



# WEEKLY EPIDEMIOLOGICAL REPORT

A publication of the Epidemiology Unit  
Ministry of Health, Nutrition & Indigenous Medicine

231, de Saram Place, Colombo 01000, Sri Lanka  
Tele: + 94 11 2695112, Fax: +94 11 2696583, E mail: epidunit@sltnet.lk  
Epidemiologist: +94 11 2681548, E mail: chepid@sltnet.lk  
Web: <http://www.epid.gov.lk>

Vol. 44 No. 35

26<sup>th</sup>– 01<sup>st</sup> September 2017

## Outbreak of hand foot and mouth disease in Sri Lanka

### Introduction

Hand, foot and mouth disease (HFMD) is a common infectious disease among infants and children, but may also occur in adults too. HFMD is most commonly caused by coxsackievirus A16, which usually results in a mild self-limiting disease with few complications and also by Enteroviruses, including enterovirus 71 (EV71) which has been associated with serious complications. Other enteroviruses such as polioviruses, coxsackieviruses and echoviruses also can cause HFMD.

HFMD spread from person to person by direct contact with the infectious viruses that cause this disease which are found in the nose and throat secretions. The infected are most contagious during the first week of the illness but can remain in the body for weeks even after the cure. Infection results in immunity to the specific virus, but a second episode may occur following infection with a different virus belonging to another enterovirus group.

### Epidemiology

The disease occurs worldwide; both sporadically and in epidemics. Even though several outbreaks of HFMD had been reported from time to time it is not a notifiable disease in Sri Lanka. An outbreak of HFMD reported in the year 2000 to the Epidemiology Unit revealed that there were 1468 cases from OPDs in 12 districts in the country within two weeks in October and out of which 70% of cases were from Colombo district. In the same year 447 cases were reported with 114 hospitalizations during the month of November. However no severe complications or deaths were reported.

### Mode of transmission

HFMD is moderately contagious. An infected person is most contagious during the first week of the illness. The virus can be transmitted from person to person via direct contact with an infected person's saliva, fluid from blisters, faeces and respiratory droplets sprayed into the air after coughing or sneezing. It also can spread via direct contact with unwashed hands or a surface containing traces of the virus. The virus may continue to be excreted in the stools of infected persons up to 1 month, but will not be transmitted to or from pets or other animals.

### Clinical features

The disease begins with a mild fever, malaise and sometimes followed by a sore throat after 3 – 5 days of incubation period. One to two days after the onset of fever, small red spots occur in the mouth which are usually located on the buccal surfaces of the cheeks, gums and may be even sides of the tongue.

At the same time, a non-pruritic vesicular rash will develop specially on the palms, fingers and the soles of the feet. The lesions could appear on the back of the elbows, front of knees and even on the buttocks which will last for 7 – 10 days. The disease may only have either rash or the oral lesions.

### Complications

HFMD caused by coxsackievirus A16 infection is typically mild disease and usually all patients recover within 7 to 10 days with relatively less complications. In contrast, HFMD caused by Enterovirus EV71, may be associated with neu-

WEEKLY SRI LANKA 2017

### Contents

### Page

1. <i>Leading Article – Outbreak of hand foot and mouth disease in Sri Lanka</i>	1
2. <i>Summary of selected notifiable diseases reported - (19<sup>th</sup>– 25<sup>th</sup> August 2017)</i>	3
3. <i>Surveillance of vaccine preventable diseases &amp; AFP - (19<sup>th</sup>– 25<sup>th</sup> August 2017)</i>	4

rological complications such as aseptic meningitis and encephalitis.

**Compiled By** Dr.A.M.U.Prabha Kumari Registrar in community medicine, Epidemiology Unit, Ministry of Health

## **Diagnosis**

The diagnosis is usually clinical based by the appearance of the vesicular rash on the hands, foot and mouth in a mildly febrile child. However, the oral lesions need to be differentiated from other conditions causing oral lesions such as Herpes Simplex. On the other hand, there are standard methods available to confirm the diagnosis based on cell culture, virus isolation and identification of enteroviruses from stools, CSF and swabs of oral ulcers or vesicular lesions.

## **Treatment**

There are no specific antiviral drugs or vaccines available against HFMD. The risk of infection can be lowered by good hygienic practices, early diagnosis and prompt medical attention for children showing symptoms. Symptomatic treatment is recommended with adequate intake of fluids to relieve fever and pain from mouth ulcers resulting in painful swallowing.

## **Prevention**

Frequent hand washing with soap and clean water by children and care givers, avoiding close contact (kissing, hugging, sharing utensils, etc.) with children with HFMD, avoid sharing of spoons, towels, cups, etc., cleaning of contaminated surfaces and soiled items with soap and water, maintain cleanliness of house, child care center, kindergartens or schools and its surroundings may help to reduce of the risk of infection and transmission.

At the same time, keeping infants and sick children away from kindergarten, nursery, school or gatherings until they are well, covering mouth and nose when coughing or sneezing and disposing of used tissues into waste bins that closed properly are also important measures in preventing an outbreak.

On the other hand, the community should be educated in close monitoring of the sick children and to seek prompt medical attention if persistence of high fever, decrease in alertness or deterioration in general condition occurs.

## **Sources**

<https://www.omicsonline.org/.../hand-foot-and-mouth-disease-2155-95381000137.pdf>  
[www.wpro.who.int/publications/docs/GuidancefortheclinicalmanagementofHFMD.pdf](http://www.wpro.who.int/publications/docs/GuidancefortheclinicalmanagementofHFMD.pdf)

[www.epid.gov.lk/web/](http://www.epid.gov.lk/web/)

Table 1: Selected notifiable diseases reported by Medical Officers of Health 19<sup>th</sup>- 25<sup>th</sup> August 2017 (34<sup>th</sup>Week)

RDHS Division	Dengue Fever		Dysentery		Encephalitis		Enteric Fever		Food Poisoning		Leptospirosis		Typhus Fever		Viral Hepatitis		Human Rabies		Chickenpox		Meningitis		Leishmaniasis			WRCD	
	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	T*	C**	
Colombo	397	29467	1	45	0	3	1	25	5	31	6	81	0	2	0	12	0	0	9	267	2	22	0	1	21	100	
Gampaha	385	27294	1	25	0	12	0	16	0	8	0	40	1	10	0	13	0	1	1	208	2	25	0	2	6	100	
Kalutara	223	8765	1	44	0	3	1	15	0	50	2	199	0	6	1	5	1	1	11	404	3	103	0	1	1	99	
Kandy	344	9931	0	55	0	4	0	5	0	10	1	38	2	102	0	10	0	1	4	186	0	28	2	10	13	98	
Matale	45	2397	0	17	1	4	0	1	2	9	0	30	0	2	1	7	0	0	1	39	1	49	0	5	12	100	
NuwaraEliya	22	765	1	20	0	8	1	28	0	50	4	41	0	142	0	18	0	0	3	259	1	36	0	0	54	100	
Galle	127	5094	1	41	1	12	3	16	0	15	7	239	5	45	3	4	0	1	5	304	0	51	0	1	16	100	
Hambantota	59	2742	0	17	0	6	0	7	0	17	0	42	0	45	0	7	0	1	0	152	1	18	4	207	10	100	
Matara	163	5391	2	27	0	8	0	2	0	5	1	150	0	20	0	6	0	1	6	178	0	6	8	102	9	100	
Jaffna	64	3720	11	203	1	13	0	30	0	52	2	26	0	400	0	3	0	0	4	151	0	31	0	0	41	88	
Kilinochchi	8	411	0	13	0	1	1	11	0	1	0	3	0	12	0	2	0	0	0	3	0	8	0	2	25	100	
Mannar	4	504	0	5	0	0	0	2	0	1	0	2	0	2	0	0	0	0	0	13	0	0	0	0	0	16	100
Vavuniya	4	645	0	13	0	0	0	30	0	6	0	24	0	7	0	1	0	0	1	22	0	2	0	9	15	96	
Mullaitivu	16	282	0	8	0	2	0	4	0	5	0	15	0	4	0	1	0	1	0	15	0	5	0	1	8	99	
Batticaloa	37	4496	4	89	0	8	0	13	0	20	0	20	0	0	0	4	0	1	2	135	1	22	0	1	22	100	
Ampara	26	738	2	19	0	2	0	1	0	0	2	14	0	1	0	3	0	0	8	157	3	34	0	3	32	100	
Trincomalee	14	4603	0	18	0	2	0	5	3	20	1	18	0	12	0	17	0	0	5	111	0	18	4	9	19	97	
Kurunegala	246	9016	1	55	0	6	0	3	0	17	1	53	0	24	0	16	0	2	10	405	3	54	4	115	10	100	
Puttalam	199	4749	1	33	0	2	0	2	5	9	1	22	0	11	0	1	0	0	4	116	1	38	0	3	9	100	
Anuradhapur	34	2376	0	30	0	3	0	1	0	12	0	57	2	15	0	10	0	1	3	318	3	52	9	185	7	99	
Polonnaruwa	7	1107	0	12	0	5	0	9	0	6	1	32	1	7	0	7	0	0	0	174	0	12	0	96	4	96	
Badulla	68	2875	4	74	0	7	0	7	0	2	9	81	3	82	0	52	0	1	6	282	13	148	0	12	8	97	
Monaragala	59	1962	2	44	0	3	0	1	0	9	3	101	3	95	0	17	0	1	2	70	1	49	1	15	26	100	
Ratnapura	256	9696	4	115	0	69	1	9	0	8	7	443	1	23	3	61	0	0	0	233	1	133	1	17	9	99	
Kegalle	395	8029	0	30	1	10	0	4	0	17	8	67	1	60	0	11	0	0	3	206	2	52	1	9	9	100	
Kalimune	25	2073	1	63	0	4	0	4	2	280	0	8	0	0	0	2	0	0	1	116	1	17	0	0	12	99	
<b>SRI LANKA</b>	<b>3227</b>	<b>149128</b>	<b>37</b>	<b>1115</b>	<b>4</b>	<b>197</b>	<b>8</b>	<b>251</b>	<b>17</b>	<b>660</b>	<b>56</b>	<b>1846</b>	<b>19</b>	<b>1129</b>	<b>8</b>	<b>290</b>	<b>1</b>	<b>13</b>	<b>89</b>	<b>4524</b>	<b>39</b>	<b>1013</b>	<b>34</b>	<b>806</b>	<b>15</b>	<b>98</b>	

Source: esurveillance.epid.gov.lk  
 \*T=Timeliness refers to returns received on or before 25<sup>th</sup>August, 2017 Total number of reporting units 344 Number of reporting units data provided for the current week: 342 C\*\* -Completeness

**Table 2: Vaccine-Preventable Diseases & AFP**

19<sup>th</sup>– 25<sup>th</sup> August 2017 (34<sup>th</sup>Week)

Disease	No. of Cases by Province									Number of cases during current week in 2017	Number of cases during same week in 2016	Total number of cases to date in 2017	Total number of cases to date in 2016	Difference between the number of cases to date in 2017 & 2016
	W	C	S	N	E	NW	NC	U	Sab					
AFP*	01	00	00	00	00	00	01	00	00	02	03	47	49	- 4.0%
Diphtheria	00	00	00	00	00	00	00	00	00	00	00	00	00	0%
Mumps	01	00	00	00	00	00	02	00	00	03	06	219	275	- 20.3%
Measles	00	01	00	01	02	00	01	01	00	06	00	165	312	- 47.1%
Rubella	00	00	00	00	00	01	00	00	00	01	00	06	07	- 14.2%
CRS**	00	00	00	00	00	00	00	00	00	00	00	01	00	0%
Tetanus	00	00	00	00	00	00	00	00	00	00	00	11	07	57.1%
Neonatal Tetanus	00	00	00	00	00	00	00	00	00	00	00	00	00	0%
Japanese Encephalitis	00	00	00	00	00	00	00	00	00	00	01	21	13	61.5%
Whooping Cough	00	00	00	01	00	00	00	00	00	00	00	11	46	- 76.0%
Tuberculosis	27	16	11	02	15	14	05	09	10	109	202	5527	6263	-11.7%

**Key to Table 1 & 2**

**Provinces:** W: Western, C: Central, S: Southern, N: North, E: East, NC: North Central, NW: North Western, U: Uva, Sab: Sabaragamuwa.  
**RDHS Divisions:** CB: Colombo, GM: Gampaha, KL: Kalutara, KD: Kandy, ML: Matale, NE: Nuwara Eliya, GL: Galle, HB: Hambantota, MT: Matara, JF: Jaffna, KN: Killinochchi, MN: Mannar, VA: Vavuniya, MU: Mullaitivu, BT: Batticaloa, AM: Ampara, TR: Trincomalee, KM: Kalmunai, KR: Kurunegala, PU: Puttalam, AP: Anuradhapura, PO: Polonnaruwa, BD: Badulla, MO: Moneragala, RP: Ratnapura, KG: Kegalle.

**Data Sources:**  
**Weekly Return of Communicable Diseases:** Diphtheria, Measles, Tetanus, Neonatal Tetanus, Whooping Cough, Chickenpox, Meningitis, Mumps., Rubella, CRS,  
**Special Surveillance:** AFP\* (Acute Flaccid Paralysis), Japanese Encephalitis  
**CRS\*\*** =Congenital Rubella Syndrome

**Number of Malaria Cases Up to End of August 2017,**

**04**

**All are Imported!!!**

**PRINTING OF THIS PUBLICATION IS FUNDED BY THE WORLD HEALTH ORGANIZATION (WHO).**

Comments and contributions for publication in the WER Sri Lanka are welcome. However, the editor reserves the right to accept or reject items for publication. All correspondence should be mailed to The Editor, WER Sri Lanka, Epidemiological Unit, P.O. Box 1567, Colombo or sent by E-mail to [chepid@sltnet.lk](mailto:chepid@sltnet.lk). **Prior approval should be obtained from the Epidemiology Unit before publishing data in this publication**

**ON STATE SERVICE**

**Dr. P. PALIHAWADANA**  
 CHIEF EPIDEMIOLOGIST  
 EPIDEMIOLOGY UNIT  
 231, DE SARAM PLACE  
 COLOMBO 10