

The Basics: Tackling an Infectious Disease

Since 2015, tuberculosis (TB) has been *the leading global infectious disease killer*, surpassing even HIV/AIDS. Far from being a disease of the past, TB sickens 10.4 million people and kills 1.7 million people each year.¹ An easily spread, airborne pathogen, TB disproportionately affects people in poor and vulnerable communities and drives many people deeper into poverty.

TB is preventable, it is treatable, and in almost all cases, it is curable, yet the world is failing to deliver quality treatment to 40 percent of people who are sick with TB.² With new, better data showing country by country where these people are, the world has an opportunity to find these missing people and cure their TB.

Who is TB impacting?

- Tragically, ending TB among children has historically been a low priority, and today 90 percent of children with TB go untreated.³ The World Health Organization estimates that one million children develop TB every year. We cannot reach the goal of ending preventable child and maternal deaths if we fail to also address TB.
- Adolescents are also heavily impacted. An estimated 1.78 million young people develop TB every year⁴, and in South Africa and other countries, schools are known to be TB transmission hot spots.
- Pregnant women are especially vulnerable to TB – in fact, a woman’s chance of developing the disease doubles during pregnancy.⁵
- Stigma, shame, and discrimination resulting from TB is a serious problem that makes the epidemic much worse. In some settings women ill with TB are ostracized by their families and communities.
- TB is the leading killer of people living with HIV/AIDS, and of the 10.4 million people who became ill with tuberculosis in 2016, one-in-ten live with



Image: [Stop TB Partnership](#)

¹ [Global Tuberculosis Report 2017](#), World Health Organization

² Ibid.

³ Thornton, J. (2018). Nine in 10 children who die from TB went untreated. *BMJ* 2018;361:k2345

⁴ Snow, K. J., Sismanidis, C., et al. (2018). The Incidence of Tuberculosis Among Adolescents and Young Adults: A Global Estimate. *European Respiratory Journal*, 51 (2) 1702352

⁵ Zenner, Dominik, et al. (2012). Risk of Tuberculosis in Pregnancy: A National, Primary Care-based Cohort and Self-controlled Case Series Study. *American Journal of Respiratory and Critical Care Medicine*, 185 (7)

HIV/AIDS.⁶ Failure to invest in TB control also threatens the substantial gains we have made in the fight against HIV/AIDS.

- Between 2000 and 2016, 53 million lives have been saved from TB because of all global investments, showing an enormous return on investment.⁷

Challenges and Opportunities

In 2018 there are major new opportunities to accelerate progress in the fight against TB. Scientific innovations in diagnostics and treatment, as well as prevention, are giving new hope. And most importantly, political will is increasing, with the first-ever UN High Level Meeting on TB scheduled for September.⁸ To be held alongside the UN General Assembly, the UNHLM is an opportunity for heads of state from around the world to make specific commitments to end the disease.

Finding the Unreached

TB deaths fell globally by 37 percent between 2000 and 2016.⁹ While there has been some progress on TB, unfortunately, the rate of new cases of TB is falling quite slowly across all countries – only about 1.5 percent a year.¹⁰ The response to TB has been far too passive, with patients expected to come to a clinic when they feel unwell or suspect they may have TB. Active case finding is essential, yet it requires more resources. Greater funding can help make it the norm rather than the exception.

At the UN High Level Meeting, countries are expected to commit to reaching the unreached, with specific country targets. Ten countries account for 76 percent of the unreached or “missing” people with TB: Bangladesh, China, Democratic Republic of the Congo, India, Indonesia, Nigeria, Pakistan, the Philippines, South Africa, and Tanzania.¹¹

“There are people who are invisible in all of our countries, people who fall through the cracks in the health system, and people who cannot complete treatment”
- Dean Lewis
TB survivor and advocate, India



Image: [Stop TB Partnership](#)

6 Tuberculosis Key Facts, World Health Organization, June 2018, <http://www.who.int/news-room/fact-sheets/detail/tuberculosis>
7 Ibid.

8 United Nations Calendar, <https://www.un.org/pqa/72/event-latest/fight-to-end-tuberculosis/>

9 [Global Tuberculosis Report 2017](#), World Health Organization

10 [Global Tuberculosis Report 2016](#), World Health Organization

11 Friedrich, M. (2017). Tuberculosis Update. [JAMA. 2017;318 \(23\):2287. doi:10.1001/jama.2017.18477](https://doi.org/10.1001/jama.2017.18477)

Increasing Drug Resistance

Approximately 600,000 people per year develop a form of TB that is resistant to multiple antibiotics, called multi-drug resistant TB (MDR-TB).¹² Once on treatment, a patient quickly becomes non-infectious, yet only 22 percent of patients with drug-resistant TB receive any treatment.¹³ An even worse form of drug-resistant TB is called extensively drug-resistant tuberculosis (referred to as “XDR-TB”), a strain of TB that is very difficult and expensive to treat.

A Patient’s Story

“I worked in a children’s hospital ward as a dietitian where I contracted drug-resistant TB, diagnosed by a lung biopsy. The medication to treat the TB caused me to go into a coma due to liver failure—which nearly killed me. For 75 days, I was hospitalised. I was completely bedridden and suffered physically, vomiting and having diarrhoea. Emotionally, I struggled to cope...If I felt so overwhelmed despite having support from loved ones, kindness of hospital staff and access to good medical care, how do the majority of people with TB, who do not even have food on the table to eat get through this? All representatives of member states, Office of the General Assembly and co-facilitators, let us stop this suffering! The truth is, any of you could have been in my place, as TB spreads through the air and can affect anyone. I am young, and as a future mother, want my children to have a bright future - it is critical that this unique moment of having a UN HLM on TB is effective to bring change.”



Source: TB Proof, [Ingrid Schoeman](#)

– Ingrid Schoeman, TB Proof, South Africa

Innovative Approaches to Save Lives

A new TB medication, called bedaquiline, has been developed, which is an antibiotic that boosts an MDR-TB patient’s chance of survival from approximately 50 to 80 percent. USAID is assisting countries to access it through a partnership with Johnson & Johnson. About 24,000 patients are receiving this new medication, but this is still a small fraction of those in need.

Rapid molecular diagnosis, such as the new GeneXpert machine, is much more accurate than the microscope, but it is still greatly underutilized. Molecular diagnosis, which can also show whether the TB is drug resistant, must become the standard approach for all forms of TB, despite greater costs per test. A new, easier-to-take treatment for latent TB is also becoming available, and there is a new pediatric formulation to treat drug-sensitive TB.



[GeneXpert Omni Machine](#)

¹² Friedrich M. Tuberculosis Update 2017. [JAMA. 2017;318\(23\):2287. doi:10.1001/jama.2017.18477](#)

¹³ World Health Organization, Drug-resistant tuberculosis, June 2018 <http://www.who.int/tb/areas-of-work/drug-resistant-tb/en/>

The Global Fund in the Global Fight

Since its inception in 2002, the Global Fund to Fight AIDS, Tuberculosis, and Malaria has saved the lives of over 22 million people from these infectious diseases. By supporting countries to test and treat over 17.4 million people for TB, the Fund has been a major player in driving down global TB deaths in high-burden countries.¹⁴ The Global Fund resources have also allowed countries to roll out the new diagnostics and drugs to better find and treat MDR-TB cases.

The Global Fund is a partnership between governments, civil society, the private sector and people affected by the diseases. The Fund provides more than 65 percent of all international financing for TB and has disbursed \$5.8 billion to fight the disease since the end of 2016.¹⁵ The Global Fund is active in over 100 countries and, in countries with a high burden of TB, has worked to ensure the TB-HIV response is better coordinated to fight the deadly risk of co-infection. The Global Fund is also currently providing support for over 11 million people with HIV to be on life-saving antiretroviral drugs.

Historically, the United States is the leading donor to the Global Fund and every dollar the U.S. provides to the Fund leverages \$2 in additional donor support. The U.S. current annual appropriation for the Global Fund is \$1.35 billion for fiscal year 2018.



Image: [The Global Fund](#)

How is the US Government Helping?

The US has been making a very important contribution to the fight against TB, through funding for the Global Fund, as well as PEPFAR (the President's Emergency Plan for AIDS Relief is the U.S. government's bilateral program to fight global HIV/AIDS) to fight TB-HIV coinfection, and through bilateral TB programs at the U.S. Agency for International Development (USAID).

USAID strengthens the capacity of national TB programs in 23 focus countries to provide high-quality prevention, diagnosis, and treatment services. This funding is having a significant impact. The latest report shows that in the 23 countries with bilateral USAID TB funding, the rate of new

¹⁴ The Global Fund Overview, <https://www.theglobalfund.org/en/overview/>

¹⁵ The Global Fund, <https://www.theglobalfund.org/en/tuberculosis/>

cases of TB has fallen by almost 20 percent since 2000.¹⁶ That is a faster rate of reduction compared to countries that are not US focus countries.

Tuberculosis kills more people than any other infectious disease, yet current USAID bilateral TB funding represents just 3 percent of the \$8.69 billion in funding provided to USAID and State Department global health programs. Congressional action to boost funding levels is required to build the global momentum on TB. The stakes are high: recent reports from USAID show that the U.S. cannot reach the next stage of its plan to find and treat people with MDR-TB without additional funding that rises above current levels.

U.S. investments in tuberculosis are saving lives and building capacity. USAID TB funding:

- **Lowers costs:** USAID supports the Global TB Drug Facility, which improves the market for MDR-TB medications and strengthens the emergency warning system for stock-outs of drugs. Already, with USAID efforts, the cost of MDR-TB regimens has declined 50 percent since 2012.
- **Implements patient and community-centered approaches:** USAID supports patient-centered approaches to make it easier for patients to get proper treatment. Additional resources can support efforts to find the “missing millions.” USAID has already significantly increased case notification, for instance contributing to a 20 percent increase in the Philippines.
- **Supports the Global Fund to Fight AIDS, Tuberculosis, and Malaria:** Bilateral TB funding at USAID supports countries to develop strong applications to the Global Fund and better manage their grants.
- **Strengthens the system:** USAID strengthens health systems and laboratories in affected countries, as well as reduces TB risk in health care facilities. In 2016, USAID provided training in TB for 46,000 health workers.
- **Supports crucial research:** Some treatments for drug-resistant TB can cause permanent nerve damage and hearing loss. USAID is investing in research on improved, faster-acting regimens and seeing positive results.
- **Contributes to TB elimination in the U.S.:** The U.S. reports TB cases every year in every state. The CDC reports over 1,000 cases of MDR-TB occurred in the U.S. from 2006 to 2016, severely straining state public health budgets. Treating just one case can devastate the budgets of a state health department. We cannot end TB in the U.S. until we stop it globally. Targeted investments can make the difference; WHO reports that 10 high MDR-TB countries make up more than 60 percent of the global MDR-TB burden.

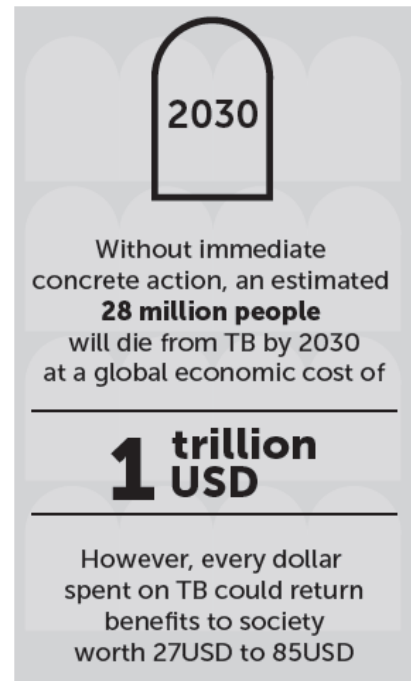


Image: [Stop TB Partnership](#)

¹⁶ USAID, Committed to Ending TB: Tuberculosis Report to Congress February 2018, <https://www.usaid.gov/sites/default/files/documents/1864/USAID-TB-ARTC-2018-508.pdf>

Fiscal Year 2019 Appropriations

This spring, all members of Congress had the opportunity to weigh in to leadership of the congressional committee that makes funding decisions for the critical anti-poverty programs in the international affairs account. RESULTS advocated from January to June to urge both House and Senate members to weigh in through submitting personal requests in writing and by speaking personally to the Chairs and Ranking Members of the State and Foreign Operations subcommittee of Appropriations. You can read more on our [Appropriations webpage](#) or on the [updated blog](#) following actions to these leaders that oversee foreign aid funding.

Members of Congress that are part of the select group known as the State and Foreign Operations Subcommittee of Appropriations in either the [Senate](#) or the [House of Representatives](#) are particularly important in fighting the proposed funding cuts to foreign aid from the administration. This fiscal year 2019 (FY19), RESULTS supports funding in the State and Foreign Operations Appropriations bill for Bilateral Tuberculosis. As any final negotiations move ahead between the House and Senate bills, RESULTS supports the higher House funding levels for TB in FY19.

Fiscal Year	FY15	FY16	FY17	FY18	RESULTS' FY19 Request	President's FY19 Request	House FY19*	Senate FY19*
Bilateral Tuberculosis	\$236 million	\$236 million	\$241 million	\$261 million	\$400 million	\$178.4 million	\$302 million	\$275 million

*As of the end of June 2018, the FY19 spending bills for foreign affairs have passed favorably out of the full Appropriations Committees in both the House and Senate.

The Stories

Whether you are speaking with members of Congress, hosting an outreach event, or looking for some inspiration, use the links below to find stories to help when advocating for investments in funding for tuberculosis research, prevention, and treatment. Below are stories and videos that inspire us into action:

Inspiring Stories

- [Diagnosing and Treating Children with Drug-Resistant TB](#)
Community-based treatment saved the life of seven-month-old Rahat from Dhaka—an outcome that should be possible for every child with TB.
- [Health Workers on the Frontline Against TB](#)
Daniel, a clinician in Tanzania, trains health care workers in his community to recognize symptoms of TB—the critical first step to ensure proper care.
- [Comprehensive Supports Improve TB Treatment Outcomes](#)
Mother of three, Muka, from the Democratic Republic of the Congo received the supports she needed to successfully undergo TB treatment while pregnant.

- [UNAIDS Calls for Bold Action to End TB and AIDS](#)
TB causes one in three AIDS-related deaths, so it is imperative that the two diseases, and patients who are co-infected, receive proper attention.
- [The UN High-Level Meeting and the Opportunity for Advocacy](#)
RESULTS Canada volunteers are featured for their efforts to engage the Canadian government around the UN High-Level Meeting on TB. Now it's our turn!
- [When my brother got TB, doctors said there was no hope. How could that be?](#)
A patient in California is diagnosed with extensively drug-resistant TB—his family calls for more research and new drugs to treat the disease at home and abroad.
- [How Prison Conditions Fuel the Tuberculosis Epidemic](#)
“Sometimes you can go as long as a month waiting to go to the clinic...They don't open the door in the cell at night for anything.” Prison conditions are making tuberculosis much worse, but some countries are moving forward with reforms.
- [In India, Survivors of TB are at the Forefront of the Movement to End the Disease](#)
“We are quick to blame the patient. We never try to understand why they abandon treatment, hide their TB. Treatment is long and has toxic side effects. It limits one's ability to earn or work.”

"It is a sad statement that childhood tuberculosis still kills as many children as it does. But this is an eminently solvable problem. All the world needs is a more aggressive commitment to end the disease. That would make this tuberculosis survivor, and millions of others like me, very happy."

Archbishop Desmond Tutu, 2013™

Source: UNICEF, [Change the Game: An agenda for action on childhood tuberculosis](#)

Inspiring Videos

- [Begimai's Story: From Sufferer to Supporter](#)
After contracting TB at the age of 15, Begimai survived multidrug-resistant TB. Now she supports other patients to complete their courses of treatment.
- [An Inside Look at TB in Uganda](#)
Stories from patients and health workers provide an up-close look at the reality of TB in a high-burden country.
- [My Journey Fighting TB: Sophia's Story](#)
Namibian TB survivor Sophia learned that you can be exposed to TB anywhere, and now she volunteers to help other patients and educate people in her community.
- [Powerful Photographs of Extensively Drug-Resistant TB](#)
TED Prize winner James Nachtwey shares his award-winning photographs to bring attention to the global tuberculosis crisis—and the fact that it is preventable.