Unitaid
SAVE LIVES FASTER

Tuberculosis

Tuberculosis (TB) is the second leading cause of death by infectious disease after COVID-19 – causing more deaths than HIV and malaria combined.

Though the TB response has begun to recover from the catastrophic disruptions and delays caused by the COVID-19 pandemic, new infections have continued to rise and drug-resistance remains a considerable threat to efforts to curtail the spread of disease. Children are at the heart of this crisis, facing the lowest rates of detection and some of the highest rates of death from TB.

In 2022, more than 10 million people fell ill with TB, yet only about 7 million were diagnosed, leaving more than 3 million people untreated and at risk of spreading the disease to others. It is estimated that only one in three children with TB gets diagnosed and nearly all those who die were never treated.

Drug-resistant TB (DR-TB), a leading cause of death from antimicrobial resistance, is more costly and difficult to treat, and severely complicates efforts to halt transmission and control the disease. More than 400,000 people have DR-TB but only two in five access treatment.

New tests, medicines, and preventive therapies can turn the tide on TB, but their impact will be limited if we do not urgently address access barriers such as affordability, availability and accessibility.

How we work

At Unitaid, we save lives by making new health products available and affordable for people in low- and middle-income countries. We identify innovative treatments and tools, help tackle the market barriers that are holding them back, and get them to the people who need them most – fast.

We are committed to ensuring new TB medicines can benefit all populations, that better preventive treatments reach those at highest risk, and that testing is quick, accurate, and available where it is needed most so people do not continue to fall ill and die from a preventable and curable disease.

Photo: A doctor checks up on a patient who has completed MDR-TB treatment in Lima, Peru. © Unitaid

Putting children at the center of our response: Because diagnosing and treating TB in children is more complex, their care had been largely neglected. Our work helped launch the first TB medicines for children – fruit-flavored, water-dispersible tablets that include guidance on accurate dosing for children of different weights and ages – a long over-due advance in care. Additional work is underway to make better formulations available to treat children with DR-TB and prevent illness in children who have been exposed to TB.

But identifying TB in children remains a critical barrier to treatment. Many healthcare centers do not systematically screen sick children for TB and, because children often cannot produce the sputum sample required for testing, many children with TB aren't diagnosed even when they are screened. Our work has demonstrated effective ways to integrate TB services for children into community-level health settings and helped advance diagnostic methods that allow alternative methods for diagnosing children with TB using samples that are easier to collect.

Advancing TB prevention: Because a person can be infected with the TB bacteria for months or even years before developing TB disease, catching the infection early is critical to averting illness and death and halting transmission. We have helped quickly expand access to shorter, effective TB preventive treatments by negotiating price reductions of 80%; working with countries to pilot implementation; driving the research needed to ensure all populations – including children, pregnant women and people living with HIV – could safely use new medicines; and increasing quality generic supplies of the drugs.

Today, people in 78 countries can take best-in-class TB preventive treatments, compared to only one country when our work began.

Tackling drug resistance: For decades, MDR-TB was treated with a long and toxic combination of drugs lasting up to two years, which made treatment completion costly and difficult. Meanwhile, diagnostic tools for identifying resistance were scarce and traditional methods could take months to return a result, slowing access to life-saving treatment.

We have been integral in getting diagnostic technologies that can quickly identify DR-TB into countries so people can start on the right treatment without delay, and we've funded massive observational and clinical trials that are transforming MDR-TB treatment and care to be shorter, more effective and less toxic. The gold-standard evidence generated through this work provided critical insight into safety and efficacy of new medicines, which has led to additional advances to care. We are continuing our work to ensure that high prices of medicines, tests and tools do not stop lifesaving treatments from reaching people in need.

Finding the missing millions: Each year, millions of people with TB go undiagnosed, meaning they never access treatment and they can continue to pass the airborne disease to other people. We're working to better integrate existing TB testing and screening approaches in primary care and layering screening methods so no one falls through the cracks.

Meanwhile, new tools promise to improve TB detection and could be gamechangers in making rapid, accurate diagnosis available at the primary health care level. These include: tests that are simple to operate and use samples that are easier to obtain, such as oral swabs or urine; tools for fast and easy detection of TB drug resistance; and X-ray machines that use artificial intelligence to interpret scans. We are working with partners to accelerate the development of these tools, ensure they are adapted for the settings where people need them most, and pilot implementation to find the most viable solutions to improve TB testing.

Making treatment easier: Despite significant advances, TB treatment still takes months. In addition to our ongoing efforts to enable a person with TB to access quick diagnosis and the most tolerable and effective medicines, we are investigating digital support tools to help patients adhere to treatment – which is critical to save lives and prevent drug resistance. These tools link a patient remotely with their health service, reducing the frequent clinic visits often required in TB treatment and freeing up time for health care workers and patients alike.

Our impact

Our goal is to identify the most needed solutions and help get them off the ground so they can be rolled out widely. Our interventions are designed with scale-up in mind; their impact is achieved several years after our programs are complete, as community advocates drive demand and governments and partners step in to replicate our proven models on a wide scale.

Together with our partners, we are playing a key role in advancing the tools and strategies needed to meet global targets to reduce new TB cases by 80% and deaths by 90% by 2030. This includes:

- **Early interventions that have enabled access to shorter TB prevention in 78 high burden countries** since 2018, with over 4 million patient courses purchased in 2022. Coupled with contact tracing, TB preventive treatment could save 1 million lives by 2035[1].
- **Reducing the price by more than 40% of faster and more accurate TB diagnostic technology to identify drug resistance.** Today, 130 countries purchase millions of these test cartridges every year at lower rates.
- **Strawberry-flavored TB medicines make treatment easier for children** in 123 countries, replacing imprecisely dosed, bitter-tasting adult medicines.

Our ongoing work to close the care gap in TB is advancing new health products and approaches. When delivered at scale, this work is projected to diagnose half a million more people with TB and reach 50,000 people with shorter, more effective, less toxic treatments for MDR-TB every year.

1 https://www.thelancet.com/journals/langlo/article/PIIS2214-109X(23)00251-6/fulltext

Case Study:

Better medicines to fight drug-resistance

Hugo was diagnosed with MDR-TB when he was just 16, at a time when the standard treatment for MDR-TB was arduous and unaffordable, taking up to two years to complete and causing severe side effects like irreversible hearing loss and, in extreme cases, psychosis. Like hundreds of thousands of people like him, Hugo struggled with the medicines.

“I abandoned treatment after a year because of the extreme side effects I had from an injectable drug,” he recounts.

But bedaquiline, the first new TB drug developed in over 40 years, showed promise in advancing treatment. Our commitment to finding shorter, less toxic and more effective treatments for MDR-TB using new and repurposed drugs helped get rid of the injectable drug that Hugo struggled with and lay the foundations for additional treatment regimens.

When Hugo’s MDR-TB relapsed, he was able to be treated in just nine months with no injections and far fewer side effects – just one result of our research that has provided the gold standard evidence needed to inform MDR-TB treatment globally.

Photo: Hugo, now 21, with one of the community health workers who supported him through his treatment.

Looking ahead

At the United Nations’ High-level Meeting on TB in September 2023, world leaders committed to ambitious new targets to end TB. As the largest multilateral funder of TB research and development globally, we remain committed to this fight. We will continue to drive innovation and ensure lifesaving tests, treatments and tools reach the countries and communities at the heart of the crisis.

We are focused on closing the diagnostic gap, reducing the cost of vital medicines, and ensuring everyone at risk of TB can access high quality preventive care and avoid illness, with the voices of affected communities and commitments from the High-Level Meeting guiding our efforts.

Enable same-day TB diagnosis and advance more sensitive, simple TB tests

Accelerate availability of the best MDR-TB regimens for all populations

Reach children and others at risk of TB with high quality preventive medicines

About Unitaid:

We save lives by making new health products available and affordable for people in low- and middle-income countries. We work with partners to identify innovative treatments, tests and tools, help tackle the market barriers that are holding them back, and get them to the people who need them most – fast. Since we were created in 2006, we have unlocked access to more than 100 groundbreaking health products to help address the world’s biggest health challenges, including HIV, TB, and malaria; women’s and children’s health; and pandemic prevention, preparedness and response. Every year, more than 170 million people benefit from the products we’ve helped roll out.

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