

Hand, Foot and Mouth Disease (HFMD)

(Vesicular Stomatitis with Exanthem)

Clinical Description:

HFMD is a mild illness occurring most often in children less than five (5) years of age, caused by enteroviruses (most commonly Coxsackievirus A16 and Enterovirus 71). Cases may also occur in older adolescents and adults. HFMD is characterized by symptoms that can include sudden onset of fever, malaise, poor appetite, and sore throat followed by lesions in the mouth 1 - 2 days later. The lesions begin as small red spots that blister and may become ulcers. They are usually located on the tongue, gums, and inside of the cheeks and can be very painful. A skin rash then develops, which is usually located on the palms of the hands and soles of the feet. The sores may also appear on the buttocks. Serious conditions can result from infection with enteroviruses, including viral meningitis and encephalitis.

Incubation Period:

The incubation period is usually 3 - 5 days.

Mode of Transmission:

Transmission is through direct contact with discharges from the nose and throat, and through the fecal-oral route. Infections are most common in the summer and early fall.

Period of Communicability:

A person can spread HFMD during the acute stage of illness and may be able to spread the virus for several weeks after symptoms resolve.

Exclusion/Reporting:

There are no specific recommendations on the exclusion of children or staff with HFMD from school. Ill persons are often excluded from group settings during the first few days of illness, while they are most contagious. Exclusion during the first few days of illness may reduce spread, but will not completely interrupt it. Exclusion of ill persons does not prevent additional cases since the virus can be excreted for weeks after the symptoms disappear. Also, some persons excreting the virus, including most adults, may have no symptoms. Some benefit may be gained by excluding children who have blisters in their mouths and drool or who have weeping lesions on their hands.

Prevention/Care:

- There is no specific treatment or vaccine for HFMD.
- Wash and sanitize or discard articles soiled by discharge.
- Encourage frequent hand washing, especially after handling discharges and after using the restroom.
- Certain foods and beverages can cause burning or stinging of the blisters. The following ideas may make eating and drinking more tolerable for the student:
 - Suck on popsicles or ice chips; eat ice cream or sherbet
 - Drink cold beverages, such as milk or ice water
 - Avoid acidic foods, citrus drinks and soda
 - Avoid salty or spicy foods and choose foods that are soft

- Rinse mouth with warm water after meals

Outbreaks:

According to the ISDH Communicable Disease Reporting Rule (410 IAC 1-2.3) the definition of an outbreak means cases of disease occurring in a community, region, or particular population at a rate in excess of that which is normally expected. The local health department should be notified of suspected and/or documented cases of HFMD if the number of cases is in excess of what is normally experienced in your school or occur with a common connection (same class, sports team, etc.). For additional information and recommendations regarding the preparation for, and the management of an outbreak situation in a school setting, see Appendix A, "Managing an Infectious Disease Outbreak In a School Setting."

Other Resources:

Indiana State Department of Health Quick Facts Page (found on disease/condition page):

<http://bit.ly/12IJLfD>

Centers for Disease Control and Prevention (CDC):

<http://www.cdc.gov/hand-foot-mouth/index.html>

Photographs of Disease/Condition:

<http://www.mayoclinic.com/health/medical/IM00929>

<http://www.mayoclinic.com/health/medical/IM01479>