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## 2009 H1N1 Flu Vaccine during Pregnancy

This sheet talks about the 2009 H1N1 flu vaccine and pregnant women. 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 the 2009 H1N1 flu?***

The flu (influenza) is an infection of the respiratory tract. The 2009 H1N1 flu is caused by a new type of influenza virus. The H1N1 flu first appeared in the United States in April 2009. It is now spreading from person to person worldwide.

The symptoms of the H1N1 flu are similar to those seen with seasonal flu. You may have fever, headache, chills, muscle aches, coughing, congestion, runny nose, and sore throat. Sometimes H1N1 flu can cause stomach upset with vomiting and diarrhea.

For more information about the 2009 H1N1 flu and pregnancy, please see the OTIS fact sheet [H1N1 Flu and Pregnancy](#).

### ***What is the H1N1 flu vaccine?***

The H1N1 vaccine is the best protection against the H1N1 flu virus. There are two types of H1N1 flu vaccines.

The injected H1N1 vaccine, also known as the H1N1 flu shot, is an inactivated virus vaccine. This means that it is noninfectious and cannot cause the flu. This vaccine is given as an injection in the upper arm. The injected H1N1 vaccine is recommended for all pregnant women in any trimester.

A nasal spray H1N1 vaccine (also called LAIV for “live attenuated influenza vaccine”) is also available. This vaccine contains a live but weakened virus. The nasal spray flu vaccine is not recommended during pregnancy.

### ***I am pregnant. Should I get the injected H1N1 flu vaccine?***

**Yes.** Pregnant women are at an increased risk of developing serious complications from the flu. Getting vaccinated is the best way to protect yourself and your baby. The Centers for Disease Control and Prevention’s Advisory Committee on Immunization Practices recommends that all pregnant women receive the injected H1N1 vaccine. The vaccine can be given during any trimester of pregnancy.

### ***Why is the nasal spray H1N1 vaccine not recommended during pregnancy?***

Nasal spray flu vaccines contain a live but weakened virus. There have been no studies looking at the use of live virus flu vaccines during pregnancy. The safety of receiving the nasal spray vaccine during pregnancy is unknown.

### ***How do we know that the injected H1N1 vaccine is safe during pregnancy?***

The injected H1N1 vaccine is made in the same way as seasonal flu vaccines. Seasonal flu vaccines have been given to pregnant women for many years and have not been shown to cause harm to pregnant women or their babies. The injected H1N1 vaccine is recommended during any trimester of pregnancy.

### ***I have already gotten my seasonal flu vaccine. Do I still need to get the H1N1 vaccine?***

Yes. 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 seasonal flu and the vaccine during pregnancy, please see the OTIS fact sheet [Seasonal Influenza and the Vaccine during Pregnancy](#).

### ***When should I receive the H1N1 vaccine?***

You should get the H1N1 vaccine as soon as it becomes available. Flu season can last as late as April or May. Protection begins about 1-2 weeks after you get the vaccine and lasts six months or longer.

### ***Do I need to get two shots of the H1N1 vaccine?***

No. People 10 years and older only need to get one shot to be fully protected from the H1N1 flu. Children 9 years of age and younger will need to get two shots separated by 4 weeks.

***Is there anyone who should not receive the H1N1 vaccine?***

Yes. Anyone with a severe allergy or hypersensitivity to eggs should not receive the H1N1 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 or illness after getting a flu vaccine in the past should talk with her doctor before receiving the vaccine. Also, if you have an illness with fever, you should wait until you are well before getting the H1N1 vaccine.

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

Side effects from the H1N1 vaccine are expected to be uncommon and similar to those of the seasonal flu vaccine. 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. Although some people have concerns about thimerosal, there has been no evidence, even in large studies, of any harmful effects. Pregnant women can safely receive vaccines containing thimerosal.

If you wish to avoid thimerosal, H1N1 flu vaccines that do not contain thimerosal may be available in your area. It is recommended that all pregnant women receive the H1N1 vaccine with or without thimerosal.

***Does the H1N1 vaccine contain any adjuvants such as squalene?***

No. Adjuvants are sometimes added to vaccines to make them more effective. There are no adjuvants in any of the H1N1 or seasonal flu vaccines used in the United States.

***My due date is only a couple weeks away. Do I still need to get the H1N1 vaccine?***

Yes. It is important to protect yourself from getting sick both during your pregnancy and after your baby is born. Getting vaccinated during your pregnancy can also help protect your baby from getting sick during the first six months of life. This is especially important because infants less than 6 months of age cannot receive the flu vaccine.

***The father of my baby just got the nasal spray H1N1 vaccine. Is it OK for me to be around him while I'm pregnant?***

Yes. Pregnant women can be in close contact with others who have gotten the nasal spray vaccine.

***I am a nurse. Is it OK for me to give my patients the nasal spray H1N1 vaccine while I am pregnant?***

Yes. You do not need to take any special precautions. Always practice good hygiene and wash your hands or use an alcohol-based hand sanitizer before and after giving the vaccine.

***Can I receive the H1N1 vaccine while I am breastfeeding?***

Yes. Breastfeeding women can receive the injected or the nasal spray form of the H1N1 vaccine. Getting the vaccine while breastfeeding can help prevent you from getting sick and passing the illness to your baby. This is especially important if your baby is less than 6 months of age and cannot yet receive the H1N1 vaccine.

*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.*

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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.*