

# HAND, FOOT AND MOUTH DISEASE (HFMD)



## Human pathogen information sheet – hygiene keeps you safe!

### What is hand, foot and mouth disease (HFMD)?

HFMD is caused by viruses and its associated symptoms include a rash near the mouth, on the palms of the hands and on the soles of the feet. The buttocks, genitals, knees or elbows may also be affected. HFMD is encountered worldwide.

### How is HFMD transmitted?

#### *Person-to-person*

The viruses that cause HFMD are highly infectious. Transmission via the hands plays an important role here.

The pathogens are spread from person to person by direct contact with bodily fluids. Fluid from the blisters in the skin rash is especially infectious. If the hands come into contact with this fluid, then the viruses can be passed on easily from hand to hand. Pathogens can also be transmitted from the patient's stools – such as when changing a nappy.

Airborne infection is another transmission pathway: if a person coughs or sneezes, minute droplets containing the virus are expelled as an aerosol and can be breathed in by other people nearby.

#### *Via contaminated objects*

Pathogens can also be passed from one person to another via objects in common use, such as door handles, handrails or banisters.

### What signs of infection do patients have?

Over 80 percent of people who have been infected with the virus do not show any signs of disease although they can still pass the virus on to others.

If a case of hand, foot and mouth disease develops, then the first symptoms are typically fever, reduced appetite and a sore throat. One or two days after the onset of fever, small red spots then appear on the mucous membranes in the mouth, especially the tongue and gums. As the disease progresses, these develop into painful blisters. After another one or two days, more red spots appear, especially on the palms of the hands and soles of the feet. The buttocks, genitals, knees or elbows may also be affected. While the skin rash is not typically itchy, this symptom may nonetheless develop.

Cases of hand, foot and mouth disease are normally mild. Even if the disease is left untreated, almost all patients recover fully after five to seven days.

Complications – which include meningitis, symptoms of paralysis or encephalitis – are very rare indeed. Some patients report the loss of fingernails or toenails.

Even during pregnancy, the disease usually takes a mild course and severe complications occur very infrequently. The same applies to newborn babies, who are infected by their mothers during birth. In very rare cases, however, newborns may suffer complications affecting vital organs such as the liver or heart.



# HAND, FOOT AND MOUTH DISEASE (HFMD)



## Human pathogen information sheet – hygiene keeps you safe!

### What's the incubation period – and how long are you infectious?

As a rule, the first signs of hand, foot and mouth disease appear three to ten days after infection. Fluid from the blisters in the skin rash is highly infectious. As a result, the risk of infection is especially high while the rash is present and starts to decrease only when the blisters dry out.

Even once symptoms have resolved, however, a patient can still excrete and pass on the viruses in their stools for several weeks.

### Who is most at risk of infection?

While anyone can catch HFMD, it is especially common in children under ten years old, with outbreaks tending to occur in late summer and autumn.

### What should I do if someone falls ill?

Patients should practice good hand hygiene and keep away from others wherever possible.

Children with HFMD should not attend communal facilities if possible, so as to keep the risk of infection as low as possible for other people. Once the blisters have dried out, the children can normally attend communal facilities again without a written note from their doctor.

There is no specific treatment for hand, foot and mouth disease. Only the symptoms can be treated – by giving the patient medicine to reduce fever and pain, as well as mouthwashes.

### How can I protect myself?

Practising good hygiene reduces the risk of infection:

- ▶ Good hand hygiene is always important. Wash your hands regularly and thoroughly with soap and water, especially after changing your child's nappies, after helping them to use the toilet or after using the toilet yourself.
- ▶ Thoroughly clean any objects the patient has come into contact with – such as toys, door handles, etc.
- ▶ Avoid close contact (such as kissing, hugging) with HFMD patients.
- ▶ Do not share cutlery or drinking vessels.
- ▶ Talk to your doctor or health authority about whether you should consider using hand disinfectants or surface disinfectants.

### Where can I find out more?

Your local health authority can provide you with further advice and information.

Further information about the disease itself can be found on the website of the Robert Koch-Institut ([www.rki.de/Hand-Fuss-Mund-Krankheit](http://www.rki.de/Hand-Fuss-Mund-Krankheit)).

For information about using hygiene to guard against infection, please visit the website of the Bundeszentrale für gesundheitliche Aufklärung ([www.infektionsschutz.de](http://www.infektionsschutz.de)).



STEMPEL

#### Issued by:

Bundeszentrale für gesundheitliche Aufklärung, Cologne.  
All rights reserved.

Created in collaboration with the Bundesverband der Ärztinnen und Ärzte des Öffentlichen Gesundheitsdienstes e.V. and in consultation with the Robert Koch-Institut.

This public health advisory notice is offered as a free download on the [www.infektionsschutz.de](http://www.infektionsschutz.de) website.

