

Fifth Disease

(Erythema Infectiosum)

Clinical Description:

Fifth disease is usually a mild illness caused by the human parvovirus (B19). The disease is characterized by a facial rash with a "slapped cheek" appearance and a lace-like rash on the trunk and extremities that is often itchy. Reddening of the skin may recur due to nonspecific stimuli such as temperature or sunlight. Symptoms can include low-grade fever and mild cold symptoms. Parvovirus can also cause other conditions. In people with certain red blood cell abnormalities, such as sickle cell disease, this infection can cause an aplastic crisis. Infection with the virus can also cause chronic anemia in immunosuppressed people or arthralgia or arthritis in susceptible adults. Parvovirus infection during early pregnancy may cause intrauterine growth retardation, fetal hydrops and/or death in the fetus, although this is very rare. Infection is most common in school-aged children. Clusters of cases can occur in schools, usually in late winter and spring.

Incubation Period:

The incubation period is normally from 4 -14 days, but can be as long as 20 days.

Mode of Transmission:

Transmission occurs through contact with infectious respiratory secretions, exposure to blood or blood products and from an infected mother to her fetus; however, droplet contact and close person-to-person contact are the most common modes of transmission.

Period of Communicability:

An infected person can spread fifth disease during the week prior to the appearance of the rash. When the rash appears, a person can no longer spread the virus to others.

Exclusion/Reporting:

Individuals with fifth disease are most communicable before onset of illness; once the rash appears, they are usually no longer contagious.

Prevention/Care:

- Inform high risk people within the school when a case of fifth disease has been identified: persons with chronic hemolytic anemia, congenital or acquired immunodeficiencies, and pregnant women. Pregnant women should consult with their health care provider if exposed to a case of fifth disease. Serologic testing for parvovirus B19 can determine a pregnant woman's susceptibility to the virus.
- Encourage frequent hand washing and prompt disposal of used tissues.

Outbreaks:

According to the ISDH Communicable Disease Reporting Rule (410 IAC 1-2.3) the definition of an outbreak means cases of disease occurring in a community, region, or particular population at a rate in excess of that which is normally expected. The local health department should be notified of suspected and/or documented cases of Fifth

Disease if the number of cases is in excess of what is normally experienced in your school or occur with a common connection (same class, sports team, etc.). For additional information and recommendations regarding the preparation for, and the management of an outbreak situation in a school setting, see Appendix A, "Managing an Infectious Disease Outbreak In a School Setting."

Other Resources:

Indiana State Department of Health Quick Facts Page (found on disease/condition page):

<http://bit.ly/12JLfD>

Centers for Disease Control and Prevention (CDC) Link:

<http://www.cdc.gov/parvovirusB19/index.html>

<http://www.cdc.gov/parvovirusB19/pregnancy.html>

Photographs of Disease/Condition:

<http://www.cdc.gov/parvovirusB19/photos.html>