



Fifth Disease

Fifth disease (also called erythema infectiosum (EI) or human parvovirus B19 infection) is a mild, common illness caused by a virus. Rash is the most common symptom. Immunity increases with age; 50%-80% of adults are immune. Outbreaks of fifth disease frequently occur in childcare settings and schools.

School health and childcare provider information

Cause

Human parvovirus B19.

Symptoms

Rash; possibly a low-grade fever or sore throat. The characteristic rash causes an intense redness of the cheeks (a "slapped cheek" appearance) in children. The rash often begins on the cheeks and is later found on the arms, upper body, buttocks, and legs; it has a very fine, lacy, pink appearance. In general, the rash on the face will fade within 4 days. The rash on the rest of the body initially fades within 3 to 7 days. However, the rash may come and go for days or even weeks, when the person is exposed to sunlight or heat. Adults, especially women, may have pain, redness, and swelling of the joints. Joint pain and swelling may last 1-3 months.

Most people who get fifth disease do not become very ill, and some will have no symptoms at all. However, children with sickle cell anemia, chronic anemia, or a weakened immune system may become seriously ill and require medical care when infected with parvovirus B19.

Spread

When an infected person coughs or sneezes. People can also become infected by touching these secretions and then touching their eyes, mouth, or nose.

Incubation

It takes from 4 to 21 days, usually 4 to 14 days, from the time of infection until symptoms begin.

Contagious period

Most contagious before a rash develops and unlikely to be contagious after the rash begins.

Exclusion

Childcare and School

None if a health care provider rules out other rash-causing illnesses. Persons with fifth disease are no longer infectious once the rash begins.

Diagnosis

Lab (blood) tests are available to determine whether a person is immune or is currently infected with parvovirus B19.

Treatment

For most individuals, there is no treatment, and they will recover from the illness without intervention. For immunodeficient patients, Immune Globulin Intravenous (IGIV) therapy may be used in some situations.

Prevention

- Those who are pregnant, have a weakened immune system, have sickle cell anemia, or have other blood disorders should notify their health care provider if exposed. A health care provider may recommend blood tests to determine immunity (have had fifth disease in the past).
- Wash hands thoroughly with soap and warm running water after touching secretions from the nose or mouth. **Thorough handwashing is the best way to prevent the spread of communicable diseases.**
- Cover nose and mouth with a tissue when coughing and sneezing or cough/sneeze into your sleeve. Dispose of used tissues in the trash.
- Clean and disinfect commonly touched surfaces (doorknobs, refrigerator, handles, crib rails, water faucets, cupboard handles) at least daily (see Section 2).
- Clean and sanitize mouthed toys, objects, and surfaces at least daily when soiled (see Section 2).

For more information, call Hennepin County HSPHD-Epidemiology at (612) 542-5230 or call your local health department.

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