

Fifth Disease (parvovirus B19)

This sheet is about having fifth disease during pregnancy or while breastfeeding. This information 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 infection caused by human parvovirus B19. It is more common in children than adults and usually affects children ages 4 to 14. 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 may develop several weeks after infection. About 20 to 30% of adults who are infected with parvovirus B19 will not have symptoms.

Is fifth disease contagious?

Fifth disease is very contagious. It is spread by coughing, sneezing, by 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.

What testing is available for 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 may not remember if they ever had it.

I don't think I've had fifth disease and I am a school teacher. Could I be exposed at work?

Many people that work with children have antibodies to parvovirus B19 and are not at risk for infection. Talk with your healthcare provider if you think you have been exposed to parvovirus B19. If you are not immune to the disease, and work with children, there is a chance that you can be infected. You can lower your chance of infection by practicing good hygiene such as washing your hands regularly and not sharing food or drinks.

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 for miscarriage?

Miscarriage is common and can occur in any pregnancy for many different reasons. Based on the studies reviewed, it is not known if fifth disease can increase the chance for 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 There is no evidence to suggest that having fifth disease during pregnancy 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?

Based on the studies reviewed, 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).

Studies show that most people who become infected with fifth disease during pregnancy deliver healthy babies. If a person is infected during pregnancy, there is up to a 33% chance of passing the infection to the baby. Of that 33%, approximately 10% will have complications. 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 person who is



pregnant and the pregnancy.

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 may 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 may 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 smaller percentage of infected pregnancies that develop complications.

Breastfeeding while I have fifth disease:

People who have fifth disease can usually continue to breastfeeding. People who are breastfeeding should talk with their healthcare providers about precautions when handling the baby, such as washing hands before touching and using a face mask. People who use a breast pump should disinfect of 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 disease to the child that is breastfeeding. Be sure to talk to your healthcare provider about all of your breastfeeding questions.

If a male has fifth disease, could it affect fertility (ability to get partner pregnant) or increase the chance of birth defects?

Studies have not been done to see if fifth disease could affect fertility or increase the chance of birth defects above the background risk. Since fifth disease is contagious, it is important to talk to your healthcare provider if your partner has been diagnosed with this disease. For more information on paternal exposures, please see the MotherToBaby fact sheet Paternal Exposures at https://mothertobaby.org/fact-sheets/paternal-exposures-pregnancy/.

Can I catch a parvovirus infection from my infected pet?

No. Dog and cat parvovirus is different from human parvovirus. People are only at risk from the parvovirus that infects humans.

Please click here for references.

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

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