

# How the U.S. can transform the fight against Tuberculosis

# As COVID-19 disrupted health systems around the world, an ancient killer once again found its footing.

While Tuberculosis (TB) is often thought of as a disease of the past, it remains a major global health threat, and cases and deaths are back on the rise. The COVID-19 pandemic has made us all intimately familiar with the challenges of responding to infectious respiratory diseases. But COVID is not the only challenge the global health community faces. Due to a combination of constant under-funding and the acute need for COVID resources, TB has recently become an even greater danger to low-income communities.

Because TB and COVID are both respiratory diseases, they share a lot of overlap in supply chains, equipment, and expertise. Throughout 2020 and 2021, TB researchers, medical professionals, and facilities were drafted into the frontlines of the fight against COVID. That mobilization made an enormous difference for COVID patients, saving lives and leading to the development of treatments and vaccines. But it came at the expense of the core TB response and put unprecedented pressure on health systems around the world.

The pandemic damaged the already under-funded TB response. Global progress against TB was already slow and fragile. Now, a <u>new report from the World Health Organization (WHO)</u> shows that TB incidence rates and mortality increased in 2020 and again in 2021. This means that we have lost over a decade of progress on TB, putting high-risk countries and communities in danger.



Over 10.5 million people fell ill with TB in 2021, and 1.6 million died. These cases disproportionately affect low-income and otherwise marginalized communities, and are a key driver of poverty.

## **Understanding Tuberculosis**

TB is a respiratory disease caused by bacteria. It most commonly affects the lungs, but there are many forms of TB with varying symptoms and treatments. The bacteria is spread through the air when people with active TB cough or sneeze. People infected with the TB bacteria have a 5-10% chance of developing an active case of the disease. If they do not become ill, they have a "latent" TB infection—meaning the bacteria is lying dormant in their

system. Then they are at risk of developing an active TB infection in the future, especially if they become immunocompromised. So, people living with HIV/AIDS or autoimmune conditions are more likely to experience active infection and serious or deadly outcomes.

TB is a complex disease to diagnose and treat. Many of the classic symptoms of TB—coughing, chest pains, fever, and fatigue—can also be signs of other diseases. But rapid molecular diagnostic tests and chest x-rays can help doctors diagnose active TB cases.

TB is treatable and, most often, curable. For most patients, a 6-month course of antibiotic drugs is needed to completely treat their infection. This long process is difficult for patients to maintain and may come with medication side effects. But if patients stop taking their drugs too soon, or take them incorrectly, the remaining bacteria may develop drug resistance and become much harder to treat.

Patients with multi-drug resistant (MDR-TB) or extensively drug resistant (XDR-TB) infections require more onerous drug regimens, which can last up to 20 months. This grueling schedule is taxing on patients and the medical professionals who watch their patients take their medications during directly observed therapy (DOT). Treating MDR-TB is difficult and expensive, and <a href="https://www.who.ne.ne.gov/who-reports">WHO reports</a> that only about one in three people with drug resistant TB accessed treatment in 2020.



IMAGE: (Global Fund) Qorabaeva, 21, is being treated for tuberculosis at the regional TB hospital in Fergana, Uzbekistan. She will be supervised every day by health care personnel in taking her medication for the first few months, and then continue the treatment at home. Thanks to Global Fund support, treatment for TB is provided free of charge. The hospital also conducts outreach activities in schools and the local community to raise awareness and reduce stigma around the disease.

### **Tuberculosis and Poverty**

For decades, TB was stuck at the bottom of political priority lists, allowing it to climb to the top of the list of global infectious killers. And that burden does not fall evenly. **TB disproportionately impacts people who are already in poverty and otherwise pushed to the margins**, largely in countries facing the consequences of colonialism, resource extraction, and unjust global lending policies.



≥500 No data Not applicable

Over <u>98 percent</u> of TB cases and deaths are in low- and middle-income countries, and marginalized communities are disproportionately affected.

The vast majority of TB cases are curable, but in resource-poor areas treatment often comes too late. As a result, TB is the leading infectious disease killer in many low-income countries.

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#### Estimated TB incidence rates, 2021

Source: World Health Organization <u>2022 Global Tuberculosis Report</u>

TB is an intersectional issue that touches many of RESULTS's other priorities. Lack of access to housing leads to families living in unsafe conditions with inadequate ventilation, which can increase their chances of catching and spreading TB. Malnutrition also increases the chances of contracting TB and can worsen symptoms and outcomes. Groups that are most likely to suffer from malnutrition like young children, pregnant people, and adolescents are the least likely to receive treatment, increasing the chance that they will suffer debilitation or death from the infection.

Access to TB treatment is also inequitable. For patients who need DOT, the cost of traveling to clinics can force people to drop out of treatment. TB patients with active cases face quarantining and isolation. This often means missing work for months while receiving their treatment. When TB hits breadwinners in their prime, it can put their entire family at risk of further malnutrition, homelessness, and poverty.

WHO reports that over 48% of TB patients and their households face catastrophic health care costs. That number soars to 82% of patients with DR-TB. WHO defines

catastrophic costs as a total cost of direct medical expenses and indirect expenses like lost income above 20% of household income. Because this is an average across many countries, these percentages are likely much higher in communities already in poverty.

### TB systems: The frontlines of the global COVID response

Before COVID-19 struck, the global picture on TB was cautiously brightening. In 2018 at the United Nations High Level Meeting on Tuberculosis, the global community set ambitious goals to end the TB epidemic by 2030. And with affected communities leading the way, countries like the U.S. and global organizations like the Global Fund to Fight AIDS, Tuberculosis and Malaria stepped up to invest in reaching and treating every person with TB, preventing its spread, and scaling up new innovations like diagnostics and drugs.

Current TB treatment is shorter, with fewer side effects, and had been reaching more patients than ever before. The number of people with TB who were missing out on care declined by 1.4 million between 2015 and 2019. And between 2000 and 2019, <u>63 million lives</u> were saved from TB. But COVID derailed and has even reversed this progress.



The Stop TB Partnership estimates that delaying or failing to achieve the goals will mean **43 million people developing TB, leading to 6.6 million deaths by 2030.** 

This will cost communities and families their loved ones, and upwards of \$1 trillion in economic loss. Humanity would lose a projected 234 million disability-adjusted life years.

This moment of enormous public health challenge is an opportunity to create a better global health system. Investments in finding and treating all forms of TB will not only help stop this deadly disease but will better prepare the world for any future pandemics. In many countries, existing TB programs formed the backbone of national and local COVID responses. Infection control, lab capacity, respiratory disease expertise, active outreach, and contact tracing were all built in TB programs.

Tapping into TB-fighting systems and infrastructure added quick capacity to fight COVID-19, but it placed an immense burden on already-stretched national TB programs that were also facing lockdowns, supply chain challenges, and other disruptions.

In high-prevalence countries, TB patients struggled to get diagnosed, receive treatment, and follow their grueling drug regimens. Some countries are beginning to recover, but **WHO estimates that around 4 million people are still "missing" from treatment**, **going undiagnosed and untreated because of lack of access.** These disruptions in TB treatment could lead to more drug-resistant, and often more deadly, forms of the disease.

#### **TB Counseling in South Africa**

#### Meet Nombasa Krune-Dumile



A drug-resistant TB counselor in South Africa who has dedicated her life to supporting TB patients says COVID-19 has devastated health systems and upended normal operations of her work. <u>See video.</u>

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Image: Global Fund/Karin Schermbrucker

#### **Access to TB Services in India**

#### Meet Birsa Manjhi



Thanks to a man and his motorcycle, rural TB patients in India's Jharkhand State did not have to worry about running out of medication during the COVID-19 pandemic. Birsa is a TB survivor and part of a group of volunteers helping their communities better access TB services.

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Image: REACH

### Investing in smart ways to fight airborne pathogens

This moment of enormous public health challenge is an opportunity to create better systems that can fight tuberculosis and other airborne pathogens to come. When smartly done, the same systems could support both contact tracing for COVID-19 and active case findings of TB. India, for example, started bidirectional testing — when a person was tested for one, they were automatically tested for the other. At a national scale, this type of collaboration could have an enormous impact on the response to both diseases. Investments in infrastructure and systems for one disease buoy progress against all diseases.

But funding for research to create a true "point of care" test is desperately needed for fighting TB. While there have been advancements in simple to use and quick to yield results tests that could transform diagnostic accessibility, few have been piloted much less brought to scale. While there have been advancements in simple to use and quick to yield results tests that could transform diagnostic accessibility, few have been piloted, much less

brought to scale. These investments are needed to reduce the lost time that TB patients too often endure between first reporting to a health system and finally getting diagnosed.



IMAGE: (The Global Fund / David O'Dwyer) Tackling MDR-TB in the heart of Abidjan, Côte d'Ivoire: Maxime Djangone Bi is a social worker, trained and working as part of the Ministry of Health's National Anti-Tuberculosis Plan. He insists that patients follow their treatment plan and take each prescribed drug.

The challenge is that TB programs were already hugely underfunded, and COVID further diverted resources. There are two funding institutions that support country-led TB programs in high-burden, low-income countries: USAID – the U.S. Agency for International Development – and the Global Fund to Fight AIDS, Tuberculosis, and Malaria. They both can play critical roles to support locally led TB programs, rapidly adapt and restore critical TB services, prevent a dangerous reversal of progress, and strengthen TB programs for the future.

The U.S. could soon take critical actions to impact global TB efforts and continue building the systems needed for future pandemics. In fiscal year 2024 (FY24), the U.S. government should increase its annual USAID bilateral TB budget to \$1 billion, and maintain its pledge to appropriate \$2 billion to the Global Fund, and a plan set out by the End TB Now Act to ensure that funding has the greatest possible impact. With this level of funding the U.S. could have a transformative impact on TB efforts globally.

## **Opportunities to Take Action in 2023**

## **USAID:** Making a difference in the global fight against TB

U.S. investment has driven incredible progress against TB in the hardest hit countries. Backed by strong bipartisan Congressional support, USAID leads the U.S. government's bilateral global TB efforts. Their programs support <u>24 priority countries</u> to reach, treat, and cure every person with TB, and to prevent new infections.

With a current budget of \$394.5 million in FY23, USAID <u>has strengthened TB programs</u> in 23 of the highest burden countries and provided technical assistance to 32 others.



Between 2000 and 2020, **TB incidence decreased by 31%** and **TB deaths decreased by 44%** in the Global Fund's 23 priority countries.

USAID prioritizes innovative strategies and tools, and played a key role in expanding the availability of medicines to treat multi drug-resistant TB (MDR-TB) in the most vulnerable communities. By backing the Global TB Drug Facility, USAID enabled a 60% drop in prices for MDR-TB treatment since 2013—helping more countries and patients access these lifesaving medicines than ever before.

USAID also improves the effectiveness of Global Fund investments by providing targeted technical assistance to national TB programs.

## What would an annual \$1 billion USAID TB budget buy?

We know that U.S. investment has contributed to incredible progress to reach, treat, and cure more people from TB. Yet USAID TB funding in 2021 represented just 3% of the \$9.1 billion provided to USAID and State Department global health programs.

As it resumes its place as the deadliest infectious disease in the world, TB should be a centerpiece of U.S. global health leadership and pandemic response. Civil society and allies in Congress are calling for a \$1 billion annual TB budget for USAID to restore critical TB services and strengthen programs for the future.

We only need to look at the President's Emergency Plan for AIDS Relief (PEPFAR) or the President's Malaria Initiative to see that U.S. commitment on a global health issue can have a massive impact.



IMAGE: (The Global Fund / Tanya Habjouqa) Haijar, 2 years old, is a Syrian refugee living in the Zaatari refugee camp in Jordan. She contracted TB when she was just one, but today she is very happy and healthy. Syrian refugees in Jordan receive prevention education, diagnosis, and treatment for TB through a special initiative that is financed by the Global Fund.

#### With an annual \$1 billion TB budget, USAID could:

- Support local health workers and programs to save more lives from TB and recover momentum against the disease. Investment in this infrastructure expands access to treatment for all forms of TB, including MDR-TB, increases prevention, , and catalyzes research and development. Investment in this infrastructure expands access to treatment for all forms of TB, including MDR-TB, increases prevention, and catalyzes research and development.
- Expand its list of priority countries, helping even more national TB programs fight both COVID-19 and TB.
- Expand the integration of TB and COVID-19 testing networks in priority countries by training staff on bidirectional testing, ensuring adequate diagnostic equipment and facilities, and building back up the human resources available to fight both diseases.
- Channel additional resources to community-based organizations, which are now even more important for maintaining and improving TB services.
- Address urgent procurement and supply challenges affecting access to TB medications, as well as diagnostics needed for both TB and COVID-19.

This relatively modest level of annual investment could have a transformative impact on TB efforts globally, while creating health systems that will help prevent future pandemics.

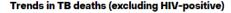
### The Global Fund to Fight AIDS, Tuberculosis and Malaria

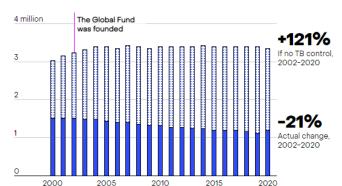
Two decades ago, the world came together to fight back against the AIDS crisis, pooling its resources and creating the Global Fund. Since then, the U.S. has played a leading role, providing one-third of the Global Fund's financial resources. This international partnership has helped save 50 million lives from AIDS, TB and malaria, but has also felt the effects of the COVID pandemic.

In 2020, for the first time in the history of the Global Fund, progress against all three diseases tumbled backwards. HIV testing fell by 22 percent and prevention services by 11 percent. Progress against malaria is also faltering—new estimates suggest a child is dying every minute as a result of this disease.

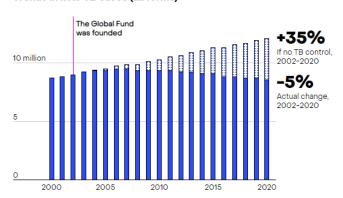
Fortunately, the Global Fund has a proven track record and a plan to get back on track. Since 2002, they have built a locally-driven, country-led partnership that prioritizes human rights and collaboration between governments, civil society, and communities affected by the diseases.

Their work has reduced AIDS-related deaths by 70%, TB deaths by 21%, and malaria deaths by 26%. In 2021 alone, the Global Fund treated 5.3 million people for TB, while also using their COVID-19 Response Mechanism (C19RM) to provide support to low- and middle-income countries for COVID-19 tests, treatments, and personal protective equipment (PPE).





#### Trends in new TB cases (all forms)



Source: The Global Fund Results Report 2022

### What would \$2 billion for the Global Fund buy?

The U.S. is the Global Fund's largest donor, and securing funding is more important than ever. In September 2022, the Biden administration hosted the Global Fund's <u>seventh</u> replenishment pledging conference, where heads of state met to pledge almost \$16 billion to the Global Fund over the next three years. Congress agreed to approve \$2 billion in FY23—our maximum contribution—and we aim to secure that same pledge again this year.

Because of legal caps on our contribution to the Global Fund, the U.S. cannot provide more than 1/3 of the total funding to the Fund. So it's important that other countries and private donors across the world also step up to increase the total replenishment pledge to \$18 billion. Securing \$2 billion from Congress in FY24 will demonstrate the U.S.'s continued commitment to fighting these diseases of poverty and can leverage action from other countries to increase their pledges as well.

#### A fully funded Global Fund could:

- Save 20 million lives and reduce the mortality rate by 64 percent across the three diseases by 2026.
- Prevent more than 450 million infections or cases of HIV, TB, and malaria.
- Reinforce health systems for pandemic preparedness, investing in health workers, laboratories, supply chains, and centering community-led systems.
- Yield a return on investment of 1:31—with every \$1 invested in fighting the three diseases resulting in \$31 in health gains and economic returns.
- Reduce health inequities, by addressing gender and human rights -related barriers to care.

## **RESULTS' FY24 request and funding history**

	FY20 Enacted	FY21 Enacted	FY22 Enacted	FY23 House bill	FY23 Senate bill	FY23 Enacted	RESULTS FY24 Request
USAID Bilateral Tuberculosis	\$310 million	\$319 million	\$371 million	\$469 million	\$400 million	\$394.5 million	\$1 billion
Global Fund to Fight AIDS, TB and Malaria	\$1.56 billion	\$1.56 billion	\$1.56 billion	\$2 billion	\$2 billion	\$2 billion	\$2 billion

## How can we use this funding effectively?

In addition to increasing annual funding for USAID's TB programs, we need to make sure that the money is used effectively. The End TB Now Act requires the U.S. to focus on the most impactful supports and partnerships.

This bipartisan bill, first introduced in the 117<sup>th</sup> Congress by Senators Bob Menendez (D-NJ) and Todd Young (R-IN), and Representatives Ami Bera (D-CA) and Maria Salazar (R-FL), also addresses the impact COVID-19 has had on global TB control efforts.

#### The End TB Now Act:

- Requires the U.S. to establish bold goals for reaching the most vulnerable populations to detect, cure and prevent all forms of TB globally.
- Strengthens U.S. bilateral coordination with global organizations, including the Global Fund to Fight AIDS, TB, and Malaria, to develop and implement a comprehensive global TB response.
- Catalyzes support for research and development (R&D) of new tools to prevent, diagnose, treat, and control TB, including drug-resistant strains of TB worldwide.
- Improves the capacity of countries and affected communities with high burdens of TB to implement programs to prevent and control the spread of TB.
- Requires annual reporting to Congress on U.S. TB activities and their impact, including progress in recovering from the negative effects of COVID-19 on TB.
- Evaluates the performance and the focus on impact of TB programs that are supported by U.S. bilateral assistance funding.

During the 117<sup>th</sup> Congress, the bill received bipartisan support and passed both the House Foreign Affairs Committee and the Senate Foreign Relations Committee. This year, we aim

to reintroduce in both chambers and pass the bill quickly so it can go into effect as soon as possible. The world is not on track to meet global goals on TB—but strong U.S. leadership can help change that. The End TB Now Act is a great step towards ensuring funding effectively supports communities marginalized by poverty around the world.

## **United Nations High Level Meeting**

In September 2023, we expect there to be a United Nation High Level meeting (HLM) on TB. At that conference, the global community has an opportunity to set bold new goals that create country-led plans to prevent, treat, and cure all forms of TB.

As a leader in the global health community, the U.S. must take advantage of this opportunity by sending high-level representatives and urging other countries to contribute to the ambitious planning. Our government should lead the effort to secure increased resources and accountability from other countries and private donors, building on their work during the Global Fund replenishment last year. RESULTS advocacy, along with that of our international partners, will be key to a successful HLM and building global political will for ending tuberculosis once and for all.