

Burden of Typhoid in the **Central African Republic (CAR)**

CAR is a typhoid-endemic country. The Global Burden of Disease 2021 study estimated that CAR experienced more than 1,800 typhoid cases, with the **highest burden in children younger than 5 years old.**¹

The true typhoid burden in CAR is likely higher than these estimates due to challenges with diagnosis and surveillance. CAR has very limited disease surveillance to accurately monitor typhoid cases. Typhoid is difficult to diagnose because it requires blood cultures, which require specialized training to perform and laboratory capacity that may not be available.

Typhoid is often misdiagnosed for other diseases with similar symptoms, making it difficult to know the true burden.

Typhoid burden regionally is high. CAR's neighbors in DRC, Cameroon, and Chad experience high rates of typhoid. As pathogens cross borders, the burden in neighboring countries can impact communities in CAR.

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.

Most typhoid cases in CAR occur in children younger than 15 years old.



The risk of typhoid may be increasing in CAR.



Typhoid is spread through contaminated food and water. In CAR, **more than 60% of the population do not have access to basic water services** and more than 85% do not have access to basic sanitation services.² This raises typhoid risks.



Nearly 70% of the urban population live in slums,² which are typically overcrowded and lack access to safe water and sanitation infrastructure. These conditions can facilitate the spread of typhoid.



There are **more than 455,000 internally displaced people (IDP)** in CAR, and that number is expected to rise to more than 550,000 by the end of 2025.³ IDPs often seek shelter in camps, urban areas, and informal dwellings, which are typically subject to overcrowding, poor infrastructure, and limited resources, conditions where typhoid can proliferate rapidly.



Typhoid intestinal perforations (TIP) are a severe and life threatening complication of typhoid. A study of pediatric TIP in CAR included children from 10 months to 15 years of age. 16% of patients in the study experienced postoperative complications and 29% died,⁴ demonstrating the severity of this complication and suggesting higher typhoid burden than current estimates.



Global data show that multidrug-resistant typhoid prevalence has increased dramatically since 1992. **While drug-resistant typhoid has not been identified in CAR, it has been found regionally.** As drug-resistant typhoid becomes more common, it will likely spread to CAR.

Typhoid conjugate vaccines (TCVs) in CAR

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;⁵



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



Can be **co-administered with measles, yellow fever, and meningococcal A** vaccines.^{6,7}

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 CAR.⁸

Let's Take on Typhoid in CAR

- ✓ Typhoid is a *growing threat in CAR* with more than 1,800 cases per year.
- ✓ CAR's burden of typhoid is most heavily borne by children *younger than 15* years of age.
- ✓ *Climate change, urbanization, and increasing refugee populations* are poised to add additional strains on water, sanitation, and hygiene infrastructure, thereby *increasing the populations susceptible to typhoid*.
- ✓ 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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5. 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.
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