

Hand, Foot and Mouth Disease Information Sheet

(For Healthcare Workers)

What is hand, foot and mouth disease?

Hand, foot and mouth disease (HFMD) is a common infectious disease of infants and children. It is characterized by fever, painful sores in mouths, and rash with blisters on palms, soles of feet and also buttocks. It is prevalent in many countries through out the world.

Where and when does HFMD occur?

Individual cases and outbreaks of HFMD occur worldwide. In tropical countries like Cambodia, outbreaks can occur year-round.

Outbreaks of HFMD occur every few years in different parts of the world, but in recent years these have occurred more in Asia. Countries with recent large increases in the number of reported cases in Asia include: China, Japan, Hong Kong, South Korea, Malaysia, Singapore, Thailand, Taiwan and Viet Nam.

What causes HFMD?

Several viruses like coxsackievirus and EV71 can cause HFMD.

HFMD usually results in a mild self-limiting disease with few complications. However, among the enteroviruses that caused HFMD, enterovirus 71 (EV71) has been associated with serious complications.

How serious is HFMD?

Most people with HFMD recover fully after acute illness

HFMD is usually a mild disease, and nearly all patients recover in 7 to 10 days without medical treatment and complications are uncommon.

Dehydration is the most common complication of HFMD infection caused by coxsackieviruses; it can occur if intake of liquids is limited due to painful sores in the mouth.

Rarely, EV71 can cause severe complications, including neurological, cardiovascular and respiratory problems and lead to death.

How soon do you become sick?

Most people become sick 3-7 days after infection. Fever is often the first symptom of HFMD, and usually lasts 24-48 hours.

What are the symptoms?

The disease usually begins with fever, poor appetite, malaise, and frequently with sore throat.

One or 2 days after fever onset, painful sores develop in the mouth. They begin as small red spots that blister and then often become ulcers. They are usually located on the tongue, gums, and inside of the cheeks.

A non-itchy skin rash develops over 1–2 days with flat or raised red spots, some with blisters. The rash is usually located on the palms of the hands and the soles of the feet. It may also appear on the buttocks and/or genitalia.

A person with HFMD may not have symptoms, or may have only the rash or only mouth ulcers.

In a small number of cases, children may experience a brief illness, present with mixed neurological and respiratory symptoms and succumb rapidly to the disease.

How do you get HFMD?

HFMD virus is contagious and infection is spread from person to person by direct contact with respiratory secretions (e.g. saliva, sputum, and nasal mucus), fluid from blisters, or stools of infected persons. Infected persons are most contagious during the first week of illness.

HFMD is not transmitted to or from animals.

Who is at risk for HFMD?

Children less than 10 years old are at high risk.

HFMD occurs mainly in children under 10 years old, but most commonly in children younger than 5 years of age. Younger children tend to have worse symptoms.

Adults can also get infected but is uncommon.

Can you be infected with HFMD more than once?

Yes, because HFMD can be caused by different viruses. Infection only results in immunity to one specific virus, other episodes may occur following infection with a different virus type.

What can pregnant women do to prevent HFMD?

Ideally pregnant women should avoid close contact with anyone with HFMD and pay particular attention to measures that prevent transmission.

Enterovirus infections, including HFMD are common and pregnant women are frequently exposed to them. They may cause mild or no illness in the pregnant woman and currently there is no clear evidence that enterovirus infection during pregnancy can cause abortion, stillbirth or birth defects. However, pregnant women may pass the virus to the baby if they are infected shortly before delivery or have symptoms at the time of delivery.

Most newborns infected with an enterovirus have mild illness, but rarely may develop an overwhelming infection of many organs, including liver and heart, and die from the infection. The risk of this severe illness is higher for newborns infected during the first two weeks of life.

How is HFMD treated?

Presently, there is no specific treatment available for HFMD. Patients should drink plenty of water or liquid and may require symptomatic treatment to reduce fever and pain from ulcers.

Can HFMD be prevented?

Yes, the risk of infection can be lowered by good hygiene practices and prompt medical attention for children showing severe symptoms. However, there is no specific vaccine or antiviral drug against enteroviruses causing HFMD.

What are the preventive measures for HFMD?

- Frequent hand-washing with soap and water or alcohol hand rub especially before patient contact, before aseptic procedures, after patient contact, after body fluid exposure, and after contact with patient surroundings
- Cleaning contaminated surfaces and soiled items first with soap and water, and then disinfecting them using a dilute solution of chlorine-containing bleach.