**Seasonal Influenza Vaccine (Flu Shot)**

This sheet talks about exposure to the flu shot in a pregnancy and while breastfeeding. This information should not take the place of medical care and advice from your healthcare provider.

**What is influenza?**

Influenza is commonly called the “flu”. It is an infection of the respiratory (breathing) tract. The symptoms of the flu are fever, headache, chills, muscle aches, cough, congestion (stuffy nose), runny nose, sore throat, and feeling tired (fatigue). Influenza sometimes causes vomiting and diarrhea. The typical flu season is from October through May of each year. The types (strains) of viruses that cause seasonal influenza can change each year.

**Why is the flu a concern for people who are pregnant?**

Even if you are healthy, when pregnant, the body has a harder time fighting infections than when you are not pregnant. The flu can cause serious symptoms in people who are pregnant, such as respiratory distress (severe breathing problems) and even death. These complications can occur in any trimester of pregnancy. For more information, see the MotherToBaby fact sheet on Seasonal Influenza (the Flu) at https://mothertobaby.org/fact-sheets/seasonal-influenza-the-flu-pregnancy/pdf/.

**Why is the flu a concern for the developing baby?**

While having the flu while pregnant does not appear to cause birth defects, symptoms of the flu such as a high fever could affect the developing baby. For more information, see the MotherToBaby fact sheet on Seasonal Influenza (the Flu) at https://mothertobaby.org/fact-sheets/seasonal-influenza-the-flu-pregnancy/pdf/.

Like those who are pregnant, infants who get the flu are at increased chance for serious symptoms. Since infants cannot receive the flu shot until they are six months old, vaccinating the those who have direct contact with the baby can help to protect the baby from getting the flu.

**What is the seasonal flu vaccine?**

The injected seasonal influenza vaccine (flu shot) is an inactivated virus vaccine. This means that the shot cannot cause you to get the flu. Studies have shown that the flu shot can prevent flu illness by about 40% to 60% in the overall population. The mixture of viruses in the flu shot is updated every year to include the main strains expected to be common for the upcoming flu season. It is necessary to receive the flu shot each year in order to be protected from the current flu strains.

In 2010, the seasonal flu vaccine was changed to include protection against the H1N1 virus. This was done so that there was only one recommended flu vaccine instead of having the H1N1 vaccine as a second required shot. Flu vaccines produced since that time offer protection against this strain.

A nasal-spray influenza vaccine may also available. However, the nasal-spray form is not recommended for use during pregnancy. Unlike the flu shot, this vaccine contains a live, but weakened, virus (live attenuated influenza vaccine).

**I just found out I was pregnant when I got the nasal spray flu vaccine. Should I be concerned?**

The nasal spray vaccine contains a tiny amount of weakened active virus (“live vaccine”). In general, those who are pregnant are advised to avoid live vaccines. However, getting the nasal spray is not expected to increase the chance of having a baby with a birth defect or other pregnancy complications. See your healthcare provider right away if you have any symptoms of the flu.

**I just got the flu shot. How long should I wait until I try to get pregnant?**

There is no recommended waiting period since the flu shot can be given at any time during pregnancy.

**If I get the flu shot can it make it harder for me to get pregnant?**

Studies have not been done to see if a flu shot could make it harder to get pregnant.
Does getting a flu shot increase the chance for miscarriage?

Miscarriage can occur in any pregnancy. Studies have not found a higher chance for miscarriage among those who received the injected flu vaccine.

Can I receive the flu shot while I am pregnant?

It is recommended that those who are pregnant (whether in their first, second, or third trimester) or planning to become pregnant get the seasonal flu shot given by injection. The nasal-spray flu vaccine is not recommended during pregnancy.

In the United States the flu shot has been given in pregnancy since the 1960s. Studies of thousands of people, from around the world, who have received the flu shot just before or during pregnancy have found no increased chance for birth defects, other pregnancy complications such as preterm delivery (delivery before 37 weeks of pregnancy), low birth weight, or health problems in a child after delivery.

Is there anyone who should not receive the flu vaccine?

In the past, some people with allergies or hypersensitivities to eggs were told to avoid the flu vaccine. This is because most flu vaccines contain a small amount of egg protein. Newer recommendations state that everyone older than six months of age should receive a flu shot. This is because there are vaccines that do not contain egg protein. Also, the vaccines with egg have such a tiny amount of egg protein that an allergic reaction isn’t likely to happen in response to vaccination. However, anyone with a severe, life-threatening allergy to any of the vaccine ingredients should discuss the vaccine with their healthcare provider first.

When should I receive the flu vaccine?

To provide protection during the flu season, it is important to get the vaccine as soon as it becomes available. The vaccine usually becomes available in September and is offered throughout flu season. Protection begins about two weeks after you get the flu shot and lasts at least six to eight months. It is necessary to receive the seasonal flu shot each year in order to be protected in the current flu season.

Does getting the flu shot increase the chance of birth defects?

Every pregnancy starts out with a 3-5% chance of having a birth defect. This is called the background risk. Studies have not found a higher chance for birth defects after receiving the injected flu during pregnancy.

Could getting the flu shot cause other pregnancy complications?

Studies have not found a higher chance for pregnancy complications after receiving the injected flu shot.

What about thimerosal?

Thimerosal is a preservative, which is used to help keep potentially harmful bacteria out of the flu shot. It is found in small amounts in the large vials of vaccine used to hold several doses of vaccine. Single-dose vaccine vials do not contain thimerosal. Thimerosal has been well studied and there has been no evidence of any harmful effects from thimerosal. People who are pregnant can receive vaccines containing thimerosal.

My due date is only a couple weeks away. Do I still need to get the flu shot?

It is important to protect yourself from getting sick both during your pregnancy and after your baby is born. Getting vaccinated during your pregnancy may 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.

Can I receive the flu vaccine while breastfeeding?

People who are breastfeeding can receive the flu vaccine. Getting the flu vaccine while breastfeeding can help prevent you from getting sick and passing the illness to your baby. Talk to your healthcare provider about all of your breastfeeding questions.

I received the flu shot. Can it make it harder for me to get my partner pregnant or increase the chance of birth defects?
In general, exposures that fathers or sperm donors have are unlikely to increase the risks to a pregnancy. For more information, please see the MotherToBaby fact sheet Paternal Exposures at https://mothertobaby.org/fact-sheets/paternal-exposures-pregnancy/pdf/.

**One of my family members just got the nasal spray flu vaccine. Can I be around them while I am pregnant?**

People who are pregnant can be in close contact with others who have gotten the nasal spray vaccine.

**Please click here for references.**