

FIFTH DISEASE (PARVOVIRUS B19) AND PREGNANCY

What is parvovirus B19?

Parvovirus B19 is a virus that commonly infects humans. About 50% of all adults have been infected sometime during childhood or adolescence. Parvovirus B19 infects only humans. There are animal parvoviruses, but they do not infect humans. Therefore, a person cannot catch parvovirus B19 from a dog or cat.

What illnesses do parvovirus B19 infection cause?

The most common illness caused by parvovirus B19 infection is “fifth disease,” a mild rash illness that occurs most often in children. The ill child usually has an intense redness of the cheeks (a “slapped-cheek” appearance) and a lacy red rash on the trunk and limbs. Occasionally, the rash may itch. The child is usually not very ill. The rash resolves in 7 to 10 days. However, if the person is exposed to sunlight or heat, the rash may come back. Recovery from parvovirus infection produces lasting immunity and protection against future infection.

An adult who has not previously been infected with parvovirus B19 can be infected and have no symptoms or can become ill with a rash and joint pain and/or joint swelling. The joint symptoms usually go away in a week or two, but may last several months.

Are these illnesses serious?

Fifth disease is usually a mild illness. It goes away without medical treatment among children and adults who are otherwise healthy. Joint pain and swelling in adults usually goes away without long-term disability. During outbreaks of fifth disease, about 20% of adults and children are infected without getting any symptoms at all. However, the disease can be severe in children with sickle cell anemia, other blood disorders, or weakened immune systems and in pregnant women.

I’ve recently been exposed to someone with fifth disease. How will this exposure affect my pregnancy?

Usually, there are no serious complications for a pregnant woman or her baby following exposure to a person with fifth disease. About 50% of women are already immune to parvovirus B19, and these women and their babies are protected from infection and illness. Even if a woman is susceptible and gets infected with parvovirus B19, she usually experiences only a mild illness. Likewise, her unborn baby usually does not have any problems because of the parvovirus B19 infection.

Sometimes, however, parvovirus B19 infection will cause the unborn baby to have severe anemia and the woman may have a miscarriage. This occurs in less than 5% of all pregnant women who are infected with parvovirus B19 and occurs more commonly during the first half of pregnancy. There is no evidence that parvovirus B19 infection causes birth defects or mental retardation.

What should I do about this exposure?

If you have been in contact with someone who has fifth disease or you have an illness that might be caused by parvovirus B19, you may wish to discuss your situation with your healthcare provider. Your healthcare provider can do a blood test to see if you have become infected with parvovirus B19.

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I have had a blood test for parvovirus B19. What do the results show?

A blood test for parvovirus B19 may show that you:

- Are immune to parvovirus B19 and have no sign of recent infection. You have protection against parvovirus B19.
- Are not immune and have not yet been infected. You may wish to avoid further exposure during your pregnancy.
- Have had a recent infection. You should discuss this with your healthcare provider.

If I'm infected, what do I need to do about my pregnancy?

There is no universally recommended approach to monitor a pregnant woman who has a documented parvovirus B19 infection. Some healthcare providers treat a parvovirus B19 infection in a pregnant woman as a low-risk condition and continue to provide routine prenatal care. Other healthcare providers may increase the frequency of doctor visits and perform blood tests and ultrasound examinations to monitor the health of the unborn baby. The benefit of these tests in this situation, however, is not clear. If the unborn baby appears to be ill, there are special diagnostic and treatment options available. Your obstetrician will discuss these options with you and their potential benefits and risks.

Is there a way I can keep from being infected with parvovirus B19 during my pregnancy?

There is no vaccine or medicine that can prevent parvovirus B19 infection. Frequent handwashing is recommended as a practical and probably effective method to reduce the spread of parvovirus. Excluding persons with fifth disease from work, childcare centers, schools, or other settings is not likely to prevent the spread of parvovirus B19, since ill persons are only contagious before they develop the characteristic rash.

The Centers for Disease Control and Prevention (CDC) do not recommend that pregnant women routinely be excluded from a workplace where a fifth disease outbreak is occurring, because of the problems noted above. Rather, CDC considers this to be a personal decision for the woman after discussion with her family, healthcare provider, and employer.

For more information, call Hennepin County HSPHD-Epidemiology at (612) 543-5230 or call your local health department.