Increase in Cases of Hand, Foot, and Mouth Disease

Summary
The Delaware Public Health District (DPHD) is encouraging healthcare providers to be vigilant for cases and outbreaks of Hand, Foot, and Mouth disease (HFMD) in the community. HFMD is usually seen in children 5 years old and younger but can infect people of any age.

Children with HFMD should be kept out of daycare and away from other children until sores are fully scabbed over without seepage. Additionally, if the child is of an age when drooling is common, they will need to stay away from other children until all sores in the mouth are fully healed.

HFMD is spread through saliva, respiratory droplets, seepage from sores, and stool. Proper handwashing and cleaning of surfaces is vital to controlling the spread of HFMD.

Background
In recent months, a higher than usual incidence of HFMD has occurred in the communities served by DPHD. HFMD can easily and rapidly spread in grouped childcare settings such as daycares.

Guidelines for Hand Foot and Mouth Disease HFMD
Hand, foot, and mouth disease, or HFMD, is a contagious illness caused by different viruses. Infants and children younger than 5 years are more likely to get this disease. However, older children and adults can also get it.

Case definition
Clinical case definition of HFMD:
Any child with:
a. mouth / tongue ulcer and
b. maculopapular rashes and /or vesicles on palms and soles
c. with OR without history of fever

Clinical Presentation
Hand, foot, and mouth disease 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 that 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. Persons infected with the viruses that cause hand, foot, and mouth disease may not get all the symptoms of the disease. They may only have mouth sores or skin rash.

The viruses that cause hand, foot, and mouth disease (HFMD) can be found in an infected person’s:
- Nose and throat secretions (such as saliva, sputum, or nasal mucus),
- Blister fluid, and
- Feces (stool).

An infected person may spread the viruses that cause hand, foot, and mouth disease through:
- Close personal contact,
- The air (through coughing or sneezing),
- Contact with feces,
- Contaminated objects and surfaces.

A person with hand, foot, and mouth disease is most contagious during the first week of illness. People can sometimes be contagious for days or weeks after symptoms go away. Some people, especially adults, who get infected with the viruses that cause hand, foot, and mouth disease may not develop any symptoms. However, they may still be contagious. Therefore, people should always try to maintain good hygiene (e.g., handwashing) so they can minimize their chance of spreading or getting infections. Hand, foot, and mouth disease is not transmitted to or from pets or other animals.

Complications
- Viral or "aseptic" meningitis can occur with hand, foot, and mouth disease but it is rare. It causes fever, headache, stiff neck, or back pain.
- Inflammation of the brain (encephalitis) can occur, but this is even rarer.
- Fingernail and toenail loss have been reported, occurring mostly in children within 4 weeks of their having hand, foot, and mouth disease.

Diagnosis
Depending on how severe the symptoms are, samples from the throat or stool may be collected and sent to a laboratory to test for the virus.

Clinical Management
There is no specific treatment for hand, foot, and mouth disease. 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

Mild HFMD cases only need symptomatic treatment. Treatment of fever and relief of symptoms, adequate hydration and rest are important. Parents and care takers should be educated on hygiene and measures that they should take to prevent transmission to other children.

Infection control
- Proper hygiene including mandatory hand washing after contact with patient; appropriate cleanliness during diaper changes is imperative.
- Personal items such as spoons, cups and utensils should not be shared and should be properly washed with detergent after use.
- The use of gowns may act as a useful protection for health personnel looking after these patients.
• Patients with HFMD should be isolated and the usual isolation procedures followed for infection control.
• Articles such as toys contaminated by infected cases are disinfected with 0.5% sodium hypochlorite solutions.
• A high standard of food and personal hygiene is maintained by the institution involved which include proper waste and diapers disposal.

If the outbreak occurs in primary schools
• Principals, teachers, and supervisors shall be alerted to look out for children with fever, rash / blisters on palms and soles and to isolate them immediately. Screening before coming to class is recommended.
• Ensure that the infected children remain away from the institution for at least ten days after onset of symptoms and must be certified free from infection by a registered medical practitioner prior to returning to school.
• Health education to the students on the disease, mode of transmission, importance of good personal hygiene.
• If closure is necessary, just close the affected class. Closure of the whole school is unnecessary as HFMD in older children is usually very mild and so far, no complication has been documented from this age group.

If you have any questions, you may call the Delaware Public Health District at 740-203-2086 and ask to speak to a member of the Disease Control and Response Team.