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Seasonal Influenza and the Vaccine during Pregnancy

This sheet talks about the risks that exposure to seasonal 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 often called the flu. The symptoms of influenza are fever, headache, chills, muscle aches, coughing, congestion, runny nose, and sore throat. Influenza sometimes causes vomiting and diarrhea.

The typical flu season is from November through March of each year. The types (strains) of viruses that cause seasonal influenza change a little bit each year.

During the 2009-2010 flu season, people will get sick from both seasonal influenza viruses and a new type of virus called H1N1. For more information about the 2009 H1N1 flu and pregnancy, see the OTIS fact sheet [H1N1 Flu and Pregnancy](#) and visit the Centers for Disease Control and Prevention (CDC)'s website at <http://www.cdc.gov/h1n1flu/pregnancy>.

Is influenza contagious? How does the virus spread?

Yes, influenza is contagious. The virus is spread through contact with respiratory droplets from the nose and mouth of infected individuals. When people cough or sneeze droplets containing the virus are spread through the air. The incubation period (the time between exposure and the development of symptoms) is about 1 to 4 days. A person with the flu is contagious for up to a week after he or she first develops symptoms.

Can having influenza during pregnancy put my health at risk?

Yes. When you are pregnant your body has a harder time fighting infections. Pregnant women have an increased risk of developing serious complications from the flu, such as respiratory distress (severe breathing problems).

If you think you have the flu, talk to your doctor as soon as you have symptoms. Your doctor may recommend antiviral medications to lessen the symptoms of the flu and to reduce the risk of serious illness. These medications work best if taken early in the course of the illness. For more information about

antiviral medications, see the OTIS fact sheet [Antiviral Medications to Treat/Prevent Influenza during Pregnancy](#).

Can having influenza during pregnancy cause birth defects or put my baby at risk?

The influenza virus itself has not been shown to cause birth defects. However, having a high fever during pregnancy may increase the risk for birth defects. Therefore, fever during pregnancy should be treated. Acetaminophen is the drug of choice for reducing fever during pregnancy. Tylenol® is one brand of acetaminophen.

Being very sick from the flu may increase the risk of pregnancy complications such as miscarriage or premature delivery. It is important to talk with your doctor if you are pregnant and have symptoms of the flu.

What is the seasonal influenza vaccine?

The injected seasonal influenza vaccine, also known as the flu shot, is an inactivated virus vaccine. This means that it is noninfectious and cannot cause influenza. This vaccine is given as an injection in the upper arm. The mixture of viruses in the seasonal influenza vaccine is updated every year. It is necessary to receive the seasonal influenza vaccine each year in order to be protected from the current flu virus. Because pregnant women are at an increased risk for complications from influenza, women who are pregnant or planning to become pregnant should get the seasonal flu shot.

A nasal-spray influenza vaccine (FluMist®) is also available. This vaccine contains a live but weakened virus. The nasal-spray influenza vaccine is not recommended during pregnancy.

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

Yes. The influenza vaccine given by injection is considered safe anytime in pregnancy. It is recommended that all women who are pregnant or

planning to become pregnant during the flu season receive the injected form of the influenza vaccine.

There have been no animal or human studies looking at use of the nasal-spray influenza vaccine during pregnancy. Therefore, the safety of receiving the nasal-spray vaccine during pregnancy is unknown.

Will getting the seasonal influenza vaccine also protect me from H1N1 flu?

No, the seasonal flu vaccine does not protect against H1N1 flu. It is important that pregnant women get *both* the seasonal flu vaccine *and* the H1N1 flu vaccine. For more information about the H1N1 vaccine and pregnancy, please see the OTIS fact sheet [H1N1 Flu Vaccine during Pregnancy](#).

When should I receive the seasonal influenza vaccine?

The vaccine usually becomes available in September or October and is offered throughout the flu season. Protection begins about 1-2 weeks after you get the vaccine and lasts six months or longer. It is necessary to receive the seasonal influenza vaccine each year in order to be protected from the current flu virus. To provide protection throughout the flu season, it is important to receive the vaccine as soon as it becomes available.

Is there anyone who should not receive the influenza 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 allergic reaction can occur in people with an egg allergy. In addition, anyone who has had a bad reaction from an influenza vaccine in the past should talk with her doctor before receiving the vaccine.

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

Side effects from the influenza vaccine are uncommon. Some minor side effects that can occur are redness or soreness at the site of injection, low grade fever, or muscle aches.

What about thimerosal in the vaccine? Is it safe?

Thimerosal is a preservative. It is found in some vaccines in very small amounts. There has been some thought that thimerosal may cause central nervous system effects in children who received it through vaccines, but large studies have not supported this possibility. Pregnant women can safely receive vaccines containing thimerosal. However, if pregnant women wish to avoid thimerosal, seasonal influenza vaccines that do not contain thimerosal are available.

Can I receive the influenza vaccine while I am breastfeeding?

The influenza vaccine given by injection is safe to get while breastfeeding. Getting the flu vaccine while breastfeeding can help prevent you from getting sick and passing the illness to your baby. If you are breastfeeding and become sick with the flu, do not stop nursing your baby. You have antibodies in your breast milk that will help your baby stay well. Be sure to drink lots of liquids so that you do not get dehydrated because this could reduce the amount of milk you make.

OTIS is currently conducting the [OTIS Vaccines and Medications in Pregnancy Study \(VAMPSS\)](#). The purpose of the study is to learn more about influenza vaccines and antiviral medication use in pregnancy. If you are pregnant and have received the seasonal influenza vaccine, the H1N1 vaccine, or have taken an antiviral medication to prevent or treat the flu (including Tamiflu® or Relenza®), and you are interested in learning more about this study, please contact the OTIS VAMPSS Coordinating Center at 877-311-8972.

October 2009.

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Selected References:

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Centers for Disease Control and Prevention. 2008. Prevention and control of influenza: Recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 57(RR07):1-60.

Neuzil KM, et al. 1998. Impact of influenza on acute cardiopulmonary hospitalizations in pregnant women. Am J Epidemiol. 148(11):1094-1102.

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