

The 2026 Measles Outbreak in Bangladesh: A Critique of Immunity Gaps and Care Deficiencies

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ABSTRACT

Bangladesh entered 2026 amid a severe measles outbreak that peaked in mid-May. This article analyses the public health response to the outbreak and evaluates the government's management of the crisis. Health professionals and measles experts have attributed the outbreak to accumulated gaps in routine immunisation, weaknesses in public health infrastructure, poor nutritional status among children, widespread vitamin A deficiency, and maternal undernutrition during pregnancy and breastfeeding.

Keywords: Bangladesh, children under five, immunity gap, low-income families

Introduction

Measles has been endemic in South Asia for centuries, with historical records dating back to the ninth century. Although routine vaccination programmes were introduced in the late twentieth century, the region continues to experience periodic outbreaks due to persistent immunity gaps, historical disease reservoirs, and weaknesses in public health administration. Bangladesh received international recognition after achieving approximately 95% coverage for the second dose of the measles vaccine by 2016. Following the political transition in August 2024 and the formation of the Interim Government under Chief Adviser Dr. Muhammad Yunus, concerns arose about the continuity of routine immunisation programmes. Critics have argued that disruptions to the 2024–25 measles vaccination campaign contributed to the 2026 outbreak. Public debate intensified after allegations were raised before the High Court about shortcomings in immunisation activities and warnings reportedly issued by international health organisations about potential consequences.

Rather than assigning blame, this article seeks to provide a constructive assessment of accountability and policy implementation.

Reported measles incidence had declined steadily since 2020 and reached one of the lowest levels recorded in the decade before the outbreak (see Table 1). Consequently, policymakers may have perceived a reduced need to expand vaccination capacity. Procurement decisions for vaccine acquisition also reflected broader considerations, including cost, transparency, and administrative procedures. However, these assumptions ultimately proved inadequate in preventing what became one of the most serious measles outbreaks in Bangladesh in recent decades.

Scale of the Disease and Epidemiological Review

Bangladesh experienced a severe and widespread measles outbreak beginning on 15 March 2026. It showed signs of slowing in the third week of June. By 24 June 2026, more than 95,760 confirmed and suspected cases had been reported, including over 690 deaths. The estimated case-fatality ratio (CFR) was approximately 0.72%. Although these figures provide a useful indication of the outbreak's scale, the true burden of disease is likely to have been higher, as some infections and deaths, particularly in remote and underserved areas, may not have been captured by the surveillance system. The outbreak affected virtually the entire country. Cases were reported in all eight administrative divisions, and 60 of Bangladesh's 62 districts recorded infections, indicating sustained nationwide transmission. The highest case numbers were concentrated in the capital, Dhaka, and in the divisional cities of Rajshahi, Chittagong, and Khulna. This geographic

pattern reflects underlying socioeconomic factors that facilitate measles transmission.

Measles is a highly contagious, acute viral disease transmitted primarily through respiratory droplets and airborne spread. Consequently, densely populated urban environments with inadequate sanitation and overcrowded living conditions provide favourable conditions for rapid transmission. The concentration of cases in major urban centers is unsurprising. In Dhaka, for example, large numbers of infections have been reported in densely populated informal settlements, including the slum.

Clinically, affected children commonly present with high fever, cough, coryza (runny nose), conjunctivitis, and the characteristic maculopapular rash of measles (Photo 1). While many cases are resolved without serious consequences, severe complications can occur, particularly among malnourished children. Pneumonia remains one of the most common and deadly complications and often necessitates hospitalisation and intensive supportive care. Delayed access to appropriate medical treatment can significantly increase the risk of mortality.

Care Deficiency: (Shortage of Pediatric Intensive Care Unit (PICU) Capacity)

The clinical management of measles is primarily supportive, focusing on symptom relief and the prevention of complications. Common manifestations include high fever, cough, coryza, conjunctivitis, oral lesions (Koplik spots), and a characteristic maculopapular rash. Although measles is viral and therefore does not respond directly to antibiotics, antibiotic therapy may be required to treat secondary bacterial infections, such as pneumonia or otitis media (ear infection).

Antipyretics and analgesics, including ibuprofen or paracetamol syrup, are commonly used to reduce fever and discomfort.

Clinical care for severe measles extends beyond symptom management and includes the ongoing provision of hospital-based services to prevent, identify, and treat life-threatening complications.

Critically ill children may develop severe pneumonia, respiratory failure, dehydration, encephalitis, or other conditions requiring intensive, advanced supportive treatment. In such cases, PICU care may be necessary.

A PICU is a specialised hospital unit dedicated to the treatment of critically ill infants and children.

These units provide advanced monitoring, oxygen therapy, ventilatory support, blood transfusions, and other life-saving interventions delivered by multidisciplinary teams of pediatric intensivists, specialised nurses, and allied health professionals. Access to PICU services is particularly important during large-scale infectious disease outbreaks, when complications can overwhelm pediatric services.

Despite its importance, PICU capacity in Bangladesh remains severely limited. The country is estimated to have about 150 PICU beds across just 11–12 hospitals, with roughly 80% of

these facilities in Dhaka.[1] This concentration of specialised services in the capital creates substantial geographic inequities in access to critical care. During the 2026 measles outbreak, families from across the country reportedly travelled to Dhaka to seek treatment for severely ill children.

Political Economy of Healthcare and Gaps in Routine Vaccination

The 2026 measles outbreak in Bangladesh was not solely the result of a failure in disease control but reflected deeper structural weaknesses within the country's health system. The crisis stemmed from the convergence of several factors, including historically low levels of public health expenditure. For many years, Bangladesh has allocated a relatively small share of its national income (0.7% of GDP) to public healthcare, compared with about 1.9% of GDP in neighbouring India. Consequently, households in Bangladesh bear a substantial share of healthcare costs through out-of-pocket payments, which account for approximately 70% of total health expenditure. As a result, many citizens, particularly those from low-income households, continue to face significant barriers to timely and affordable healthcare.

Commonly reported challenges include shortages of medicines, informal payments, inadequate staffing, weak referral systems, and uneven quality of care between urban and rural areas.

Recognising these challenges, the government increased health-sector spending in the 2026–27 national budget to 1.01%. Additional initiatives include introducing targeted health insurance schemes for low-income populations and plans to build a large public hospital in Keraniganj, on the outskirts of Dhaka, to ease pressure on existing health facilities in the capital.

From a long-term disease-prevention perspective, greater investment in primary healthcare, immunisation systems, urban infrastructure, and low-income housing could help address some of the underlying social determinants that contribute to the spread of infectious diseases. In particular, improvements in informal settlements and other densely populated urban environments may reduce vulnerability to future outbreaks and advance broader public health objectives.

Financial Vulnerability of Patients from Low-Income Families

The 2026 measles outbreak exposed not only weaknesses in disease prevention and clinical care but also the profound financial vulnerability of low-income households. For many families, the costs of treatment, transport, medicines, and hospitalisation created significant economic hardship.

The financial burden of measles varies with disease severity and the level of care required. For uncomplicated cases treated on an outpatient basis, costs at district-level public hospitals are estimated to range from BDT 2,500 to BDT 3,000 (approximately US\$21–25 at an exchange rate of BDT 120 per US dollar). These expenses typically include consultation fees, medicines, transport, and other incidental costs.

For patients requiring hospital admission, treatment costs rise substantially. Hospitalisation in public facilities for stays of less

than one week is estimated to cost between BDT 15,000 and BDT 30,000, with out-of-pocket expenditure commonly ranging from BDT 10,000 to BDT 20,000.

Costs increase further when complications such as pneumonia, respiratory distress, or other severe manifestations require specialised treatment, prolonged hospital stays, or intensive care. For low-income households, these expenses can be catastrophic, often necessitating the sale of assets, borrowing from informal lenders, or diverting household income from essential needs.

The concentration of specialised healthcare services in Dhaka further compounds the financial burden. Although the capital contains the country's largest concentration of public, private, and non-profit hospitals, available capacity remains insufficient relative to the healthcare needs of a metropolitan population exceeding 40 million. Private-sector treatment is generally unaffordable for many households, while public hospitals frequently operate under severe capacity constraints.

Hospitals in divisional headquarters provide additional services, but many face shortages of trained personnel, inadequate equipment, limited intensive care capacity, and persistent overcrowding. Consequently, critically ill patients are often referred to Dhaka, increasing both treatment costs and delays in accessing care.

The highly contagious nature of measles poses additional challenges for hospital management.

Effective infection-control measures require the prompt identification and isolation of suspected cases to prevent transmission within healthcare facilities. However, many hospitals lack dedicated isolation wards or sufficient space to separate infectious patients from other vulnerable groups, thereby increasing the risk of nosocomial transmission during large-scale outbreaks.

Access to healthcare is further constrained by weaknesses in district hospitals and Upazila (subdistrict) Health Complexes, which form the foundation of Bangladesh's public healthcare system. Many facilities face chronic shortages of physicians, nurses, and allied health personnel, while deficiencies in diagnostic capacity, medical equipment, and hospital management limit the quality of care. High vacancy rates among healthcare workers and underutilised diagnostic infrastructure are persistent challenges. These deficiencies reduce local facilities' ability to manage severe measles cases effectively and place excessive pressure on referral hospitals in major cities.

The 2026 outbreak demonstrates that the health and economic consequences of measles are closely intertwined. Strengthening financial protection mechanisms, expanding access to affordable healthcare, and improving the capacity of district- and subdistrict-level facilities are therefore essential not only for reducing mortality but also for protecting vulnerable households from the economic shocks of major infectious disease outbreaks.

Conclusion and Policy Recommendations

The 2026 measles outbreak in Bangladesh exposed significant weaknesses in disease prevention and clinical care. The

resurgence of measles was not attributable to a single cause but to the interplay of multiple structural factors, including gaps in routine immunisation coverage, delayed vaccine uptake among some populations, persistent poverty, malnutrition, overcrowded living conditions, and long-standing deficiencies in healthcare infrastructure. Together, these conditions created substantial immunity gaps that enabled the rapid spread of the virus and led to disproportionately high morbidity and mortality among children under five years of age.

The outbreak also exposed significant shortcomings in the healthcare system's capacity to manage severe cases. Limited hospital capacity, shortages of paediatric intensive care unit (PICU) beds, inadequate infection-control facilities, and high out-of-pocket healthcare costs placed considerable strain on healthcare providers and affected families. For many low-income households, the costs of treatment, transport, medicines, and hospitalisation were a significant financial burden, highlighting the need for stronger financial protection mechanisms within the health sector.

Given the government's stated commitment to human development, preventing future measles outbreaks should be a key national priority. The following policy measures merit consideration:

- Strengthen routine immunisation and implement targeted catch-up vaccination campaigns to sustain high coverage. Increase public investment in health. Public expenditure on health remains low relative to national needs. Additional fiscal resources should be directed towards primary healthcare, immunisation services, disease surveillance, and workforce development.
- Investments are needed to increase the number of PICU beds, improve referral systems, strengthen district and divisional hospitals, and reduce the concentration of specialised services in Dhaka. Strengthen outbreak preparedness and hospital infection-control measures.
- Improve child nutrition with protein-rich foods and address vitamin A deficiency. Long-term investments in housing, sanitation, and urban development are essential to reducing vulnerability to infectious disease outbreaks, particularly among populations living in overcrowded and underserved communities.

In conclusion, the 2026 measles outbreak serves as a reminder that effective disease control requires more than vaccination alone. Sustainable prevention depends on strengthening health systems, improving nutrition and hygiene, and expanding access to quality healthcare.

Table 1: Measles Cases in Bangladesh 2020-20

Year	2020	2021	2022	2023	2024	2025
Num	2,410	203	311	281	274	125

<https://www.ijidonline.com/action/showPdf?pii=S1201-9712%2826%2900400-5>



Figure 1: A measles patient

Endnote:

- In neighbouring West Bengal, which has 56% of Bangladesh's population, there are 435 PICUs.
- In Vietnam, the figure is 667. Out-of-pocket health expenses in Thailand account for only 10%.

- The vaccine that protects against measles also protects against mumps and rubella, which is why it is called the measles, mumps, and rubella (MMR) vaccine.

Reference

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