

World Health Organization (WHO) report on *drug resistance*

Together We Can
Take on Typhoid

A 2022 report¹ from WHO highlights the importance of the vaccine development pipeline through a lens of using vaccines to combat drug resistance. Based on published data, typhoid conjugate vaccines (TCVs) are powerful tools to limit the spread of drug-resistant typhoid.

General priorities



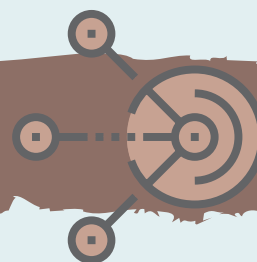
Expanding vaccine reach

- Increase use of licensed vaccines
- Accelerate new vaccine research
- Enhance global understanding and awareness of vaccine impact

Typhoid priorities

- Enhance country understanding and awareness of TCV impact on drug-resistant typhoid
- Increase introduction of TCV

Data



- Increased information on vaccine development to inform policymakers, researchers, and funders
- Impact of bacterial vaccines on emergence and burden of drug-resistant pathogens

- TCVs were 97% effective against drug-resistant typhoid infections in Pakistan
- During next decade, TCV introduction could drastically reduce the number of drug-resistant typhoid cases and deaths in Gavi-eligible countries



Economic impact

To fill data gaps on:

- Long-term morbidity
- Drug-resistant infections
- Impact of vaccines to prevent the emergence of drug-resistance

- Typhoid is costly to treat and families often bear a significant cost
- Treatment of drug-resistant typhoid requires more expensive and less available antibiotics at a higher price to the patient and health care system
- A modeling analysis shows that TCV is likely cost-effective in countries with high typhoid incidence, high cost of typhoid treatment, and/or high death rates from typhoid



Recommendations

- Increase vaccine coverage to maximize impact on drug-resistant pathogens

- Increase vaccine coverage in countries that have already introduced TCV
- Prioritize country decision-making for TCV introduction in typhoid endemic countries and countries with high burden of drug-resistant typhoid

1. Bacterial vaccines in clinical and preclinical development: An overview and analysis. Geneva: World Health Organization; 2022. Available at: <https://www.who.int/publications/i/item/9789240052451>.