

# Hand, Foot and Mouth Disease

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**Hand, foot and mouth disease** is a common, mild illness caused by a type of virus called an enterovirus.

It is usually caused by the coxsackie A virus, but in some cases can be caused by the coxsackie B or the enterovirus 71 virus.

Hand, foot and mouth disease gets its name from the non-itchy rash that develops on the palms of your hands and soles of your feet. It can also cause ulcers in your mouth and make you feel generally unwell, although some people have no symptoms.

## Who is affected?

Hand, foot and mouth disease is very contagious (easily spread) and is common in children under 10 years of age. However, adolescents and adults can also be affected.

Most adults are immune to the coxsackie A and B virus as they have been previously exposed to it during their childhood. Adults who develop the disease usually experience milder symptoms than children.

It is possible to catch hand, foot and mouth disease more than once, but children are unlikely to catch it again during the same outbreak.

## Outlook

Generally, hand, foot and mouth disease is a mild and short-lasting illness. Treatment is usually not needed as the body's immune system clears the virus and symptoms go away after about 7 to 10 days.

Further information on management of Hand Foot and Mouth infection in Childcare Facilities is available in the Document Management of Infectious Disease in Childcare Facilities and Other Childcare Settings available at <http://www.hpsc.ie/hpsc/A-Z/LifeStages/Childcare/>.

**Symptoms of hand, foot and mouth disease** usually appear three to five days after infection with the virus. They last for 7 to 10 days before disappearing on their own.

Some people with hand, foot and mouth disease do not develop any symptoms.

If an adult develops the disease, their symptoms will usually be much milder than those of a child.

## **Early symptoms**

The first symptoms of hand, foot and mouth disease include:

- fever and feeling unwell,
- loss of appetite,
- sore throat, and
- small red spots in the mouth, throat and skin.

## **Later symptoms**

### ***Mouth lesions***

After one or two days, red spots in the mouth will develop into painful ulcers, particularly around the tongue, gums and inside of the cheeks. It may be difficult to eat, drink and swallow.

### ***Skin rash***

Any red spots on the skin will turn into a non-itchy rash over the following one to two days. The spots are flat or raised, sometimes with blisters, and smaller than chickenpox sores.

The rash develops on the palms of the hands, the soles of the feet and between the fingers and toes. In some cases, spots also develop on the buttocks and genitals.

## **Useful Links**

- [Health A-Z: chickenpox](#)
- [Health A-Z: meningitis](#)
- [Meningitis Information from the Health Protection Surveillance Centre](#)

## **CAUSES**

Hand, foot and mouth disease is usually caused by the coxsackie A virus, but it is sometimes caused by the coxsackie B virus or the enterovirus 71.

These viruses remain in the body for weeks after symptoms have gone away, so infected people can pass the disease to others even when they appear well.

### **Airborne spread**

The viruses that cause hand, foot and mouth disease are contained in the millions of tiny droplets that come out of the nose and mouth when someone with the disease coughs or sneezes. These droplets hang suspended in the air for a while, then land on surfaces. Anyone who touches these surfaces can spread the virus by touching something else.

People usually become infected by picking up the virus on their hands from contaminated objects and then placing their hands near their mouth or nose. It is also possible to breathe in the virus if it is suspended in airborne droplets.

### **Other ways of catching it**

You can also become infected with hand, foot and mouth disease if you have contact with fluid from the sores, saliva or faeces of someone who is infected.

The virus stays in the faeces for about four weeks after the person has recovered. It is, therefore, vital that adults and children wash their hands thoroughly after going to the toilet or handling nappies.

## **Diagnosing hand, foot and mouth disease**

Several different viruses can cause sores and ulcers in the mouth. However, a GP will normally be able to distinguish hand, foot and mouth disease from other viral infections by:

- The age of the affected person. Hand, foot and mouth disease is most common in children under the age of 10.
- The pattern of symptoms. Symptoms begin with fever and a sore throat; spots then develop in your mouth and later on the palms of your hands and soles of your feet.
- The appearance of sores. The sores are smaller than chickenpox sores.

A throat swab or stool sample may be taken and sent to a laboratory to determine which enterovirus has caused hand, foot and mouth disease. The result usually takes a few days.

## Useful Links

- [Health A-Z: chickenpox](#)
- [Health A-Z: meningitis](#)
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**There is no specific treatment for hand, foot and mouth disease.** The condition usually clears up by itself after 7 to 10 days. As it is caused by a viral infection, it cannot be treated with antibiotics.

You can ease the symptoms of hand, foot and mouth disease by:

- resting,
- drinking plenty of fluids (water or weak squash are ideal), and
- taking medication to relieve symptoms.

## Medication

### *Fever*

If you or your child has a fever or sore throat, paracetamol should relieve pain and bring down a temperature. Children's paracetamol can be used to treat your child. Aspirin must not be given to children under 16 years of age.

### *Mouth sores*

The pain of mouth ulcers can be numbed with anaesthetic mouthwashes or sprays, such as benzydamine hydrochloride (Difflam). Choline salicylate gel can be used in adults and children aged 16 and over.

**Hand, foot and mouth disease is usually a mild disease that clears up on its own. Complications are uncommon, but could include the following.**

## Dehydration

The sores that develop in your throat and mouth may make it difficult for you to drink and swallow. As a result, dehydration can occur. Therefore, if you have the disease, it is important to drink plenty of fluids. If your child is affected, make sure that they drink plenty.

If dehydration becomes severe, you may have to go to hospital so that fluid can be given through a drip in your arm (intravenously).

## Infection

Another possible complication of hand, foot and mouth disease is infection of the sores. If the sores are scratched, they may become infected. If this happens, your GP may prescribe antibiotics to treat the infection.

## Viral meningitis

In rare cases, hand, foot and mouth disease can lead to viral meningitis. Viral meningitis is an infection of the meninges (membranes that cover the brain and spinal cord).

Viral meningitis is less severe than bacterial meningitis and most people will make a full recovery within two weeks. Symptoms include fever, drowsiness, headache, neck stiffness, vomiting and dislike of bright lights. There is no specific treatment.

## Encephalitis

In very rare cases, hand, foot and mouth disease can lead to encephalitis. Encephalitis is an infection that causes the brain tissue to swell and become inflamed. It can cause brain damage and is potentially life threatening.

Early signs of encephalitis are flu-like symptoms, which can develop in a few hours or over a few days. Other symptoms include:

- vomiting,
- drowsiness or confusion,
- seizures (fits), and
- dislike of bright lights.

If you develop encephalitis, you will need to be admitted to hospital. Many people make a full recovery.

**Hand, foot and mouth disease is very contagious. The best way to avoid catching and spreading it is to avoid close contact with people who have the disease and to practise good hygiene.**

- Always wash your hands after going to the toilet and handling nappies, and before preparing food. If your child has hand, foot and mouth disease, encourage them to wash their hands regularly as well.
- Avoid sharing utensils with people who are infected with hand, foot and mouth disease.
- Make sure that shared work surfaces are clean.

## **Useful Links**

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- [Health A-Z: meningitis](#)
- [Meningitis Information from the Health Protection Surveillance Centre](#)

## **Keeping your child off school**

If your child has hand, foot and mouth disease, keep them out of school or playschool while they are feeling unwell. They can go back to school when their symptoms get better.