Measles, Mumps, and Rubella

This sheet is about exposure to measles, mumps, and rubella in pregnancy and while breastfeeding. This information is based on published research studies. It should not take the place of medical care and advice from your healthcare providers.

What is measles, mumps, and rubella?

Measles (rubeola), mumps, and rubella (German measles, three-day measles) are viral diseases that are mostly spread from person to person through coughing and sneezing. The measles virus can stay in the air for up to two hours after an infected person has sneezed or coughed and can spread to others even when the infected person is no longer in the area. Mumps can also be spread through close contact activities (such as playing sports) and from contact with an infected person's saliva (sharing cups, kissing, etc.). Rubella can be spread by coughing and sneezing. If a woman has rubella during pregnancy, it can be passed to the developing fetus. Serious problems can occur with these viruses, including pneumonia, meningitis, deafness, and death.

Outbreaks of measles and mumps still happen in the U.S., especially in areas where vaccination rates are not high enough to protect the population. Rubella is no longer constantly present (endemic) in the U.S. but can be brought into the country by people who get infected in other countries. Once a person has been infected with measles, mumps, or rubella, it is rare for them to get sick from the virus again.

What are the symptoms of measles, mumps, and rubella?

Measles can cause rash, high fever, cough, runny nose, and red watery eyes. A person infected with measles can spread the virus to other people from 4 days before the rash appears until 4 days after it goes away.

Mumps can cause fever, headache, muscle aches, tiredness, loss of appetite, and swelling of the salivary glands under the ears, which can cause puffy and tender cheeks and jaw. Some people who get mumps might have mild symptoms or no symptoms at all. People without symptoms can still spread the mumps virus.

Rubella can cause fever, sore throat, and a rash that usually starts on the face. Other symptoms can include headache, cough, runny nose, red eyes, and general discomfort. People with the virus can spread it to others for about 7 days before to 7 days after the rash appears. Some people who get rubella might have no symptoms but can still spread the virus to others. A pregnant woman can pass rubella to their pregnancy.

The best ways to protect yourself against measles, mumps, and rubella are to avoid others who are sick with these diseases, wash your hands well with soap and water, and to get vaccinated before getting pregnant. Other people living in the home should also be vaccinated. For more information on the MMR vaccine, please see our fact sheet here: https://mothertobaby.org/fact-sheets/measles-mumps-rubella-mmr-pregnancy/.

I have measles, mumps, or rubella. Can it make it harder for me to get pregnant?

It is not known if measles or rubella can make it harder to get pregnant. Rarely, a mumps infection can cause inflammation in the ovaries (oophoritis). Ovaries are the organ where eggs are stored and released. Oophoritis could make it harder to get pregnant.

Does having measles, mumps, or rubella increase the chance of miscarriage?

Miscarriage is common and can occur in any pregnancy for many different reasons. Infection with measles, mumps, and/or rubella during pregnancy might increase the chance of miscarriage.

Does getting measles, mumps, or rubella during pregnancy increase the chance of birth defects?

Birth defects can happen in any pregnancy for different reasons. Out of all babies born each year, about 3 out of 100 (3%) will have a birth defect. We look at research studies to try to understand if an exposure, like getting measles, mumps, or rubella, might increase the chance of birth defects in a pregnancy. If someone gets rubella during pregnancy, the virus can pass to the fetus and cause birth defects. This is called congenital rubella syndrome (CRS). Babies affected by CRS can have hearing loss, heart defects, and cataracts (cloudy films that form over the lens of the eyes that can affect vision). Not all babies with CRS will have all these symptoms. A baby is more likely to be affected



by CRS if the pregnant woman gets rubella during the first trimester of pregnancy, although infection any time in pregnancy carries a chance of CRS. Because of these concerns, women who are pregnant are usually screened early in pregnancy to be sure they have antibodies to rubella.

Having measles or mumps during pregnancy is not expected to increase the chance of birth defects.

Does having measles, mumps, or rubella during pregnancy increase the chance of other pregnancyrelated problems?

If a woman has measles during pregnancy and has not had an MMR vaccine, there might be an increased chance of preterm delivery (birth before week 37) or low birth weight (weighing less than 5 pounds, 8 ounces [2500 grams] at birth).

Available information does not suggest a significant link between preterm delivery or low birth weight and having mumps during pregnancy.

Having measles, mumps, or rubella during pregnancy might increase the chance of stillbirth (fetal death after 20 weeks). A measles or mumps infection near the time of delivery might also increase the chance of a baby being born with the infection, although this is expected to be rare.

If a rubella infection occurs between 12 and 16 weeks of pregnancy, about half of these babies are expected to be affected by CRS. Deafness is the most common complication reported with infection after the first trimester.

CRS can also cause growth issues and low birth weight. This is most likely to occur when an infection happens before 16 weeks of pregnancy.

Does having measles, mumps, or rubella during pregnancy affect future behavior or learning for the child?

It is not known if having measles or mumps can increase the chance of behavior or learning issues for the child. Having a rubella infection in pregnancy can increase the chance of developmental delay and/or intellectual disabilities in some children.

What screenings or tests are available to see if my pregnancy has birth defects or other issues?

Prenatal ultrasounds can be used to screen for some birth defects. Ultrasound can also be used to track the growth of the pregnancy. Talk with your healthcare provider about any prenatal screenings or testing that are available to you. There are no tests available during pregnancy that can tell how much effect there could be on future behavior or learning.

Breastfeeding and measles, mumps, or rubella:

If you have measles, mumps, or rubella, talk to your healthcare provider about the best ways to prevent the spread of illness to your breastfed baby. If you suspect that your baby has any symptoms of measles, mumps, or rubella, contact the child's healthcare provider right away. Be sure to talk to your healthcare provider about all your breastfeeding questions.

If a man has measles, mumps, or rubella could it affect fertility or increase the chance of birth defects?

Studies have not been done to see if measles or rubella could affect men's fertility or increase the chance of birth defects. Having mumps might temporarily decrease the size of testicles, but this is not likely to cause infertility. Infected partners can pass these viruses to a pregnant woman through close contact. For more information on paternal exposures, please see the MotherToBaby fact sheet at

https://mothertobaby.org/fact-sheets/paternal-exposures-pregnancy/.

Please click here for references.



Questions? Call 866.626.6847 | Text 855.999.3525 | Email or Chat at MotherToBaby.org.

Disclaimer: MotherToBaby Fact Sheets are meant for general information purposes and should not replace the advice of your health care provider. MotherToBaby is a service of the non-profit Organization of Teratology Information Specialists (OTIS). Copyright by OTIS, November 1, 2024.