

Division of the National Health Laboratory Service

### HAND, FOOT AND MOUTH DISEASE PREPAREDNESS

An update for healthcare workers

Division of Public Health Surveillance and Response Centre for Vaccines and Immunology

(NICD) 24-hour hotline number: 0800 212 552 COMPILED: 28 FEBRUARY 2025

An increase in the number of hand, foot, and mouth disease (HFMD) cases has been reported in some provinces in South Africa since January 2025, affecting mostly children. The majority of cases were reported in KwaZulu-Natal province, eThekwini Metro. HFMD outbreaks occur globally, with periodic cases in South Africa, mainly in daycare centres and primary schools. The disease occurs commonly in children, is a mild and self-limiting disease with seasonal peaks occurring in summer and autumn.

Public health response included health education and risk communication with parents and caregivers on HFMD clinical presentation, transmission, and prevention.

<u>Diagnosis</u>: HFMD is diagnosed clinically with laboratory investigations conducted for epidemiological surveillance and during outbreaks, and in cases with severe disease and to help confirm the diagnosis, if uncertain.

<u>Suspected case:</u> Any person (child or adult) with febrile illness with papulovesicular rash or maculopapular rash on the palms, fingers, soles of the feet or buttocks, knees or elbows with or without vesicles/ulcers in the mouth.

<u>Confirmed case:</u> A suspected case with a clinical diagnosis of HFMD made by a healthcare professional (Medical Doctor/Professional nurse), with or without a positive laboratory test for a human enterovirus that causes HFMD (such as enterovirus 71, coxsackievirus A6 (CV-A6) and coxsackievirus 16 (CV-A16)).

**Outbreaks:** When there is an increase in the number of HFMD cases more than what is usually expected, reported within a specific time and geographic area, affecting a specific population.

**Cluster:** A cluster is when two or more cases occur within an institution, indicating transmission within a specific group/population, within a specific time.

<u>Incidence:</u> Occurs globally with children under 10 years mostly affected. Outbreaks have been reported in schools and crèches in the summer and autumn months.

### **Transmission:**

- Droplet spread: sneeze/ cough
- Direct contact: with nasal secretions, saliva, and fluid from vesicles
- Contaminated surfaces: doorknobs, bedrails.
- Faecal-oral route: stool-contaminated hands, objects or surfaces

<u>High-risk groups:</u> Children younger than 6 months, immunocompromised individuals and during pregnancy (limited data)

<u>Geographical distribution:</u> The viruses that cause HFMD are in circulation globally.

## Clinical presentation

Symptoms may occur within 3-6 days of infection, usually are mild and self-limiting and may resolve within 7-10 days.

- Feve
- Fatigue and irritability- particularly in young children
- Sore throat
- Painful ulcerative lesions on the mucous membranes of the mouth, tongue and throat

Maculopapular rash or vesicles develop on palms, soles and sometimes buttocks.

# Differential diagnosis:

Varicella (Chickenpox), herpangina, impetigo, aphthous ulcers ("canker sores"), measles, herpetic gingivostomatitis and drug eruption.

### Response to a suspected cluster/outbreak:

- Establish that the patient meets the signs and symptoms for suspected HFMD.
- Observe appropriate infection control procedures (i.e. isolation with universal precautions).
- Clinical management is supportive and will vary from case to case, but typically symptoms are self-resolving.
- Submit samples to NICD for laboratory testing only if indicated.
- Notify the local and provincial communicable disease control coordinator (CDCC) telephonically to initiate public health response.

### Case management and prevention

Outpatient: Symptomatic treatment of fever, dehydration and pain with over the counter medication. In-patient: Isolation, inform IPC team at facility, no specific antivirals available. Exclude differentials.

**Hand hygiene:** Soap and water, alcohol sanitizers may be used if no soap and water available.

**PPE**: Gloves, face masks and gowns should be worn when managing patients or exposure to bodily fluids anticipated

Patient isolation: Designated area/ ward

Cleaning and disinfection: Using approved disinfectant, clean high touch surfaces (bedrail, door handles). Clean medical equipment between patients.

## Sample collection and testing for HFMD:

See laboratory guidance on the submission of samples for HFMD testing. Please refer to <a href="HFMD">HFMD</a> lab testing

For more information, visit the NICD website, Hand, foot and mouth disease