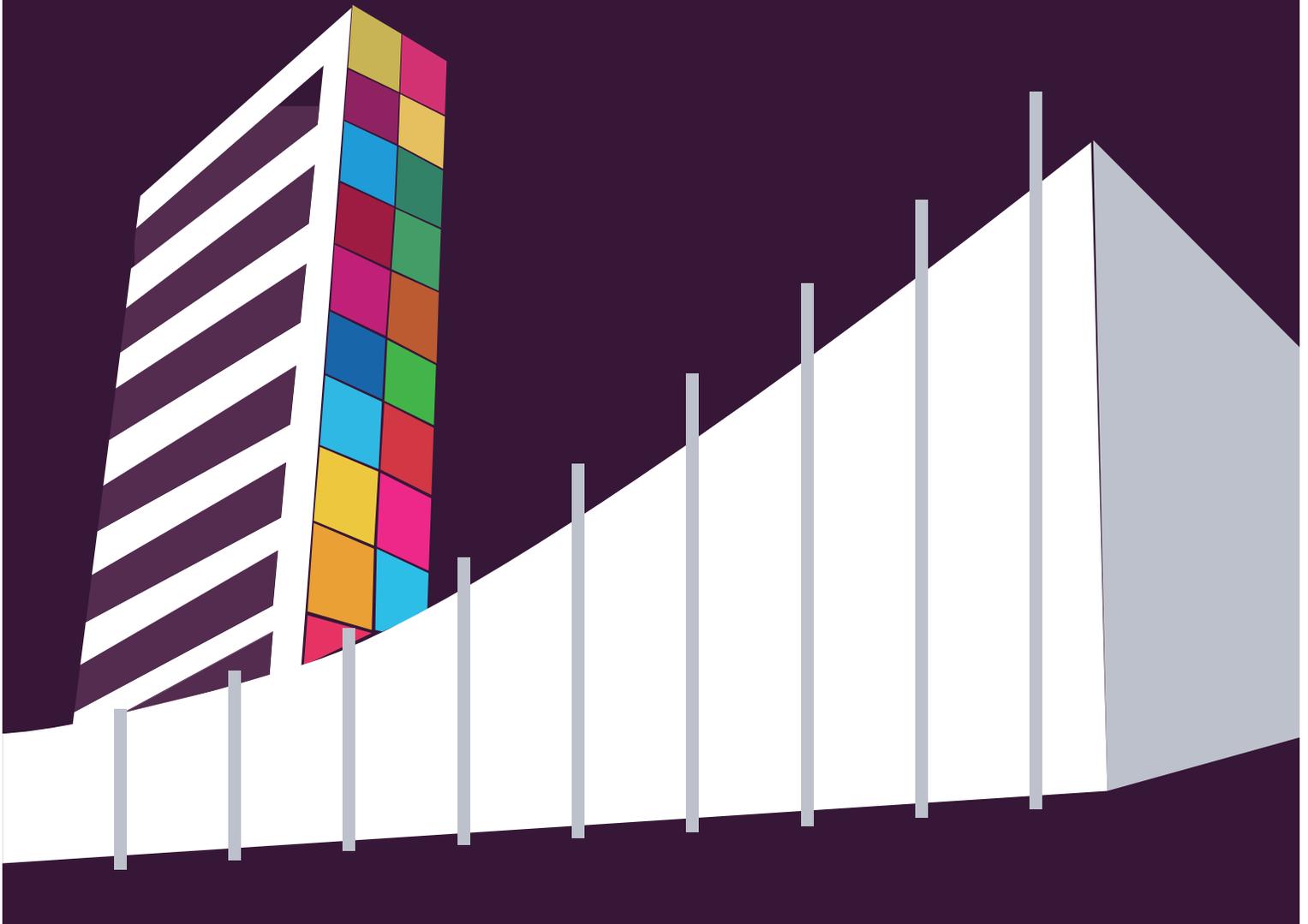


# Funding for TB Research

## Recent Momentum Must Inspire Bold Commitments

**NEW YORK – SEPTEMBER 24, 2018**



# Funding for TB Research: Recent Momentum Must Inspire Bold Commitments

*Higher funding for TB research in 2017 should embolden heads of state and government at the first-ever United Nations High-Level Meeting on TB to make ambitious commitments to support R&D that will end this deadly disease.*

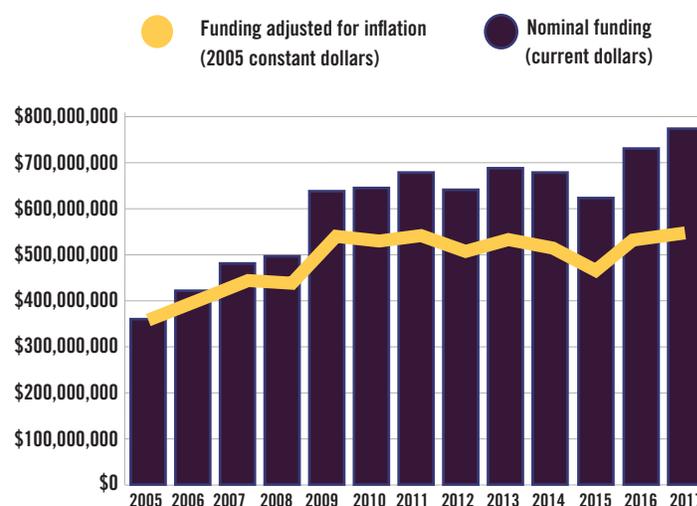
Global funding for research and development (R&D) on tuberculosis (TB) reached a new high of USD \$767.8 million in 2017, according to the latest in a series of global surveys of TB research funders conducted annually by Treatment Action Group (TAG) since 2005. Although higher than in any of the previous 12 years, total TB R&D expenditures in 2017 fell more than \$1 billion short of the \$2 billion the United Nations–hosted Stop TB Partnership estimates the world must spend each year to end the TB epidemic by 2030.<sup>1</sup>

The figures released in this brief are preliminary; final numbers and methodology will be available in the forthcoming report *Tuberculosis Research Funding Trends, 2005–2017* in December 2018. Until that time, TAG encourages any donors not represented in the current estimates to submit investment data by contacting [tbrdtracking@treatmentactiongroup.org](mailto:tbrdtracking@treatmentactiongroup.org).

The higher total extends the positive momentum observed in 2016, when global spending on TB R&D first crossed the \$700 million mark (**Figure 1**). Funding in 2017 increased in almost every area of TB research tracked by TAG, from basic science to the development of new diagnostics, drugs, and vaccines to operational research. Within these categories, spending on research related to pediatric TB, a traditionally neglected area, nearly doubled to \$54 million. However, inflation has eroded the real value of TB research dollars, so the recent increases only bring TB R&D spending back to 2009 levels.

As in previous years, over 60 percent of TB R&D funding came from public-sector institutions (**Figure 2**). Combined, the private sector spent less than \$100 million on TB research, highlighting the extent to which scientific progress against TB relies on government support. The Bill & Melinda Gates Foundation (Gates Foundation) gave more than any other philanthropic organization.

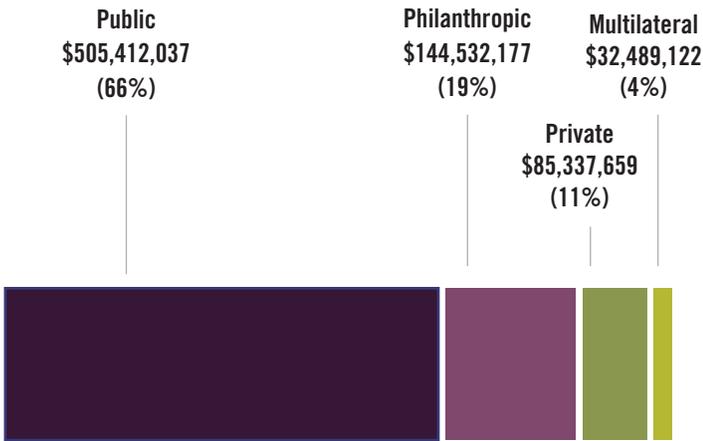
**Figure 1: Total TB R&D Funding, 2005–2017**



Year	Nominal funding (current dollars)	Year	Nominal funding (current dollars)
2005	\$358,119,753	2012	\$638,783,272
2006	\$418,928,300	2013	\$686,303,295
2007	\$478,343,421	2014	\$674,036,492
2008	\$494,168,892	2015	\$620,600,596
2009	\$636,979,349	2016	\$726,080,643
2010	\$643,360,390	2017	\$767,770,994
2011	\$675,328,887		

Funding for TB research remains vulnerable. The shallow funding base is composed of a handful of major donors (**Table 1**). The U.S. government contributed 40% of total spending and 61% of public spending in 2017. Together, the U.S. National Institutes of Health and the Gates Foundation comprised nearly half of global funding. The \$42 million increase between 2016 and 2017 can primarily be attribut-

**Figure 2: Total TB R&D Funding by Sector, 2017**  
**Total: \$767,770,994**



ed to higher public sector spending as well as a doubling in expenditures by the multilateral organization Unitaid. To continue this positive trend, the TB research field must cultivate a wider, more diverse funding base that includes more donors from countries that bear the greatest burden of TB.

All governments at all income levels can give more to TB research. A broad coalition of TB civil society groups, community-based organizations, and other stakeholders developed a list of key asks for the political declaration that will be endorsed at the UN High-Level Meeting.<sup>2</sup> Among these is a call for each UN member state to devote at least 0.1% of its annual gross domestic expenditure on research and development to TB research.<sup>3</sup> This proposal acknowledges that TB R&D is a global responsibility, and each country must contribute its fair share. **Table 2** shows country funding for TB R&D in 2017 in relation to the 0.1% target. New Zealand, the Philippines, and South Africa laudably met their targets, but most countries did not. Even the United States government, the largest funder of TB R&D globally, can give more (an additional \$135 million annually) to satisfy its fair share. Notably, several high-TB-burden countries failed to provide any funding data.

The world will not achieve the Sustainable Development Goal target of ending the TB epidemic by 2030 unless funding for TB research increases substantially and as a matter of urgency. A review of the past decade of global investments in TB R&D by the World Health Organization concluded: “The present and future threat that TB poses to human health is mainly a consequence of the enormous neglect the TB research field has experienced over the past several decades.”<sup>4</sup> Anemic financing has slowed the pace of innovation, allowing TB to reclaim the notorious distinction of being the world’s leading cause of death from an infectious disease.

The persistent lethality of TB also reflects the absence of a needs-driven approach to R&D. The current R&D system, with its reliance on high prices or high sales volumes to incentivize investments in research, has failed to spur research into TB given that the disease primarily affects poor and marginalized populations, whether they live in developing or developed countries. As a result, people with TB and the health systems that serve them have had to rely on outdated, insufficient technologies for prevention, diagnosis, and treatment.

The past two years of increased funding for TB R&D must mark a permanent break with the usual pattern of complacency and neglect. Heads of state and government convening at the UN High-Level Meeting must make the following commitments in support of TB research:

**Table 1: Top Ten Funders of TB Research in 2017**

Funding Organization	Sector	Total (USD)	Percent of Total Funding
U.S. NIH	Public	\$245,461,895	32%
Bill & Melinda Gates Foundation	Philanthropic	\$127,953,459	17%
USAID	Public	\$33,989,472	4%
Unitaid	Multilateral	\$28,556,016	4%
Otsuka Pharmaceuticals	Private	\$22,773,887	3%
U.K. DFID	Public	\$20,642,634	3%
Company X	Private	\$20,550,920	3%
European Commission	Public	\$19,275,723	3%
U.S. CDC	Public	\$18,256,200	2%
EDCTP	Public	\$17,708,217	2%

- 1. Devote the resources.** At least \$2 billion for TB R&D is needed annually. The current \$1.2 billion funding gap could be closed if each country contributed its fair share by dedicating just 0.1% of its annual spending on all R&D to TB. Funding increases could underwrite domestic research or be combined with money from other countries and stakeholders to support bold new initiatives at the regional and global levels, such as the BRICS TB Research Network or the Life Prize.

**2. Develop the tools.** Governments must accelerate the development of new tools to prevent, diagnose, and treat TB in all of its forms. This will require supporting the full spectrum of TB R&D, from basic science to product development to implementation research. To achieve this, governments should build research capacity, devise national strategic plans for TB R&D, and create regulatory and policy environments that facilitate research and the rapid uptake of new interventions.

**3. Designate the outcomes of research as global public goods.** Research frameworks and safeguards that ensure all R&D efforts are needs driven, evidence based, and guided by the core principles of affordability, efficiency, equity, and collaboration will be essential to meet the unique scientific and public health challenges posed by TB. Traditional market-based incentives have failed to spur the innovation required to end TB. Governments must work together and in concert with other partners to introduce innovative financing models and appropriate incentive mechanisms, including those that advance the concept of delinkage by separating the costs of R&D from expected prices and sales volumes of final products.

Higher funding for TB research in 2017 has given heads of state and government firmer ground on which to strive for more ambitious goals following the UN High-Level Meeting. For this meeting to be judged a success, political leaders must leave New York committed to what Anele Yawa, General Secretary of South Africa’s Treatment Action Campaign, has called a “new moral consensus”: one that sees TB research not as a luxury, but as a necessity that no country can afford to ignore, and one that treats the fruits of scientific progress against TB not as privileges for the wealthy or lucky few, but as rights to be enjoyed by all. For their right to scientific progress to be fulfilled, people with and at risk of TB need this new moral consensus to produce tangible scientific results. The money to enable these must follow.

**Table 2: Majority of Countries have not Met TB R&D Fair Share Funding Targets**

Country	2017 Funding	Annual Target	Percent of Target Met in 2017
Australia	\$9,578,906	\$21,200,000	45%
Brazil	\$2,116,380	\$35,000,000	6%
Canada	\$18,573,136	\$25,300,000	73%
China	Not reported	\$305,600,000	---
European Union	\$36,983,994	\$202,400,000	18%
France	\$958,927	\$55,400,000	2%
Germany	\$18,901,110	\$99,700,000	19%
Hong Kong	\$127,300	\$9,900,000	1%
India	\$16,842,455	\$46,500,000	36%
Indonesia	Not reported	\$2,100,000	---
Ireland	\$2,098,544	\$3,300,000	64%
Japan	\$5,508,140	\$154,900,000	4%
Mexico	Not reported	\$10,300,000	---
New Zealand	\$2,055,977	\$1,800,000	114%
Nigeria	Not reported	\$7,000,000	---
Norway	\$3,424,657	\$5,300,000	65%
Pakistan	Not reported	\$2,400,000	---
Russian Federation	Data forthcoming	\$36,500,000	---
Singapore	\$1,814,213	\$8,400,000	22%
South Africa	\$8,402,370	\$4,600,000	183%
South Korea	\$15,100,698	\$64,000,000	24%
Sweden	\$2,644,386	\$13,700,000	19%
Switzerland	\$5,292,685	\$13,400,000	39%
Taiwan	\$1,323,230	\$4,369,762	30%
Thailand	\$902,147	\$4,900,000	18%
The Netherlands	\$5,558,751	\$15,100,000	37%
The Philippines	\$1,128,864	\$700,000	161%
United Kingdom	\$36,065,970	\$40,400,000	89%
United States	\$309,348,764	\$444,500,000	70%
Vietnam	Not reported	\$1,300,000	---

Table includes countries that reported more than \$100,000 in TB R&D funding to TAG and select other high-income or high-TB-burden countries.

Countries that met the target of spending 0.1% of overall R&D expenditures on TB research are shaded.

## Endnotes

1. Stop TB Partnership. Global plan to end TB: 2016–2020: the paradigm shift. Geneva: UNOPS; 2015. <http://www.stoptb.org/global/plan/plan2/>.
2. Key asks from TB stakeholders and communities. [http://www.stoptb.org/global/advocacy/unhlm\\_asks.asp](http://www.stoptb.org/global/advocacy/unhlm_asks.asp).
3. For more information on the country-specific TB R&D funding targets, see: Khimani S. Investing in R&D to end TB: a global priority. New York: Treatment Action Group; 2017. [http://treatmentactiongroup.org/sites/default/files/Funding%20target%20brief\\_final\\_31Oct.pdf](http://treatmentactiongroup.org/sites/default/files/Funding%20target%20brief_final_31Oct.pdf).
4. World Health Organization. Global investments in TB research and development: past, present, and future. Geneva: World Health Organization; 2017. [http://www.who.int/tb/publications/2017/Global\\_Investments\\_in\\_Tuberculosis\\_Research\\_Investment/en/](http://www.who.int/tb/publications/2017/Global_Investments_in_Tuberculosis_Research_Investment/en/).