

Burden of Typhoid in

Kenya

Typhoid, a serious disease marked by fever and fatigue that is caused by the bacteria *Salmonella Typhi*, is endemic in Kenya. The Global Burden of Disease study estimated that, in 2023, there were at least:

81,681 typhoid cases (157 cases per 100,000)
753 typhoid deaths
56,807 disability-adjusted life-years (DALYs), a measure of healthy years of life lost to either illness or early death, lost to typhoid¹

A separate study of blood culture-confirmed typhoid incidence in Kibera, an urban settlement in Nairobi, estimated an incidence of 822 cases per 100,000 population, with extremely high rates (2,243 cases per 100,000) among children 2 to 4 years of age.²

Typhoid is spread by fecally contaminated food and water. Limited water, sanitation, and hygiene (WASH) infrastructure greatly increases the risk of typhoid. In Kenya, 50% of rural households have no toilet facilities.³

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 Kenya, regionally, and across the globe.



An analysis of typhoid samples from three different parts of Kenya found that **82.4% of the samples were resistant to all five of the commonly available drugs:** ampicillin, chloramphenicol, tetracycline, streptomycin, and cotrimoxazole.⁴



Another analysis of typhoid samples from outbreaks in Kenya from 1988-2008 found a **dramatic increase in the number and percentage of multidrug-resistant (MDR) *S. Typhi* isolates.** The majority (60.4%) were multiply resistant to most commonly available drugs.⁵ Genetic analysis revealed that MDR typhoid strains in Kenya belonged to the same lineage linked to MDR typhoid across Asia, suggesting intercontinental spread of the clone.⁵



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

The Government of Kenya prioritized child health and introduced typhoid conjugate vaccines (TCVs) into the routine immunization program in 2025.

Kenya vaccinated more than 16 million children during the catch-up campaign and currently offers TCV to all children at 9 months old.

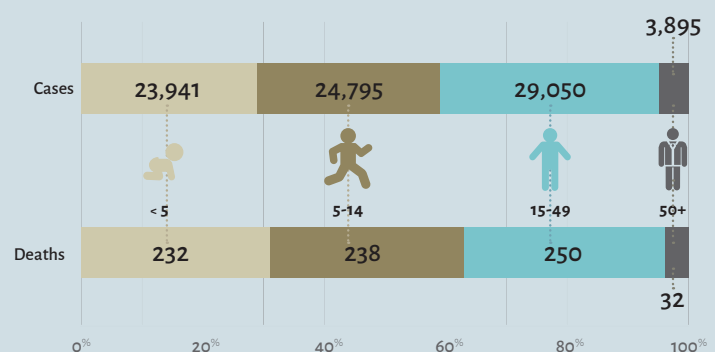


More than half of the typhoid cases and deaths in Kenya occur in children **younger than 15 years old.**



Photo: PATH/Peter Abweo

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



Potential for typhoid conjugate vaccines (TCVs) in Kenya

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;⁶



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



Can be **co-administered with measles-rubella and yellow fever vaccines**.^{7,8}

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 Kenya.⁹

Let's Take on Typhoid in Kenya

- ✓ Typhoid is endemic in Kenya, with more than **81,000** cases per year.
- ✓ Kenya's **limited WASH infrastructure** heightens the risk of typhoid infections, particularly for young children.
- ✓ Most of Kenya's typhoid burden is borne by children **younger than 15** years of age.
- ✓ Data show an increase in **drug-resistant typhoid** in Kenya, 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 Kenya **introduced TCV in 2025**.

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