

Hand, foot and mouth disease (HFMD) is a common viral infection presenting as painful mouth sores and rashes on hands and/or feet.

It mostly affects children <7 years old, but can occur in all ages. It is usually a self-limiting illness, but highly contagious occurring from spring to fall in North America.

PRESENTATION

Symptoms may be more severe in infants and young children:

- **Painful oral lesions**
 - on tongue and buccal mucosa
 - may occasionally be absent
- **Maculopapular or papulovesicular rashes** (fluid-filled blisters)
 - on palms (most common) or soles
 - can occur on knees, elbows, buttocks and/or genital area

12-36hr prodrome

- Fever
- Malaise
- Cough
- Sore throat
- ↓ Appetite
- Abdominal pain
- Myalgia



PATHOGEN & TRANSMISSION

- HFMD is caused by Human Enteroviruses, commonly Coxsackievirus A16, A6, Enterovirus 71.
- Infection spread by exposure to virus-containing respiratory droplets, oral secretions, blister fluid or stool. **Enteroviruses may survive on dry surface for several days.**
- Infected persons are most contagious in the first week of illness but virus may be shed in stool for up to 4-8 weeks after symptoms have resolved.

DIAGNOSIS

- HFMD is a **clinical diagnosis**
- Testing for virus is not required for confirmation
- **DDx of vesicular rash:**
HSV gingivostomatitis (anterior oral/lip lesions), chickenpox (generalized blisters of different ages), Behçet syndrome (recurring oral/genital ulcers).



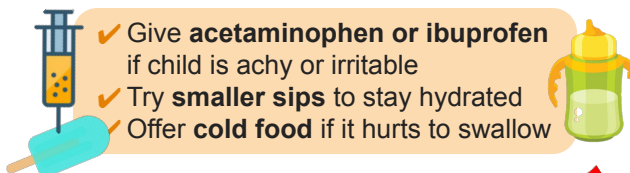
MANAGEMENT

Prognosis

- Most cases resolve spontaneously in 5-10 days
- Rare neurological/cardiopulmonary complications reported in EV 71 outbreaks in Asia

Treatment

- No effective antiviral therapy or vaccine is available for HFMD
- Supportive treatment of fever, pain and hydration



PREVENTION

- **Hand hygiene**, esp. after changing diapers
- **Disinfect all surfaces**, toys and contaminated items with chlorine bleach and water mixture (ratio: 1 tablespoon bleach to 4 cups water)
- Avoid close contact with infected persons
- Keep child from group settings; talk to daycare and school staff before returning

- **Do not** pop the blisters. Keep the areas clean and uncovered
- **Do not** routinely use topical therapies for oral ulcers
- **Never** give aspirin to children or teens
- Educate parents to seek medical treatment if their child has any **sign of dehydration**

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