

# Burden of Typhoid in Tanzania

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

**79,334** typhoid cases (140 cases per 100,000)  
**1,671** typhoid deaths  
**129,334** disability-adjusted **life-years lost** to typhoid<sup>1</sup>

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 in Tanzania, regionally, and across the globe.



Typhoid was the most commonly found invasive bacteria in two separate studies in Zanzibar and rural Korogwe District. In Korogwe, **88% of typhoid isolates were resistant to chloramphenicol**, which is a first-line treatment option.<sup>2,3</sup>



An evaluation of blood culture-confirmed typhoid cases in Moshi, Tanzania, between 2011 and 2013 found that **89% of samples were multidrug-resistant (MDR)**.<sup>4</sup>



In another analysis using sites from both rural and urban Moshi, 36% of all blood culture-confirmed cases were MDR. **The urban site estimated a population incidence of MDR typhoid of 103 cases per 100,000**.<sup>5</sup>



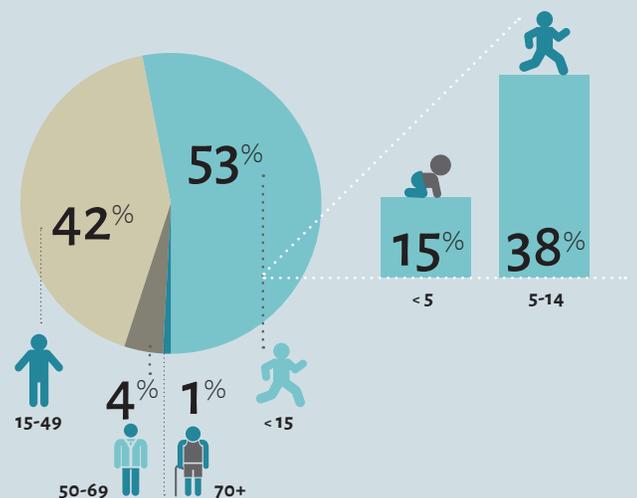
Each typhoid case in Zanzibar costs families an average of US\$154.47, nearly two months of average family income.<sup>6</sup> As drug-resistant typhoid becomes more common, it will become more difficult to treat and **force the use of more expensive and less readily-available treatment options.**

Most typhoid cases in Tanzania occur in children **younger than 15 years old.**



Photo: PATH/Doane Porter

## TYPHOID CASES IN TANZANIA BY AGE (2019)



# Typhoid conjugate vaccines (TCVs) in Tanzania

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 Malawi show TCV is safe and 84% effective in preventing typhoid.<sup>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 and meningococcal A vaccines**.<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 Tanzania.<sup>9</sup>

## Let's Take on Typhoid in Tanzania

- ✓ Typhoid is endemic in Tanzania, with more than **79,000** cases per year.
- ✓ Tanzania's burden of typhoid is most heavily borne by children **under 15** years of age.
- ✓ Data show an increase in **drug-resistant typhoid** in Tanzania, 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.
- ✓ **Gavi support** for TCV introduction is available **now**.

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