Hand, Foot and Mouth Disease

Causative agent

Hand, foot and mouth disease (HFMD) is a common disease in children caused by enteroviruses such as coxsackieviruses and enterovirus 71 (EV71). HFMD caused by EV71 is of particular concern as it is more likely associated with severe complications (such as viral meningitis, encephalitis and poliomyelitis-like paralysis) and even death. In Hong Kong, the usual peak season for HFMD in Hong Kong is from May to July and another peak may also occur from October to December.

Clinical features

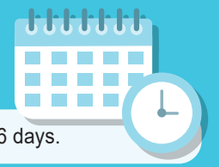
The disease is mostly self-limiting and resolves in 7 to 10 days. It usually begins with fever, poor appetite, tiredness and sore throat. Painful sores may develop in the mouth one to two days after fever onset. They begin as small red spots with blisters and then often become ulcers. They usually appear on the tongue, gum and inside of the cheeks. There may also be a skin rash that is non-itchy and sometimes accompanied by blisters. The rash usually appears on the palm of the hands and sole of the feet and may also appear on the buttocks and/or genitalia. A person with HFMD may not have symptoms or may only have rash or mouth ulcers.

HFMD will result in immunity to (protection against) the specific virus that has caused the infection. However, subsequent infections with a different virus may result in further episodes of HFMD.

Mode of transmission

The disease mainly spreads by contact with an infected person's nose or throat discharges, saliva, fluid from vesicles or stool, or after touching contaminated objects. The disease is most contagious during the first week of the illness and the viruses can be found in stool for weeks.

Incubation period



The incubation period is about 3 to 6 days.

Management

There is no specific drug treatment for HFMD. Patients should drink plenty of water and take adequate rest, and may receive symptomatic treatment to reduce fever and pain from oral ulcers.

Sick children should stay away from school or gatherings till all vesicles have dried up to avoid spreading the disease. If the infection is caused by EV71, the patient is advised to stay at home for two more weeks after recovery from the disease (i.e. fever and rash have subsided, and vesicles have dried and crusted).

Parents should monitor the child's condition closely and seek medical advice immediately if there is persistent high fever, decrease in alertness or deterioration in general condition.

Prevention

There is no effective vaccine to prevent HFMD. Good personal and environmental hygiene are the mainstay of prevention.

1. Maintain good personal hygiene

- Perform hand hygiene frequently, especially before and after touching the mouth, nose or eyes; before eating or handling food; after touching blister; and after using the toilet.
- Wash hands with liquid soap and water, and rub for at least 20 seconds; then rinse with water and dry with a clean cotton towel or a paper towel. Alcohol-based handrub should not substitute hand hygiene with liquid soap and water, as alcohol does not effectively kill some viruses (e.g. EV71) causing HFMD.
- Cover your mouth and nose with tissue paper when coughing or sneezing. Dispose of soiled tissue paper into a lidded rubbish bin, then wash hands thoroughly.
- Use serving chopsticks and spoons at meal time. Do not share food and drinks with others.
- Do not share towels and personal items with others.
- Avoid close contact (such as kissing, hugging) with infected persons.
- Refrain from work or attending class at school, and seek medical advice if feeling unwell.
- Exclude infected persons from handling food and from providing care to children, elderly and immunocompromised people.

2. Maintain good environmental hygiene

- Regularly clean and disinfect frequently touched surfaces such as furniture, toys and commonly shared items with 1:99 diluted household bleach (mixing 1 part of household bleach containing 5.25% sodium hypochlorite with 99 parts of water), leave for 15 - 30 minutes, and then rinse with water and keep dry.
- Ensure the household bleach used has not expired. For effective disinfection, diluted bleach should be used within 24 hours after preparation as effectiveness would decrease with time if left unused.
- As undiluted bleach liberates a toxic gas when exposed to sunlight, it should be stored in a cool and shaded place out of reach of children.
- Use absorbent disposable towels to wipe away obvious contaminants such as respiratory secretions, vomitus or excreta, and then disinfect the surface and neighbouring areas with 1:49 diluted household bleach (mixing 1 part of household bleach containing 5.25% sodium hypochlorite with 49 parts of water), leave for 15 - 30 minutes and then rinse with water and keep dry.
- Avoid arranging group activities when HFMD outbreak occurs in the school or institution. Besides, minimise staff movement and arrange the same group of staff to take care of the same group of children as far as possible.

Centre for Health Protection Website www.chp.gov.hk

Revised in August 2026

Centre for Health Protection

Department of Health