

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 occur at any age, but occurs most often in children younger than ten. 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 ten. 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. They begin as small red spots that blister and that often become ulcers. The sores are often in the back of the mouth. 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, contact with the rash or blisters, and feces during the acute stage of the illness. The virus can continue to be transmitted in the feces perhaps 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 to diagnose hand, foot, and mouth disease.

What is the treatment?

There is no specific treatment for hand, foot, and mouth disease. People with the infection should rest and may be given medication and liquids to control fever and pain associated with the disease. Do not give aspirin to children with hand, foot and mouth disease. Young children can become dehydrated easily if they are not able to tolerate drinking and may need supportive fluids through an IV in their vein.

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 child care, school, work or other activities if they have hand, foot and mouth disease?

People with hand, foot, and mouth disease do not need to be excluded unless:

- The child is not feeling well enough to participate in class or has a fever.
- The teacher or child care provider feels he or she cannot take care of the child without compromising care for the other children in the class. Excessive drooling from mouth sores might be a problem that people find difficult to manage.
- The individual has many open blisters. It usually takes about 7 days for the blisters to dry up.
- The individual meets other exclusion criteria.

Note: Exclusion from child care or school will not reduce the spread of hand, foot, and mouth disease because children can spread the virus even if they have no symptoms and the virus may be present in the stool for weeks after the symptoms are gone

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 with 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.

Resources:

American Academy of Pediatrics. (2016). Hand, Foot, and Mouth Disease: Parent FAQs. Retrieved from <https://www.healthychildren.org/English/health-issues/conditions/infections/Pages/Hand-Foot-and-Mouth-Disease.aspx>

Centers for Disease Control and Prevention. (2019). Hand, Foot, and Mouth Disease. Retrieved from <https://www.cdc.gov/hand-foot-mouth/index.html>.