



TUBERCULOSIS

Global Tuberculosis Report 2016



49 million lives saved between 2000-2015

TB deaths fell by 22% in the same period



1.8 MILLION TB DEATHS
INCLUDING 0.4 MILLION TB DEATHS AMONG PEOPLE WITH HIV*

TB was one of the top ten causes of death worldwide

TB was responsible for more deaths than HIV and malaria



MDR-TB crisis with gaps in detection and treatment

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



US\$ 2 BILLION GAP

Funding shortfall for TB implementation

Gap of over US\$1 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 2015, and was **responsible for more deaths than HIV and malaria**.

THE BURDEN

In 2015, there were an estimated **10.4 million** new (incident) **TB cases** worldwide, of which 5.9 million were men, 3.5 million were women and 1 million were children. People living with HIV accounted for 11% of the total.

Six countries accounted for 60% of the new cases: India, Indonesia, China, Nigeria, Pakistan and South Africa.

In 2015, **1.8 million people died from TB***, including 0.4 million among people with HIV. The total includes 1.1 million men, 0.5 million women and 0.2 million children.

Globally, the number of **TB deaths fell by 22%** between 2000 and 2015.

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.

*When an HIV-positive person dies from TB disease, the underlying cause is classified as HIV in the International Classification of Diseases system (ICD-10). #MDR-TB is defined as resistance to rifampicin and isoniazid. WHO recommends that all patients with rifampicin-resistant TB (RR-TB) are treated with a second-line MDR-TB regimen.

TB CARE AND PREVENTION

TB treatment **saved 49 million lives** globally between 2000 and 2015.

In 2015, **6.1 million** new TB cases were notified to national authorities and reported to WHO. This reflects a **4.3 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 2014.

DRUG-RESISTANT TB

Globally in 2015, there were an estimated **480 000 new cases of multidrug-resistant TB (MDR-TB)** and an additional 100 000 people with rifampicin-resistant TB (RR-TB) who were also newly eligible for MDR-TB treatment.#

A total of **125 000 patients** (20% of those newly eligible for treatment) were **enrolled** and started on **MDR-TB treatment**, an increase of 13% compared to 2015.

Globally, data show an average **cure rate of only 52%** for treated **MDR-TB patients**.

In 2015, an estimated **9.5% of people with MDR-TB** had **extensively drug resistant TB (XDR-TB)**. XDR-TB patients had a **treatment success rate of 28%** in 2013.

ADDRESSING THE CO-EPIDEMICS OF TB AND HIV

In 2015, **55%** of TB patients globally had a documented **HIV test result**. In the African region, that has the highest TB/HIV burden, **81%** of TB patients **knew their HIV status**.

Globally, **78% of HIV-positive TB patients** in 2015 were **started on antiretroviral therapy**. Nevertheless, only a third of the 1.2 million people living with HIV estimated to have developed TB in 2015 had been placed on antiretroviral therapy.

TB PREVENTIVE TREATMENT

A total of **910 000 people** who were newly enrolled in HIV care were **started on TB preventive treatment** in 2015. In addition, **87 000 children** under five (7% of the 1.2 million children eligible) were known to be provided with it.

UPTAKE OF DIAGNOSTICS, NEW DRUGS AND REGIMENS

By the end of 2015, at least **15 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 **23 countries** in Africa and Asia have **introduced shorter MDR-TB regimens**, which have achieved high treatment success rates (87–90%) under operational research conditions.

At least **70 countries** had imported or started using **bedaquiline** and **39 countries** had used **delamanid** by the end of 2015 for the treatment of M/XDR-TB patients.

RESEARCH AND DEVELOPMENT

In 2016, **four new diagnostic tests** were reviewed and recommended by WHO: one for TB and three for MDR-TB. A next-generation cartridge called **Xpert Ultra** and a new diagnostic platform called **GeneXpert Omni** are in development. Assessment of both by WHO is expected in 2017.

Nine new or repurposed anti-TB drugs are in advanced phases of clinical development.

Thirteen vaccine candidates are in clinical trials, including candidates for prevention of TB infection and candidates for prevention of TB disease in people with latent TB infection.

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

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

Government expenditures on health in 2014 were **less than the WHO benchmark** of at least **6% of gross domestic product (GDP)** in **150 countries**. **Out-of-pocket expenditures exceeded 45%** of total **health expenditures** in **46 countries**, including 11 of the 30 high TB burden countries.

In some of the highest TB burden countries, emerging **national health insurance** and **social protection schemes** need to be **scaled-up** to **reduce medical and other costs for patients**.

TB FINANCING

The funding required for a full response to the global TB epidemic in low- and middle-income countries is estimated at **US\$ 8.3 billion** in 2016, excluding research and development.

Based on reporting by countries, **US\$ 6.6 billion** was **available** for TB prevention, diagnosis and treatment in 2016, leaving a **funding gap** of almost **US\$ 2 billion**.

Overall, **84%** of the US\$ 6.6 billion available in 2016 is from **domestic sources**.

International donor funding dominates in the group of 25 high-burden countries outside the BRICS countries, accounting for 85% of total funding. **Low-income countries** continue to **rely on international donors for more than 90% of their financing**.

For **research and development**, at least an **extra US\$ 1 billion** per year is needed to accelerate the development of new tools.

8.3 BILLION
US\$ REQUIRED
PER YEAR FOR
TB IMPLEMENTATION



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

84% DOMESTIC FINANCING
16% INTERNATIONAL DONOR FINANCING

1.7 BILLION
US\$ FUNDING
GAP
IN 2016

>1 BILLION
US\$ FUNDING GAP
FOR TB RESEARCH IN 2016