

Current Trend of Febrile Illness in Bangladesh: An Escalating Public Health Challenge

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Bangladesh is currently facing with a formidable wave of febrile illnesses. In this crisis, it causes severe impact on the public health infrastructure. These febrile illnesses occur in seasonal variation. Though, it is once a seasonal burden, it has now become a year-round emergency. In this crisis, the dengue and chikungunya fever are the leading the cause, while the other viral and bacterial infections are also further complicate the clinical picture¹. The current situation of Bangladesh about febrile illness underscores the urgent need for systemic reform of infrastructures, prevention of the diseases with a proactive action and community-driven engagement to contain.

Dengue at Record Highs: Bangladesh is witnessing one of the most severe dengue outbreaks in its history. By September 2025, more than 33,000 cases and over 130 deaths had been officially reported, and the true burden is likely much higher². Unlike earlier years, dengue is no longer a city-centric or seasonal disease. It has spread across districts such as Chattogram, Khulna, and Barishal, while Dhaka remains the epicenter of cases. Climate change, with longer monsoons and rising temperatures, has extended mosquito breeding seasons, ensuring that transmission continues beyond traditional peaks. Hospitals are overcrowded, with many facilities reporting two to three times their bed capacity. Late presentation of patients and shortage of trained manpower in peripheral hospitals are aggravating the mortality burden. The rate of Dengue for PCR is not high which may be due to application of NS1 and Dengue for IgG and IgM.

Chikungunya Re-Emergence: Alongside dengue, chikungunya has re-emerged after remaining relatively silent since its major outbreak in 2017. Laboratory surveillance in Dhaka has shown

positivity rates up to 30.0% in suspected cases, while Chattogram has reported several thousand patients¹. Though chikungunya is not usually fatal, its impact is far from benign. Severe joint pain, chronic fatigue, and long recovery times are affecting productivity and quality of life. The simultaneous surge of dengue and chikungunya has overwhelmed diagnostic services, as both illnesses share similar early symptoms—fever, headache, and body ache—making differentiation difficult without laboratory support³. Currently, most cases of PCR positive patients are detected in National Institute of Laboratory Medicine and Referral Center, Dhaka, Bangladesh. This is practicing by applying Multiplex PCR for Arboviruses circulating in our country like Dengue, Chikungunya and Zika virus.

Diagnostic and Systemic Dilemma: The overlapping symptoms of these febrile illnesses pose major diagnostic dilemmas for clinicians, particularly in rural and peri-urban settings where access to diagnostic kits is limited². Many patients are treated symptomatically, increasing risks of under-diagnosis or mismanagement. Furthermore, residual COVID-19 cases and seasonal influenza complicate the clinical picture. This uncertainty not only hampers effective patient care but also affects national disease surveillance and timely public health response.

Root Causes of the Crisis: The current febrile illness burden is not a sudden development but the result of multiple structural issues. Rapid, unplanned urbanization has created countless mosquito breeding grounds in stagnant drains, construction sites, and poorly managed waste⁴. Inadequate drainage and persistent waterlogging during monsoon further exacerbate the problem. Vector control remains largely reactive, dependent on

fogging campaigns, rather than proactive, community-based environmental management. Public awareness is inconsistent, with many households unaware of how small containers and rooftop tanks contribute to mosquito proliferation.

Climate change adds another dimension, with erratic rainfall and rising humidity providing favorable conditions for *Aedes* mosquito survival. Meanwhile, hospitals remain underprepared for large-scale outbreaks, with shortages of beds, intravenous fluids, diagnostic kits, and adequately trained personnel. The combined result is an overstretched health system, rising mortality, and public anxiety.

The Way Forward: The situation calls for urgent and coordinated action. First, surveillance systems must be strengthened to provide real-time data on dengue, chikungunya, and other febrile illnesses. A decentralized diagnostic network—ensuring that district and sub-district hospitals are equipped with rapid tests—is essential.

Second, vector control efforts must be restructured into year-round programs rather than seasonal campaigns. Community-driven initiatives, such as neighborhood clean-up drives and awareness campaigns, can significantly reduce breeding sites.

Third, hospital preparedness must be enhanced. This includes expanding temporary ward capacity during outbreak peaks, ensuring steady supplies of supportive care materials, and training frontline health workers in the management of severe dengue. Fourth, public education should emphasize early care-seeking, the dangers of self-medication, and the need for household-level mosquito control. Finally, intersectoral coordination—involving urban planning authorities, municipalities, and environmental agencies—is critical to address the root urban determinants of these outbreaks.

Conclusion

Bangladesh has proven its resilience in managing disasters such as cyclones and, more recently, the COVID-19 pandemic. The current febrile illness crisis requires the same urgency, innovation, and coordination. Dengue and chikungunya are no longer seasonal inconveniences but structural public health threats that will recur unless tackled systematically. Investing in surveillance, community engagement, and sustainable vector control is not merely a health priority but a national development imperative. Unless bold steps are taken, febrile illnesses will continue to erode public health gains and impose heavy social and economic costs. The time for action is now.

References

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