

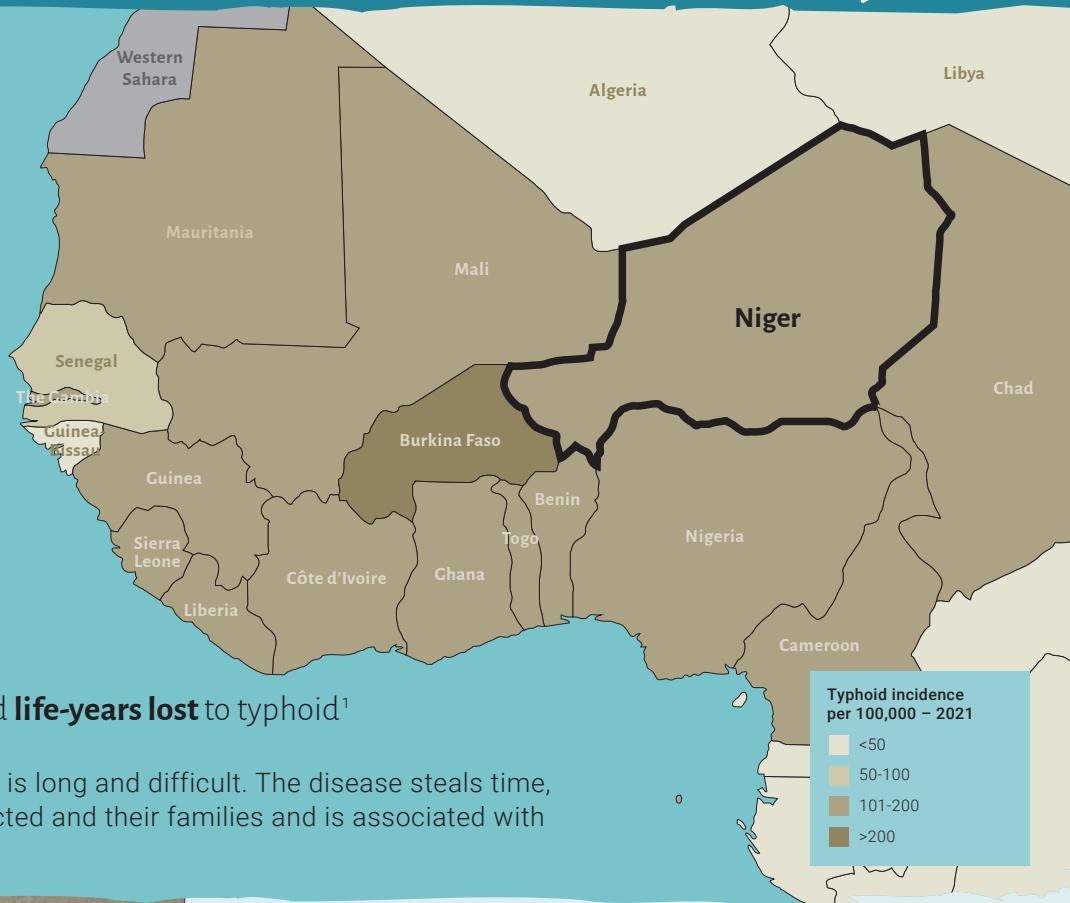
Burden of Typhoid in Niger

Niger is a typhoid-endemic country. The Global Burden of Disease 2021 study estimated that Niger experienced at least:

34,808 typhoid cases
(139 cases per 100,000)

479 typhoid deaths

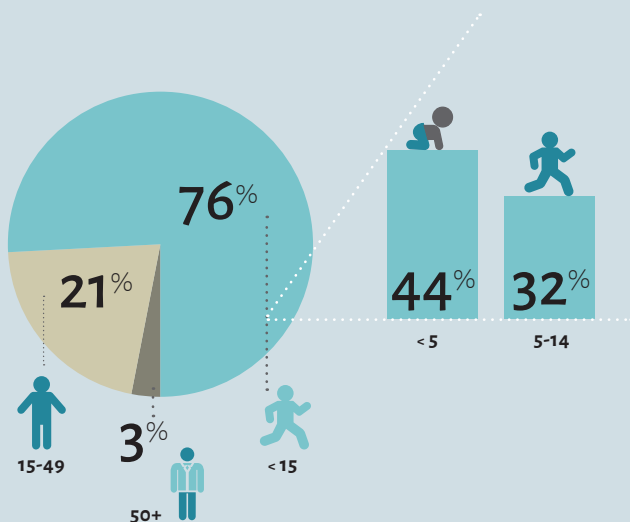
38,822 disability-adjusted **life-years lost** to typhoid¹



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 Niger occur in children **younger than 15 years old**.

TYPHOID CASES IN NIGER BY AGE (2021)



The risk of typhoid may be increasing in Niger.



Typhoid is spread through contaminated food and water. **In Niger, more than half of the population does not have access to basic water services and 85% do not have access to basic sanitation services.**² This raises typhoid risks.



Global data show that multidrug-resistant (MDR) typhoid prevalence has increased dramatically since 1992.³ **A study in Niger found that all 4 typhoid isolates identified were MDR.**⁴ While the total number of isolates from this study is small, it confirms that MDR typhoid is present in Niger. Drug-resistant typhoid is more difficult to treat and forces the use of more expensive and less readily-available treatment options.



Typhoid intestinal perforations are a severe and life threatening complication of the disease. A study of childhood abdominal emergency surgeries at Niamey National Hospital found that **38% of the abdominal surgeries performed in children younger than 5 years old were for intestinal perforation due to typhoid.**⁵ These cases have a more complicated recovery, are more expensive to treat, and have a higher mortality rate.

Typhoid conjugate vaccines (TCVs) in Niger

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;⁶



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



Can be **co-administered** with measles, yellow fever, and meningococcal A 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 Niger.⁹

Let's Take on Typhoid in Niger

- ✓ Typhoid is endemic in Niger, with more than **34,000** cases per year.
- ✓ Niger's burden of typhoid is most heavily borne by children *younger than 15* years of age.
- ✓ Data show a *high number of intestinal perforations* due to typhoid as well as increasing *drug resistance*, which is more difficult to treat.
- ✓ **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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4. Abdelkader AS, Oumarou SS, Yacoubou B. Epidemiology, diversity and resistance to antibiotics in *Salmonella* strains isolated from humans in two cities of Niger Republic. *International Journal of Current Research*. 2018;10(2):65364-65370.
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