Together We Can
Take on Typhoid

Burden of Typhoid in

# Cambodia

**Cambodia is a typhoid-endemic country. The Global Burden of Disease study estimated that, in 2021, there were at least:**

**24,544** **typhoid cases** (144 cases per 100,000)

**338** **typhoid deaths**

**25,153** disability-adjusted **life-years lost** to typhoid[1]

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.

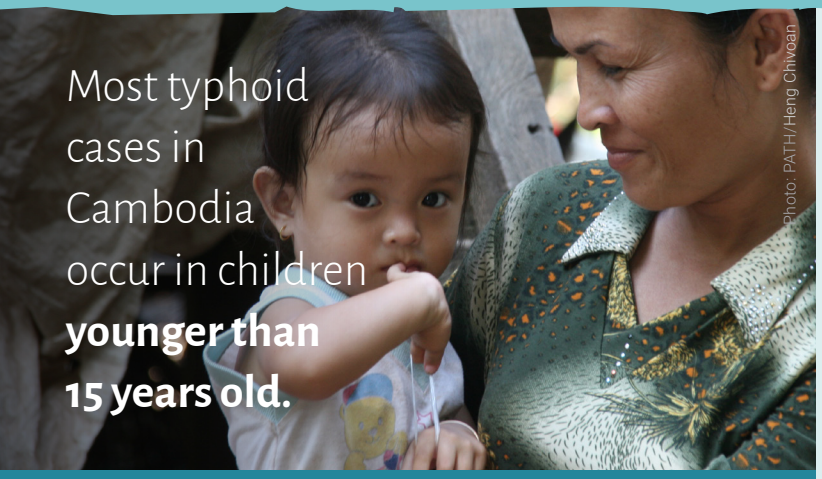
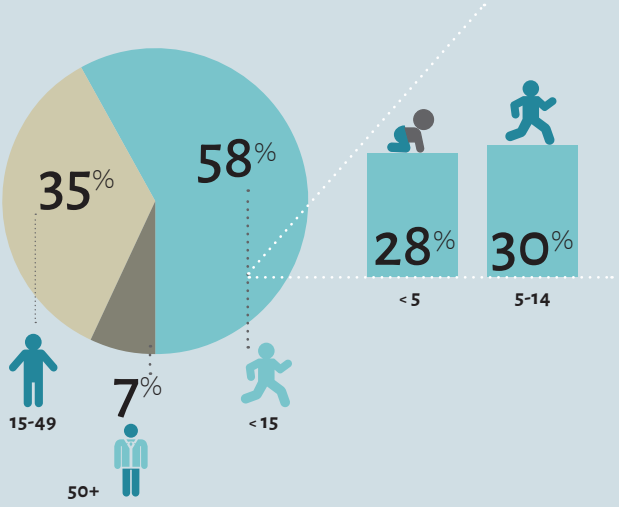



Photo: PATH / Heng Chivoan

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

## TYPHOID CASES IN CAMBODIA BY AGE (2021)




**Drug-resistant typhoid strains** are a growing problem in Cambodia, regionally, and across the globe.

Global data show that the multidrug-resistant (MDR) H58 typhoid strain prevalence has **increased dramatically since 1992**.[2]

A study found that **typhoid in Cambodian children is dominated by the H58 strain.** Additionally, 85% of the isolates analyzed were MDR, leading the authors to conclude that drug-resistant typhoid is common in Cambodian children and therapeutic options are limited.[3]

Another study found that the majority of isolates tested were MDR, and 80% had reduced susceptibility to ciprofloxacin[4], the standard treatment for typhoid in many parts of the world.

As drug-resistant typhoid becomes more common, it will become more difficult to treat and **force the use of more expensive and less readily-available** treatment options.

# Typhoid conjugate vaccines (TCVs) in Cambodia

**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. Gavi, the Vaccine Alliance support for introduction 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;[5,6]
- Offer strong protection for **at least 4 years**; and
- Can be **co-administered with measles-rubella** vaccine.[7]

## Let's Take on Typhoid in Cambodia

- Typhoid is endemic in Cambodia, with more than ***24,000*** cases per year.
- Cambodia's typhoid burden is most heavily borne by children ***younger than 15*** years old.
- Data show an increase in ***drug-resistant typhoid*** in Cambodia and globally.
- ***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***.

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 Cambodia.[8]

Photo: PATH/Heng Chivoan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3. Emary K, Moore CE, Chanpheaktra N, et al. Enteric fever in Cambodian children is dominated by multidrug-resistant H58 *Salmonella enterica* serovar Typhi with intermediate susceptibility to ciprofloxacin. *Transactions of the Royal Society of Tropical Medicine and Hygiene*. 2012;106(12):718-724.
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5. Shakya M, Voysey M, Theiss-Nyland K, et al. Efficacy of typhoid conjugate vaccine in Nepal: Final results of a phase 3, randomised, controlled trial. *The Lancet Global Health*. 2021;9(11):e1561-1568.
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TyVAC Typhoid Vaccine Acceleration Consortium
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