

# Fifth Disease (parvovirus B19)

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This fact sheet talks about fifth disease during pregnancy and while breastfeeding. This information should not take the place of medical care and advice from your healthcare provider.

## ***What is fifth disease?***

Fifth disease, also called erythema infectiosum, is a viral illness caused by human parvovirus B19. It usually affects children ages 4 to 14 (is more common in children than adults). The infection often starts with mild fever, headache, sore throat, and 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. A pregnant woman who develops symptoms of fifth disease may or may not develop a facial or body rash and can pass the virus to her baby. Some adults (about 20 to 30%) infected with parvovirus B19 will not have symptoms.

## ***Is fifth disease contagious?***

Yes, fifth disease is very contagious. The virus is spread through contact with respiratory secretions of the nose (nasal mucus), saliva, and lungs (sputum / mucus) 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. Individuals with fifth disease are most infectious before the onset of symptoms and are unlikely to be contagious after the development of the rash. This makes efforts to prevent exposure difficult.

## ***I don't remember ever having fifth disease. Should I be tested?***

A blood test can be done to look for antibodies. Once you have had fifth disease, it's very 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 pre-school teacher. Could I be exposed at work?***

Many women that work with children have antibodies to parvovirus B19 and are not at risk for infection. You can ask your healthcare provider to do a blood test for antibodies to parvovirus B19 to see if you are immune to fifth disease. If you are not immune to the disease, and work with children, there is a risk that you will be infected. You can lower your risk of infection by practicing good hygiene such as washing your hands regularly and not sharing food or drinks.

## ***My child had fifth disease about 3 weeks ago and now my joints are sore. Could I have fifth disease?***

It is possible to get fifth disease from children. However, there are many other causes of joint pain. Talk with your healthcare provider to see if it is appropriate to order a blood test to check for antibodies for fifth disease. If you are not immune, you have a 50% risk of becoming infected from contact with an infected family member.

## ***Does having fifth disease in pregnancy increase the chance of birth defects?***

In every pregnancy, a woman starts out with a 3-5% chance of having a baby with a birth defect. This is called her background risk. There is no evidence that having fifth disease during pregnancy **increases the chance of birth defects above the background risk in their babies; however, some other problems in the babies may be present (see below).**

## ***I am pregnant and testing showed that I recently had fifth disease. Is my pregnancy at increased risk of problems because of the infection?***

Studies show that most women who become infected with fifth disease during pregnancy deliver healthy babies. However, if a woman is infected during pregnancy, there is up to a 33% chance of passing the infection to the baby. Of the 33% prenatally infected, 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 mom and the baby.

Fetal infection with fifth disease (whether a mother has symptoms or not) 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. Rarely, if the heart damage or anemia is severe, hydrops fetalis (excess 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, but this risk decreases into the third trimester. Infection after 20 weeks gestation also carries a risk; though likely lower, for fetal loss.

Neurodevelopmental problems have been reported in a smaller percentage of infected pregnancies that develop complications.

***I had fifth disease in my pregnancy. Are there any tests I can have to see if my baby is OK?***

Your healthcare providers will help to determine what testing or screening is right for your pregnancy.

***Can I breastfeed my baby if I have fifth disease?***

Breastfeeding does not need to stop if a woman has fifth disease. However, women with fifth disease should discuss precautions when handling the baby such as washing hands before touching and using a face mask with their healthcare providers. Mothers who use a personal 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 the presence of these antibodies might confer immunity to the disease in breastfeeding babies. Talk to your healthcare provider about all of your breastfeeding questions.

***What if the father of the baby has a Fifth disease?***

There are no studies on how parvovirus may affect a man's ability to get his partner pregnant. However, since Fifth disease is contagious, talk to your healthcare provider about testing if your partner has been diagnosed with this. In general, exposures that fathers 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/pdf/>.

***My pet has a parvovirus infection. Can I catch it from him/her?***

No. Dog and cat parvovirus is different from human parvovirus. Pregnant women are at risk only 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](https://mothertobaby.org).**

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