

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 typhoid¹

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.^{2,3}



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



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**.⁵



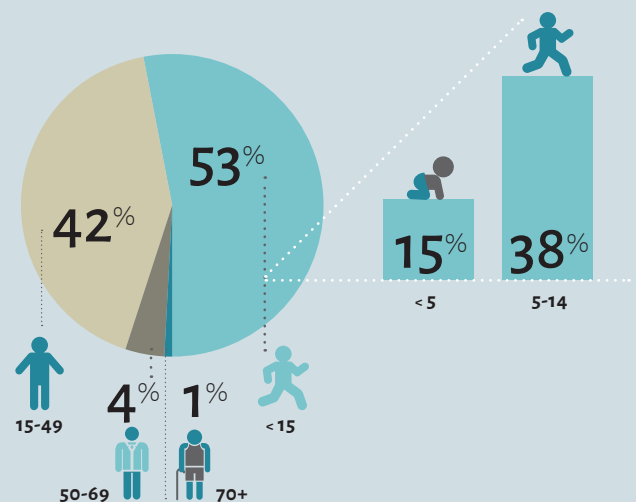
Each typhoid case in Zanzibar costs families an average of US\$154.47, nearly two months of average family income.⁶ As drug-resistant typhoid becomes more common, it will become more difficult to treat and **force the use of more expensive and less readily-available treatment options.**

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**. 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;



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



Can be **co-administered with measles-rubella and meningococcal A vaccines**.⁸

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.⁹

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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