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## **Influenza and the Vaccine during Pregnancy**

This sheet talks about the risks that exposure to influenza or the influenza vaccine can have during pregnancy. With each pregnancy, all women have a 3% to 5% chance of having a baby with a birth defect. This information should not take the place of medical care and advice from your health care provider.

### ***What is influenza?***

Influenza is an infection of the respiratory tract. It is commonly known as the flu and is caused by a variety of viruses. Major symptoms are fever, headache, chills, muscle aches, coughing, congestion, runny nose, and sore throat. Nausea is not seen very often with influenza.

### ***Is influenza contagious? How does the virus spread?***

Yes, influenza is contagious. The virus is spread through contact with secretions of the nose and mouth of infected persons. The incubation period (the time between infection and the development of symptoms) is between 1 to 3 days.

### ***Can having influenza during pregnancy be harmful to the mother or the baby?***

Influenza may cause an increase in the rate of miscarriage during pregnancy. Some women who develop influenza while pregnant are at an increased risk for heart and lung conditions that may lead to their hospitalization. The high incidence of fever during influenza is also a concern for pregnant women. If you have a high fever (over 102 degrees for more than 24 hours) at any time between the beginning of the third week and the end of the fourth week after conception, you may want to talk with your doctor about taking medication to reduce the fever. Researchers have seen a small risk for a birth defect called spina bifida when high fevers occur during this time period.

### ***What is the influenza vaccine?***

The injected influenza vaccine, also known as the flu vaccine (flu shot), is an inactivated virus vaccine. This means that it is noninfectious and cannot cause influenza. Most influenza vaccines contain virus particles from three different strains of influenza (two type A and one type B). This mixture of viruses is updated every year according to the current type of virus thought to be causing infection. It is necessary to receive the influenza vaccine each year in order to be protected from the current flu virus. This vaccine is given as an injection in the upper arm.

A nasal-spray influenza vaccine (FluMist<sup>®</sup>) has become available. This vaccine is different from the injected vaccine because it is composed of a live but weakened virus. There have been no animal or human studies regarding exposure to this form of the influenza vaccine during pregnancy. Therefore, the safety of receiving the nasal-spray vaccine during pregnancy is unknown and should be avoided.

### ***Is it safe for me to receive the influenza vaccine while I'm pregnant?***

Yes. The influenza vaccine given by injection is considered safe for use anytime in pregnancy. It is recommended that all women who will be pregnant during influenza season receive the inactivated influenza vaccine. In addition, women who have other medical conditions that increase their risk for complications from influenza should be vaccinated before the influenza season.

As previously stated, the new nasal form of influenza vaccine contains a live but weakened virus. Presently the safety of the nasal form of the

influenza vaccine during pregnancy is not known and should be avoided.

***Is there anyone who should not receive this vaccine?***

Yes. Anyone with an allergy or hypersensitivity to eggs should not receive the influenza vaccine. The virus used for the vaccine is grown in eggs and an immediate allergic reaction can occur in people with an egg allergy. In addition, anyone who has had a negative reaction from an influenza vaccine should talk with their doctor before receiving the vaccine.

***When should I receive this vaccine?***

The vaccine should be given between September and mid-November. In the US, the flu season usually begins in December and protection begins about 1 to 2 weeks after receiving the vaccination. The vaccine lasts for 6 months or longer. Because the virus causing the flu changes each year a flu shot should be given each year before the flu season begins.

***Are there any negative side effects I should be aware of?***

Side effects from the influenza vaccine are uncommon. One third of those receiving the vaccine report some soreness at the site of the injection, and about 5 to 10% experience headaches, low grade fever or malaise (general discomfort or feelings of uneasiness).

***Can I receive the influenza vaccine while I am breastfeeding?***

There have been no studies about women who receive the influenza vaccine during breastfeeding. However, the vaccine is not thought to be a risk to a nursing infant. In fact, the vaccine is recommended for most women who are considering breast-feeding.

**Bird Flu (Avian Influenza)**

***Bird Flu has been in the news a lot. Will the influenza vaccine protect me from the bird flu?***

No. The viruses that cause influenza in humans and the viruses that cause bird flu are not the same. There is no vaccine available to protect against bird flu at this time.

Fortunately, the risk of coming in contact with the bird flu is very low for most people. The bird flu viruses, in their present form, do not easily transmit from birds to humans and most cases of human infection have been the result of close contact with live infected animals.

Scientists, however, are watching bird flu very carefully. If one of the bird flu viruses goes through certain genetic changes it may become easily spread from one human to another. If the virus can spread easily and quickly from one human to another before a vaccine is developed it is possible that many people could become sick from the virus.

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*If you have questions about the information on this fact sheet or other exposures during pregnancy, call **OTIS** at 1-866-626-6847.*