Together We Can
Take on Typhoid

Burden of Typhoid in

The Gambia

The Gambia is a typhoid-endemic country. The Global Burden of Disease 2023 study estimated that The Gambia experienced at least:

1,092 **typhoid cases** (43 cases per 100,000)

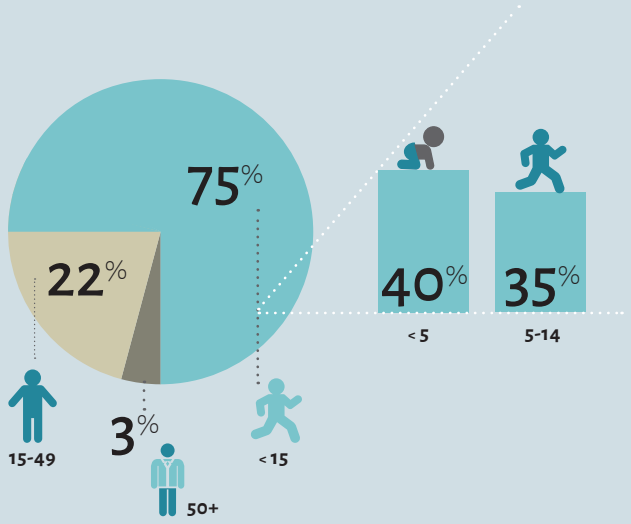
16 **typhoid deaths**

1,319 disability-adjusted **life-years lost** to typhoid[1]

While typhoid is rarely fatal, the recovery is long and difficult. The disease steals time, money, and productivity from those infected and their families and is associated with numerous long-term complications.

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

TYPHOID CASES IN THE GAMBIA BY AGE (2023)[1]



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

Global data show that multidrug-resistant (MDR) typhoid prevalence has **increased dramatically since 1992**.[2]

While drug-resistant typhoid has not been isolated in The Gambia, it has been **found in other West African countries**, including Ghana.[2]

Diseases such as typhoid can easily cross borders, and as drug-resistant typhoid becomes more common, **it has the potential to spread to The Gambia.**

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

In The Gambia, **20% of the population does not have access to basic drinking water services**, and 53% lack access to basic sanitation services.[3] This can cause an increase in typhoid risks in Gambia.

Typhoid conjugate vaccines (TCVs) in The Gambia

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. Support for introduction from Gavi, the Vaccine Alliance 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;[4]
- Offer strong protection for **at least 4 years**; and
- Can be **co-administered** with measles-rubella, yellow fever, and meningococcal A conjugate vaccines.[5,6]

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 The Gambia**.[7]

Let's Take on Typhoid in The Gambia

- Typhoid is endemic in The Gambia, with more than *1,000* cases per year.
- The Gambia's burden of typhoid is most heavily borne by children *younger than 15* years of age.
- Data show a global increase in *drug-resistant typhoid*, which could spread to The Gambia.
- *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*.

1. Institute for Health Metrics and Evaluation. Global Burden of Disease. 2023. Accessed via: ghdx.healthdata.org/gbd-results-tool.
2. Park SE, Pham DT, Boinett C, et al. The phylogeography and incidence of multi-drug resistant typhoid fever in sub-Saharan Africa. *Nature Communications*. 2018;9(1):509
3. Sustainable Development Report. The Gambia. 2020. Available at: https://dashboards.sdgindex.org/profiles/gambia-the/indicators.
4. Patel PD, Patel P, Liang Y, et al. Safety and efficacy of a typhoid conjugate vaccine in Malawian children. *New England Journal of Medicine*. 2021;385(12):1104-1115.
5. Sirima SB, Ouedraogo A, Barry N, et al. Safety and immunogenicity of co-administration of meningococcal type A and measles-rubella vaccines with typhoid conjugate vaccine in children aged 15-23 months in Burkina Faso. *International Journal of Infectious Diseases*. 2021;102:517-526.
6. Sirima SB, Ouedraogo A, Barry N, et al. Safety and immunogenicity of Vi-typhoid conjugate vaccine co-administration with routine 9-month vaccination in Burkina Faso: A randomized controlled phase 2 trial. *International Journal of Infectious Diseases*. 2021;108:465-472.
7. Bilcke J, Antillón M, Pieters Z, et al. Cost-effectiveness of routine and campaign use of typhoid Vi-conjugate vaccine in Gavi-eligible countries: A modelling study. *Lancet Infectious Disease*. 2019;19(7):728-739

TyVAC Typhoid Vaccine Acceleration Consortium
CENTER FOR VACCINE DEVELOPMENT • OXFORD VACCINE GROUP • PATH

COALITION AGAINST TYPHOID a program of the Sabin Vaccine Institute