

Typhoid +

Forced Migration

Key Messages

- ➔ **The Universal Declaration of Human Rights** entitles everyone to the highest standards of physical and mental health.
- ➔ **The 1951 Refugee Convention** explicitly states that forcibly displaced people should enjoy access to health care and services equivalent to that of the host population.
- ➔ **Limited resources and infrastructure** in camps and informal settlements—combined with the continuous influx of forcibly displaced people—often hinder access to quality health care, perpetuating cycles of illness and disease transmission.
- ➔ **Preventive interventions, such as the new typhoid conjugate vaccine (TCV), can greatly reduce this threat.** Compared to previous typhoid vaccines, TCVs offer longer-lasting protection, require fewer doses, and are safe and effective for children under two years of age—characteristics that make the vaccine optimal for use in mass displacement settings where conditions are often ripe for potential typhoid outbreaks.

More people are on the move now than at any other point in history. In 2017, it was estimated that nearly 258 million people, or 1 in every 30, were living as international migrants.

Recent projections anticipate that by 2050, this figure could rise to 405 million.¹ While some people migrate by choice, many others—including refugees and asylum-seekers (RAS) and internally displaced people (IDPs)—migrate out of necessity. This rapid increase in mass migration has important public health implications, posing new epidemiological and health system challenges.

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1. International Organization for Migration. World Migration Report 2018. http://publications.iom.int/system/files/pdf/wmr_2018_en.pdf



Typhoid

Typhoid is a serious and potentially life-threatening enteric fever spread through contaminated food and water.

While largely eliminated in industrialized countries, it remains a substantial public health issue that disproportionately affects children and adolescents in low- and middle-income countries. The Global Burden of Disease study estimates that in 2017 there were **nearly 11 million cases and more than 116,000 deaths due to typhoid worldwide**. However, the burden is likely underestimated due to difficulties with surveillance and diagnostics.

Research shows that the burden of typhoid goes beyond physical illness and mortality. Even with prompt treatment with antibiotics, **typhoid infections can force children to miss school for weeks**, impacting attendance and performance. **A child's illness has broader economic impacts on the family** due to medical and transport expenses, and time lost from work to care for a sick child.

Improved water quality, sanitation, and hygiene are the major ways to break the typhoid transmission cycle in the long term. However, until these investments can be made in all countries, vaccination with TCV is an important and effective way to prevent typhoid.

Expanded use of TCVs through routine immunization will allow children to remain healthy, stay in school, and for families to continue to work and prosper, preventing the socioeconomic burden from typhoid. It also has the potential to reduce the need for antibiotics and slow further emergence of drug-resistant typhoid.



Forced Migration

70 million

people forced to migrate due to conflict, persecution, disaster, or violence.

50%

of forcibly-displaced people are **younger than 18 years old**.

Today, more than 70 million people have been forced to migrate from their homes as a result of conflict, persecution, disaster, or violence. That is 1 of every 110 people in the world. RAS, who have crossed international borders in search of protection, account for 25.9 million and 3.5 million, respectively; IDPs, who face many of the same circumstances as RAS but are unable or unwilling to leave their home country, constitute 41.3 million.² **Children younger than 18 years old account for 50 percent of the forcibly displaced population, a staggering over-representation of children and adolescents at risk of the vulnerabilities of displacement.**

Since people typically flee to neighboring areas, the host-countries and -communities often face many of the same social and economic challenges as the RAS' and IDPs' homeland, with 85 percent of the world's refugee population settling in low- and middle-income countries.³ **Already faced with the challenge of pursuing their own development goals, the massive influx of displaced people further increases the demand on host-country government's services and infrastructure.** As a result, the camps, urban areas, and informal dwellings in which forcibly displaced people seek shelter, are often subject to overcrowding, poor infrastructure, and limited resources—exposing inhabitants to a host of challenges relating to poverty, education, exploitation, and health.

2. UNHCR. Global trends: Forced displacement in 2018. <https://www.unhcr.org/5d08d7ee7.pdf>.

3. UNHCR. Global trends: Forced displacement in 2017. <https://www.unhcr.org/5b27be547.pdf>.

Infectious diseases, including typhoid, account for 60 percent to 80 percent of all reported cases of death among refugees.⁴

As with other fecal-oral diseases, typhoid can proliferate rapidly, sometimes to epidemic proportions, when people in crowded conditions—such as camps and informal settlements—are **without basic water, hygiene, and sanitation infrastructure**.

Infrastructure and resources are further strained by the increasing frequency of extreme weather events triggered by climate change, which not only perpetuate the cycle of forced migration, but also increase populations' exposure to typhoid. As heavy rains and flooding overwhelm inadequate sanitation systems, fecal material contaminates water sources further enabling the spread of disease. This is compounded by limited availability and access to health care services, including diagnosis and treatment. **In situations such as these, where circumstances heighten disease transmission, prevention, often with vaccines, is one of the most effective means of keeping displaced people healthy.**

These environments often lack adequate sanitation facilities and toilets; access to clean drinking water is limited; and every day activities, from cooking to bathing to laundry, can be compromised by contaminated water sources.

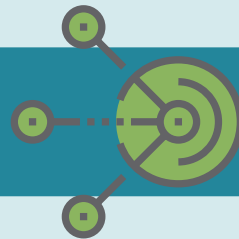


4. Snyder M. Displaced populations and the threat of disease. 2018. <https://www.outbreakobservatory.org/outbreakthursday-1/1/4/2018/displaced-populations-and-the-threat-of-disease>.



Typhoid + Forced Migration

Take Action Now!



→ **Policy- and decision-makers in countries with RAS and IDPs should consider introducing TCVs** as a way to protect these already vulnerable communities from typhoid, especially in areas with mass displacement or prone to extreme weather events.

→ **Consider immunization alongside education** about drinking safe water, limiting open defecation, and handwashing.



Additional Resources

- **Take on Typhoid website**
- **United Nations High Commissioner for Refugees website**

TyVAC Typhoid Vaccine Acceleration Consortium
CENTER FOR VACCINE DEVELOPMENT • OXFORD VACCINE GROUP • PATH



a program of the
Sabin Vaccine Institute

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Visit www.takeontyphoid.org for the complete series, which includes information about:

- Climate Change
- Drug Resistance
- Forced Migration
- Universal health coverage (UHC) and the Sustainable Development Goals (SDGs)
- Urbanization
- Water, Sanitation, and Hygiene



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