TAG
Treatment Action Group

Tuberculosis Research at the National Institutes of Health

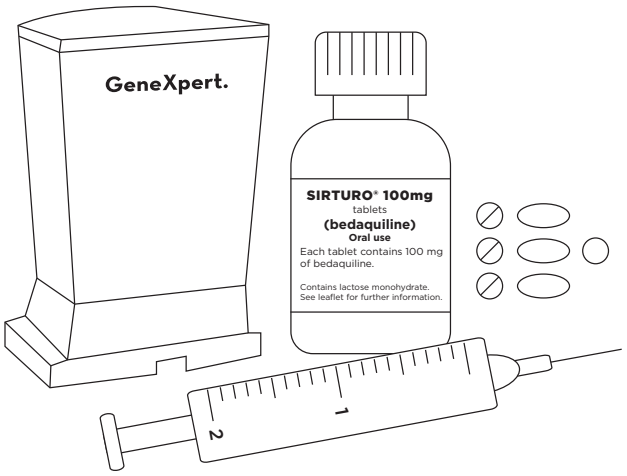
Saving Lives, Shrinking Costs, Fueling American Jobs and Innovation

Tuberculosis (TB) is preventable and treatable but remains the leading cause of infectious disease deaths globally as of 2025.[1] This airborne bacterium, often represented in U.S. media as a concern of the past, continues to circulate, killing 1.5 million people annually and sickening many millions more.[2] While the United States is considered a relatively low-burden country, rates of TB have been steadily increasing since 2021 and have surpassed pre-COVID levels. **In 2023, the United States reported 9,633 cases of TB, the highest number recorded in over a decade.**[3] This overall rise has included outbreaks of TB in a number of widely varied populations — including bone allograft recipients,[4] faith communities, multigenerational households,[5] incarcerated people,[6] and those experiencing homelessness.[7] Still other groups, such as coal miners[8] and racial and ethnic minorities,[9] continue to be placed at high risk for TB.

While there are many contributing factors for the resurgence of TB in the United States, the solution is widely agreed upon: comprehensive testing and treatment for TB,[10] especially among populations placed at greatest risk for infection.[11] Unfortunately, the process of implementing these strategies is labor-intensive[12] and the tools available have been slow to reach the U.S. public. For example, the high price of bedaquiline,[13] one of the most effective drugs for treating drug-resistant TB (DR-TB), has resulted in restricted access among U.S. patients.[14] Another option for DR-TB treatment, delamanid, was never even registered in the United States;[15] nor were child-friendly formulations,[16] whose manufacturers saw little opportunity for profits in a low-burden setting given the registration costs. The recommended regimen for TB preventive treatment, 3HP,[17] is approved for use in the United States but only has a single supplier, which results in frequent shortages. As new forms of TB drug resistance continue to emerge, the research and development (R&D) pipeline has struggled to keep sufficient pace to address it, underscoring the importance of continued investment.

The United States can get ahead of rapidly evolving drug resistance by building on these recent innovations through public investment,[18] helping guarantee access for Americans. Some new drugs are currently being studied[19] but desperately need additional funding to complete clinical trials that will inform how they can be optimally combined to shorten treatment, improve outcomes, and reach patients.[20] Diagnostic tests have become more accurate and efficient in recent years but remain reliant on sample types that are difficult to obtain, especially from children, and are incapable of rapidly diagnosing more complicated drug-resistance patterns.[21] And the pipeline for new vaccines, to prevent drug resistance from emerging in the first place and to avert the economic costs associated with treatment, has not been sufficiently resourced to introduce an approved product for more than a hundred years.[22]

Within a landscape of biomedical research that has been hesitant to fund TB R&D — or has even redirected important resources to other, more profitable but less urgent, health areas[23]— there has been an important beacon of hope. The National Institutes of Health (NIH) is the largest funder of TB R&D globally through its National Institute for Allergy and Infectious Diseases (NIAID).[24] **Through intramural basic science, extramural research support, and interagency collaboration, NIAID has been instrumental in continuing to push the TB R&D pipeline forward.[25]** With the help of its in-house scientists and academic partners, NIAID investment in TB science has fought against inertia to shepherd many of the most important TB breakthroughs to market.[26]

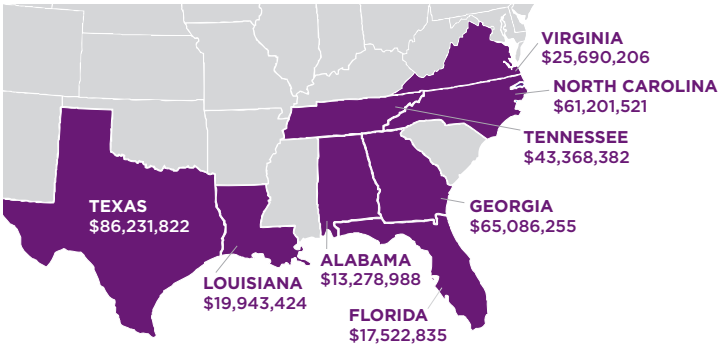


NIH has funded research on TB vaccines, preventive treatment, the standard of care for DR-TB, and rapid diagnostics, which has transformed TB response.

NIAID's unique structure affords it the greatest possible impact on TB R&D by putting infectious disease research in the context of immunology and health across the life-course. By bringing together research on both infectious and chronic diseases,[27] scientists are better able to understand the underlying immunology that makes TB infection remain dormant for so long in some people and become so deadly in others.[28] This also pays dividends for HIV, another disease with close epidemiological ties to TB and chronic disease (as TB disease is the leading cause of death for people living with HIV globally).[29] The NIAID Division of AIDS, in turn, hosts clinical trial networks[30] that are critically important for TB R&D; these networks, such as the Advancing Clinical Therapeutics Globally for HIV/AIDS and Other Infections (ACTG), have provided the trial recruitment and infrastructure necessary to administer some of the most groundbreaking TB research in decades.[31] **Indeed, the long-term immune responses to both TB and HIV, and the way those responses are related, are infinitely better understood because of NIAID's seemingly unlikely composition.[32]**

The TB R&D that takes place through NIH also has another unexpected benefit for the American people: it supports local economies across the country.[33] The majority of NIAID TB funding stays in the United States through awards and contracts won by American universities, small business, and research institutes in nearly all 50 states. In addition to this direct funding, millions of dollars in NIH "indirect costs" go directly to the material suppliers, custodial staff, electricians, food service workers, and other employees whose jobs are necessary to keep laboratories and trial sites running.[34] **Because these jobs are so varied across industries, NIH funding can have a meaningful and sizable impact on the economic health of cities and even entire states.**[35] For example, the University of Alabama at Birmingham is the largest employer in the state,[36] and NIH funding[37] paid for more than 7 percent of the school's entire operating expenses in fiscal year 2023.[38] Alabama received over $2 million in TB research funding from NIH in 2023 — and the state was not alone: NIH funding specifically for TB is sent to more states in the U.S. South than in any other region.[39]

STATE-LEVEL NIH TB FUNDING: 2019-2023



Source: NIH RePORT

Funding for TB R&D through NIH, and especially NIAID, is absolutely vital to the health and prosperity of millions of Americans. This funding employs countless workers and supports their local economies, keeping the United States safe from emerging drug resistance while also maintaining our country's title as the world's leading innovator in biomedical sciences. As TB continues to spread, drug resistance continues to develop, and the global R&D landscape continues to evolve, it is critical that NIH's budget remains robustly supported by federal funding. American lives and economic security depend upon it.

CITATIONS CAN BE FOUND AT
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