

# Fifth Disease (erythema infectiosum)

This sheet is about having fifth disease during pregnancy and while breastfeeding. This information is based on available published literature. It should not take the place of medical care and advice from your healthcare provider.

#### What is fifth disease?

Fifth disease (erythema infectiosum) is a viral illness caused by human parvovirus B19. It is more common in children than adults and usually affects children ages 4 to 14 years. The disease often starts with mild fever, headache, sore throat, and other flu-like symptoms. Children can also develop a bright red rash on the face that looks like "slapped cheeks", along with a lacy or bumpy rash on the body, arms, and legs. In adults, joint aches are a common symptom. Rash and joint symptoms might develop several weeks after infection. About 20-30% of adults who are infected with parvovirus B19 will not have symptoms.

## How do you get fifth disease?

Fifth disease is very contagious. It is spread by coughing, sneezing, touching secretions from the nose and mouth of an infected person, and through contact with blood. When an infected person coughs or sneezes, the virus can travel several feet. The time between infection and the development of the illness (incubation period) is usually between 4 and 14 days. People with fifth disease are most likely to spread the disease before symptoms start. People are less likely to be contagious after the rash occurs. Many people that work with children have antibodies to parvovirus B19 and are not at risk for infection. You can lower your chance of infection by practicing good hygiene such as washing your hands regularly and not sharing food or drinks.

#### How can I find out if I am infected with fifth disease?

Blood tests can show if someone is immune to the virus, if they are not immune and have never been infected, or if they have had a recent infection. Once you have had fifth disease, it is rare to be re-infected. Because fifth disease is a mild illness, and most people get infected as children, many adults might not remember if they ever had it.

## I have fifth disease. Can it make it harder for me to get pregnant?

It is not known if fifth disease can make it harder to get pregnant.

### Does having/getting fifth disease increase the chance of miscarriage?

Miscarriage is common and can occur in any pregnancy for many different reasons. Having a parvovirus B19 infection during pregnancy might slightly increase the chance of miscarriage.

### Does having/getting fifth disease 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. It is not known if fifth disease increases the chance of birth defects above the background risk.

# Does having/getting fifth disease in pregnancy increase the chance of other pregnancy-related problems?

It is not known if fifth disease can increase the chance of other pregnancy-related problems, such as preterm delivery (birth before week 37) or low birth weight (weighing less than 5 pounds, 8 ounces [2500 grams] at birth).

There are some reports of the placenta also becoming infected. The placenta is the organ that develops during pregnancy and works as the blood connection between the mother and the fetus. Studies show that most women who become infected with fifth disease during pregnancy deliver healthy babies. There is information to suggest that if a woman is infected during pregnancy there is up to a 33% chance of passing the infection to the fetus. Of that 33%, approximately 10% will have complications.

Fetal infection with fifth disease can lead to inflammation of the heart (myocarditis) and can damage the bone marrow so that red blood cells cannot be made (aplastic crisis). This can lead to anemia, a condition in which the body does not have enough healthy red blood cells. Fetuses with mild anemia generally recover. If the heart damage or anemia is



severe, hydrops fetalis (too much fluid in fetal tissues) can occur and might lead to fetal death. Sometimes, the hydrops goes away without treatment. Rarely, a baby is born unable to make red blood cells and will need blood transfusions. Babies with hydrops might also have breathing problems at birth.

In a small number of cases, fetal loss can occur. Infection in the first 20 weeks of pregnancy has up to a 10-15% chance of fetal loss. This chance gets lower in the third trimester. Infection after 20 weeks of pregnancy also carries a chance, though likely lower, for fetal loss.

# Does having/getting fifth disease in pregnancy affect future behavior or learning for the child?

Neurodevelopmental problems have been reported in a small number of infected pregnancies that develop complications.

### What screenings or tests are available to see if my pregnancy has any issues?

Prenatal ultrasounds can be used to screen for some issues, such as hydrops fetalis. Ultrasound can also be used to monitor 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 while I have fifth disease:

Women who have fifth disease can usually keep breastfeeding. Talk with your healthcare providers about precautions when handling the baby, such as washing hands before touching and using a face mask. Women who use a breast pump should disinfect all parts of the pump that come into contact with the milk after each use. Antibodies against parvovirus B19 have been found in breast milk. It has been suggested that these antibodies might pass immunity to the child that is breastfeeding. Be sure to talk to your healthcare provider about all your breastfeeding guestions.

## If a man has fifth disease, could it affect fertility or increase the chance of birth defects?

Studies have not been done to see if fifth disease could affect a man's fertility (ability to get a woman pregnant) or increase the chance of birth defects. In general, exposures that men have are unlikely to increase risks to a pregnancy. For more information, please see the MotherToBaby fact sheet Paternal Exposures 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.

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