

PARVOVIRUS B19 AND 'FIFTH DISEASE'

WHAT IS PARVOVIRUS B19?

- Parvovirus B19 is a virus that commonly (and only) infects humans. About 50 per cent of all adults have been infected sometime during childhood or adolescence.

HOW IS THE INFECTION SPREAD?

- The virus is spread by contact with infected respiratory secretions (for example, by coughing), and from mother to unborn baby.
- The incubation period varies from 4–20 days from infection to the development of a characteristic rash or other symptoms.
- Persons are contagious before the rash develops.

WHAT ILLNESS DOES THE 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 typically has a 'slapped-cheek' rash on the face and a lacy red rash on the trunk and limbs.
- Occasionally, the rash may itch. The child is usually not very ill, and the rash resolves in seven to 10 days.
- Once a child recovers from parvovirus infection, he or she develops lasting immunity, and is protected against future infection.
- An adult who is infected with parvovirus B19 may have no symptoms at all, or may develop a rash, joint pain or swelling, or both. The joint symptoms usually resolve in a week or two, but can last longer.
- 'Fifth disease' is usually a mild illness. It resolves without treatment among children and adults who are otherwise healthy.

PARVOVIRUS B19 AND PREGNANCY?

- Usually there is no serious complication for a pregnant woman or her baby following exposure to a person with fifth disease.
- About 50 per cent 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 attributable to 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 five per cent 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.
- There is no universally recommended approach to monitor a pregnant woman who has a documented parvovirus B19 infection. Some doctors treat a parvovirus B19 infection in a pregnant woman as a low-risk condition and continue to provide routine prenatal care. Other physicians 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, and your obstetrician will discuss these options with you and their potential benefits and risks.

BLOOD TEST FOR PARVOVIRUS B19

- A blood test for parvovirus B19 may show that you:
 1. are immune to parvovirus B19 and do not have the infection
 2. are not immune and could be infected if exposed, or
 3. have had a recent infection.

PREVENTING PARVOVIRUS B19 INFECTION

- There is no vaccine or medicine that prevents parvovirus B19 infection.
- Frequent hand washing is recommended as a practical and probably effective method to reduce the spread of parvovirus.
- Excluding persons with fifth disease from work, child care centres, schools, or other settings is not likely to prevent the spread of parvovirus B19, since ill persons are contagious before they develop the rash.
- Pregnant women should not routinely be excluded from a workplace where a fifth disease outbreak is occurring, because of the problems noted above. Whether to stay away from a workplace where there are cases of fifth disease is a personal decision for a woman to make, after discussions with her family, doctor, and employer.

For more information please contact your local public health unit, community health centre, or doctor.

Adapted from: Centers for Disease Control and Prevention: Parvovirus B19 infection and Pregnancy. www.cdc.gov/ncidod/diseases/parvb19preg.htm 