

FIFTH DISEASE (Erythema Infectiosum)

Last Reviewed January 2006

Definition

Fifth disease is a mild viral illness caused by parvovirus B19, that usually affects children. It is called fifth disease because it was the fifth of six similar rash-causing illnesses to be described. Most cases of fifth disease occur in late winter or early spring. Clusters or outbreaks of illness among children in schools or day-care centers are not unusual.

Many people have already caught this disease before they reached young adulthood. It is estimated that about half the adults in the United States have been infected with parvovirus B19 and are now immune.

Signs and symptoms:

The first stage of illness often consists of mild symptoms such as headache, body ache, sore throat, low-grade fever and chills. These symptoms last approximately two to three days and are followed by a second stage, lasting about a week, during which the person has no symptoms at all. In children, the third stage involves a bright red rash on the cheeks which gives a “slappedcheek” appearance. This may be followed by a “lacy” rash on the arms and legs. Adults and adolescents may not develop the third-stage rash but may experience joint pain, particularly in the hands and feet. The disease is usually mild and both children and adults recover without problems. However, in rare situations some people, especially those with blood disorders such as sickle cell anemia, may develop more severe symptoms. The characteristic facial rash is sometimes confused with rubella (German measles) or scarlet fever.

Mode of Transmission:

Fifth disease is spread through contact with infected respiratory secretions. Incubation period is 4 – 21 days. Rash and joint symptoms occur 2 – 3 weeks after infection. People who have fifth disease are usually contagious only during the first stage of the illness. By the time the rash or joint pains develop (two to three weeks after exposure) people are no longer contagious.

Severe complications are unusual but can occur especially in persons with anemia, immunosuppression, or women in their first half of pregnancy. Pregnant women in schools with reported cases of fifth disease, should consult their physician.

Role of the School Nurse:

- By the time most children are diagnosed they are no longer contagious. Therefore, there is no reason to exclude these children from school or day care.
- Rule out other rash-causing infections.
- There is no specific treatment for fifth disease, only symptomatic care.
- Encourage routine hygiene practices.
- This is not a reportable disease.

Resources:

<http://www.cdc.gov/ncidod/diseases/parvovirus/B19.htm> - CDC web site.

http://kidshealth.org/parent/infections/bacterial_viral/fifth.html - Kids Health web site.

<http://www.nlm.nih.gov/medlineplus/fifthdisease.html> - Medline

Nancy Dube, School Nurse Consultant
Department of Education
624-6688, Nancy.Dube@Maine.Gov