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## **Measles, Mumps, Rubella and the MMR Vaccine during Pregnancy**

This sheet talks about the risks that exposure to measles, mumps, rubella, and the MMR 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 measles, mumps and rubella?***

Measles (rubeola) is a virus that can cause a person to have a rash, high fever, cough, runny nose and red, watery eyes.

Mumps is a virus that affects the lymph nodes closest to the jaw. The symptoms usually include fever, headache and body aches.

Rubella, also known as the German measles, is a virus that usually causes a mild rash with a fever. A person with rubella may also have headaches, achy joints, a runny nose and reddened eyes.

Measles, mumps and rubella used to be common childhood illnesses in the United States but vaccination programs have dramatically decreased their incidence. These viruses are still common in some parts of the world.

### ***What is the MMR vaccine?***

The MMR vaccine is a mixture of live, weakened viruses from measles, mumps and rubella. The vaccine causes a person to develop antibodies to these viruses and causes immunity to the viruses in the future.

The MMR vaccine is a combination vaccine and was introduced in 1960-70's. These viruses are now quite rare in the United States.

### ***Are measles, mumps or rubella contagious?***

#### ***How does the virus spread?***

Yes, all three illnesses are contagious. They are all spread by coughing and sneezing.

Measles is contagious from 4 days before to 5 days after the rash appears. Mumps is contagious from 3 days before to 4 days after symptoms appear. Rubella is contagious from 7 days before to 5-7 days after the rash appears.

### ***I don't think I ever had the MMR viruses or the vaccine. I was recently exposed, is there anything I can do?***

First, your doctor can do a blood test to see if you have antibodies for these viruses.

### ***If I have one of these viruses during pregnancy could it be harmful to the baby?***

The data on whether measles or mumps increase the risk for birth defects is uncertain. There does seem to be an increase for miscarriage when a woman gets these illnesses in the first trimester.

Rubella has been shown to increase the risks for birth defects. When a woman gets rubella during her pregnancy, her fetus is at risk to develop Congenital (present at birth) Rubella Syndrome. Some of the symptoms of Congenital Rubella Syndrome include: vision loss due to cataracts (cloudy films that form over the lens of the eyes); congenital heart disease, hearing loss, and other defects of the eye, bleeding underneath the skin which resemble bruises, enlargement of the liver and spleen, jaundice, small head size, developmental delay, enlargement of the brain and thin bones. Not all babies with Congenital Rubella Syndrome will have all the symptoms; however, the most common symptom is hearing loss.

### ***I had the MMR vaccine as a child, but was recently exposed to rubella while traveling. Is there any risk to the baby?***

When a person receives a vaccine, he/she makes antibodies to the virus. These antibodies typically last throughout life and make a person immune to the measles, mumps or rubella viruses. People who are vaccinated and develop

antibodies will not get the virus if they are exposed again.

Make sure you received *two* doses of the MMR vaccine for maximum immunity. Also make sure you received the MMR vaccine and not some other vaccine.

***I am not sure I have received the MMR vaccine. Should I be immunized before becoming pregnant?***

Yes! The effects on a fetus after a rubella infection during pregnancy can be severe. The effects of measles and mumps, while not as severe as rubella, can still cause complications during a pregnancy. Therefore, it is recommended that all women of childbearing age who do not have immunity to MMR receive the vaccine before pregnancy. In the United States, almost all children are immunized at a young age, and therefore, most women have been immunized. If you were born outside of the United States, or are not sure if you have received a vaccination, your doctor or local health department can perform a blood test to see if your body has antibodies to these viruses. If you do not have antibodies to any one of these viruses, it is recommended that you be immunized as soon as possible.

***I just received the MMR vaccine. How long must I wait before becoming pregnant?***

After immunization with a rubella-containing vaccine the Centers for Disease Control recommends avoiding pregnancy for 28 days.

***I received the MMR vaccine before I knew I was pregnant, will this harm the baby?***

In very rare instances, a person who receives the rubella vaccine will develop the illness. Because of this very small but possible risk it is recommended that a woman wait 28 days after receiving the vaccine to become pregnant.

There is information on a large number of pregnancies where a woman received the MMR vaccine during pregnancy. No babies were born with Congenital Rubella Syndrome and there was not an increase in the rate of birth defects.

***I am pregnant. Is it okay for my child to receive the MMR vaccine?***

Yes. There is no known risk to other individuals when a child receives the MMR vaccine.

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

People who have had previous adverse reactions to either the antibiotic neomycin or a prior dose of the MMR vaccine should not receive the vaccine. Persons with any type of diseases that lowers the defenses of their immune system (such as HIV/AIDS) should not receive this vaccine.

***Can I receive the MMR vaccine while I am breastfeeding my baby?***

Yes. It is possible to continue breastfeeding after receiving this vaccination.

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**References:**

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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**.*