



Hand, Foot and Mouth Disease

(Enteroviral Vesicular Stomatitis With Exanthem)

What is hand, foot and mouth disease?

Hand, foot and mouth disease is a mild viral illness that can affect anyone, but most often occurs in children younger than 10. The disease is characterized by vesicles (small blisters that contain clear fluid) inside the mouth, on the gums, and on the side of the tongue. On rare occasions, people with the virus that causes hand, foot and mouth disease may develop viral meningitis. Infants who develop blisters in the mouth may stop nursing and become dehydrated. Most cases of hand, foot and mouth disease occur in summer and fall.

Who is at risk for hand, foot and mouth disease?

Everyone is at risk for hand, foot and mouth disease, but it usually occurs in children younger than 10. Not everyone who is infected becomes ill.

What are the symptoms of hand, foot and mouth disease?

Hand, foot, and mouth disease usually starts with a fever, poor appetite, a vague feeling of being unwell (malaise), and sore throat. One or two days after fever starts, painful sores usually develop in the mouth, often in the back of the mouth. They begin as small red spots that blister and that often become ulcers. A skin rash develops over one to two days. The rash has flat or raised red spots, sometimes with blisters. The rash is usually on the palms of the hands and soles of the feet; it may also appear on the knees, elbows, buttocks or genital area.

How soon do symptoms appear?

Symptoms usually appear three to six days after exposure.

How is hand, foot and mouth disease spread?

The disease is spread by contact with nose and throat discharges, blister fluid and feces of infected people.

When and for how long is a person able to spread the disease?

Generally, a person with hand, foot, and mouth disease is most contagious during the first week of illness. A person with hand, foot and mouth disease can transmit the virus through nose and throat discharges and feces during the acute stage of the illness. The virus can continue to be transmitted in the feces for as long as several weeks after the onset of infection when a person has no apparent illness.

How is a person diagnosed?

A health-care provider can diagnose hand, foot and mouth disease. Laboratory tests are not usually needed for diagnosis.

What is the treatment?

Hand, foot and mouth disease does not require treatment. People with the disease should rest and may be given medication and liquids to control fever and pain associated with the disease.

Does past infection make a person immune?

Immunity to the specific virus type probably is acquired after infection; however, the duration of the immunity is unknown. Current immunity to one type of virus will not prevent infection from a different virus type.

Should children or others be excluded from day care, school, work or other activities if they have hand, foot and mouth disease?

Children with symptoms should not attend day care or school until the fever is no longer present and the vesicles begin to subside.

What can be done to prevent the spread of hand, foot and mouth disease?

Particular attention should be given to thorough hand washing following contact with nose and throat discharges and feces. Cleaning and disinfecting frequently touched surfaces and soiled items, including toys, will help prevent the spread of disease. People should avoid close contact, such as kissing, hugging, or sharing eating utensils or cups, with people who have hand, foot, and mouth disease.

Additional Information:

Additional information is available at www.ndhealth.gov/disease or by calling the North Dakota Department of Health at 800.472.2180.

Resource: [National Center for Immunization and Respiratory Diseases \(NCIRD\)](#), [Division of Viral Diseases](#).