



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 is generally mild.

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 body sites may be involved with the blisters).
- 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 may cause neurologic symptoms.

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 do not stay in the air; they usually travel no more 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 their own fingers and then touching an object that another child touches. The child who touched the contaminated surface then puts their fingers into their own mouth or another person's mouth.



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

How do you control it?

- Prevent contact with respiratory secretions. Teach children and educators to cover their noses and mouths when sneezing or coughing with a disposable facial tissue, if possible, or with an upper arm sleeve or elbow if no facial tissue is available in time. Teach everyone to remove any mucus or debris on skin or other surfaces and perform hand hygiene

right after using facial tissues or having contact with mucus to prevent the spread of disease by contaminated hands. Change or cover clothing with mucus on it.

- Dispose of facial tissues that contain nasal secretions after each use.
- Use good hand-hygiene technique at all the times listed in Chapter 2, especially after diaper changing.

What are the roles of the educator and the family?

- Report the infection to the staff member designated by the early childhood education 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.

Exclude from educational setting?

No, unless

- The child is unable to participate and staff members determine 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 (see Conditions Requiring Temporary Exclusion in Chapter 4).

Readmit to educational setting?

Yes, when all the following criteria are met:

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

Notes: 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.

In some cases, the local health department may require children with hand-foot-and-mouth disease to stay home to control an outbreak.

