World Health Organization

TUBERCULOSIS
Global Tuberculosis Report 2018

GLOBAL TUBERCULOSIS REPORT 2018

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54 million lives saved between 2000 and 2017

TB deaths fell by 33% in the same period

1.6 MILLION TB DEATHS INCLUDING 0.3 MILLION TB DEATHS AMONG PEOPLE WITH HIV*

TB is the top infectious killer worldwide

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

MDR-TB crisis with gaps in detection and treatment

Only 1 in 4 needing MDR-TB treatment were enrolled on it

US$ 3.5 BILLION GAP

Funding shortfall for TB implementation

Gap of over US$ 1.3 billion per year for TB research

DESPITE PROGRESS AND MILLIONS OF LIVES SAVED, GLOBAL ACTIONS AND INVESTMENTS FALL FAR SHORT OF THOSE NEEDED.

TB SITUATION AND RESPONSE

Tuberculosis (TB) is **contagious** and **airborne.**
TB was one of the **top 10 causes of death** worldwide in 2017. It is also the **leading killer of people with HIV** and a major cause of deaths related to **antimicrobial resistance**.

THE BURDEN
In 2017, there were an estimated **10 million** new (incident) **TB cases** worldwide, of which 5.8 million were men, 3.2 million were women and 1 million were children. People living with HIV accounted for 9% of the total.

Eight countries accounted for 66% of the new cases: India, China, Indonesia, the Philippines, Pakistan, Nigeria, Bangladesh, and South Africa.

In 2017, **1.6 million people died from TB**, including 0.3 million among people with HIV.

Globally, the **TB mortality rate fell by 42%** between 2000 and 2017.

The **severity of national epidemics varies widely** among countries. In 2017, there were fewer than 10 new cases per 100 000 population in most high-income countries, 150–400 in most of the 30 high TB burden countries, and above 500 in a few countries including Mozambique, the Philippines and South Africa.

TB CARE AND PREVENTION
TB treatment **saved 54 million lives** globally between 2000 and 2017.

In 2017, **6.4 million** new **TB cases were notified** to national authorities and reported to WHO. This reflects a **3.6 million gap** between incident and notified cases. Ten countries accounted for 80% of this gap; the top three were India, Indonesia and Nigeria, accounting for almost half (46%).

Globally, the **treatment success rate** for people newly diagnosed with TB was **82%** in 2016.

DRUG-RESISTANT TB
Globally in 2017, **558 000 people** developed TB that was resistant to **rifampicin (RR-TB),** the most effective first-line drug, and of these, **82% had multidrug-resistant TB (MDR-TB).**

160 000 cases of MDR/RR-TB were detected and notified in 2017. Of these, a total of **140 000 people were enrolled** and started on treatment with a second-line regimen.

Treatment success rate at 55%, remains low globally.

Among cases of MDR-TB in 2017, **8.5%** were estimated to have **extensively drug-resistant TB (XDR-TB).**

ADDRESSING THE CO-EPIDEMICS OF TB AND HIV

In 2017, there **were 465 000 reported cases of TB among people living with HIV**, of whom **84% on antiretroviral therapy**.

Most of the gaps in detection and treatment were in the WHO African Region, where the burden of HIV-associated TB is highest.

TB PREVENTIVE TREATMENT

WHO recommends preventive treatment for people living with HIV and all contacts living in households with TB.

A total of 960 000 people who were newly enrolled in HIV care were **started on TB preventive treatment** in 2017 (only 36% of people newly enrolled in HIV care).

In addition, the number of **children aged under 5 years reached 280 000 in 2017** – a three-fold increase from 2015 but still only around one in five of the 1.3 million estimated to be eligible.

UPTAKE OF DIAGNOSTICS, NEW DRUGS AND REGIMENS

The WHO-recommended rapid diagnostic test (WRD) for detection of TB and rifampicin resistance currently available is the **Xpert MTB/RIF® assay**. Of the 48 countries in at least one of the lists of high burden countries, 32 had adopted national algorithms positioning the WRD as the initial diagnostic test for all people suspected of having pulmonary TB by the end of 2017.

By the end of 2017, 68 countries reported having imported or started using **bedaquiline**, and 42 countries had used **delamanid**

RESEARCH AND DEVELOPMENT

A small number of technologies emerged in 2017–2018 and several have not demonstrated adequate performance in field evaluation studies. There is still **no single rapid, accurate** and robust TB diagnostic test suitable for use at the **point of care.**

Twelve vaccine candidates are in clinical trials: four in Phase I, six in Phase II and two in Phase III. They include candidates to prevent the development of TB infection and disease, and candidates to help improve the outcomes of treatment for TB disease.

There are **20 drugs**, several treatment regimens and 12 vaccine candidates in clinical trials.

Funding for TB research and development has increased and reached a peak of **US$ 724 million in 2016.** However, this is only 36% of the estimated requirement of **US$ 2 billion per year.**

The **WHO GLOBAL TB PROGRAMME** together with WHO regional and country offices: develops policies, strategies and standards; supports the efforts of WHO Member States; measures progress towards TB targets and assesses national programme performance, financing and impact; promotes research; and facilitates partnerships, advocacy and communication. More information: **www.who.int/tb**

UNIVERSAL HEALTH COVERAGE AND SOCIAL PROTECTION

All of the 30 high TB burden countries need to **increase service coverage** and **reduce** levels of **catastrophic expenditures** to reach Universal Health Coverage, consistent with findings from surveys of costs faced by TB patients and their households.

The report features a **TB-SDG monitoring framework** that focuses attention on 14 indicators that are associated with TB incidence. Monitoring of these indicators can be used to identify key influences on the TB epidemic at national level and inform the multisectoral actions required to end it.

Many new cases of TB are attributable to **undernourishment, HIV infection, smoking, diabetes and alcohol use.**

TB FINANCING

The funding required for a full response to the global TB epidemic in low- and middle-income countries is estimated at **US$ 10.4 billion in 2018**, excluding research and development.

US$ 6.9 billion was **available** for TB prevention, diagnosis and treatment in 2018, leaving a **funding gap** of almost **US$ 3.5 billion.**

86% of the funding available in 2018 is from **domestic sources**. However, this global aggregate figure is strongly influenced by BRICS countries.

International donor funding accounts for 39% of funding in the 25 high TB burden countries outside BRICS and **57% of funding in low-income countries**.

For **research and development**, at least an extra **US$ 1.3 billion** per year is needed to accelerate the development of new tools.

REQUIRED IN 2018
US$ 10.4 BILLION

6.9 BILLION
AVAILABLE
IN 2018

OF WHICH
6 BILLION
DOMESTIC
FINANCING

AND
0.9 BILLION
INTERNATIONAL
FINANCING

GAP OF
US$ 3.5 BILLION

2 BILLION
US$ REQUIRED
PER YEAR FOR
TB RESEARCH

1.3 BILLION
US$ FUNDING GAP
IN 2017