

EVERY YEAR 9 MILLION
PEOPLE GET SICK WITH TB.

3 MILLION DON'T GET THE
CARE THEY NEED.

HELP US REACH THEM.



**REACH THE
3 MILLION.**

FIND. TREAT. CURE TB.



LEAVE NO ONE BEHIND.

HELP ACHIEVE ZERO
DEATHS AND PUT AN END
TO THE GLOBAL
TB EPIDEMIC.

What does **missed** mean?

“Missed” is the gap between the estimated number of people who became ill with TB in a year and the number of people who were notified to national TB programmes.



Riccardo Venturi,
Afghanistan

In 2012, 8.6 million people fell ill with TB.
More than 1.3 million people died.

Every year **3 million people** with
TB are missing out on quality care.
The vast majority of people dying
of TB are **missed**.

We need to **reach** them.



**REACH THE
3 MILLION.**

FIND. TREAT. CURE TB.

TB is infectious and spreads through the air. A third of the world's population has been infected by TB bacteria but only one in 10 will fall ill. For those with active TB, the symptoms may be mild for many months, leading to delays in diagnosis and treatment, while spreading the disease to others. Most people with TB can be cured by taking a six-month course of drugs. If treatment is incomplete, TB can come back, often, in a more resistant form. People with TB also suffer discrimination and stigma, rejection and social isolation. While there has been major progress in fighting TB, more needs to be done.

Nearly 22 million lives have been saved since 1995. There has been a 45% decrease in TB deaths since 1990. But we need to do more. **Now.**

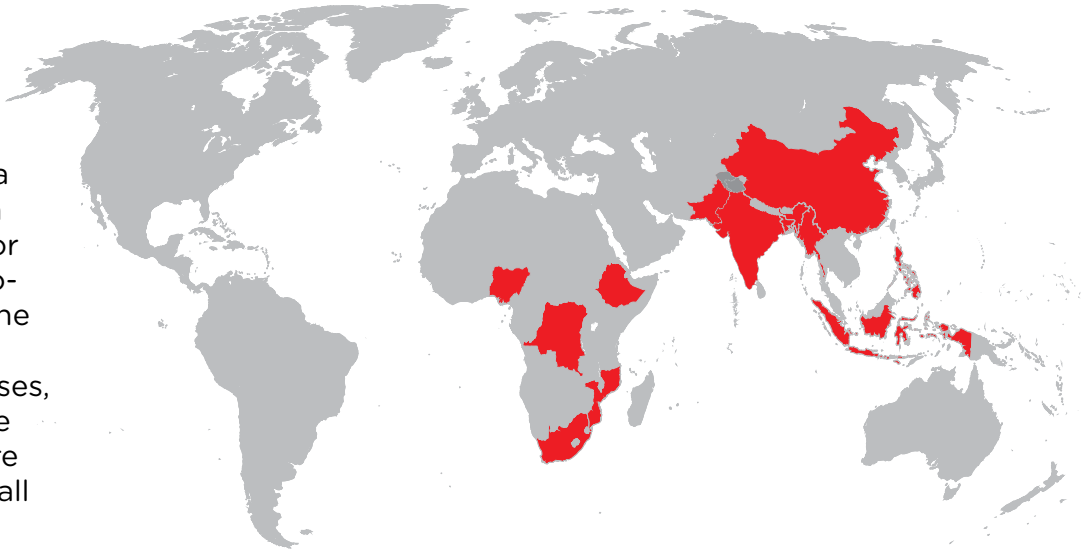


Vanessa Vick,
Uganda

The problem

12 countries carry 75% of the burden of missed cases

South Asia and Africa account for nearly two-thirds of the burden of missed cases, but people with TB are missed in all countries.



About 3 million people are “missed” each year by health systems and many therefore do not get the TB care that they need and deserve. Many of the missed will die, some will get better, others will continue to infect others.

The proportion of missed cases has been nearly the same for the past seven years and the number of missed is accumulating every year.

Vulnerable populations around the globe

Those most vulnerable to falling ill with TB include very poor and/or malnourished/undernourished people, people living with HIV/AIDS, children and women, contacts of people with TB including health workers, migrants, refugees and internally displaced persons, miners and mining-affected persons, persons with diabetes, elderly, ethnic minorities, indigenous populations, substance users and homeless persons.



Carlos Cazalis,
Peru

Why are they missed?

1. People with TB may not access care at all

The reasons are varied, but often are related:

- Limited awareness of TB, as well as why and where to seek care
- Poverty, marginalization and related stigma or discrimination
- Limited number and distribution of health facilities
- Little community engagement and outreach
- Financial barriers such as user fees, transport and lost income
- Conflict or insecurity

2. People with TB may access health services but are not diagnosed

For the average patient, half of the costs of having TB are linked to seeking diagnosis – patients spend time and money, without getting proper diagnosis.

This can be due to:

- Overburdened and undertrained healthcare staff who fail to identify the symptoms or refer for testing
- Diagnostic tests offered are not always the most accurate and appropriate
- Long delays or travel prevent receipt of test results

3. People with TB may get diagnosed but they are not documented

Some people get diagnosed but may not get started on proper treatment or get notified. The quality of care is unknown.

Underlying barriers include:

- Weaknesses in recording and reporting within public systems.
- Non-existent or poor linkages with private practitioners, hospitals, laboratories, or NGO services
- Lack of mandatory case notification by health service providers, or its enforcement



Jacob Cresswell,
Peru



ECDC/Tobias Hofsäss,
Romania

Long path to care Hard to reach populations

In the North-Eastern Nigerian state of Adamawa, lies a temporary Nomadic settlement of about 200 people that has no health services.

Outreach workers meet with the nomadic community leaders and set up opportunities for health screening on market days. Samples are transported to the nearest microscopy labs.



During one of these sessions, Abdul, a three year old child was identified as possibly having TB. Abdul's mother was supported by outreach workers to get to the local hospital where he was diagnosed with TB. Abdul's grandfather who had chronic cough, had died three years earlier, when Abdul was 7 months old. Abdul's mother said that she would go to the herbalist of the community or buy medicine from drug hawkers in the market.

After receiving proper treatment from health workers, Abdul's mother was excited with the improvement in her child's health.

Reaching the missed children with TB

Children account for an estimated half a million new TB cases annually and 74, 000 deaths (among HIV-negative children).

In 2012, only around 300, 000 cases were notified to National TB Programmes. TB in children is often missed or overlooked due to non-specific symptoms and limitation of diagnostic tools.



In 2013, a childhood TB roadmap was launched - **Towards Zero Deaths**, to improve the prevention, diagnosis, treatment and care for children with TB and children living in families with TB. The roadmap includes practical actions that can be taken today at local, national and global levels to make a difference. Tens of thousands of children's lives could be saved if these steps are taken.

Photo credits:

Stephen John, Nigeria (left)
Miguel Bernal, Peru (right)



Sailendra Kharel,
Cambodia

Missed out not missed altogether

Nearly half of the 3 million missed TB cases are in Asia. The majority of these people with TB first go to the private sector, often seeking care from multiple providers in their journey to access TB treatment, such as drug sellers, private practitioners, hospitals etc. When they fall ill, they must weigh the options of waiting in long lines at overcrowded public clinics where they may have to pay a user fee or head to a local private clinic where a doctor can be seen at any time of the day or night and not miss out on a day's pay. Unfortunately the TB management practices of these providers are rarely aligned with national or international standards, and they don't notify people under their care to national health systems for lack of information, incentives or tools.

A typical story from Asia

Hamidah is a low wage worker in the informal sector. She first tried to self-medicate her cough, then went to a local clinic where she was seen by an unqualified, unlicensed practitioner. When her condition worsened, a different provider referred her to a laboratory for a useless and an expensive blood test. A third attempt got her a diagnosis of TB, but she had to pay for her medications and could not afford to keep buying them. Finally, when her symptoms returned, she received free diagnosis and treatment at a private clinic that was linked to the national TB programme. Then she finished treatment successfully.

TB-HIV

The need to integrate care

In 2012 only **50%** of the estimated 1.1 million new cases of people with HIV-related TB were reached globally.

This is of major concern as TB is the leading cause of death among people living with HIV (PLHIV) and untreated TB in PLHIV can lead to death in weeks.

TB is more difficult to diagnose in PLHIV as they are more likely to have lower levels of TB bacteria, making it difficult to identify. The dual stigma associated with TB and HIV, often along with discrimination in health care settings, further limits access, particularly among high risk groups such as people who inject drugs or people with a history of incarceration. Multi-sectoral engagement, integrated service delivery and the scale-up of rapid diagnostics in HIV care settings are recommended and critical to expand access to testing and full TB/HIV care. Accelerated scale-up of rapid diagnostic tests is needed. The test is currently recommended as the primary diagnostic test for TB among PLHIV.

A Crisis

The gap in reaching and treating those ill with MDR-TB

Only **1 in 4** people falling ill with MDR-TB are diagnosed.

Worldwide, only 94, 000 of the 450, 000 people estimated to have developed multidrug-resistant TB (MDR-TB) in 2012 were detected. The lowest proportions of new MDR-TB patients reached were in the South-East Asia region (21%) and Western Pacific Region (6%), though they carry over 50% of the global burden of MDR-TB.

While the pace of expansion of MDR-TB diagnostic testing is increasing, it needs further acceleration. Access to quality treatment is also lagging. Financing of diagnostics and drugs, need to be secured along with a network of well-trained facility-based and community care providers. Stronger links between the public and private sectors will help limit the development of drug-resistance and enable improved access or referral.



Andrew Reed Weller,
Kenya

Simple and Effective **Solutions**

Acknowledging and understanding the problem is the **first** step.

For solutions to be effective and sustainable, actions from grassroots organizations, governments, and the global community are needed. Choosing and prioritizing actions depends on the local barriers identified.

Solution 1

Expand access to care

- Identify and focus on underserved and vulnerable communities
- Improve awareness and education to reduce stigma and increase help-seeking
- Expand community-based care and outreach and empower communities
- Ensure catastrophic out-of-pocket expenses for seeking and receiving care are eliminated, in keeping with aim of Universal Health Coverage
- Increase the number of public, voluntary, private and corporate health facilities that provide quality TB care especially in under-served communities

Ethiopia

Community outreach

In Ethiopia, rural communities face many access barriers for TB care. A recent partnership involved training, engaging stakeholders and communities and active case-finding by female Health Extension Workers (HEWs) who are lay workers with a small government salary to provide basic services to their communities. HEWs identified individuals with TB symptoms in their community and also collected sputum, prepared slides for microscopy and supervised treatment. In a year's time, TB case notification almost doubled in an area of over 3 million people and treatment success improved despite the added workload.

Myanmar

National response planning

Myanmar has framed a national response to its heavy burden of missed TB patients using evidence. It builds on the foundation of an active national TB programme, development partners, and an invigorated agenda for universal health coverage. A recent national survey showed higher TB burden in urban areas, in men, and among the elderly. Over 1% of adults tested in urban areas were found to have active TB disease. Other known risk groups are PLHIV, TB contacts, persons with diabetes, prisoners, miners and ethnic minorities. The response builds on the ongoing roll-out of new rapid TB tests, and more effective use of chest x-ray for TB screening. It involves hospital outpatient departments, use of mobile x-ray units for screening in poor urban areas and selected remote rural areas.

Solution 2

Expand screening and testing

- Enable all healthcare providers to better identify patients with TB symptoms for further testing.
- Perform systematic screening in selected high-risk groups
- Improve diagnostic capacity, use of rapid tests, specimen transport and patient referral systems
- Implement or strengthen outreach to the contacts of persons with TB
- Develop and enable access to new and better screening and diagnostic tools

Afghanistan

Better screening of people attending health facilities

Sometimes people with TB do attend health facilities. However with overburdened and untrained health staff, these people can go unattended. Providing training and systematic screening of people already attending health facilities can yield impressive results. In Afghanistan, staff across 47 health facilities were trained in screening, to ensure good sputum collection. In one year, these facilities found over 70% more cases than the year before by improving the identification of people who should be tested, screening almost one million people in the process.

Moldova and South Africa

New molecular tests can identify more people with TB than smear microscopy

Moldova and South Africa, among other countries are currently working to provide greater access to Xpert MTB/RIF, a rapid diagnostic test, for all people with TB symptoms. South Africa is currently the largest user of Xpert MTB/RIF in the world. There has been a dramatic increase in the numbers of people diagnosed and put on treatment for drug resistant TB. Moldova has been able to identify people with TB more quickly. Almost twice as many people with TB were detected by Xpert than by smear microscopy.



Riccardo Venturi,
Afghanistan

Solution 3

Improve information flow for quality care

- Expand linkages that enable all those who can screen, test, diagnose or treat TB to effectively communicate and serve patients
- Strengthen TB recording and reporting systems so that data on all patients tested and diagnosed by all care providers within and outside TB programmes is available and used effectively.
- Implement mandatory TB case notification systems along with tools and/or incentives that promote notification of all TB cases while maintaining patient confidentiality

Pakistan

Engaging private providers

In many countries, a large proportion of healthcare is provided through the private sector where they have to pay for drugs and may receive substandard care. A systematic situation assessment helped Pakistan. Its multi-pronged approach included not only investing in public-private mix – the public sector supporting private sector to contribute to TB care and control, but also a private-private mix through the promotion of social franchising and social business models. Currently, every fourth case is notified by engaging the private sector. A particularly impressive initiative provides a mix of an incentive-based system to community lay workers who act as screeners using mobile phones in a large number of small general practitioner facilities and a large hospital. It also involves mass media campaigns, and a sputum transport network. As a result, case notifications from the reporting unit in Karachi doubled and it became the second largest contributing unit in Pakistan in one year. In the second year – the same approach was expanded to a second area of the city with equally impressive results.

India and The Philippines

Engaging with big hospitals can bring big gains

In many countries, major hospitals in big cities, serve people who seek care and have signs and symptoms of TB. Efforts by National TB Programmes to build linkages

with these institutions have enabled improved use of national standards of care, information exchange and patient referrals closer to home for treatment follow up and support after diagnosis. In the Philippines, streamlining hospital TB clinics in Manila, increased case notifications by over 13, 000. The model is now being replicated and scaled up nationwide. In India, national and regional task forces set up to involve all public and private medical college hospitals, with related financial aid for operating hospital-based TB clinics, have helped contribute up to 15 percent of national case reporting from these facilities.

China

Strengthening surveillance systems to improve notifications

In China, the National TB Programme provides services principally through a network of TB dispensaries. Yet, a large number of people with TB symptoms seek care from hospitals, although these facilities cannot always enable continuity of care during a full course of TB treatment. Until a decade ago, hospitals were not referring patients to dispensaries, so, many patients were “missed”.

In 2004, in response to the SARS (severe acute respiratory syndrome) epidemic, the government established a national web-based system for mandatory reporting of 37 infectious diseases, including TB, within 24 hours of diagnosis. With this stimulus, hospitals now contribute nearly 40% of TB notifications in China.

The World Bank estimates that each dollar invested in TB yields US\$ 30 in return, making it great value for money.

We need to invest more to find and treat the missed 3 million.

Examples from different countries show that modest investments can yield significant results in finding and treating people among hard to reach populations.

Small interventions can have big impacts for vulnerable groups

In Karachi, Pakistan, community health workers are using electronic scorecards on mobile phones to identify people that need a TB test. At a low cost, health workers identified six times the number of cases of childhood TB compared to previous years.

In the remote villages of Lesotho, health workers on horseback reached out to communities which previously had little or no access to healthcare. The health workers pick up samples from villagers and take them to laboratories for analysis. The test results are reported via text messages and people with TB are provided with life-saving drugs.

In Mbeya, Tanzania, a mobile laboratory offers a rapid diagnostic test (Xpert) and HIV testing in rural areas. The van serves as a test centre during the day and a mobile cinema with educational films at night. Other countries that have adopted this approach include Zimbabwe and Cambodia.

In London, UK, where TB rates are among the highest in Western Europe, an outreach program using mobile digital x-ray units helps homeless people, drug or alcohol users, vulnerable migrants, and people who have been in prison, to access TB care. The team includes former TB patients, health and social workers. Leading evaluating agencies in the UK have assessed the program to be highly cost-effective and suggest it could even save costs.



Samuel George Nuttall,
Lesotho

The promise of new tools

Given recent advances in molecular technologies, research interest in TB diagnostics is at an all-time high. More than 50 companies are currently involved in developing new TB tests including for use at point-of-care. Research pipelines for new drugs and vaccines are also under progress. However, bottlenecks in financing are slowing basic science, diagnostics, drugs and vaccine research. Less than a third of the US\$ 2 billion needed for TB research and development, is currently available.

The opportunity of new strategic plans and Global Fund's new funding model

Reaching the unreached with TB care is at the heart of national efforts moving to 2015 and beyond. Many countries in all regions are working on new national TB strategic plans and setting new targets for driving down deaths and cases. All of this depends on fast progress towards universal access to care and engaging new partners. These plans aim to prioritize interventions, leverage best use of domestic resources, and lay out the financing gaps for TB control. The Global Fund has a new funding model which seeks to help countries fill those gaps, along with bilateral and other sources. The focus is on meeting the needs of the most vulnerable in high-disease burden settings. Inclusive country dialogue and prioritization interventions for impact are fundamental to the new funding model, and to finding the missed 3 million.

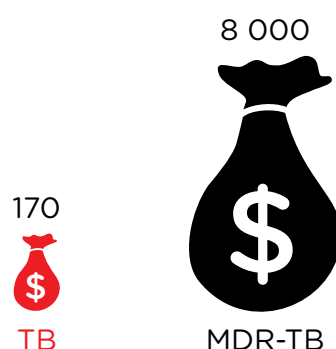
The cost of inaction

There are major health security and economic consequences of failure to act now:

- Ongoing massive number of fully-preventable deaths
- Risk of disease transmission: one patient can infect up to 10 people a year
- Catastrophic costs to patients; grave burden for health systems and economy
- Increasing risk of drug resistance

Cost of TB care vs. MDR-TB care

Myanmar



South Africa



Priorities for **action** on TB

Reaching the **missed** 3 million each year is one element of the wider effort to reach the 2015 target of halving TB deaths.

Governments, civil society, health and development partners, and researchers can:

- Fill the current funding gap of **US\$ 2 billion** per year for TB interventions
- Fill the **US\$ 1.39 billion** annual gap for research and development
- Eliminate access barriers to all recommended TB diagnostics and drugs
- Address TB and MDR-TB as global health security threats
- Support the post-2015 global strategy for TB, and a global plan to end the global TB epidemic.



Jacob Cresswell,
Ethiopia



Samuel George Nuttall,
Lesotho

REACH THE 3 MILLION



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3 MILLION.

FIND. TREAT. CURE TB.

Cover photo credits (left to right):

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Jacob Cresswell, Myanmar

David Rochkind, India

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Stop TB Partnership

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The Bright Sun

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Reach the 3 million.
Find. Treat. Cure TB.

FIND

Every year 3 million people with TB are missed. Failure to reach the missed has devastating human, health and economic consequences.

TREAT

A person with TB infects about 10 people in a year. Without treatment, half of the people with TB die.

CURE

With urgent action and increased investment, we can cure the missed 3 million and ensure we leave no one behind.

ACCESS TO
TUBERCULOSIS CARE
IS A RIGHT.