

Burden of Typhoid in

# Côte d'Ivoire

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

**29,115** typhoid cases (111 cases per 100,000)

**475** typhoid deaths

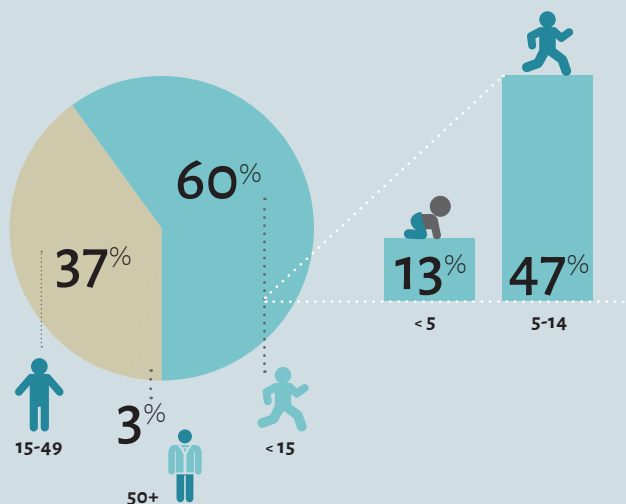
**36,964** disability-adjusted **life-years lost** to typhoid<sup>1</sup>

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 Côte d'Ivoire occur in children **younger than 15 years old.**

TYPHOID CASES IN CÔTE D'IVOIRE BY AGE (2019)



## The risk of typhoid may be increasing in Côte d'Ivoire.



Global data show that multidrug-resistant (MDR) typhoid prevalence has **increased dramatically since 1992.**<sup>2</sup>



While drug-resistant typhoid has not been isolated in Côte d'Ivoire, it has been found in other West African countries, including Ghana<sup>3</sup>. **Diseases such as typhoid can easily cross borders**, and as drug-resistant typhoid becomes more common, it has the potential to spread to Côte d'Ivoire.



In Côte d'Ivoire, **30% of the population does not have access to basic water services** and **65% do not have access to basic sanitation infrastructure.**<sup>4</sup> This drastically increases the risk of typhoid infections.



**Rapid urbanization** has increased the number of people living in urban slums, placing **even more pressure on fragile water and sanitation infrastructure.**<sup>4</sup> This can increase the risk of typhoid.

# Typhoid conjugate vaccines (TCVs) in Côte d'Ivoire

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;<sup>6</sup>



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



Can be **co-administered** with measles-rubella, 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 Côte d'Ivoire**.<sup>8</sup>

## Let's Take on Typhoid in Côte d'Ivoire

- ✓ Typhoid is endemic in Côte d'Ivoire, with more than **29,000** cases per year.
- ✓ Côte d'Ivoire's burden of typhoid is most heavily borne by children **younger than 15** years of age.
- ✓ Increasing urbanization is poised to add increased pressure on already fragile water and sanitation infrastructure, raising typhoid risks in Côte d'Ivoire.
- ✓ **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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3. 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.
4. Sustainable Development Report. Côte d'Ivoire. 2020. Available at: <https://dashboards.sdindex.org/profiles/cote-d-ivoire/indicators>.
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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