



Philadelphia Department of Public Health
Division of Disease Control

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Health Advisory

Increase in Cases of Hand Foot and Mouth Disease

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In the past two weeks, the Philadelphia Department of Public Health's Division of Disease Control (DDC), has seen an increase in cases of Hand Foot and Mouth Disease (HFMD) in Philadelphia as reported by health care providers and by syndromic surveillance of selected hospital emergency department visits. HFMD is an illness caused by certain types of Coxsackie viruses. Although anyone can get HFMD, it is most common in infants and young children.

Clinical illness is characterized by fever, blisters or ulcers in the mouth, and a red or blistered skin rash. The rash is not itchy and usually appears on the palms, soles, and occasionally the buttocks. Persons with HFMD can have only the rash, only the mouth ulcers, or both. HFMD typically resolves without treatment in several days. In very rare cases, some of the viruses that can cause HFMD may also cause more serious infections, such as viral meningitis or encephalitis. HFMD can be transmitted from person to person by contact with infected stool, saliva, respiratory secretions, and fluid from blisters. Infected persons are most contagious during their first week of illness, but, in some cases, communicability may extend for weeks beyond resolution of symptoms. The usual incubation period for HFMD is 3 to 7 days.

Although the viruses that cause the illness can be isolated from throat swabs or stool specimens, these tests often take several weeks to complete; therefore, HFMD is usually diagnosed on the basis of the characteristic mouth sores and rash. Treatment is supportive and may include symptomatic treatment of fever, body aches, and pain from mouth sores. DDC recommends the following:

- Exclusion of ill persons from group settings during the first few days of illness to reduce the spread of infection, though additional cases may also occur due to shedding of virus from asymptomatic persons. Schools and daycare centers should consider longer durations of exclusion for drooling children who have blisters in their mouths, or children who have weeping lesions on their hands.
- Though there is no specific treatment for HFMD, measures to enhance cleanliness and hygiene such as frequent hand washing and cleaning of soiled environmental surfaces may help interrupt disease transmission. Hand washing after diaper changes, contact with blisters, and secretions from the nose and mouth is particularly important.
- Avoidance of close contact (hugging, kissing, sharing utensils, etc.) with infected persons may help reduce the risk of disease transmission
- Coxsackie viruses can persist on surfaces in the environment. Currently, the CDC recommends disinfection of non-porous surfaces using a bleach solution (1:50 dilution of household bleach).

To report an outbreak of rash illness, please call the Division of Disease Control at 215-685-6741 during regular business hours, or 215-686-1776 after-hours and ask for the person on-call for the Division of Disease Control.



CITY OF PHILADELPHIA DEPARTMENT OF PUBLIC HEALTH DIVISION OF DISEASE CONTROL

Hand Foot and Mouth Disease (Coxsackie Virus) FAQ's

What is Hand Foot and Mouth Disease?

Hand Foot and Mouth disease (HFMD) is a viral illness caused by certain types of Coxsackie virus. In climates such as Philadelphia, HFMD is more common in the summer and autumn. It is a fairly common, mild disease that usually does not require medical treatment. In very rare instances, viruses that cause HFMD can also cause more serious infections, such as viral meningitis.

Who gets HFMD?

Anyone can get HFMD, but infection is more common in infants and young children. Infants and children are most susceptible to infection because they are less likely to have developed immunity from previous exposure to the viruses.

How is HFMD spread?

HFMD is spread by direct contact with the nose and throat discharges, saliva, or stool of infected persons. HFMD can also be spread by direct contact with the fluid from blisters. Infected persons can be contagious even if they have no symptoms.

What are the symptoms of HFMD?

HFMD is characterized by fever, sores in the mouth, and a skin rash with blisters. Illness typically begins with a mild fever, poor appetite, malaise, and frequently a sore throat. The mouth sores begin as small red spots on the tongue, gums, and inside of the cheeks. They can then blister and become ulcers. The skin rash is not itchy and is characterized by flat or raised red spots, some with blisters. This rash usually appears on the palms of the hands and soles of the feet, and may also appear on the buttocks. A person with HFMD can have only the rash, only the mouth ulcers, or both.

How soon after exposure do symptoms appear (*incubation period*)?

The usual period from exposure to onset of symptoms is 3 to 7 days. Fever is often the first symptom of HFMD.

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

Infected persons can excrete the virus in their stool for several weeks after they have been infected. However, an infected person is most contagious during the first week of their illness.

How is HFMD diagnosed?

HFMD is usually diagnosed by a clinician on the basis of the characteristic rash and mouth sores.

What is the treatment for HFMD?

There is no specific treatment for HFMD. Symptomatic treatment can be given for fever and pain from the sores.

Should an infected person be isolated or excluded from school?

Children are often excluded from group settings during the first few days of the illness, when they are most contagious. This may help reduce the spread of infection, but will not completely interrupt it. Some benefit may also be gained by longer durations of exclusion for drooling children who have blisters in their mouths and for children who have weeping lesions on their hands.

What can be done to prevent the spread of HFMD?

The risk of HFMD infection can be lowered by good hygienic practices. Frequent handwashing is very important, especially after diaper changes and after contact with blisters or secretions from the nose and mouth.

Contaminated surfaces and soiled items can be cleaned by first washing them with soap and water, and then disinfecting them by using a diluted solution of chlorine-containing bleach (made by mixing approximately ¼ cup of household bleach with 1 gallon of water. Avoidance of close contact (kissing, hugging, sharing utensils, etc.) with infected persons may also help to reduce the risk of infection.