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Editorial

Nipah 2026 in Bangladesh: Lessons from Naogaon and the Urgency of Early Control

Nipah virus is a bat-borne zoonotic pathogen that is not new to Bangladesh but remains highly dangerous due to its high case fatality and potential for wider outbreaks. It can cause severe disease—particularly encephalitis—and may also spread through close contact, especially where infection prevention and control (IPC) practices are suboptimal.[1] In Bangladesh, the most common—and preventable—source of infection is the consumption of raw date palm sap. This sap may be contaminated by bat secretions, and the use of bat-proof skirts over collection pots is a practical and effective preventive measure. Strengthening understanding of Nipah virus and addressing gaps in diagnostics and countermeasures can help keep it out of our hospitals and headlines.[2]

On 3 February 2026, Bangladesh's IHR National Focal Point notified a confirmed Nipah virus case from Naogaon District, Rajshahi. Laboratory confirmation by PCR and ELISA was obtained on 29 January 2026. The patient, a woman aged 40–50 years, developed symptoms on 21 January, initially presenting with fever and other systemic features that progressed to neurological manifestations. She became unconscious on 27 January, was admitted to a tertiary hospital on 28 January, and died on the same day. Following admission, surveillance samples were collected. A history of repeated consumption of raw date palm sap between 5 and 20 January was elicited. A One Health outbreak investigation began on 30 January, identifying 35 contacts across household, community, and healthcare settings. Six symptomatic contacts were tested and found negative. As of 3 February, no additional cases had been detected, and contacts remained under monitoring.[3]

The first recognized human cases of Nipah virus infection in Bangladesh were reported in 2001. Since then, infections have occurred almost annually, including four laboratory-confirmed fatal cases in 2025.[3] International media coverage of recent events, alongside WHO confirmation, underscores how rapidly local outbreaks can gain global attention.[4]

A key lesson from recent outbreaks is the narrow clinical window: Nipah virus infection can deteriorate rapidly. By the time laboratory confirmation is obtained, the primary challenges often include protecting healthcare workers, safeguarding family caregivers, managing patient movement within crowded wards, and initiating timely contact tracing. The WHO emphasizes IPC measures because Nipah virus can be transmitted through close contact, including in healthcare settings.[3] Suspected cases should therefore be managed with immediate isolation—similar to other high-risk infectious syndromes—as delays increase exposure risk to both caregivers and healthcare personnel.

While early isolation and strict IPC measures remain essential for immediate outbreak control, long-term prevention will depend on the development and evaluation of effective vaccines. Bangladesh's role in hosting the world's first Phase II Nipah vaccine trial represents a significant milestone. However, defining "success" in practical terms is critical. The Coalition for Epidemic Preparedness Innovations (CEPI), in collaboration with the Serum Institute of India and the University of Oxford, has established an investigational stockpile of up to 100,000 doses of a Nipah vaccine candidate (ChAdOx1 Nipah B).[5,6] The current trial focuses on healthy adults aged 18–55 years, reflecting an early-phase emphasis on safety and immunogenicity rather than immediate large-scale deployment.[7] Given that Nipah outbreaks are typically small and sporadic, conducting conventional efficacy trials remains challenging. Nevertheless, such trials can strengthen surveillance and response systems alongside generating immunogenicity data.

Understanding the biology of Nipah virus is essential for effective prevention and management, yet significant gaps remain in rapid diagnostics, accessible therapeutics, and vaccine availability.[8] In the context of Bangladesh, the most effective immediate response continues to rely on early clinical suspicion, prompt isolation, and strict adherence to IPC measures.

Preparedness for Nipah virus should begin at triage, particularly in district hospitals during the date palm sap harvesting season. Patients presenting with acute encephalitis syndrome (AES)—characterized by fever with altered consciousness, seizures, or severe headache—or severe unexplained respiratory illness should be promptly evaluated for possible Nipah infection, especially if there is a history of raw sap consumption or contact with a suspected case.[2] Such a "Nipah-aware" pathway does not require advanced technology but depends on disciplined implementation: early isolation or cohorting, restriction of crowding at the bedside, appropriate use of personal protective equipment, and minimization of unnecessary patient movement across departments. Delays in these measures increase the risk of nosocomial transmission.

It must be acknowledged that most hospitals in Bangladesh are designed to manage high patient volumes rather than rare, high-risk infectious diseases. This structural reality

increases vulnerability to in-hospital transmission, as beds are often closely spaced, family members frequently participate in caregiving, and multiple individuals may come into contact with a single patient.[9] Seasonal preparedness should therefore prioritize practical and consistently enforced IPC measures to interrupt transmission.

Operational readiness depends not only on IPC discipline but also on timely recognition and diagnostic action. Early diagnosis can be challenging because Nipah infection may clinically resemble other causes of AES.[2] However, a standardized minimum approach can improve early detection: routine risk screening of AES patients during the sap season for exposure to raw sap or relevant contact history; prompt specimen collection; and rapid transport to designated laboratories.[10] To strengthen preparedness, healthcare facilities should conduct regular operational audits based on national guidelines, focusing on key indicators such as time to isolation, time to specimen dispatch, and time to receipt of test results.

Vaccination may significantly alter the future trajectory of Nipah virus control. Under appropriate regulatory and public health frameworks, emergency vaccine deployment during outbreaks may become feasible. However, even a limited investigational vaccine supply cannot compensate for delays in detection and response. In Bangladesh, avoiding the consumption of raw date palm sap remains the most important preventive measure.

The international attention generated by confirmed cases in Bangladesh highlights the importance of clear and effective communication.[4] Clinicians and healthcare institutions should provide accurate, calm, and consistent information regarding symptoms that require urgent care, relevant exposure risks, appropriate preventive behaviors, and the rationale for measures such as visitor restrictions and patient isolation. Effective communication is not merely a public relations function—it is a critical component of infection control.

In conclusion, Nipah virus will not wait for perfect tools. Although scientific advances, including vaccine development, are encouraging, the recent death in Naogaon underscores that the immediate determinants of outbreak impact remain fundamentally operational: early suspicion, prompt isolation, protection of healthcare workers and caregivers, rapid specimen handling, and clear risk communication. Strengthening these measures—particularly in district hospitals during the sap season—offers the most effective strategy to reduce transmission and prepare for future outbreaks.

Dr. Shamoli Saha
Assistant Professor
Department of Microbiology
Ad-din Momin Medical College
Dhaka

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