

Hand-Foot-and-Mouth Disease

What is hand-foot-and-mouth disease?

A common set of symptoms associated with viral infections that are most frequently seen in the summer and fall. Despite its scary name, this illness generally is mild. Most commonly caused by coxsackievirus A16 and enterovirus 71.

What are the signs or symptoms?

- Tiny blisters in the mouth and on the fingers, palms of hands, buttocks, and soles of feet that last a little longer than a week (one, few, or all of these may be present).
- May see common cold signs or symptoms with fever, sore throat, runny nose, and cough. The most troublesome finding is blisters in the mouth, which make it difficult for the child to eat or drink. Other signs or symptoms, such as vomiting and diarrhea, can occur but are less frequent.
- Hand-foot-and-mouth disease caused by enterovirus 71 can cause neurologic symptoms.



Child with blisters inside lips

AAP, COURTESY OF EDGAR O. LEDBETTER, MD



Child with blisters on hands and feet

AAP, COURTESY OF JERRI ANN JENISTA, MD

What are the incubation and contagious periods?

- Incubation period: 3 to 6 days.
- Contagious period: Virus may be shed for weeks to months in the stool after the infection starts; respiratory shedding of the virus is usually limited to 1 to 3 weeks.

How is it spread?

- Respiratory (droplet) route: Contact with large droplets that form when a child talks, coughs, or sneezes. These droplets can land on or be rubbed into the eyes, nose, or mouth. The droplets don't stay in the air; they travel less than 3 feet and fall onto the ground.
- Contact with the respiratory secretions from or objects contaminated by children who carry these viruses.
- Fecal-oral route: Contact with feces of children who are infected. This generally involves an infected child contaminating his own fingers, then touching an object that another child touches. The child who touched the contaminated surface then puts her fingers into her own mouth or another person's mouth.

How do you control it?

- Teach children and teachers/caregivers to cover their mouths and noses when sneezing or coughing with a disposable facial tissue if possible, or with a shoulder if no facial tissue is available in time ("give your cough or sneeze a cold shoulder"). Teach everyone to practice hand hygiene right after using facial tissues or having contact with mucus.

- Dispose of facial tissues that contain nasal secretions after each use.
- Use good hand-hygiene technique at all the times listed in "When to Practice Hand Hygiene" on 31, especially after diaper changing.

What are the roles of the teacher/caregiver and the family?

- Report the infection to the staff member designated by the child care program or school for decision-making and action related to care of ill children. That person in turn alerts possibly exposed family and staff members to watch for symptoms.
- Encourage the family to seek medical advice if the child is very uncomfortable with signs of illness from the infection, such as an inability to drink or eat, or if the child seems very ill.

► *continued*

Exclude from group setting?**No, unless**

- The child is unable to participate and staff members determine that they cannot care for the child without compromising their ability to care for the health and safety of the other children in the group. Excessive drooling from mouth sores might be a problem that staff members will find difficult to manage for some children with this disease.
- The child meets other exclusion criteria, such as fever with behavior change (see “Conditions Requiring Temporary Exclusion” on 55).
- Note: Exclusion will not reduce disease transmission because some children may shed the virus without becoming recognizably ill, and other children who became ill may shed the virus for weeks in the stool.

Readmit to group setting?

When exclusion criteria are resolved, the child is able to participate, and teachers/caregivers determine that they can care for the child without compromising their ability to care for the health and safety of the other children in the group

