

# Burden of Typhoid in Niger

Niger is a typhoid-endemic country. The Global Burden of Disease 2019 study estimated that Niger experienced at least:

**31,141** typhoid cases  
(134 cases per 100,000)

**491** typhoid deaths

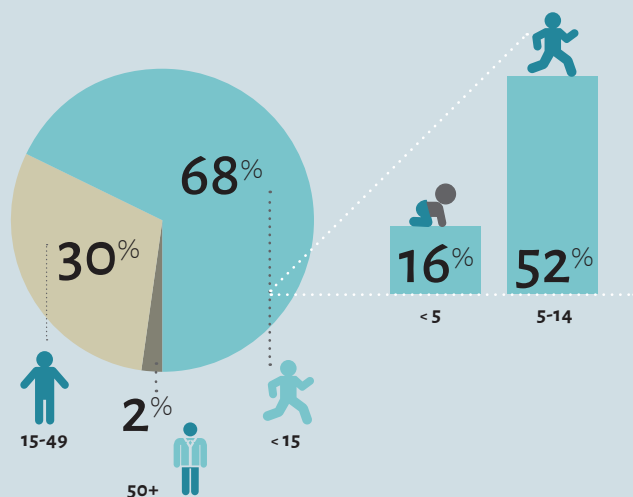
**38,895** disability-adjusted **life-years lost** to typhoid<sup>1</sup>



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 (2019)



## 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.**<sup>2</sup> This raises typhoid risks.



Global data show that multidrug-resistant (MDR) typhoid prevalence has increased dramatically since 1992.<sup>3</sup> **A study in Niger found that all 4 typhoid isolates identified were MDR.**<sup>4</sup> 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.**<sup>5</sup> 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.

Prequalified TCVs are highly effective and safe for children as young as 6 months of age. Recent data from Malawi show TCV is safe and 84% effective in preventing typhoid.<sup>6</sup> TCVs:



Require **one dose**;



Are **more effective and may be longer-lasting** than other typhoid vaccines; and



Can be **co-administered** with measles, yellow fever, and meningococcal A vaccines.<sup>7,8</sup>

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.<sup>9</sup>

## Let's Take on Typhoid in Niger

- ✓ Typhoid is endemic in Niger, with more than **31,000** 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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