

Hand Foot and Mouth Disease

Hand, foot and mouth disease (HFMD) is usually a mild illness that occurs mainly in young children, but can also affect older children and adults. It is caused by a number of different enteroviruses, particularly coxsackieviruses. People can be infected with these viruses but not develop symptoms of the disease.

Outbreaks of HFMD can occur among groups of children, for example in child care centres.

It is not related to the foot- and-mouth disease that affects cattle, sheep and pigs.

Signs and Symptoms:

Hand, foot and mouth disease usually begins with a mild fever and a runny nose. This is followed by a sore throat and mouth, with the appearance of blisters in the mouth, and on hands and feet. Sometimes blisters may also be seen on knees, elbows or in the nappy area.

The blisters usually last for 3–5 days. Dehydration can sometimes occur as the pain from the blisters may stop the person from eating and drinking.

In rare cases those infected with hand, foot and mouth disease caused by Enterovirus 71 go on to develop neurological disease such as meningitis (inflammation of the lining of the brain), encephalitis (inflammation of the brain itself), or paralysis.

Treatment:

No specific treatment is required for mild hand, foot and mouth disease. Paracetamol can be given to relieve fever and discomfort.

If fever persists, or if you are worried about other symptoms, consult a doctor.

Transmission:

The virus is spread from an infectious person by contact with

- fluid from the blisters
- their nose and throat secretions (such as saliva, sputum, or nasal mucus)
- faeces.

A person with hand, foot and mouth disease is most infectious in the first week of the illness. Skin blisters are no longer infectious when they have crusted over, but the virus can be spread in faeces for several weeks after the person has recovered.

Prevention:

The best protection against HFMD is maintaining good hygiene measures that prevent contact with infectious substances from the sick person.

- Wash hands with soap and water for at least 20 seconds and dry thoroughly before handling food; and after going to the toilet, touching soiled linen and articles and changing nappies.
- Clean and disinfect frequently touched surfaces and soiled items, including toys.
- Avoid sharing cups, eating utensils, items of personal hygiene (eg towels, washers and toothbrushes), and clothing (especially shoes and socks).
- Teach children about cough and sneeze etiquette:
 - cough and sneeze into the elbow (rather than hands) or cover with a tissue
 - put used tissues in the bin straight away after use then wash hands.

- Allow blisters to dry naturally. The blisters should not be deliberately pierced because the fluid within the blisters is infectious.
- Children and staff with hand, foot and mouth disease should be excluded from school and childcare facilities until all blisters have dried.

Health outcome:

Hand, foot and mouth disease is a viral illness common in children. Symptoms are usually mild, and include high temperature and small blister-like lesions on the inside of the mouth, palms of hands, soles of feet, and the nappy area.

Pregnant Women

There is no clear evidence that HFMD causes any problems with pregnancy or the unborn baby. 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. Newborns infected with the virus can, very rarely, develop serious and sometimes fatal illness.

Other resources:

[Handy facts about hygiene brochure](http://www.health.qld.gov.au/flu/documents/qh_hygiene_broch.pdf) [http://www.health.qld.gov.au/flu/documents/qh_hygiene_broch.pdf]

[Hand Hygiene Australia—resources for the community](http://www.hha.org.au/ForConsumers.aspx) [<http://www.hha.org.au/ForConsumers.aspx>]

[Staying Healthy: Preventing infectious diseases in early childhood education and care services](https://www.nhmrc.gov.au/guidelines-publications/ch55) [<https://www.nhmrc.gov.au/guidelines-publications/ch55>] (5th Edition)

Help and assistance:

For further information, please contact your local doctor or call **13 HEALTH (13 43 25 84)** 24 hours a day 7 days a week for the cost of a local call.

References

Heymann, D. (2015). Control of Communicable Diseases manual. (20th edition). Washington, DC: American Public Health Association, pp.190-193.

Bennett, J., Dolin, R., Blaser, M., Mandell, G. & Douglas, R. (2014). Mandell, Douglas, and Bennett's Principles and Practice of Infectious Diseases (8th edition). Philadelphia, PA: Elsevier/Saunders, pp. 2082-2083.

[Hand, foot and mouth disease fact sheet, World Health Organisation](http://www.wpro.who.int/mediacentre/factsheets/fs_10072012_HFMD/en/) [http://www.wpro.who.int/mediacentre/factsheets/fs_10072012_HFMD/en/]

Related Content

- [Enterovirus 71 neurological disease fact sheet](http://conditions.health.qld.gov.au/HealthConditions/2/Infections-Parasites/41/Viral-Infections/201/Enterovirus-71-EV71-Neurological-Disease) [<http://conditions.health.qld.gov.au/HealthConditions/2/Infections-Parasites/41/Viral-Infections/201/Enterovirus-71-EV71-Neurological-Disease>]