

# Influvac

## Information on the influenza vaccine during pregnancy or breastfeeding

The information provided below is for readers based in the United States of America. Readers outside of the United States of America should seek the information from local sources.

### What is the influenza vaccine?

Influenza vaccine is a shot that is given to train the immune system to recognize and defend against influenza ("flu") virus, of which there are two main groups, or serotypes, known as A and B. New vaccines are produced each year, because influenza viruses evolve rapidly such that they can be very different from season to season in terms of how they are seen by the human immune system, and also because the immunity from previous years' vaccination weakens over time. Over the past several years, both weakened live attenuated (living but weakened) flu vaccines and inactivated (not living) have been produced, but as of the writing of this report data show that the inactivated influenza vaccines work better. Thus, for the 2017- 2018 flu season, inactivated influenza vaccine (IIV) is what is being given to most people getting influenza vaccine in North America. The most commonly given influenza vaccine is designed to protect against four strains of flu virus, three of these being A and B serotypes, and the other being another common flu virus.

### What is influenza vaccine given to prevent or treat?

Influenza vaccine is given to prevent influenza disease, which normally strikes about 20 percent of the population of the United States each year. Frequently there are many deaths from flu, sometimes even in young people, and every year large numbers of people are hospitalized because of flu. During pandemics (huge outbreaks affecting humans throughout the planet) up to 50 percent of people can be infected. The number of pregnant women developing flu corresponds roughly to the number of people overall, so **about 20 percent of pregnant women develop the flu, but pregnant women who get the flu are more likely to require hospitalization compared with the general population.**

The use of influenza vaccine does not prevent all cases of influenza, but the effectiveness has been increasing over the past several years, due to improving capability to predict which influenza strains

will dominate over coming seasons, and because of improving technology for making new flu vaccines. Thus, reports in the scientific literature have shown influenza vaccination reducing the occurrence of influenza in pregnant women at rates ranging from 36 to 70 percent. Furthermore, even in cases when somebody develops the flu despite having been vaccinated earlier that season, typically it is a more mild flu.

### **How does influenza vaccine work?**

The current inactivated flu vaccine that is recommended for pregnant women is made with a new cell culture technology that results in the vaccine containing proteins that normally are present on the coat that surrounds the viral genetic material, which in the case of influenza viruses consist of a molecule called RNA. Because the virus particles are inactivated with this technology, the vaccine cannot infect the woman, or her developing baby, but they train the immune system to recognize influenza virus and defend the body against it.

### **If I receive influenza vaccine during pregnancy, can it harm my baby?**

No. Since the vaccine is not live, there is little concern that it can harm the baby, nor is there evidence of any such harm. On the other hand, there is a great deal of evidence that your baby can be harmed if you get the flu.

### **If I receive influenza vaccine and become pregnant, what should I do?**

Continue with your pregnancy as normal. The vaccine is not harmful, and is helpful therefore is recommended during pregnancy.

### **If I am given influenza vaccine, can I safely breastfeed my baby?**

Yes. Inactivated influenza vaccine is not harmful if given while you are breastfeeding, although if you need it you should be administered the vaccine while you are still pregnant.

### **If I am given influenza vaccine, will it be more difficult to get pregnant?**

Influenza vaccine should not affect your fertility negatively.

### **If I am given influenza vaccine, what should I know?**

You should know that there are no live agents in the inactivated influenza vaccine, so there is no concern about infection of your baby. You also should know that it is recommended and beneficial during pregnancy.

## If I am taking any vaccine, what should I know?

You may find Pregistry's expert report about vaccines during pregnancy [here](#), reports about a variety of vaccines [here](#), and reports about the various medications used for infections [here](#). Pregistry also offers blog posts about vaccines [here](#). Additional information can also be found in the resources at the end of this report.

## Resources for influenza vaccine in pregnancy:

For more information about influenza vaccine during and after pregnancy, contact <http://www.womenshealth.gov/> (800-994-9662 [TDD: 888-220-5446]) or visit the following links:

- US Centers for Disease Control and Prevention: [Pregnancy and Vaccination](#)
- US Centers for Disease Control and Prevention: [Maternal Vaccines: Part of a Healthy Pregnancy](#)

**Last Updated: 22-03-2019**

## General information

It is very common for women to worry about having a miscarriage or giving birth to a child with a birth defect while they are pregnant. Many decisions that women make about their health during pregnancy are made with these concerns in mind.

For many women these concerns are very real. As many as 1 in 5 pregnancies end in a miscarriage, and 1 in 33 babies are born with a birth defect. These rates are considered the background population risk, which means they do not take into consideration anything about the health of the mom, the medications she is taking, or the family history of the mom or the baby's dad. A number of different things can increase these risks, including taking certain medications during pregnancy.

It is known that most medications, including over-the-counter medications, taken during pregnancy do get passed on to the baby. Fortunately, most medicines are not harmful to the baby and can be safely taken during pregnancy. But there are some that are known to be harmful to a baby's normal development and growth, especially when they are taken during certain times of the pregnancy. Because of this, it is important to talk with your doctor or midwife about any medications you are

taking, ideally before you even try to get pregnant.

If a doctor other than the one caring for your pregnancy recommends that you start a new medicine while you are pregnant, it is important that you let them know you are pregnant.

If you do need to take a new medication while pregnant, it is important to discuss the possible risks the medicine may pose on your pregnancy with your doctor or midwife. They can help you understand the benefits and the risks of taking the medicine.

Ultimately, the decision to start, stop, or change medications during pregnancy is up to you to make, along with input from your doctor or midwife. If you do take medications during pregnancy, be sure to keep track of all the medications you are taking.