

## Burden of Typhoid in

# Myanmar

Myanmar is a typhoid-endemic country. The Global Burden of Disease study estimated that, in 2019, there were at least:

**84,568** typhoid cases (155 cases per 100,000)

**1,085** typhoid deaths

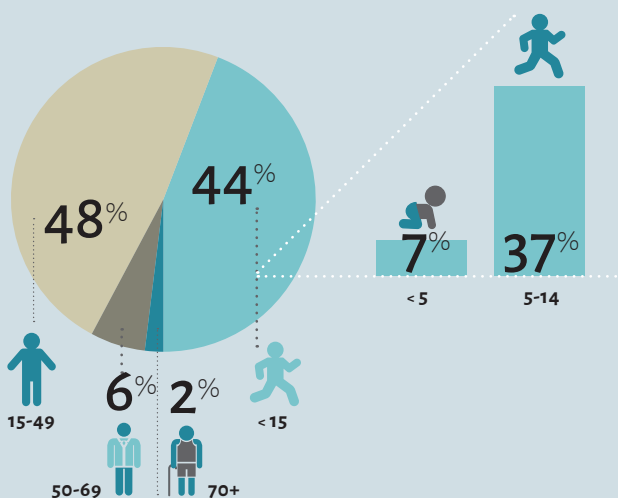
**77,362** disability-adjusted **life-years lost** to typhoid<sup>1</sup>

A separate study of blood culture-confirmed typhoid surveillance in Yangon hospitals estimated an annual typhoid incidence of 391 cases per 100,000 adolescents and adults in the Yangon area.<sup>2</sup>



Nearly half of the typhoid cases in Myanmar occur in children younger than 15 years old.

TYPHOID CASES IN MYANMAR BY AGE (2019)



**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. Drug-resistant typhoid strains are a growing problem regionally and across the globe.



While limited data on drug-resistant typhoid infections in Myanmar are available, studies in Yangon have found a **high prevalence of resistance to first-line antibiotics** in other bacterial infections.<sup>3</sup>



Additionally, an abundance of studies have found an **alarming rate of drug resistant-typhoid both globally and in neighboring countries in Southeast Asia.**<sup>4</sup> In a typhoid outbreak near the Thai/Myanmar border, 100% of cases were found to be multidrug-resistant.<sup>5</sup>



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 Myanmar

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**.

Prequalified TCVs are highly effective and safe for children as young as 6 months of age. Recent data from two large Phase 3 efficacy studies in Bangladesh and Nepal show TCV is safe and 79-85% effective in preventing typhoid in children.<sup>6,7</sup> TCVs:



Require **one dose**;



Are **more effective and may be longer-lasting** than other typhoid vaccines; and



Can be **co-administered with measles-rubella** vaccine.<sup>8</sup>

Findings from an economic analysis predict that, even in the absence of a Gavi subsidy, a catch-up campaign with TCV could be cost-effective in Myanmar.<sup>9</sup>



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## Let's Take on Typhoid in Myanmar

- ✓ Typhoid is endemic in Myanmar, with more than **84,000** cases per year.
- ✓ Nearly half of Myanmar's typhoid burden is borne by children **younger than 15** years of age.
- ✓ Data show an increase in **drug-resistant typhoid** globally, which could spread to Myanmar.
- ✓ **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.
- ✓ **Gavi support** for TCV introduction is available **now**.