



Hand, Foot, and Mouth Disease

What is hand, foot and mouth disease?

Hand, foot and mouth disease (HFMD) is a common viral illness that usually affects infants and children younger than 5 years old. HFMD is caused by viruses that belong to the Enterovirus group. This group of viruses includes polioviruses, coxsackieviruses, echoviruses, and enteroviruses. Coxsackievirus A16 is the most common cause of HFMD in the United States.

Signs and Symptoms

HFMD usually starts with a fever, poor appetite, a vague feeling of being unwell (malaise), and sore throat. One or 2 days after fever starts, painful sores usually develop in the mouth (herpangina). They begin as small red spots that blister and often become ulcers. The sores are often in the back of the mouth. A skin rash develops over 1 to 2 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. Some people, especially young children, may get dehydrated if they are not able to swallow enough liquids because of painful mouth sores.



Transmission

HFMD is spread from person to person by direct contact with the infectious viruses that cause this disease. These viruses are found in the nose and throat secretions (such as saliva, sputum, or nasal mucus), fluid in blisters, and stool of infected persons. The viruses may be spread when infected persons touch objects and surfaces that are then touched by others.



Infected persons are most contagious during the first week of the illness. The viruses that cause HFMD can remain in the body for weeks after a person's symptoms have gone away. This means that infected people can still pass the infection to others even though they may appear well. Also, some people who are infected and shedding the virus, including most adults, may have no symptoms. HFMD is not transmitted to or from pets or other animals.

Prevention and Treatment

There is no vaccine to protect against the viruses that cause HFMD. A person can lower their risk of being infected by

- Washing hands often with soap and water, especially after changing diapers and using the toilet. Visit CDC's Clean Hands Save Lives! (<http://www.cdc.gov/handwashing/>) for more information.
- Disinfecting dirty surfaces and soiled items, including toys. First wash the items with soap and water; then disinfect them with a solution of chlorine bleach (made by mixing 1 tablespoon of bleach and 4 cups of water [1:64 ratio]).
- Avoiding close contact such as kissing, hugging, or sharing eating utensils or cups with people with HFMD.

There is no specific treatment for HFMD. However, some things can be done to relieve symptoms, such as

- Taking over-the-counter medications to relieve pain and fever (Caution: Aspirin should not be given to children.)
- Using mouthwashes or sprays that numb mouth pain

Persons who are concerned about their symptoms should contact their physician.

For more information, please visit the Centers for Disease Control and Prevention's website: <http://www.cdc.gov/hand-foot-mouth/>