



## HAND, FOOT & MOUTH DISEASE

### What is it?

Hand, foot and mouth disease (HFMD) is a common childhood illness caused by an *Enterovirus*. It is characterized by its small, round blisters on the palms of the hands, soles of the feet, and frequently the mouth and gums. The illness usually affects infants and older children, producing immunity (antibodies) to the disease. However, the virus can also occur in adolescents and occasionally in adults. It is fairly common in the summer and early autumn. It is *not* hoof-and-mouth disease which is associated with a disease of cattle, sheep, and swine.

### What are the symptoms?

HFMD is not considered a serious viral illness. Symptoms usually appear 3 to 5 days after exposure and commonly include sudden onset of mild fever, sore throat, and the appearance of blisters. The blisters can also be found between the toes and fingers, inside the mouth, on the tongue and lips, and on the inside surface of the cheeks. Shallow sores result when the blisters break, generally within one to two days. Some children will develop a rash, mainly on their buttocks. Symptoms of hand, foot and mouth can last for up to 2 weeks.

### How is it spread?

HFMD is moderately infectious to others. It is spread by direct contact with nose and throat discharges, fluid from the blisters, and feces (stool) of infected individuals. Airborne droplets in the infected person's sneeze or cough can also spread the virus. It is *most* contagious during the first week of symptoms but perhaps longer as the virus is shed in the stool for several weeks. Some people may be infected and have no symptoms at all. There is no reliable evidence that the virus is spread by insects, water, food, or sewage. It is not transmitted to or from pets or other animals. A pregnant woman exposed to the virus should consult her physician.

### How is it treated?

There is no specific treatment. Antibiotics are *not* effective against viruses. Over-the-counter medications such as acetaminophen or ibuprofen are generally recommended to reduce the fever and relieve the discomfort from the blisters. Fluids should be encouraged, even though mouth blisters can be painful. Cold drinks, popsicles, or ice cubes are options for those experiencing pain with drinking.

### How can it be prevented?

Prevention is difficult due to the ease of spreading the virus during outbreaks. Good hand-washing is necessary for controlling all infections spread by hand-to-mouth contact. Covering a cough or sneeze is also important. Adequate cleaning of surfaces with soap and water or a diluted bleach solution (1/4 cup household bleach to 1 gallon of water) and the washing of soiled clothing is also important. There are no specific recommendations regarding the exclusion of children with HFMD from child care programs, schools, or other group settings. However, it is recommended that *all* children (and adults) with fever illness be kept home until symptoms resolve. This may reduce the spread of infection, but may not completely prevent it. No vaccine is currently available. There may be some benefit of excluding children who have blisters in their mouths and drool or who have weeping lesions on their hands.

**FOR MORE INFORMATION:**  
SCHD Communicable Disease Unit 330-375-2662  
Centers for Disease Control and Prevention [www.cdc.gov](http://www.cdc.gov)  
Mayo Clinic [www.mayoclinic.com](http://www.mayoclinic.com)