FIFTH DISEASE

What is it?
Fifth Disease, or erythema infectiosum, is a viral infection that appears as a relatively mild, distinctive rash and affects mostly elementary school-aged children. The specific agent is the human parvovirus B19 that occurs worldwide and most commonly during late winter and early spring. Once a person recovers, he/she is protected against future illness. A special blood test may confirm the presence or absence of immunity.

What are the symptoms?
Incubation, from exposure to onset of symptoms, is generally 4-14 days. Most individuals infected with the virus will experience a mild infection with no complications. Generally, symptoms vary by age. A child may have a low-grade fever, malaise, or a "cold" a few days before the rash breaks out. A lace-like, frequently itchy "slapped-cheek" rash on the face, trunk and limbs then develops. For weeks, the rash may fade and recur depending on activity (sun exposure, hot baths/showers, and strenuous exercise).

About 50% of adults have been previously infected with parvovirus B19 are protected from the virus. If an adult has no immunity and develops symptoms, they may include the typical rash of fifth disease, joint pain or swelling, or both. The joints of the hands, wrists, and knees are most frequently affected. The joint pain and swelling usually resolve in a week or two, but may last several months.

How is the parvovirus spread?
This virus infects only humans. Pet dogs or cats may be immunized against "parvovirus," but these are animal parvoviruses that do not infect humans. The virus is spread by exposure to airborne droplets from the mouth or nose of an infected individual. It is most contagious prior to onset of rash. Most experts suggest that by the time the rash appears, the individual is no longer contagious.

Persons with chronic blood disorders or weakened immune systems should consult their health care provider if exposure occurs. Occasionally, serious complications may develop from parvovirus B19 infection during pregnancy. Pregnant women also are encouraged to also confer with their physician. The greatest period of risk to the fetus is during the first half of pregnancy.

What is the treatment for the virus infection?
Currently, there is no available treatment or vaccine. Only supportive care that includes rest, plenty of fluids and doctor-recommended medication for control of fever and pain relief is indicated.

How can it be prevented?
Good handwashing and respiratory etiquette with proper disposal of soiled tissues is the key to prevention and control of the spread of germs and illness. Excluding persons with fifth disease from work, child care centers, or schools is not likely to prevent the spread of the virus, since people are contagious before they develop the rash.

FOR MORE INFORMATION:
SCHD Communicable Disease Unit  330-375-2662
Centers for Disease Control and Prevention  www.cdc.gov
Mayo Clinic  www.mayoclinic.com
Communicable Disease Fact Sheet 2011; logo update 0915