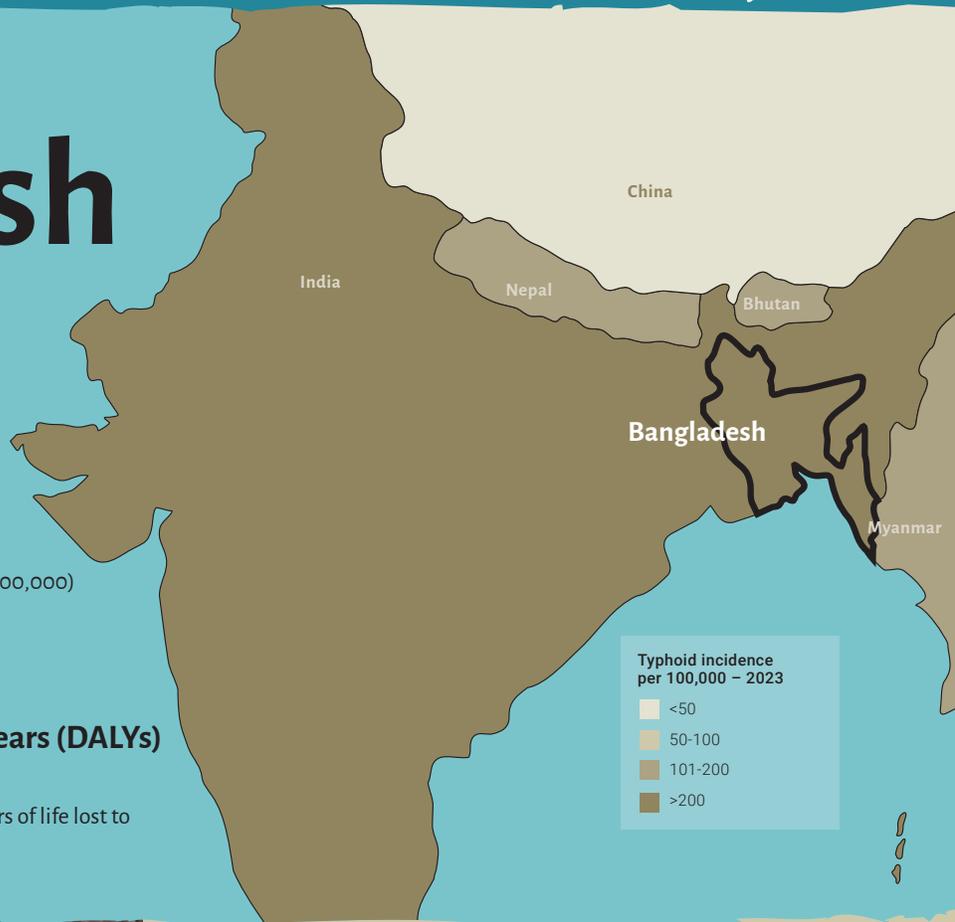


Burden of Typhoid in Bangladesh

Bangladesh is a typhoid-endemic country. The Global Burden of Disease study estimated that, in 2023, there were at least:

600,780 typhoid cases (346 cases per 100,000)
8,347 typhoid deaths
647,387 disability-adjusted life-years (DALYs) lost to typhoid¹

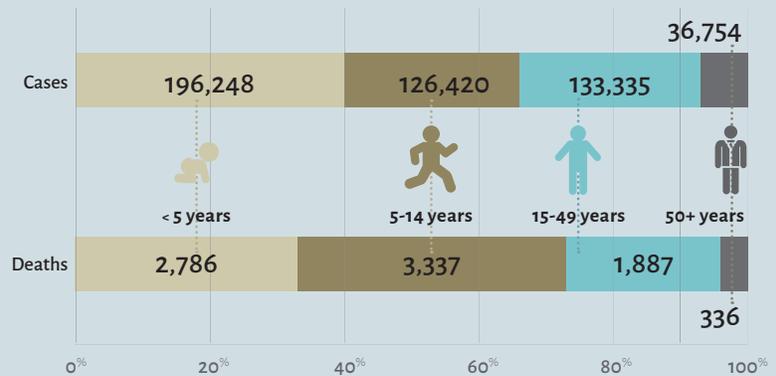
DALYs are a measure of healthy years of life lost to either illness or early death



Most typhoid cases and deaths in Bangladesh occur in children **younger than 15 years old.**

Photo: © 2018 Mithail Afrige Chowdhury. Courtesy of Photoshare

TYPHOID CASES AND DEATHS IN BANGLADESH BY AGE (2023)¹



The Government of Bangladesh prioritized child health and introduced typhoid



conjugate vaccines (TCVs) in October

2025. Bangladesh vaccinated 42.5 million children during the introduction campaign and currently offers TCV to all children at 15 months of age.

Typhoid is spread through contaminated food and water. In a recent study, 66 percent of tap water samples at study sites in Dhaka were positive for enteric fever,² demonstrating that water is a major source of typhoid infection in Bangladesh. Improvements to water and sanitation systems are important for long-term typhoid prevention and control, but can be costly and take time to implement. Typhoid conjugate vaccines can provide needed protection in the short-term.

Additionally, rapid urbanization has resulted in high population density in urban areas, which can raise the risk of typhoid transmission.²



High burden of typhoid among young children

Data on blood culture-confirmed typhoid cases in Dhaka, Bangladesh, found high rates of typhoid in children younger than 15 years old, with the highest rates in children 2-4 years old.³

Another surveillance study in Dhaka found 1,135 cases of typhoid per 100,000 people. The rate of typhoid cases identified from this study was highest in children 5-9 years old.⁷

The Surveillance for Enteric Fever in Asia Project (SEAP) found a high burden of typhoid among young children in Dhaka. Nearly 30 percent of blood culture confirmed typhoid cases are hospitalized, most of which are in children younger than 5 years of age.⁴

» This high rate of illness places a large economic burden on Bangladeshi families. A cost-of-illness study showed that typhoid typically costs a patient or caregiver US\$64.69, 152% of Bangladesh's average annual health expenditure per capita. Inpatient cases are even more expensive, costing \$US260.90.⁵ TCV introduction is projected to substantially decrease typhoid cases and be cost-saving in Bangladesh.⁶

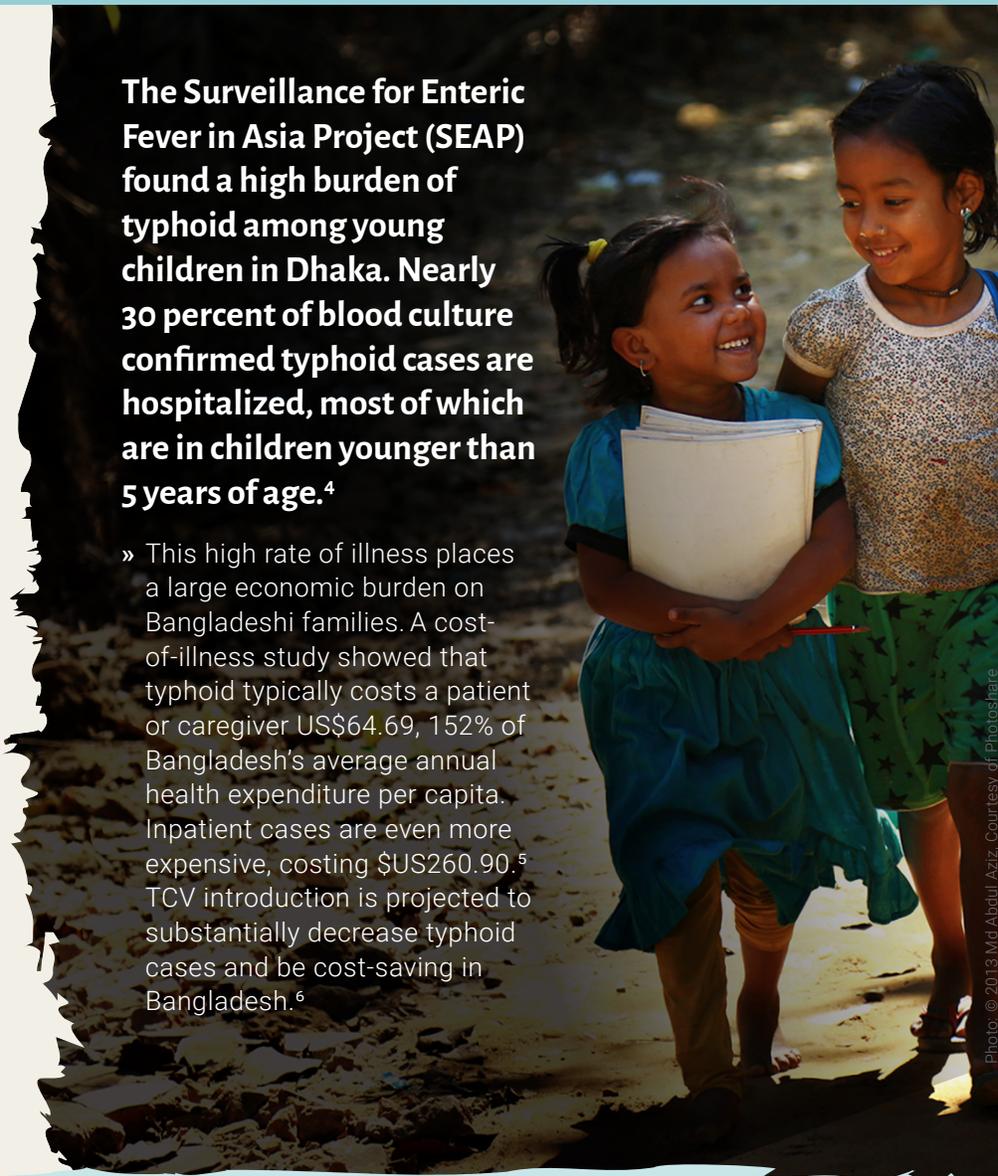


Photo: © 2013 Md Abdul Aziz, Courtesy of Photoshare

While typhoid is rarely fatal, the recovery is long and difficult.

The disease takes time, money, and productivity from those infected and their families and is associated with numerous long-term complications.

Reflecting global and regional trends, drug-resistant typhoid strains are a growing problem in Bangladesh.



An analysis of typhoid isolates collected by SEAP found high levels of drug resistance. The proportion of isolates resistant to ciprofloxacin, a common antibiotic used to treat typhoid in the region, was nearly 100%.³



Another analysis examining drug-resistant typhoid trends in Bangladesh using isolates from 1999-2013 found high rates of drug resistance to four of the most commonly used antibiotics.⁸



Children who contracted MDR typhoid had a longer duration of illness despite treatment,⁹ placing further economic burdens on their families for their care.



Drug-resistant typhoid is more difficult to treat and forces the use of more expensive and less readily-available treatment options.

Typhoid conjugate vaccines (TCVs) in Bangladesh

The World Health Organization (WHO) recommends the introduction of prequalified TCVs be prioritized in countries with a high burden of typhoid disease or a high burden of drug-resistant typhoid. Gavi, the Vaccine Alliance support for introduction is **available now**. TCVs:



Are highly effective and safe for children as young as **6 months** of age;



Require a **single dose** to prevent 79-85% of typhoid cases in children;¹⁰



Offer strong protection for **at least 4 years**; and



Can be **co-administered with measles-rubella** vaccine.¹¹



A recent modeling analysis shows that in Bangladesh, a catch-up campaign up to 15 years of age followed by routine immunization is the **preferred strategy and likely cost-saving**.⁶

Let's Take on Typhoid in Bangladesh

- ✓ Typhoid is endemic in Bangladesh, with more than **600,000** cases per year.
- ✓ More than half of Bangladesh's typhoid burden is borne by children **younger than 15** years of age.
- ✓ Data show an increase in **drug-resistant typhoid** in Bangladesh, regionally, and globally.
- ✓ **TCVs are** safe, effective, and WHO-recommended for routine immunization as part of a cost-effective, integrated approach to typhoid prevention and control alongside safe water, sanitation, and hygiene interventions.
- ✓ The Government of Bangladesh **introduced TCV in 2025**.





Photo: © 2017 Md. Akram Ali, Courtesy of Photoshare

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