

HAND, FOOT, AND MOUTH DISEASE

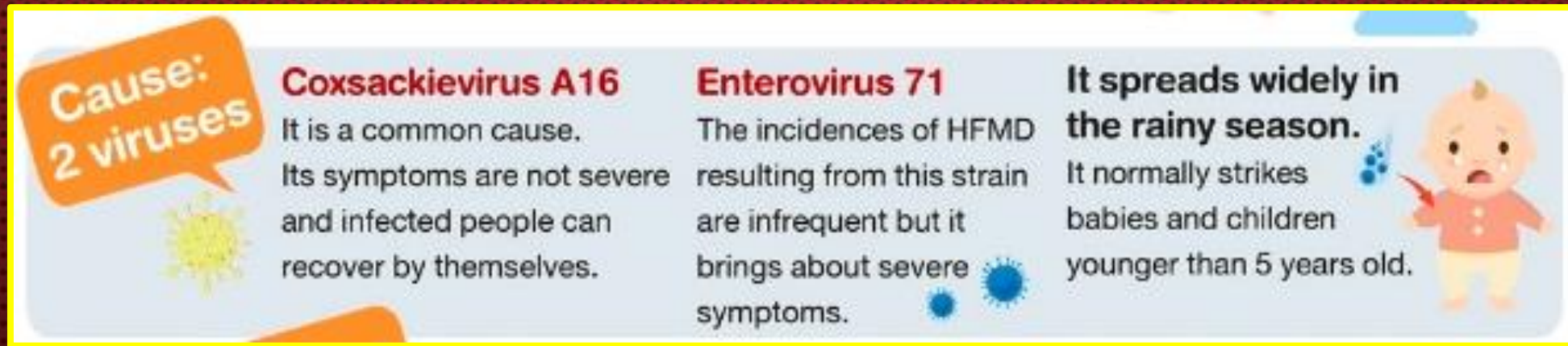
JOHNSON COUNTY HEALTH DEPARTMENT

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ABOUT HFMD

NOT SAME AS FOOT (HOOF) AND MOUTH DISEASE



The infographic is set against a light blue background with a yellow border. On the left, an orange speech bubble contains the text 'Cause: 2 viruses'. Below it is a yellow virus particle icon. The main content is divided into three columns. The first column is for 'Coxsackievirus A16', the second for 'Enterovirus 71', and the third for 'It spreads widely in the rainy season.' To the right of the third column is an illustration of a baby in a red shirt and yellow pants, looking unwell with a red thermometer in its mouth. There are also blue virus particle icons near the bottom of the second and third columns.

Cause: 2 viruses

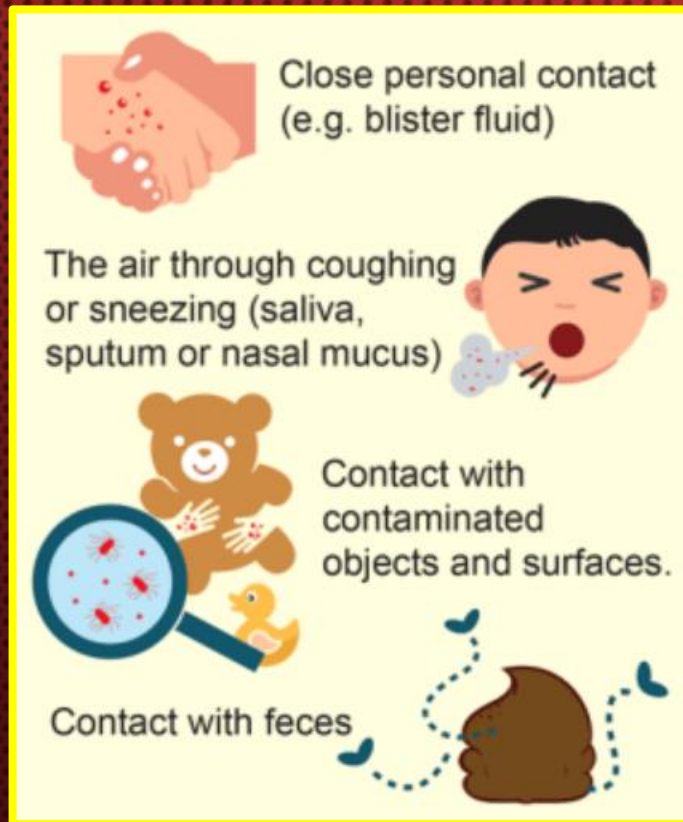
Coxsackievirus A16
It is a common cause. Its symptoms are not severe and infected people can recover by themselves.

Enterovirus 71
The incidences of HFMD resulting from this strain are infrequent but it brings about severe symptoms.

It spreads widely in the rainy season.
It normally strikes babies and children younger than 5 years old.

Generali. *Hand-Foot-and-Mouth Disease: It Must be Controlled*, n.d. <https://generali.co.th/en/wellness-content/hand-foot-and-mouth-disease-en/>

TRANSMISSION



MOST CONTAGIOUS FIRST 7 DAYS

- Direct contact
- Indirect contact
- May still be contagious after symptoms resolve

Positive Parenting. *Hand, Foot and Mouth Disease (HFMD)*, 28 Jul. 2016. <https://mypositiveparenting.org/2016/07/28/hand-foot-and-mouth-disease-hfmd/>

SYMPTOMS

INCUBATION PERIOD 3-6 DAYS



Painful sores in the mouth



Skin rash with red spots and sometimes with blisters on the palms of the hands and soles of the feet, buttocks and genital area



Poor appetite



Sore throat



Lack of energy



Fever

Khalik, Salma. *Hand, Foot and Mouth Disease Cases Surge to Near-Record High in 2016*, 9 Jun. 2016.
<https://ifonlysingaporeans.blogspot.com/2016/06/hand-foot-and-mouth-disease-cases-surge.html>

Positive Parenting. *Hand, Foot and Mouth Disease (HFMD)*, 28 Jul. 2016.
<https://mypositiveparenting.org/2016/07/28/hand-foot-and-mouth-disease-hfmd/>

DIAGNOSIS

PHYSICAL EXAMINATION / SYMPTOMS



Istock. *Stool Sample*, 24 Feb. 2017.
<https://www.istockphoto.com/illustrations/stool-sample?sort=mostpopular&mediatype=illustration&phrase=stool%20sample>



NHS Gloucestershire Hospitals. *Enterovirus PCR-Viral Swab (Hand, Foot, Mouth)*, n.d. <https://www.gloshospitals.nhs.uk/our-services/services-we-offer/pathology/tests-and-investigations/enterovirus-pcr-viral-swab/>



Shutterstock. *Enterovirus Images*, n.d.
<https://www.shutterstock.com/search/enterovirus>

TREATMENT



NO SPECIFIC TREATMENT

- Treat symptoms
- Drink plenty of fluids
- Rest

Eicrasoft. Ayurvedic Medicine. *Symptoms of Hand, Foot and Mouth Disease*, 11 Jul. 2018. <https://www.pharmacy.com.bd/blog/category/ayurvedic-medicine>

RISK FACTORS

CHILDREN, ESPECIALLY IN DAYCARES AND SCHOOLS



CDC. *Hand, Foot, and Mouth Disease (HFMD)*, 6 Dec. 2019. https://www.cdc.gov/hand-foot-mouth/index.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fhand-foot-mouth%2Foutbreaks.html

COMPLICATIONS

RARELY:

- Lose nails
- Viral meningitis
- Encephalitis

Datuk Dr. Zulkifli Ismail. Positive Parenting. *The Dangers of Dehydration in Children*, 24 Dec. 2015. <https://mypositiveparenting.org/2015/12/24/the-dangers-of-dehydration-in-children/>

DEHYDRATION

- rapid breathing
- increased heartrate
- restlessness and/ or irritability
- lethargy/weakness
- poor skin turgor (pinching a fold of skin at the abdomen results in it returning slowly to normal)



• sunken fontanelle (in infants)

• sunken eyes

• lack of tears when crying

• wants to drink a lot of water (but may vomit), excessive thirst

• decreased urine output:

- infants/babies – indicated by no wet diapers in a 6-8 hours period or diapers with a little dark-yellow urine

- toddlers/older children – very little dark-yellow urine

WHEN TO SEE A DOCTOR



Chopra, Pavin. The Asian Parent Singapore. *Why You Should Quarantine Your Kids at Home if They Have HFMD*, n.d. <https://sg.theasianparent.com/heres-why-you-should-quarantine-your-kids-at-home-if-they-have-hfmd/>

SYMPTOMS WORSENING OR NOT IMPROVING

- Signs of complications
- Weakened immune system
- Very young child
- Pregnant woman

PREVENTION

NO VACCINE



Avoid close contact with sick people



Cover your coughs & sneezes



Frequent hand washing with soap and water



Clean and disinfect surfaces (toys, eating utensils, toilet floor)



Stay at home if you are sick



Avoid touching your face with unwashed hands



Eat nutritious & balanced diet

REFERENCES

- Alli, MD, Renee A. "Facts About Hand-Foot-and-Mouth Disease." *WebMD.com*, 8 Sep. 2018. <https://www.webmd.com/children/guide/hand-foot-mouth-disease#1>. Accessed 26 Feb. 2020.
- Boskey, Marissa S. and Elizabeth. "Hand, Foot, and Mouth Disease." *Healthline.com*, 11 Feb. 2016. Reviewed by Mark R. Laflamme, MD. <https://www.healthline.com/health/hand-foot-mouth-disease>. Accessed 26 Feb. 2020.
- Centers for Disease Control and Prevention. "Hand, Foot, and Mouth Disease (HFMD)." *CDC.gov*, 6 Dec. 2019. https://www.cdc.gov/hand-foot-mouth/index.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fhand-foot-mouth%2Foutbreaks.html. Accessed 26 Feb. 2020.
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- NHS Inform. "Hand, Foot and Mouth Disease." *NHSInform.Scot*, 26 Feb. 2020. <https://www.nhsinform.scot/illnesses-and-conditions/infections-and-poisoning/hand-foot-and-mouth-disease#prevention>. Accessed 26 Feb. 2020.