Indiana State Department of Health | Epidemiology Resource Center

Quick Facts

About….Fifth Disease

What is fifth disease (human parvovirus B19)?

Fifth disease, also known as erythema infectiosum, is caused by the human parvovirus B19 and is a mild illness with symptoms of a characteristic "slapped" cheek rash, fever, fatigue and muscle aches. Few complications are experienced in healthy children, although the disease may cause painful arthritis symptoms in some children and adults. Slowed fetal growth, fetal hydrops and fetal death, can but rarely occur as a result of parvovirus infection during pregnancy.

How is fifth disease spread?

Fifth disease is spread through direct contact with an infected person's nose and mouth secretions or through air when an infected person sneezes or coughs. A person is most likely to spread the virus during the week prior to the appearance of the rash and child may return to school or work after the rash first appears.

Who is at risk for fifth disease?

School-aged children and women who are exposed to children at work or in the home are at greatest risk for infection with human parvovirus. A person can only be infected with the virus one time during his or her life.

How do I know if I have fifth disease?

Symptoms of headache, fever, fatigue and muscle aches often appear prior to the appearance of the "slapped cheek" rash. The rash appears bright red and is most visible on the face and spreads to the trunk, arms, and legs. As the rash fades, it appears in a lace-like pattern and returns upon exposure to sunlight, heat, exercise or stress. In adults, the most common symptom is arthritis 2-3 weeks after the initial onset of symptoms.

Human parvovirus can cause other illnesses including upper respiratory infection. One complication known as papulopurpuric gloves and socks syndrome (PPGSS) involves red lesions on the hands and feet that will turn purple in color causing tingling and sometimes pain. Oral lesions may also occur with PPGSS. Children with a condition called sickle cell anemia are at greater risk for a sickle-cell crisis, where red blood cells may fail to develop normally.

How can fifth disease be treated?

Most children with fifth disease do not need medication. Over the counter medication and cool compresses may be used to reduce joint pain, fever or other aches.

How is fifth disease prevented?

Good personal hygiene is the best way to prevent the spread of human parvovirus, including good hand washing and prompt disposal of used facial tissues. Pregnant women should seek medical attention if they think they have been in contact with a case of HFMD one week before the onset of rash.

All information presented is intended for public use. For more information, please refer to:

Centers for Disease Control and Prevention Website on Parvovirus at:
http://www.cdc.gov/ncidod/dvrd/revb/respiratory/parvo_b19.htm

Mayo Clinic Website on parvovirus at:
http://www.mayoclinic.com/health/parvovirus-infection/DS00437

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