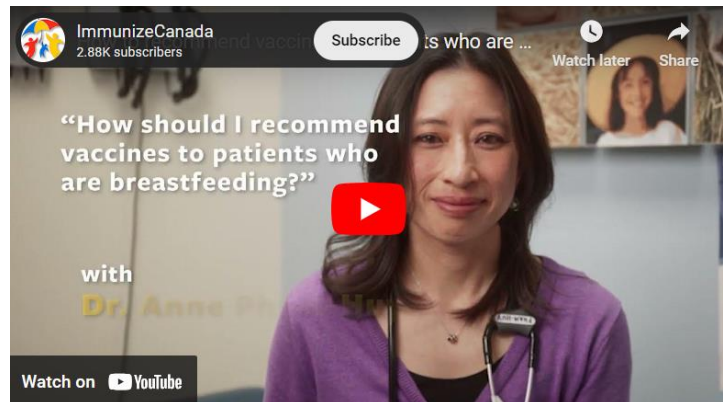
One vaccine that you may want to consider recommending to your pregnant patients is the respiratory syncytial virus (RSV) vaccine, which is safe to administer in pregnancy. When recommending this vaccine to any of your pregnant patients, you should let your patient know that getting immunized against RSV while pregnant allows them to provide their baby with short-term protection against severe RSV infection for up to six months after the baby is born.



[WATCH HERE](#)

How to recommend vaccines for patients who are breastfeeding with Dr. Anne Pham-Huy

When it comes to recommending vaccines for your patients who are breastfeeding, you can offer any of the routinely recommended vaccines in Canada. There is no evidence that any of these vaccines will harm people who are breastfeeding, or their baby. However, some vaccines are not recommended for people who are breastfeeding, due to a lack of safety data, or because of the possibility that the virus or bacteria used in the vaccine could transfer to the baby through breastmilk.



[WATCH HERE](#)

Resources to share with patients

Factsheets and Infographics on Vaccines in Pregnancy

<p>Vaccines in Pregnancy: What you need to know</p> <p>DOWNLOAD HERE</p>	<p>Influenza vaccines in pregnancy</p> <p>DOWNLOAD HERE</p>	<p>Pertussis vaccines in pregnancy</p> <p>DOWNLOAD HERE</p>
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"Vaccines in Pregnancy" factsheet in multiple languages

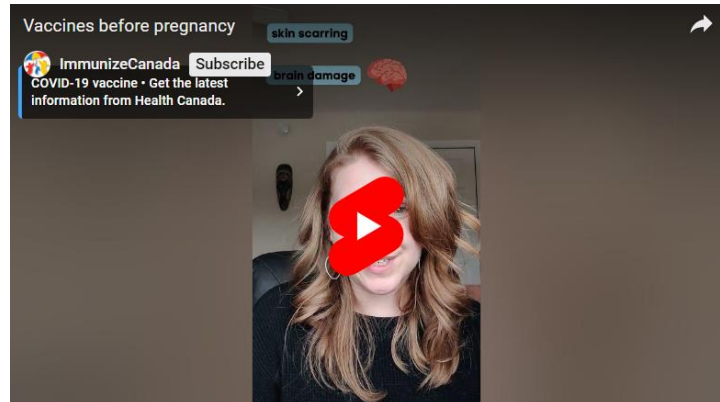
1. Download here in [Arabic](#)
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12. Download here in [Vietnamese](#)

You can also download a [French version](#) of this factsheet and toolkit

Video Shorts about Vaccines in Pregnancy

Vaccines before pregnancy

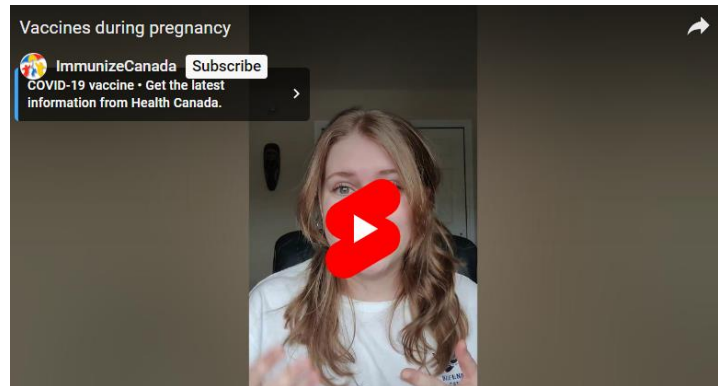
Planning a pregnancy? There are two vaccines recommended for every person who is planning to get pregnant that cannot be given during pregnancy– the MMR vaccine, to protect against rubella, and the varicella, or chickenpox, vaccine.



[WATCH HERE](#)

Vaccines during pregnancy

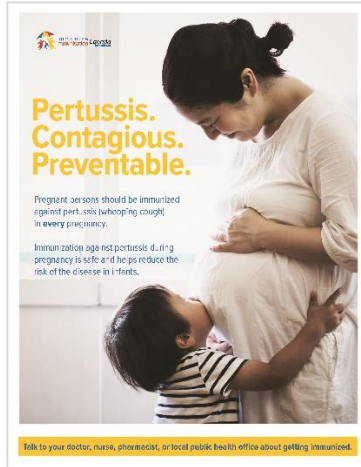
Pregnant? If so, there are three vaccines that you should consider getting – the Tdap vaccine, to protect against pertussis (also known as whooping cough), the COVID-19 vaccine, and the influenza (or flu) vaccine. In fact, these vaccines are recommended in every pregnancy, as they allow you to pass on some short-term protection to your newborn, who is too young to be immunized against pertussis, COVID-19, and the flu.



[WATCH HERE](#)

Posters on Vaccine in Pregnancy

Pertussis. Contagious. Preventable.



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Who should get immunized against pertussis (whooping cough)?



[DOWNLOAD HERE](#)

Pregnant or planning a pregnancy? (RSV immunization)



[DOWNLOAD HERE](#)

Did you know? (RSV immunization)



[DOWNLOAD HERE](#)

Questions and Answers on Vaccine in Pregnancy

Is immunization safe during pregnancy?

Yes! There are three vaccines recommended during **every pregnancy**, and all three vaccines have a **good safety record**. There is **no evidence** that these vaccines harm the pregnant parent or baby. These vaccines are:

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

In addition, if you are pregnant, you can typically receive **any of the non-live vaccines** approved for use in Canada. 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 such, they are considered safe to receive if you are pregnant.

I am planning a pregnancy. What vaccines should I consider before getting pregnant?

In general, if you are planning a pregnancy, you should consider getting any vaccines you have never received in the past or that you are not up to date on.

However, before becoming pregnant, there are **two main vaccines** that you should consider getting if you have **never received these vaccines in the past**. These vaccines are:

- the varicella (chickenpox) vaccine
- the measles, mumps, and rubella (MMR) vaccine – to specifically protect against rubella

You cannot receive these vaccines during pregnancy as they are live vaccines and, as a result, pose a potential risk to your developing baby.

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**.

Why is immunization important before and during 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 yourself 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.

How does getting vaccinated while pregnant protect my 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.

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. Talk to your healthcare professional to see if you can get immunized against RSV while pregnant.

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:

- the yellow fever vaccine
- the oral typhoid vaccine
- the Bacille Calmette-Guérin vaccine
- the Ebola vaccine
- the live replicating smallpox vaccine

In **extenuating circumstances**, your healthcare professional may recommend you receive one or more of the vaccines listed above.

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:

- typhoid
- cholera
- enterotoxigenic *Escherichia coli* (travellers' diarrhea)

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.

Why are non-live vaccines considered safe to receive while pregnant, while live vaccines are not generally recommended?

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.**