WEEKLY EPIDEMIOLOGICAL REPORT

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Ministry of Health & Mass Media

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WEEKLY EPIDEMIOLOGICAL REPORT SRI LANKA 2025

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Chikungunya: Disease Profile and Epidemiological Overview – Sri Lanka, 2025 Part II

This is the second article of two in a series on "Chikungunya: Disease Profile and Epidemiological Overview – Sri Lanka, 2025"

Clinical Presentation

Approximately 15%–35% of people infected with Chikungunya virus will remain asymptomatic. In symptomatic patients, CHIKV disease typically manifests 4–8 days (range: 2–12 days) after the bite of an infected mosquito. It is characterized by an abrupt onset of high-grade fever (typically >39°C [102°F]), frequently accompanied by severe, often debilitating, symmetric joint pain.

Joint pain occurs most commonly in hands and feet but can affect more proximal joints. Other symptoms include conjunctivitis, headache, myalgia, nausea, vomiting, or a rash. The rash, which is typically morbilliform (e.g., maculopapular) and often pruritic, occurs after onset of fever and involves the trunk and extremities but also can include the palms, soles, and face. Current evidence suggests that infection with CHIKV induces lifelong immunity, with antibodies providing protection against reinfection. Though most patients recover fully, rare complications involving the eyes, heart, and central nervous system have been reported. Individuals at the extremes of age, especially neonates infected during delivery and elderly patients with comorbidities, are at increased risk of severe disease and mortality.

Maternal-fetal transmission of chikungunya has been documented, although it remains rare at most stages of pregnancy. The greatest risk of transmission occurs in the perinatal period, particularly when the pregnant woman is viremic at the time of delivery. In such cases, transmission may occur in up to 50% of deliveries, often resulting in severe neonatal disease, including hemorrhagic manifestations, myocardial dysfunction, and neurological disorders.

Differential diagnosis

Several illnesses mimic chikungunya clinically, including dengue fever, especially during the early stages. In addition to dengue and Zika, other diagnostic considerations include leptospirosis, malaria, rickettsia, group A streptococcus, rubella, measles, parvovirus, enteroviruses, adenovirus infections, post-infectious arthritis, and rheumatologic conditions. Due to the overlapping symptoms, particularly during co-circulation with dengue, clinicians must exercise caution and use available diagnostic tests to differentiate among these conditions.

Laboratory diagnosis

Given the clinical overlap with other arboviral infections such as dengue and Zika, laboratory confirmation is essential for accurate diagnosis. The diagnostic approach depends on the duration of illness at the time of presentation:

Time since symptom onset	Preferred test	Sample
0–7 days	RT-PCR (molecular)	Serum
>7 days	IgM/IgG (serology)	Serum

Apart from that laboratory abnormalities associated with Chikungunya may include mild leukopenia with lymphocytosis, elevated ESR (20–50 mm/hr), raised CRP, mild thrombocytopenia, and ECG changes in cases with myocarditis. In outbreak situations, if a strong epidemiological link exists, laboratory confirmation may not be required for every case. The Medical Research Institute (MRI) in Colombo serves as the national reference laboratory for Chikungunya IgM testing.

Clinical management

Currently, there is no antiviral treatment for Chikungunya. Management remains supportive and symptomatic, with key priorities focused on fever and pain management, hydration, and rest during the acute phase. Paracetamol is recommended for fever and pain relief, **while NSAIDs such as ibuprofen should be avoided until dengue has been ruled out to prevent**

bleeding complications. Adequate hydration, particularly for febrile children and elderly patients, is critical, and rest is recommended during both the febrile and post-febrile phases to reduce musculoskeletal stress.

For patients who remain fever-free for 10 days but continue to experience joint pain or stiffness, NSAIDs can be cautiously introduced **after excluding dengue**. Physiotherapy and rehabilitation may assist patients with prolonged arthritis. In cases of chronic symptoms, referral to a specialist is advised.

Hospital admission may be necessary in certain circumstances, such as dehydration or persistent vomiting, severe joint symptoms that hinder mobility, suspected co-infections (e.g., dengue), or for high-risk patients such as infants, the elderly, pregnant women, and those with comorbidities (e.g., diabetes, cardiovascular disease), who require close monitoring.

Surveillance and notification

Strengthening disease surveillance is critical for controlling Chikungunya outbreaks. This process facilitates timely epidemiological investigations, vector control interventions, identification of clusters or outbreaks, and monitoring of morbidity trends.

Patient and community education

In addition to clinical care, educating patients and communities plays a vital role in controlling Chikungunya. Patients should be advised to use only paracetamol for fever relief, avoid self-medication with NSAIDs or steroids, and seek medical attention if joint pain worsens or persists beyond two weeks.

Comprehensive national guidelines on Chikungunya will be available from the Epidemiology Unit to support timely surveillance, diagnosis, and clinical management. These include:

- *Guideline for Surveillance of Chikungunya*
- *Guideline for Laboratory Diagnosis and Clinical Management of Chikungunya*

Both documents will be accessible via the official Circulars page of the Epidemiology Unit website:

http://www.epid.gov.lk/web/index.php?option=com_content&view=article&id=127&Itemid=488&lang=en

Aedes mosquitoes responsible for the transmission of chikungunya virus exhibit exophilic and exophagic behavior, meaning they predominantly rest and feed outdoors. Their preference for outdoor resting sites and feeding activities necessitates integrated vector management strategies.

At the community level, efforts to reduce mosquito breeding by eliminating stagnant water sources, such as in flower pots, coconut shells, discarded tires, and clogged gutters, are crucial. Promoting mosquito bite prevention, particularly during the day, is essential. Measures include the use of bed nets, repellents (which are not recommended for infants under 2 years), and wearing long-sleeved clothing.

Protection from mosquito bites is also crucial. Wearing long-sleeved shirts and trousers during the day, using mosquito repellents (avoiding chemical repellents for infants and children under two), and sleeping under mosquito nets, even during daytime, are key strategies. Children should be kept indoors during peak mosquito activity hours, especially in the early morning and late afternoon.

During the first week of illness, patients are most viremic and should avoid mosquito bites to prevent further transmission. This can be achieved by ensuring that infected individuals are protected from mosquitoes and preventing further exposure.

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Table 1 : Water Quality Surveillance
Number of microbiological water samples February 2025

District	MOH areas	No: Expected *	No: Received
Colombo	18	108	**0**
Gampaha	15	90	**14**
Kalutara	13	78	**53**
Kalutara NIHS	2	12	**NR**
Kandy	23	138	**19**
Matale	13	78	**NR**
Nuwara Eliya	13	78	**0**
Galle	20	120	**132**
Matara	17	102	**NR**
Hambantota	12	72	**0**
Jaffna	14	84	**151**
Kilinochchi	4	24	**28**
Mannar	5	30	**0**
Vavuniya	4	24	**2**
Mullatvu	6	36	**36**
Batticaloa	14	84	**24**
Ampara	7	42	**0**
Trincomalee	12	72	**10**
Kurunegala	29	174	**NR**
Puttalam	13	78	**NR**
Anuradhapura	23	138	**NR**
Polonnaruwa	9	54	**4**
Badulla	16	96	**140**
Moneragala	11	66	**72**
Rathnapura	20	120	**90**
Kegalle	11	66	**0**
Kalmunai	13	78	**10**

* No of samples expected (6 / MOH area / Month)
NR = Return not received

Table 1: Selected notifiable diseases reported by Medical Officers of Health 08th – 14th Mar 2025 (11th Week)

RDHS	Dengue Fever		Dysentery		Encephalitis		En. Fever		F. Poisoning		Leptospirosis		Typhus F.		Viral Hep.		H. Rabiies		Chickenpox		Meningitis		Leishmania-		Tuberculosis		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	A	B	T*	C**
Colombo	214	2607	1	11	0	3	1	3	0	5	1	107	1	4	0	4	0	0	5	126	1	17	0	1	34	430	**100**	**100**
Gampaha	132	1695	0	14	1	13	0	1	0	42	14	179	0	2	0	5	0	0	22	204	3	31	5	14	28	224	**100**	**100**
Kalutara	37	422	1	10	0	1	0	2	1	13	11	162	0	0	0	2	0	0	10	153	1	10	1	1	14	150	**100**	**75**
Kandy	59	716	0	18	0	2	0	2	0	6	3	81	0	18	0	5	0	0	14	101	0	7	5	22	15	176	**100**	**100**
Matale	22	407	0	8	0	1	0	0	0	6	4	49	0	1	0	4	0	0	7	33	0	1	15	62	5	34	**100**	**100**
Nuwara Eliya	1	50	1	23	0	3	0	4	0	44	3	37	0	18	0	0	0	0	8	62	0	6	0	0	5	70	**92**	**100**
Galle	24	494	1	18	0	2	0	0	3	26	10	202	2	26	0	4	0	0	27	191	5	43	0	1	11	112	**95**	**100**
Hambantota	14	230	0	6	0	2	0	0	0	3	9	102	2	13	0	1	0	0	10	112	2	4	10	74	4	42	**100**	**100**
Matara	32	402	0	4	0	2	0	1	0	3	4	123	1	7	0	2	0	0	15	97	0	13	2	25	4	46	**94**	**100**
Jaffna	23	417	1	19	0	1	0	3	1	11	2	107	16	214	0	0	0	1	11	80	0	9	0	0	3	39	**93**	**93**
Kilinochchi	6	39	1	5	0	0	1	4	0	1	3	39	0	10	0	1	0	0	0	1	0	0	0	0	0	7	**100**	**100**
Mannar	2	75	0	0	0	0	0	0	1	1	1	10	1	4	0	0	0	0	4	11	2	9	0	0	0	11	**100**	**100**
Vavuniya	1	23	1	5	0	0	1	1	0	20	2	30	0	2	0	0	0	0	4	10	0	5	1	6	2	8	**100**	**100**
Mullaitivu	3	24	0	1	0	0	0	1	0	0	1	33	0	3	0	0	0	0	1	7	0	4	0	0	1	6	**100**	**100**
Batticaloa	31	664	3	60	0	8	0	0	55	60	5	27	0	1	2	9	0	0	2	69	1	15	0	1	5	36	**14**	**100**
Ampara	3	45	1	6	0	1	0	0	0	2	3	44	0	1	0	1	0	0	5	35	2	4	1	7	1	15	**43**	**100**
Trincomalee	25	299	1	19	0	1	0	0	0	16	2	48	0	5	1	2	0	0	1	31	0	7	0	3	0	19	**0**	**100**
Kurunegala	23	284	1	7	0	4	0	1	0	19	6	209	0	15	0	1	0	0	28	216	2	37	10	127	9	85	**100**	**100**
Puttalam	15	249	1	8	0	0	0	0	0	4	2	100	3	18	0	1	0	0	3	45	0	26	2	7	0	48	**100**	**100**
Anuradhapura	12	241	1	14	0	5	0	1	0	7	5	149	2	11	1	5	0	0	4	74	2	28	26	198	1	62	**87**	**100**
Polonnaruwa	3	62	0	7	0	2	0	1	0	1	3	58	0	0	0	8	0	0	5	47	0	2	7	96	3	14	**100**	**92**
Badulla	17	212	3	6	0	1	1	3	0	0	7	87	0	8	1	10	0	0	12	116	2	24	3	7	5	56	**94**	**100**
Monaragala	23	213	1	6	0	3	0	0	0	3	13	145	1	19	0	4	0	0	5	39	0	16	8	38	0	26	**91**	**100**
Ratnapura	46	568	3	27	1	4	0	3	0	12	28	381	2	12	0	2	0	0	24	127	3	37	0	37	8	100	**100**	**100**
Kegalle	20	316	1	21	0	3	0	0	2	14	6	165	0	4	0	6	0	0	25	217	2	16	0	11	6	62	**100**	**100**
Kalmunai	8	138	0	7	0	0	0	0	0	7	2	37	1	1	0	1	0	0	3	48	1	7	0	0	0	27	**0**	**100**
SRILANKA	**796**	**10892**	**23**	**330**	**2**	**62**	**4**	**31**	**63**	**326**	**150**	**2711**	**32**	**417**	**5**	**78**	**0**	**1**	**255**	**2252**	**29**	**378**	**96**	**738**	**164**	**1905**	**85**	**99**

Source: Weekly Returns of Communicable Diseases (esurvillance.epid.gov.lk). T=Timeliness refers to returns received on or before 14th Mar, 2025 Total number of reporting units 361 Number of reporting units data provided for the current week: 358 **C****-Completeness ·
A = Cases reported during the current week. B = Cumulative cases for the year.

Table 2: Vaccine-Preventable Diseases & AFP

08th – 14th Mar 2025 (11th Week)

Disease	No. of Cases by Province									Number of cases during current week in 2025	Number of cases during same week in 2024	Total number of cases to date in 2025	Total number of cases to date in 2024	Difference between the number of cases to date in 2025 & 2024
	W	C	S	N	E	NW	NC	U	Sab					
AFP*	01	00	00	00	00	01	00	00	00	02	02	15	16	-6.2%
Diphtheria	00	00	00	00	00	00	00	00	00	00	00	00	00	0 %
Mumps	02	01	01	01	00	01	00	00	00	06	03	54	64	-15.6 %
Measles	00	00	00	00	00	00	00	00	00	00	11	01	158	-99.3%
Rubella	00	00	00	00	00	00	00	00	00	00	00	00	01	-100%
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	02	00	0 %
Neonatal Tetanus	00	00	00	00	00	00	00	00	00	00	00	00	00	0 %
Japanese Enceph-alitis	00	00	00	00	00	00	00	00	00	00	00	04	01	300 %
Whooping Cough	00	00	00	00	00	00	00	00	00	00	00	08	01	700 %

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

NA = Not Available

Take prophylaxis medications for leptospirosis during the paddy cultivation and harvesting seasons.

It is provided free by the MOH office / Public Health Inspectors.

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. Prior approval should be obtained from the Epidemiology Unit before publishing data in this publication**

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