



Fifth Disease

Definition:

Fifth Disease is a mild rash illness caused by parvovirus B19. It is more common in children than adults.

Signs and symptoms:

The signs and symptoms of fifth disease are usually mild and may include a fever, runny nose, headache, and rash. The most recognized symptom is a red rash on the face called “slapped cheek” rash. Some people develop a second rash on their chest, back, buttocks, or arms and legs. This rash may be itchy, can vary in intensity, and usually goes away within seven to 10 days.

People with fifth disease can also develop pain and swelling in their joints, called polyarthropathy syndrome. This is more common in adults, especially women. The joint pain usually lasts one to three weeks, but can last months or even longer.

Transmission:

- Parvovirus B19, spreads through respiratory secretions including saliva, sputum, nasal mucus, coughing, and sneezing.
- Parvovirus B19 can also spread through blood or blood products.
- A pregnant woman who is infected can pass the virus to her baby.

An individual is most contagious before the rash or joint pain and swelling develops. People with weakened immune systems may be contagious for a longer amount of time. Once an individual recovers from fifth disease, they develop immunity that generally protects you from future parvovirus B19 infections.

Diagnosis:

- Providers can often diagnose fifth disease by seeing “slapped cheek” rash on the patient’s face.
- A blood test can determine if the patient is susceptible or immune to parvovirus B19 infection or if they were recently infected. This is not a routine test but can be performed under special circumstances, such as in pregnant women suspected to have fifth disease.

Role of the School Nurse:

Prevention

There is no vaccine or medicine to prevent parvovirus B19 infection.

- Provide education to staff and students about the importance of good hand washing and covering the mouth and nose when sneezing or coughing.
- Discourage close contact with people who are sick.
- Recommend staff and students stay home when sick.

Treatment Recommendations

- There is no specific treatment for fifth disease. Fifth disease is usually mild and will go away on its own. People who have complications from fifth disease should see their healthcare provider for medical treatment.
- Over-the-counter medications can relieve pain, fever, and itching (do not give Aspirin to children, as it may cause a rare but serious illness caused Reye syndrome).

Exclusions

- There are no exclusions for fifth disease.

Reporting Requirements

- Individual cases of fifth disease are not reportable.
- Outbreaks are reportable when $\geq 15\%$ of students are absent due to illness

Resources:

- Federal CDC website: <https://www.cdc.gov/parvovirusb19/fifth-disease.html>
- American Academy of Pediatrics Infectious Disease Curriculum for fifth disease: <https://www.healthychildren.org/English/health-issues/conditions/skin/Pages/Fifth-Disease-Parvovirus-B19.aspx>