

# Epidemiology Overview: Global TB Burden

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# Disclosure

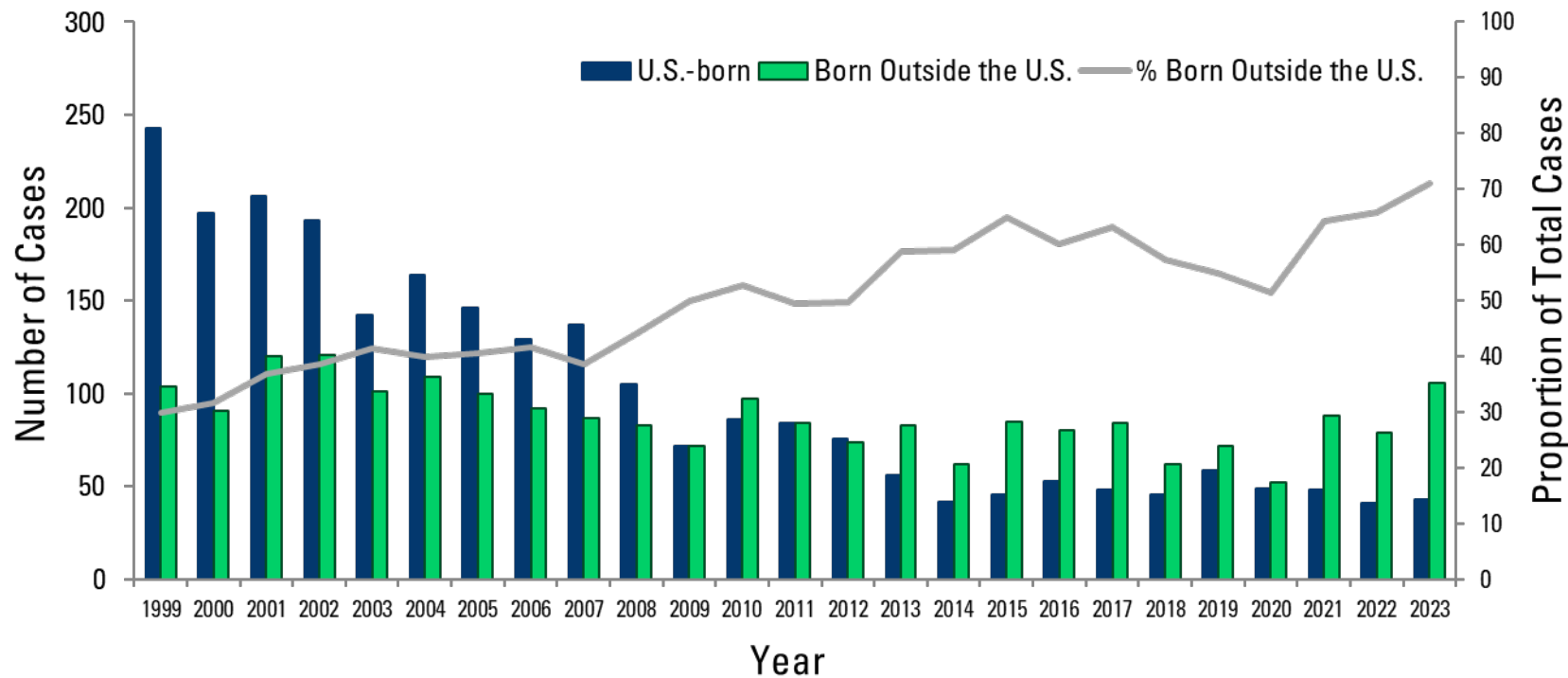
I have no professional or financial conflicts of interest to disclose.

# Objectives

Identify trends in global TB epidemiology

Identify important risk-factors for global TB cases

# TB Cases by U.S. Origin



## COUNTRY OF BIRTH

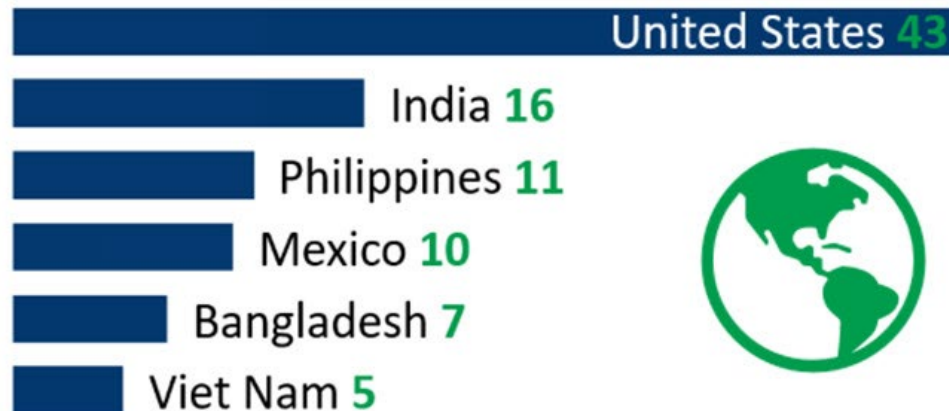
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Born in the United States (U.S.) **29%**



**38** | Countries of birth represented among patients with TB disease

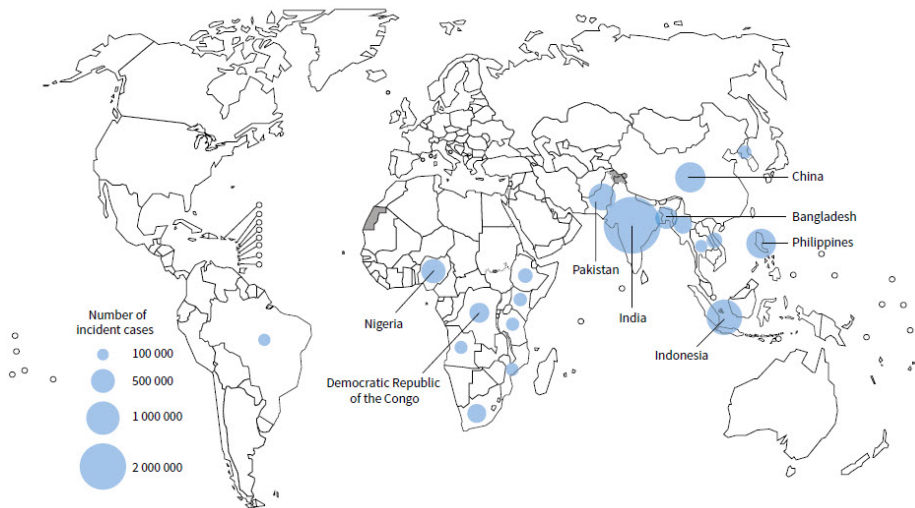
### MOST COMMON COUNTRIES OF BIRTH



# Global TB Incidence

FIG. 12

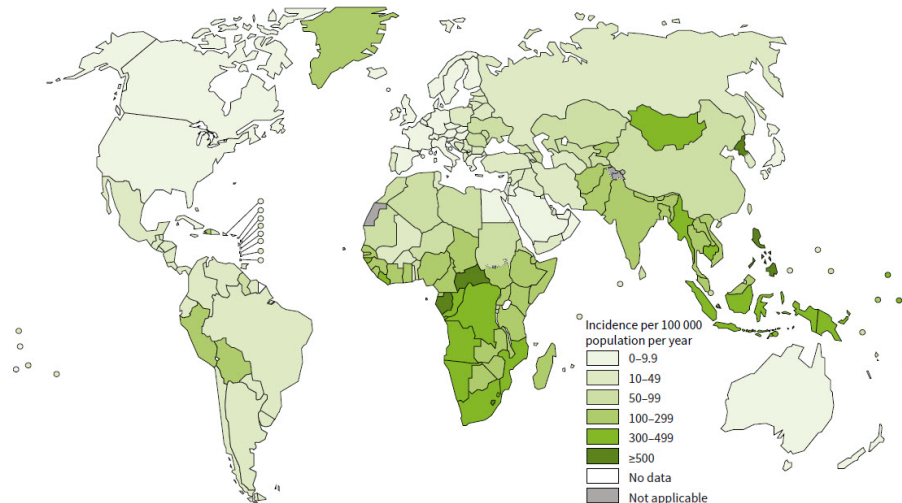
Estimated number of incident TB cases in 2022, for countries with at least 100 000 incident cases<sup>a</sup>



<sup>a</sup> The eight countries ranked in order from first to last in terms of numbers of cases, and that accounted for about two thirds of global cases in 2022, are India, Indonesia, China, the Philippines, Pakistan, Nigeria, Bangladesh and the Democratic Republic of the Congo.

FIG. 14

Estimated TB incidence rates, 2022



# Global TB Notifications

FIG. 13

Global estimates of TB incidence (black outline) and case notifications of people newly diagnosed with TB disaggregated by age and sex (female in purple; male in orange), 2022

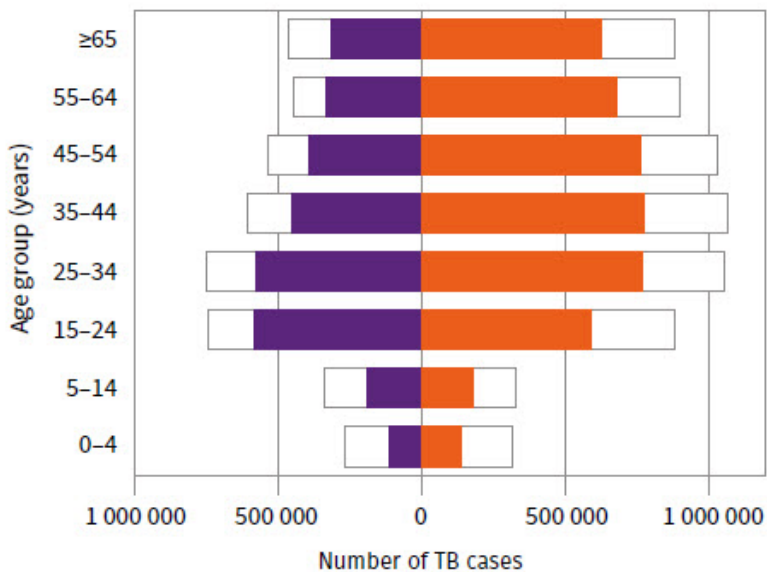
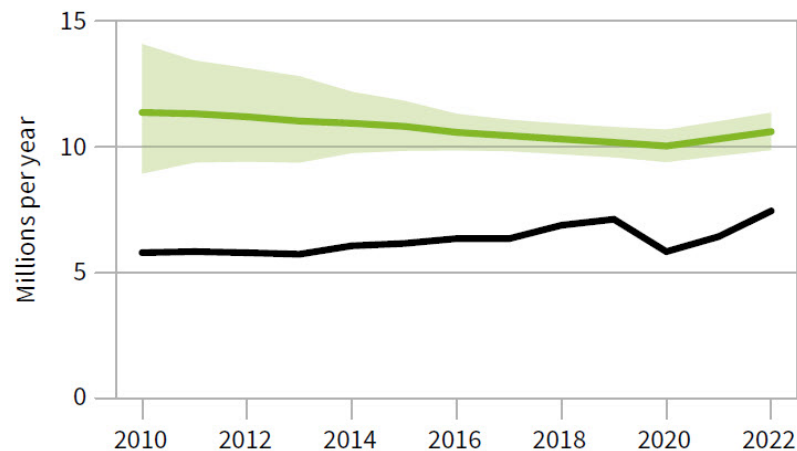


FIG. 21

Global trend in case notifications of people newly diagnosed with TB (black) and the estimated number of incident TB cases (green), 2010-2022

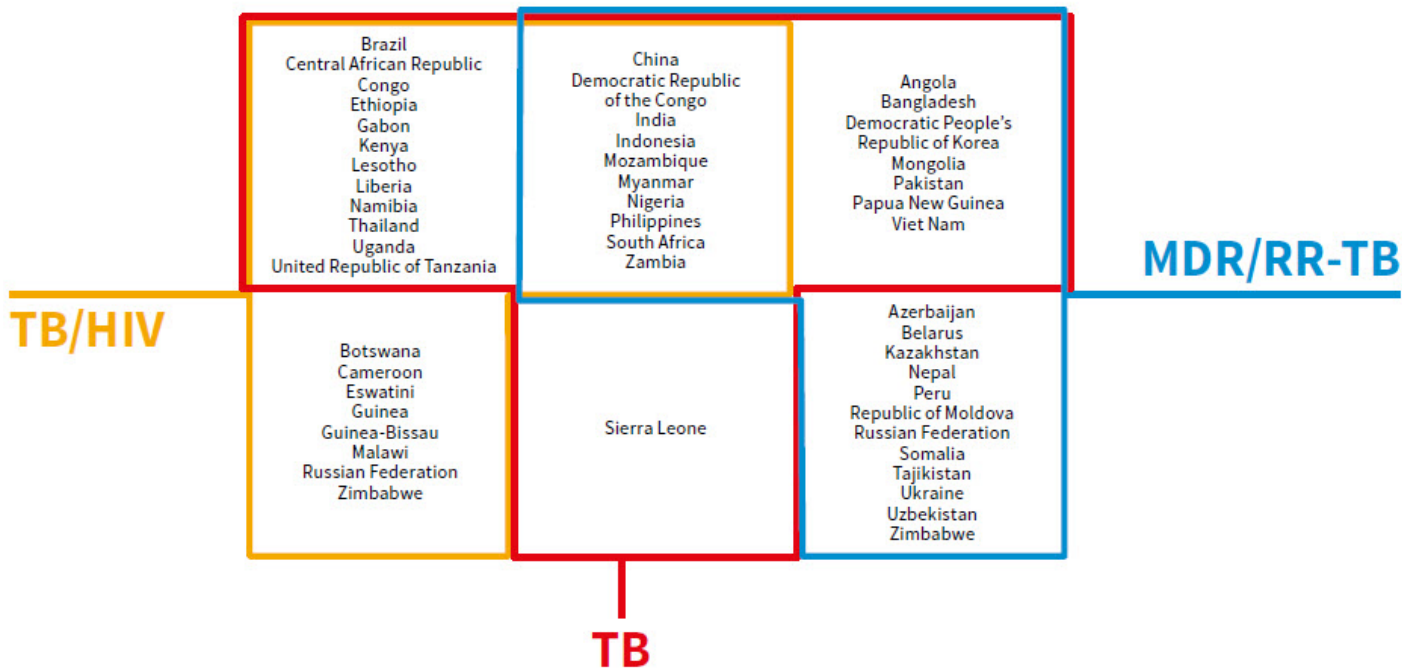
The shaded area represents the 95% uncertainty interval.



# Global TB Burden

FIG. A3.1

The three global lists of high-burden countries for TB, HIV-associated TB and MDR/RR-TB to be used by WHO in the period 2021–2025, and their areas of overlap





# World Health Organization

## Global Tuberculosis Report 2023

<https://www.who.int/teams/global-tuberculosis-programme/tb-reports/global-tuberculosis-report-2023>

## GLOBAL TUBERCULOSIS REPORT 2023

### TB SITUATION AND RESPONSE

Tuberculosis (TB) is contagious and airborne.

In 2022, TB was the second leading infectious disease killer worldwide, after COVID-19. It was also the leading killer of people with HIV and a major cause of deaths related to antimicrobial resistance.

### TB BURDEN

- In 2022, an estimated 10.6 million (95% uncertainty interval [UI]: 9.9–11.4 million) people fell ill with TB worldwide, of which 5.8 million were men, 3.5 million were women and 1.3 million were children. People living with HIV accounted for 8.2% of the total.
- The TB incidence rate (new cases per 100 000 population per year) rose by 3.0% between 2020 and 2022, reversing declines of about 2% per year for most of the past 2 decades.
- Globally in 2022, TB caused an estimated 1.30 million (95% UI: 1.18–1.43 million) deaths, including 167 000 people with HIV. This was down from best estimates of 1.4 million in both 2020 and 2021 and almost back to the level of 2019.
- Eight countries accounted for more than two-thirds of the global total: India, Indonesia, China, the Philippines, Pakistan, Nigeria, Bangladesh and the Democratic Republic of the Congo.

### TB CARE AND TREATMENT

- Global efforts to combat TB have saved an estimated 75 million lives since the year 2000.
- Globally in 2022, the reported number of people newly diagnosed with TB was 7.5 million. This is the highest number since WHO began global TB monitoring in 1995, above the pre-COVID baseline (and previous historical peak) of 7.1 million in 2019, and up from 5.8 million in 2020 and 6.4 million in 2021.
- The cumulative number of people treated between 2019 and 2022 was 34 million, equivalent to 84% of the 5-year (2019–2022) UN high-level meeting TB target of 40 million. This included 2.5 million children, 71% of the 5-year target of 3.5 million.
- There is still a large global gap between the estimated number of people who fell ill with TB and the number of people newly diagnosed, with approximately 3.1 million people not diagnosed with the disease, or not officially reported to national authorities in 2022, down from around 4 million in both 2020 and 2021, and back to the pre-pandemic level of 2019.

### DRUG-RESISTANT TB

- Globally, an estimated 410 000 people (95% UI: 370 000–450 000) developed multidrug-resistant or rifampicin-resistant TB (MDR/RR-TB) in 2022.
- The number of people diagnosed and started on treatment was much lower: 175 650 people in 2022, equivalent to about two in five of those in need and still below the pre-pandemic level of 181 533 people in 2019.
- The treatment success rate for drug-resistant TB was 63% globally.

### ADDRESSING THE CO-EPIDEMICS OF TB AND HIV

- Among all incident cases of TB in 2022, 8.3% were people living with HIV, this proportion has been steadily declining for several years. In 2022, 671 000 people living with HIV fell ill with TB, with the highest burden in countries in the WHO African Region.
- The global coverage of HIV testing among people diagnosed with TB remained high in 2022, at 80%. The global coverage of antiretroviral therapy for people living with HIV who were newly diagnosed and reported with TB was 85% in 2022.



TUBERCULOSIS IS ONE OF THE TOP INFECTIOUS KILLERS IN THE WORLD



1.3 MILLION TB DEATHS INCLUDING 167 000 DEATHS AMONG PEOPLE WITH HIV

TB is also the leading cause of deaths among people with HIV and a major cause of antimicrobial resistance related deaths



IN 2022, AN ESTIMATED 10.6 MILLION PEOPLE FELL ILL WITH TB

75 MILLION LIVES SAVED SINCE THE YEAR 2000 DUE TO GLOBAL EFFORTS TO COMBAT TB

DRUG RESISTANT TB REMAINS A PUBLIC HEALTH CRISIS with gaps in detection & treatment

Only about 2 in 5 PEOPLE ACCESSED TREATMENT OF THOSE IN NEED



Major global recovery in the number of people diagnosed with TB and treated in 2022 AFTER 2 YEARS OF COVID-RELATED DISRUPTIONS



REQUIRED IN 2023 US\$ 13 BILLION FOR TB DIAGNOSIS AND CARE



US\$ 5.8 BILLION WAS AVAILABLE IN 2022 of which 80% domestic financing and US\$ 1.1 billion international financing

US\$ 2 BILLION REQUIRED PER YEAR FOR TB RESEARCH  
US\$ 1.0 BILLION FUNDING GAP



THANK  
YOU!

## **Acknowledgements**

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## **Contact Information**

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## **Reference**

1. World Health Organization. Global tuberculosis report 2023. Geneva, Switzerland: World Health Organization; 2023. <https://www.who.int/teams/global-tuberculosis-programme/tb-reports/global-tuberculosis-report-2023>