Together We Can Take on Typhoid





TYPHOID CASES IN BURKINA FASO BY AGE (2017)



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 Burkina Faso³, it has been found in other West African countries, including Ghana⁴. Additionally, Burkina Faso has documented MDR for other *Salmonella* infections that are treated with the same antibiotics as typhoid⁵, **raising the concern that drug-resistant typhoid could evolve**.



Diseases such as typhoid do not respect borders, and as drug-resistant typhoid becomes more common, **it will likely spread to Burkina Faso**.



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

Typhoid conjugate vaccines in Burkina Faso

Typbar-TCV[®] is a newly licensed and World Health Organization (WHO)-prequalified and recommended tool for typhoid prevention in endemic areas. Support for introduction from Gavi, the Vaccine Alliance is available now.

Typbar-TCV is highly effective and safe for children as young as 6 months of age,⁶ and:



Requires one dose;



May be **more effective and longerlasting** than other typhoid vaccines; and



Can be **co-administered with measles-rubella** vaccine.

For Burkina Faso, a recent modeling study⁷ shows that a catch-up campaign up to 15 years of age followed by routine immunization is the preferred strategy and likely to be cost-effective.*

*At a willingness to pay threshold of \$100 or more to avert one disability adjusted life year (DALY).

Let's Take on Typhoid in Burkina Faso

Typhoid is endemic in Burkina Faso, with more than **90,000** cases per year.

- Burkina Faso'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 Burkina Faso.
- A new TCV is safe, effective, and WHO-recommended for routine immunization as part of a costeffective, 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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- 3. Al-Emran HM, Eibach D, Krumkamp R, et al. A multicountry molecular analysis of Salmonella enterica Serovar Typhi with reduced susceptibility to ciprofloxacin in sub-Saharan Africa. Clinical Infectious Diseases. 2016;62(Suppl 1):S42-S46.
- 4. 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):5094.
- 5. Dembele R, Konate A, Soulama I, et al. Prevalence of multidrug-resistant *Salmonella enterica* and associated factors among under five children with diarrhea in rural Burkina Faso. *Clinical Biotechnology and Microbiology*. 2018;3(1):566-576.
- 6. Jin C, Gibani MM, Moore M, et al. Efficacy and immunogenicity of a Vi-tetanus toxoid conjugate vaccine in the prevention of typhoid fever using a controlled human infection model of *Salmonella* Typhi: a randomized control, phase 2b trial. *The Lancet*. 2017;390(10111):2472-2480.
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