

Re-Evaluating global measles management: lessons from the 2026 Bangladesh outbreak

Mamunur Rahman

Department of Pharmacy, East West University, Aftabnagar, Dhaka-1212, Bangladesh.

Article received 1 April 2026 and accepted 5 May 2026

Dear Editor,
Measles is a negative-sense RNA virus of the *Paramyxoviridae* family, with a basic reproduction number between 12 and 18 [1]. A safe and inexpensive vaccine has existed for over sixty years, yet the disease still kills children in poorer countries each year. The 2026 Bangladesh outbreak shows how fast vaccination gains can unravel when programs stall and political oversight weakens. Global control strategies need a fresh look.

Between 15 March and 14 April 2026, Bangladesh notified 19,161 suspected and 2,897 laboratory-confirmed measles cases across 58 of 64 districts to World Health Organization (WHO). There were 166 suspected and 30 confirmed deaths (case-fatality 0.9-1.1%). Children under five accounted for 79% of cases, and infants under nine months for 33% [2]. The Directorate General of Health Services had logged only nine cases over the same window in 2025, which puts the early-2026 increase at roughly 75-fold [3]. WHO graded the national risk as high, pointing to widespread transmission, large susceptible cohorts, and clear immunity gaps [2].

The outbreak follows a long disruption to Bangladesh's Expanded Program on Immunization. A nationwide measles-rubella (MMR) vaccine stock-out in 2024-2025, together with no nationwide supplementary immunization activities (SIAs) since 2020, pulled coverage well under the 95%

level previously reported in WUENIC estimates [2]. A planned national campaign was delayed, and operational problems including syringe shortages held back the early response [3]. The pattern matches the wider post-pandemic picture, in which 61 million doses of measles-containing vaccine were missed or delayed during 2020-2022 and outbreaks broke out across several regions [4]. Bangladesh is not alone. Italy in 2017 had over 4,000 cases, with emergency-department crowding and adult susceptibility pockets even in a high-income setting [5]. Philippines measles outbreak resulted in approximately 25,676 cases and 355 deaths in 2019, attributed to MMR vaccination coverage dropping from above 80% in 2008 to below 70% in 2017, driven largely by Dengvaxia-related vaccine hesitancy [6]. Across the WHO Region of the Americas, over 12,000 cases identified in 2025, a 30-fold rise on 2024, with 1,958 cases and three deaths confirmed in the United States by mid-December 2025 and Canada losing elimination status in November 2025 after twelve months of sustained transmission [7]. Global first-dose coverage rose from 71% in 2000 to 84% in 2024 and second-dose coverage from 17% to 76%, so two-dose coverage still sits below the 95% target needed to break transmission [7]. What's notable about Bangladesh is how fast the situation evolved. A country that once had strong vaccination coverage moved from being on track for elimination to facing widespread transmission in just about a year [2]. That's measles for you: even brief gaps in vaccination are enough to spark outbreaks [4, 7].

On April 5, 2026, the government started an urgent measles-rubella campaign in collaboration

Corresponding author
Mamunur Rahman
E-mail: mnr@ewubd.edu

with WHO, UNICEF, and Gavi. The initial phase aims to reach more than 1.2 million children between 6 and 59 months old in 18 key districts, with plans for national expansion afterward [8]. In the most affected regions, the minimum age for vaccination has been reduced to six months. This is a reasonable decision, but it's vital to understand the trade-off: vaccines administered at six months are not as effective as those given at nine months since remaining maternal antibodies can diminish the immune response, and the protection might not endure as long [9]. Any child who is vaccinated early will still require their scheduled MCV1 and MCV2 vaccinations later, and it is essential that parents are made aware of this.

The share of cases in infants under nine months deserves a closer look. A longitudinal cohort study in China found that maternal measles IgG drops below the protective threshold (200 mIU/ml) around 2.4 months of age, well before the older schedules assumed [9]. Mothers whose immunity comes from vaccination rather than natural infection pass on lower and shorter-lived antibodies, which means the window of infant vulnerability is widening [9]. Before WHO's SAGE can sensibly revisit the schedule for endemic settings, we need seroprevalence studies that distinguish between these two groups of mothers.

A few wider lessons stand out. SIAs and routine immunisation should be treated as core public-health functions, with legal protection against budget cuts and administrative churn. Supply-chain resilience must cover ancillary items such as syringes and cold-chain capacity, not only vaccines. District-level real-time monitoring would catch immunity gaps earlier than annual national averages [2, 4]. The cross-border movement between Bangladesh, India, and Myanmar also shows how fast a national program failure becomes a regional risk [2].

Vaccine hesitancy is not what drove this outbreak in Bangladesh, although it would be a mistake to leave it out of the conversation entirely. The picture in many high-income countries is now genuinely worrying. In the United States, where measles was declared eliminated in 2000, two-dose MMR coverage at school entry has drifted from 95.2% in 2019–2020 down to 92.7% in 2023–2024, and Venkatesan recently observed that 93% of the 1,958 US cases recorded in 2025 occurred in people who were either unvaccinated or of unknown vac-

cination status [7, 10]. Most of that decline is downstream of pandemic-era misinformation and a more diffuse loss of trust in public-health institutions, both of which have proved difficult to reverse [4]. McIntyre has gone so far as to suggest that, without firmer school-entry requirements, even 25 years of US elimination may not survive the current rhetorical climate [10]. Regardless of views on mandates, the message is clear: rich countries can't criticize poorer ones while their own coverage drops below target.

Bangladesh in 2026 should not be a reality. The vaccine is effective, the cold chain is established, and funders are prepared to assist. The key issue has been the lack of follow-through. Without legal protections for vaccination initiatives and taking syringes as seriously as the vaccines, every nation aiming for elimination is just one misstep away from a crisis. Italy learned this in 2017, the Philippines in 2019, and Bangladesh is currently experiencing it. The next country should not have to undergo this realization.

Funding

Not applicable.

Conflicts of interest

None to declare.

REFERENCES

- [1] Centers for Disease Control and Prevention. Clinical Overview of Measles. Atlanta: CDC; 2024. Available at: <https://www.cdc.gov/measles/hcp/clinical-overview/> [Accessed 28 April 2026].
- [2] World Health Organization. Disease Outbreak News: Measles – Bangladesh. 23 April 2026. Available at: <https://www.who.int/emergencies/disease-outbreak-news/item/2026-DON598> [Accessed 28 April 2026].
- [3] The Business Standard. Measles cases in Bangladesh surged 75-fold compared to last year: DGHS data. 24 March 2026. Available at: <https://www.tbsnews.net/bangladesh/health/measles-cases-bangladesh-surged-75-fold-compared-last-year-dghs-data-1398636> [Accessed 28 April 2026].
- [4] Torjesen I. Measles outbreaks likely as COVID pandemic leaves millions of world's children unvaccinated, WHO warns. *BMJ*. 2021; 375: n2755.
- [5] Spagnolello O, Russo A, Borrazzo C, D'Ettorre G, Ceccarelli G. Lesson learned from the 2017 measles outbreak in Italy: report from an emergency department. *Infez Med*. 2021; 29(2): 252–258.

- [6] Ochani RK, Yasmin F, Tariq A, Shaikh A. Philippines hit by deadly Measles outbreak – a wakeup call? *Infez Med.* 2019; 27(3): 353-354.
- [7] Venkatesan P. Global resurgence in measles. *Lancet Microbe.* 2026; 7(2): 101092. doi: 10.1016/j.lanmic.2026.101347.
- [8] World Health Organization. Bangladesh launches emergency measles–rubella campaign with UNICEF, WHO and Gavi to protect over 1.2 million children. 5 April 2026. Available at: <https://www.who.int/bangladesh/news/detail/05-04-2026-bangladesh-launches-emergency-measles-rubella-campaign-with-unicef-who-and-gavi-to-protect-over-1.2-million-children> [Accessed 28 April 2026].
- [9] Wang Q, Wang W, Winter AK, et al. Long-term measles antibody profiles following different vaccine schedules in China, a longitudinal study. *Nat Commun.* 2023; 14: 1746.
- [10] McIntyre PB. Measles in 2025 - lessons from the USA, Canada, and Australia. *Lancet.* 2025; 406 (10505): 805–806. doi:10.1016/S0140-6736(25)01540-5.