



WEEKLY EPIDEMIOLOGICAL REPORT

A publication of the Epidemiology Unit
Ministry of Health & Mass Media

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

SRI LANKA 2026

V E R

Vol. 53 No. 03

12th – 18th Jan 2026

Nipah Virus in South Asia: Outbreak Trends, Transmission Dynamics, and Preparedness Strategies for Emerging Zoonotic Threats

Nipah virus (NiV) is a highly pathogenic zoonotic virus, recently emerged as a crucial public health issue as it closely related with severe encephalitis and respiratory diseases in animals and humans, leading to fatal outcomes (Wang et al., 2024) with case fatality rates ranging from approximately 40 % to 75 % in documented outbreaks (Borges et al., 2025).

Virology and Transmission

Nipah virus (NiV) is a zoonotic paramyxovirus belonging to the genus Henipavirus, subfamily Paramyxovirinae, family Paramyxoviridae, and order Mononegavirales. It is an enveloped, negative-sense, single-stranded, non-segmented RNA virus with helical symmetry (Singh et al., 2019). Nipah virus demonstrates notable environmental stability compared to many other enveloped viruses. It can survive for up to three days in certain fruit juices and on mango fruit, and for at least seven days in artificial date palm sap at 22°C. The virus has a half-life of approximately 18 hours in the urine of fruit bats. Additionally, NiV remains viable even after exposure to 70°C for one hour, although viral concentration is reduced (Tyagi et al., 2025).

Fruit bats act as natural reservoir of Nipah viruses and transmission of NiV to man occurs mainly in places where man, pigs and bats come in close proximity. It is typically occurs through direct contact with infected bats, pigs or

contaminated fruits and fruit products, such as raw date palm sap that has been contaminated by bat urine or saliva [5,10]. Although human-to-human transmission is less frequent than animal-to-human spillover, it has been documented in health care settings and among caregivers (Figure 1) (Singh et al., 2019).

Clinical Features and Diagnosis

The incubation period for NiV infection ranges from 4 to 14 days, with some reports suggesting incubation as long as 45 days in rare cases. Clinical presentation is variable but often severe. Initial symptoms commonly include fever, headache, myalgia, and sore throat and can rapidly progress to acute encephalitis, respiratory distress, seizures, or coma. Encephalitis is a hallmark in severe cases, and many survivors experience long-term neurological sequelae. The high case-fatality ratio typically between 40% and 75% and exceeding 70% in some outbreaks underscores the gravity of the disease (WHO, 2026b).

Diagnosis primarily done on molecular testing such as real-time polymerase chain reaction (RT-PCR) from blood, cerebrospinal fluid, or respiratory samples during the acute phase, supplemented by serological assays for antibody detection (WHO, 2026b).

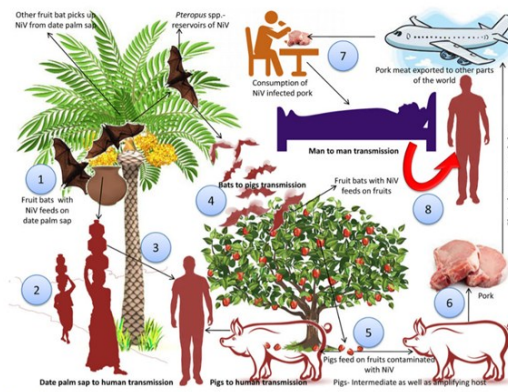


Figure 1: Transmission of the Nipah virus

| | |
|---|---|
| 1. Nipah Virus in South Asia: Outbreak Trends, Transmission Dynamics, and Preparedness Strategies for Emerging Zoonotic Threats | 1 |
| 2. Summary of distribution of notified diseases reported by MOH (05 th – 11 th Jan 2026) | 3 |
| 3. Surveillance of vaccine preventable diseases & AFP (05 th – 11 th Jan 2026) | 4 |

History of Nipah Virus Outbreaks

Nipah virus was first identified during a large outbreak in Malaysia and Singapore in 1998–1999, where transmission occurred mainly through infected pigs, resulting in more than 280 human cases and over 100 deaths. Following, Bangladesh began reporting recurrent outbreaks from 2001 onward, typically associated with the consumption of raw date palm sap contaminated by fruit bats, and demonstrated both animal-to-human and human-to-human transmission. India has also demonstrated periodic outbreaks, particularly in West Bengal and Kerala, since 2001. Moreover, smaller outbreaks have been reported in the Philippines (Singh et al., 2019)

India: 2026 Nipah Virus Situation

In January 2026, health authorities in West Bengal, India confirmed two laboratory-verified cases of Nipah virus infection. Both patients were young health-care workers (who developed symptoms consistent with NiV infection in late December 2025 and were subsequently hospitalized and isolated in early January 2026. and over 190 close contacts were identified, traced, and tested, with all returning negative results as of late January (WHO, 2026a)

Bangladesh: 2026 Nipah Virus situation

In February 2026, the International Health Regulations National Focal Point for Bangladesh notified a confirmed case of Nipah virus infection in Rajshahi Division. The patient, a woman aged between 40 and 50, history of consuming raw date palm sap first developed symptoms on 21 January 2026. Initially fever, headache, muscle cramps, anorexia, weakness, vomiting, and later neurological signs such as hypersalivation, disorientation, and convulsions and admitted to hospital on 28 January and died on same day. Laboratory confirmation occurred on 29 January using PCR and ELISA testing. A total of 35 contacts were identified, tested and all were negative for NiV infection (WHO, 2026c).

Key learnings from India(Anish T S, 2026)

Disturbance or destruction of bat habitats can increase migration and human–bat contact, paradoxically elevating the risk of Nipah virus spillover. In Kerala, outbreaks show seasonal patterns between April and September, coinciding with monsoons, fruiting cycles, and the breeding season of *Pteropus medius*. Viral RNA detected in bat tissues and excreta indicates multiple transmission routes beyond contaminated food, and domestic animals may serve as intermediate hosts. Hospital-based superspreading, particularly from non-isolated primary cases with respiratory symptoms, significantly drives transmission; however, consistent mask use and strict infection control among healthcare workers effectively prevent spread. Strengthened AES surveillance, rapid PCR diagnosis, early treatment, and chemoprophylaxis of high-risk contacts are critical for reducing mortality and containing outbreaks.

Compiled By

Dr Poojani Illangasinghe
Epidemiology Unit
Ministry of Health

References:

1. Anish T S. (2026). *Nipah encephalitis: The learnings from Kerala*.
2. Borges, C. D. S. C., Gonçalves, A. M., Rodrigues, F. A., Lima, T. de S., Nastri, A. C. S., Alves, V. A. F., Sotto, M. N., Mauad, T., Tan, S. H., Saldiva, P. H. N., Silva, L. F. F., Wong, K. T., Dolnikoff, M., & Duarte-Neto, A. N. (2025). Nipah virus infection: preparedness for the pathological diagnosis of an emerging Paramyxoviridae disease with epidemic potential. *Revista Do Instituto de Medicina Tropical de São Paulo*, 67, e40. <https://doi.org/10.1590/S1678-9946202567040>
3. Singh, R. K., Dhama, K., Chakraborty, S., Tiwari, R., Natesan, S., Khandia, R., Munjal, A., Vora, K. S., Latheef, S. K., Karthik, K., Singh Malik, Y., Singh, R., Chaicumpa, W., & Mourya, D. T. (2019). Nipah virus: epidemiology, pathology, immunobiology and advances in diagnosis, vaccine designing and control strategies – a comprehensive review. *The Veterinary Quarterly*, 39(1), 26. <https://doi.org/10.1080/01652176.2019.1580827>
4. Tyagi, S., Upadhyay, S., Bharara, T., & Sahai, S. (2025). Nipah virus: Preventing the next outbreak. *World Journal of Clinical Cases*, 13 (11), 99748. <https://doi.org/10.12998/wjcc.v13.i11.99748>
5. Wang, L., Lu, D., Yang, M., Chai, S., Du, H., & Jiang, H. (2024). Nipah virus: epidemiology, pathogenesis, treatment, and prevention. *Frontiers of Medicine*, 18(6), 969–987. <https://doi.org/10.1007/s11684-024-1078-2>
6. WHO. (2026a). *Nipah virus disease - India*. <https://www.who.int/emergencies/disease-outbreak-news/item/2026-DON593>
7. WHO. (2026b). *Nipah virus fact sheet*. <https://www.who.int/news-room/fact-sheets/detail/nipah-virus>
8. WHO. (2026c). *Nipah virus infection - Bangladesh*. <https://www.who.int/emergencies/disease-outbreak-news/item/2026-DON594>

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

| District | MOH areas | No: Expected * | No: Received |
|---------------|-----------|----------------|--------------|
| Colombo | 18 | 108 | 4 |
| Gampaha | 15 | 90 | NR |
| Kalutara | 13 | 78 | NR |
| Kalutara NIHS | 2 | 12 | 83 |
| Kandy | 23 | 138 | 51 |
| Matale | 13 | 78 | NR |
| Nuwara Eliya | 13 | 78 | 46 |
| Galle | 20 | 120 | NR |
| Matara | 17 | 102 | 46 |
| Hambantota | 12 | 72 | 100 |
| Jaffna | 14 | 84 | NR |
| Kilinochchi | 4 | 24 | 18 |
| Mannar | 5 | 30 | 5 |
| Vavuniya | 6 | 36 | 19 |
| Mullatvu | 6 | 36 | 19 |
| Batticaloa | 14 | 84 | 24 |
| Ampara | 7 | 42 | 21 |
| Trincomalee | 12 | 72 | NR |
| Kurunegala | 29 | 174 | 36 |
| Puttalam | 13 | 78 | 13 |
| Anuradhapura | 23 | 138 | NR |
| Polonnaruwa | 9 | 54 | 4 |
| Badulla | 16 | 96 | 115 |
| Moneragala | 11 | 66 | 69 |
| Rathnapura | 20 | 120 | 48 |
| Kegalle | 11 | 66 | 23 |
| Kalmunai | 13 | 78 | 0 |

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

Table 1: Distribution of Notified Diseases reported by Medical Officers of Health 05th-11th Jan 2025 (02nd Week)

| RDHS | Dengue Fever | | Dysentery | | Encephalitis | | En. Fever | | F. Poisoning | | Leptospirosis | | Typhus Fev. | | Viral Hep. | | H. Rabies | | Chickenpox | | Meningitis | | Leishman. | | Tuberculosis | | Leprosy | | 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 | A | B | T* | C** | |
| Colombo | 594 | 1028 | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 10 | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 21 | 1 | 1 | 0 | 0 | 33 | 58 | 3 | 21 | 99 | 100 |
| Gampaha | 298 | 603 | 2 | 3 | 0 | 0 | 0 | 0 | 2 | 2 | 18 | 50 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 17 | 32 | 10 | 19 | 0 | 0 | 28 | 46 | 4 | 6 | 96 | 100 |
| Kalutara | 116 | 232 | 3 | 4 | 0 | 0 | 1 | 2 | 0 | 1 | 12 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 38 | 2 | 2 | 0 | 0 | 0 | 32 | 1 | 3 | 98 | 100 |
| Kandy | 106 | 197 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 14 | 27 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 28 | 1 | 3 | 0 | 2 | 10 | 23 | 0 | 1 | 99 | 100 |
| Matale | 33 | 65 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 23 | 0 | 0 | 1 | 1 | 0 | 0 | 8 | 10 | 0 | 1 | 13 | 22 | 3 | 6 | 0 | 0 | 86 | 100 | |
| Nuwara Eliya | 9 | 16 | 0 | 2 | 0 | 0 | 0 | 0 | 1 | 1 | 8 | 11 | 1 | 3 | 0 | 1 | 0 | 0 | 8 | 10 | 1 | 6 | 0 | 0 | 2 | 8 | 0 | 1 | 84 | 100 | |
| Galle | 128 | 191 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 3 | 25 | 41 | 1 | 3 | 0 | 0 | 0 | 0 | 15 | 32 | 6 | 8 | 0 | 0 | 7 | 15 | 0 | 1 | 96 | 100 | |
| Hambantota | 63 | 123 | 1 | 3 | 0 | 0 | 0 | 0 | 1 | 1 | 6 | 15 | 2 | 2 | 0 | 1 | 0 | 0 | 9 | 17 | 1 | 3 | 7 | 9 | 5 | 8 | 1 | 4 | 100 | 100 | |
| Matara | 123 | 202 | 1 | 1 | 0 | 0 | 0 | 0 | 2 | 6 | 8 | 14 | 2 | 2 | 0 | 0 | 0 | 0 | 22 | 41 | 0 | 1 | 5 | 8 | 6 | 9 | 0 | 0 | 85 | 100 | |
| Jaffna | 44 | 108 | 0 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 7 | 20 | 10 | 24 | 0 | 0 | 0 | 0 | 13 | 19 | 0 | 1 | 0 | 0 | 0 | 6 | 0 | 2 | 96 | 100 | |
| Kilinochchi | 3 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 5 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 100 | |
| Mannar | 4 | 6 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 4 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 100 | 100 | |
| Vavuniya | 2 | 5 | 1 | 3 | 0 | 0 | 0 | 1 | 0 | 0 | 3 | 6 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 22 | 100 | |
| Mullaitivu | 6 | 7 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 4 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 100 | 100 | |
| Batticaloa | 16 | 34 | 1 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 5 | 0 | 0 | 0 | 0 | 2 | 4 | 4 | 5 | 92 | 100 | |
| Ampara | 21 | 31 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 16 | 2 | 3 | 0 | 1 | 0 | 0 | 2 | 2 | 97 | 100 | |
| Trincomalee | 26 | 41 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 7 | 1 | 1 | 0 | 0 | 2 | 5 | 0 | 0 | 88 | 98 | |
| Kurunegala | 51 | 87 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 13 | 24 | 3 | 5 | 0 | 0 | 0 | 0 | 14 | 36 | 2 | 7 | 8 | 17 | 3 | 9 | 1 | 3 | 97 | 99 | |
| Puttalam | 46 | 67 | 0 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 22 | 49 | 0 | 1 | 0 | 0 | 0 | 1 | 5 | 8 | 3 | 3 | 1 | 1 | 7 | 11 | 0 | 0 | 100 | 100 | |
| Anuradhapur | 27 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 24 | 38 | 2 | 3 | 0 | 0 | 0 | 0 | 5 | 10 | 2 | 2 | 26 | 35 | 3 | 8 | 2 | 3 | 68 | 100 | |
| Polonnaruwa | 9 | 23 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 4 | 8 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 25 | 1 | 1 | 3 | 21 | 4 | 6 | 0 | 3 | 100 | 100 | |
| Badulla | 40 | 65 | 2 | 4 | 0 | 0 | 0 | 0 | 1 | 1 | 5 | 15 | 0 | 1 | 10 | 15 | 0 | 0 | 10 | 16 | 3 | 4 | 4 | 9 | 8 | 11 | 1 | 1 | 86 | 100 | |
| Monaragala | 32 | 48 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 29 | 2 | 2 | 1 | 3 | 0 | 0 | 6 | 20 | 1 | 1 | 3 | 7 | 2 | 3 | 0 | 0 | 78 | 100 | |
| Ratnapura | 94 | 157 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 2 | 21 | 48 | 0 | 1 | 1 | 1 | 0 | 0 | 12 | 16 | 0 | 0 | 0 | 2 | 8 | 15 | 2 | 5 | 97 | 99 | |
| Kegalle | 48 | 102 | 1 | 1 | 1 | 2 | 0 | 0 | 2 | 4 | 6 | 19 | 1 | 1 | 0 | 1 | 0 | 0 | 29 | 46 | 4 | 5 | 0 | 0 | 4 | 12 | 0 | 0 | 89 | 99 | |
| Kalmunai | 18 | 33 | 1 | 3 | 0 | 0 | 0 | 0 | 1 | 1 | 3 | 4 | 1 | 1 | 0 | 0 | 0 | 0 | 9 | 29 | 3 | 3 | 0 | 0 | 3 | 5 | 1 | 2 | 100 | 100 | |
| SRILANKA | 1957 | 3526 | 21 | 54 | 4 | 7 | 3 | 6 | 15 | 43 | 263 | 538 | 25 | 50 | 14 | 26 | 0 | 1 | 255 | 483 | 45 | 77 | 71 | 136 | 141 | 304 | 22 | 64 | 90 | 100 | |

C**=Completeness;

T*=Timeliness refers to returns received on or before 11th Jan, 2026.

A = Cases reported during the current week;

B = Cumulative cases for the year.

Source: WRCD module of the EPINET. Total number of reporting units 360.

Table 2: Selected Vaccine Preventable Diseases & AFP

05th – 11th Jan 2025 (02nd Week)

| Disease | No. of Cases by Province | | | | | | | | | Number of cases during current week in 2026 | Number of cases during same week in 2025 | Total number of cases to date in 2026 | Total number of cases to date in 2025 | Difference between the number of cases to date in 2026 & 2025 |
|------------------------------------|--------------------------|----|----|----|----|----|----|----|-----|---|--|---------------------------------------|---------------------------------------|---|
| | W | C | S | N | E | NW | NC | U | Sab | | | | | |
| AFP ¹ | 01 | 01 | 00 | 00 | 01 | 00 | 00 | 00 | 00 | 03 | 00 | 07 | 02 | 250% |
| Diphtheria | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 0 % |
| Mumps ² | 02 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 02 | 03 | 04 | 07 | -42.8 % |
| Measles ³ | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 01 | 00 | 01 | -100 % |
| Rubella ³ | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 02 | -100 % |
| CRS ² | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 0 % |
| Tetanus ² | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 01 | -100 % |
| Neonatal Tetanus ² | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 0 % |
| Japanese Encephalitis ³ | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 01 | 00 | 01 | -100 % |
| Whooping Cough ² | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 01 | 01 | 0 % |

Key to Table 2

Provinces: W: Western, C: Central, S: Southern, N: North, E: East, NC: North Central, NW: North Western, U: Uva, Sab: Sabaragamuwa.

Data Sources:

Weekly Return of Communicable Diseases: Diphtheria, Mumps, Tetanus, Neonatal Tetanus, Whooping Cough.

Special Surveillance: AFP, Measles, Rubella, CRS.

AFP¹ = No Polio cases

Mumps², CRS², Tetanus², Neonatal Tetanus², Whooping Cough²—Clinically and/ or laboratory confirmed cases

Measles³, Rubella³, Japanese Encephalitis³— Laboratory Confirmed cases

AFP—Acute Flaccid Paralysis

CRS = Congenital Rubella Syndrome

NA = Not Available

AFP and all Vaccine Preventable Diseases except Mumps should be investigated by the MOH Personally.

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@slt.net.lk. The Epidemiology Unit should be formally acknowledged in all resulting publications as the primary data source.

ON STATE SERVICE

Dr. Palitha Karunapema
 CHIEF EPIDEMIOLOGIST
 EPIDEMIOLOGY UNIT
 231, DE SARAM PLACE
 COLOMBO 10