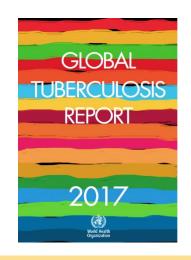


## **TUBERCULOSIS**

# **Global Tuberculosis Report 2017**





53 million lives saved between 2000-2016

TB deaths fell by 22% in the same period



TB is the top infectious killer worldwide

TB is also the leading cause of deaths due to antimicrobial resistance and among people with HIV



MDR-TB crisis with gaps in detection and treatment

Only 1 in 5 needing MDR-TB treatment were enrolled on it



Funding shortfall for TB implementation

Gap of over
US\$1.2 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 is one of the **top 10 causes of death** worldwide. It is also the main cause of deaths related to **antimicrobial resistance** and the **leading killer of people with HIV**.

#### THE BURDEN

In 2016, there were an estimated **10.4 million** new (incident) **TB cases** worldwide, of which 6.2 million were men, 3.2 million were women and 1 million were children. People living with HIV accounted for 10% of the total.

Seven countries accounted for 64% of the new cases: India, Indonesia, China, Philippines, Pakistan, Nigeria, and South Africa.

In 2016, **1.7 million people died from TB**\*, including 0.4 million among people with HIV.

Globally, the **TB mortality rate fell by 37%** between 2000 and 2016.

The **case fatality ratio** (the global proportion of people with TB who die from the disease) varied from under **5%** in a few countries to more than **20%** in most countries in the WHO African Region. This shows considerable inequalities among countries in access to TB diagnosis and treatment that need to be addressed.

#### TB CARE AND PREVENTION

TB treatment **saved 53 million lives** globally between 2000 and 2016.

In 2016, **6.3 million** new **TB cases were notified** to national authorities and reported to WHO. This reflects a **4.1 million gap** between incident and notified cases, with India, Indonesia and Nigeria accounting for almost half of this gap.

Globally, the **treatment success rate** for people newly diagnosed with TB was **83%** in 2015.

#### **DRUG-RESISTANT TB**

WHO estimates that there were **600 000 new cases** with **resistance to rifampicin** - the most effective first-line drug, of which **490 000 had MDR-TB**. Almost half of these cases were in India, China and the Russian Federation.

A total of **129 689 patients** (22% of those newly eligible for treatment) were **enrolled** and started on **MDR-TB treatment**.

Globally, data show an average cure rate of only 54% for treated MDR-TB patients.

In 2016, an estimated **6.2% of people with MDR-TB** had **extensively drug resistant TB (XDR-TB)**. XDR-TB patients had a **treatment success rate of 30%** in 2014.

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

In 2016, **57%** of TB patients globally had a documented **HIV test result**. In the African region, that has the highest TB/HIV burden, **82%** of TB patients **knew their HIV status**.

Globally, **85% of reported HIV-positive TB patients** in 2016 were **started on antiretroviral therapy**. Nevertheless, only 39% of the total number of people living with HIV estimated to have developed TB in 2016 had been placed on antiretroviral therapy.

#### TB PREVENTIVE TREATMENT

A total of **940 269 people** who were newly enrolled in HIV care were **started on TB preventive treatment** in 2016. In addition, **161 740 children** under five (13% of the 1.3 million children eligible) were known to be provided with it.

### UPTAKE OF DIAGNOSTICS, NEW DRUGS AND REGIMENS

By the end of 2016, at least **28 countries** with a high burden of TB, MDR-TB and TB/HIV had **adopted** national algorithms positioning **Xpert MTB/RIF** as the **initial diagnostic test** for **all people with signs** and **symptoms of pulmonary TB**.

At least **35 countries** have **introduced shorter MDR-TB regimens**.

As part of efforts to improve outcomes for MDR/XDR-TB, **89 countries and territories** had started using **bedaquiline** and **54** had used **delamanid** by June 2017.

#### **RESEARCH AND DEVELOPMENT**

Few diagnostic technologies emerged in 2017 and the evaluation of **GeneXpert Omni**®, which is intended as a close-to-care platform for rapid molecular testing, has been delayed.

There are 17 drugs in Phase I, II or III trials, including eight new compounds, two drugs that have received accelerated or conditional regulatory approval based on Phase IIb results, and seven repurposed drugs. Various new combination regimens are in Phase II or Phase III trials.

There are **12 vaccine candidates** in clinical trials: three in Phase I, and nine in Phase II or Phase III.

New diagnostics, drugs and vaccines are necessary to achieve the ambitious targets set in the End TB Strategy.

## UNIVERSAL HEALTH COVERAGE AND SOCIAL PROTECTION

Surveys of costs faced by TB patients and their households have been completed in seven countries: Ghana, Kenya, Myanmar, the Philippines, Republic of Moldova, Timor Leste and Viet Nam. Results from surveys of costs faced by TB patients and their households reveal a high economic and financial burden due to TB disease.

Of the 10.4 million incident cases of TB globally in 2016, an estimated 1.9 million were attributable to undernourishment, 1 million to HIV infection, 0.8 million to smoking and 0.8 million to diabetes.

#### **TB FINANCING**

The funding required for a full response to the global TB epidemic in low- and middle-income countries is estimated at **US\$ 9.2 billion** in 2017, excluding research and development.

Based on reporting by countries, **US\$ 6.9 billion** was **available** for TB prevention, diagnosis and treatment in 2017, leaving a **funding gap** of almost **US\$ 2.3 billion**.

Overall, **84%** of the US\$ 6.9 billion available in 2017 is from **domestic sources**. However, this aggregate figure is strongly influenced by the BRICS group of countries (Brazil, the Russian Federation, India, China and South Africa). BRICS accounted for 46% of the available funding for TB in 2017, with 95% of their funding coming from domestic sources.

In other countries with a high TB burden, international donor funding remains crucial, accounting for 48% of the funding available in the 25 high TB burden countries outside BRICS and for 56% of funding in low-income countries.

For **research and development**, at least an **extra US\$ 1.2 billion** per year is needed to accelerate the development of new tools.~

BILLION
US\$ REQUIRED
PER YEAR FOR
TB IMPLEMENTATION

BILLION
US\$ REPORTED TO
BE AVAILABLE IN
COUNTRIES FOR
THE TB RESPONSE
IN 2016

84% 16% INTERNA FINANCING DONOR

16%
INTERNATIONAL
DONOR
FINANCING

2.3

BILLION
USS
FUNDING
GAP
IN 2017

1.2 BILLION
US\$ FUNDING GAP
FOR TB RESEARCH IN 2017