

Influenza Vaccines in Pregnancy

What You Need to Know





All pregnant persons should receive an influenza vaccine.

Influenza (flu) vaccines are **highly recommended** for all pregnant individuals and can be given anytime during pregnancy. Pregnant persons are more likely to experience severe influenza and associated complications. This is due to changes that occur within the body, such as changes that can affect the immune system, heart, and lungs. Complications of influenza in pregnancy can include hospitalization and serious complications for newborns.

Receiving an influenza vaccine while pregnant helps protect you and your baby.

If you are pregnant, getting an influenza vaccine is the best way to **protect you and your baby** against seasonal influenza. Getting an influenza vaccine:

- 1. decreases the risk of stillbirth and/or premature birth due to influenza,
- 2. decreases the risk that your baby will be small for their gestational age or be of low birth weight due to influenza,
- 3. lowers your chance of hospitalization due to influenza by an estimated 40%, and
- 4. protects your newborn from influenza and related complications until they can be immunized at 6 months of age.

It is safe to receive an influenza vaccine while pregnant.

Influenza vaccines have been given to pregnant persons for decades and have a good safety record. There is no evidence that influenza vaccines harm the pregnant parent or fetus.



There are three kinds of influenza vaccines in use in Canada:

inactivated influenza vaccines (IIV), the recombinant influenza vaccine (RIV), and live attenuated influenza vaccines (LAIV).



- Inactivated influenza vaccines (IIV) use an inactivated (killed) version of the influenza virus in the vaccine. They are safe for use in pregnant persons. For example, during the influenza (H1N1) pandemic of 2009, 100,000 pregnant persons in Canada and nearly 500,000 pregnant persons in Europe received the pandemic H1N1 influenza vaccines. These vaccines used inactivated influenza viruses. Surveillance of these individuals revealed no safety concerns.
- Recombinant influenza vaccine (RIV) teaches your body to recognize a small protein on the surface of the influenza virus. Your body can then later recognize the influenza virus if you become infected, and fight it off. Scientists are currently gathering more safety data, but there is no evidence that this type of influenza vaccine is unsafe for use during pregnancy.
- Live attenuated influenza vaccines (LAIV) use an attenuated (weakened) form of the live influenza
 virus in the vaccine. LAIV can be given to individuals with healthy immune systems, but are not
 recommended for those who have weakened immune systems. If you are pregnant, changes that
 occur in your body can affect your immune response. Therefore, you should NOT receive LAIV if
 you are pregnant.

It is safe to receive an influenza vaccine while breastfeeding.

There is no evidence that receiving an influenza vaccine is unsafe for breastfeeding persons or their babies. If you are breastfeeding, you can receive an IIV, a RIV, or LAIV. All three are safe.

Where to access your influenza vaccine.

Talk to your doctor, nurse, pharmacist, midwife, or local public health office about getting immunized against influenza. You can also check your provincial/territorial health ministry website to find out where influenza vaccines (flu shots) are being offered.

References

Centers for Disease Control and Prevention. Influenza (Flu) Vaccine and Pregnancy. (2019.) https://www.cdc.gov/vaccines/pregnancy/html https://www.cdc.gov/vaccines/pregnancy/html

Government of Canada. Canadian Immunization Guide - Part 3: Vaccination of Specific Populations. (2023.) 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#p3c3t1

Government of Canada. Vaccination and pregnancy: During pregnancy. (2021.) https://www.canada.ca/en/public-health/services/immunization-vaccines/vaccination-pregnancy-during.html

Centers for Disease Control and Prevention. Flu Vaccine Safety and Pregnancy. (2023.) https://www.cdc.gov/flu/highrisk/qa_vacpregnant.htm

National Advisory Committee on Immunization. Statement on Seasonal Influenza Vaccine for 2023-2024. (2023). https://www.canada.ca/en/public-health/services/publications/vaccines-immunization/national-advisory-committee-immunization-statement-seasonal-influenza-vaccine-2023-2024.html

National Advisory Committee on Immunization. Recombinant influenza vaccines: A supplemental statement of the Canadian Immunization Guide chapter on influenza and statement on seasonal influenza vaccine for 2022-2023. (2022.) https://www.canada.ca/en/public-health/services/publications/vaccines-immunization/recombinant-influenza-vaccines-supplemental-statement-canadian-immunization-guide-seasonal-influenza-vaccine-2022-2023.html