



U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT REPORT ON THE PREVENTION OF TUBERCULOSIS

INTRODUCTION

Nearly 30 years after the World Health Organization (WHO) declared tuberculosis (TB) a public health emergency, TB remains one of the world's leading infectious disease killers—despite being preventable, treatable, and curable. In 2020 alone, an estimated 10 million people became ill with TB and 1.5 million people died.

In 2018, the United Nations General Assembly High-Level Meeting (UNHLM) on TB established the ambitious target of diagnosing and enrolling an additional 40 million people on TB treatment and enrolling 30 million people on TB-preventive therapy (TPT) by 2022, with a focus on countries with high TB burdens.

As the U.S. Government's lead Agency on global TB efforts, USAID works with agencies and partners around the world on the shared goal of reaching every person with TB, curing those in need of treatment, preventing the spread of new infections, and stopping the progression to active disease. At the 2018 UNHLM, USAID launched the [Global Accelerator to End TB](#) (the Accelerator) to increase commitment from, and build the capacity of, governments, civil society, and the private sector to accelerate countries' progress in reaching the global targets. The Accelerator focuses on countries with high burdens of TB where the Agency can align with local communities and partners to deliver results. To ensure the Accelerator's effectiveness and increased transparency, USAID uses standardized data-collection and performance-based indicators that align with the targets.

For this reporting period, USAID funded bilateral TB programs in 24 priority countries,¹ and of the 30 million people who comprise the UNHLM prevention target, approximately 75 percent live in USAID's priority countries. USAID builds upon country governments' efforts to scale-up preventive interventions, including the update of national TB prevention guidelines to reflect the latest international standards, expansion of TB screening approaches, TB prevention training, and introduction of TB preventive therapy.

The COVID-19 pandemic has erased years of global TB progress, with TB deaths increasing for the first time in a decade. As a result of COVID-19 and measures to control it, one million fewer people in USAID's 23 TB priority countries² had access to TB diagnosis and treatment in 2020, compared to 2019—representing a more than 20 percent decline. To mitigate this, in 2021, USAID supported urgent TB recovery efforts focused on increasing access to and improving the quality of

¹ The USAID priority countries for TB for this report are the Islamic Republic of Afghanistan; the People's Republic of Bangladesh; Burma; the Kingdom of Cambodia; the Democratic Republic of Congo; the Federal Democratic Republic of Ethiopia; the Republics of India, Indonesia, Kenya, Malawi, Mozambique, Pakistan, the Philippines, South Africa, Tajikistan, Uganda, Uzbekistan, Zambia, and Zimbabwe; the United Republic of Tanzania; Kyrgyz Republic; the Federal Republic of Nigeria; Ukraine; and the Socialist Republic of Vietnam.

² Data collected before Pakistan was added as a USAID TB priority country this reporting year.

TB services in countries most impacted by these declines, which were most severe in Asia. Working alongside governments, the Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund), and other partners, these recovery efforts have helped countries rebound from the pandemic’s impact, with a few countries recovering to pre-COVID case notification levels.

The pandemic has also stalled and reversed TB prevention efforts. Based on a USAID internal forecasting analysis conducted in January 2021 for USAID’s TB priority countries, it is projected that the UNHLM prevention target will be around a 75 percent level of achievement by the end of 2022. COVID-19’s continuing impact will likely further hinder reaching this projected target and, as a result, most of the indicators in this report show declines.

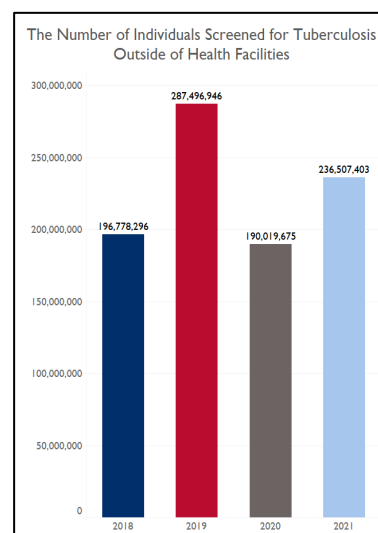
METHODOLOGY

To the maximum extent practicable, USAID collected data on the four prevention indicators outlined below. This report covers only USAID’s 24 priority countries for TB. While almost all of these countries submitted some data, not all governments were able to report on the four indicators because these data are not routinely collected by their existing surveillance and reporting systems. The governments that reported on each indicator appear in the appendix.

Indicator One: The number of individuals screened for TB disease and TB infection outside of health facilities³

To collect consistent data on Indicator One, USAID defined technical terms as follows:

- “Outside of health facilities” refers to TB-screening activities in the community, including in and outside home settings (e.g., as part of contact investigation), routine outreach, and event-based screening carried out by community health workers or any other trained or qualified health personnel; and
- “Screening” is, at a minimum, verbal screening (for TB signs and symptoms) to identify symptomatic individuals whom community health workers or health personnel then refer for further clinical evaluation or testing for TB disease. This also includes screening or assessment for TB infection, combined with or without testing for TB infection by tuberculin skin test (TST) or interferon-gamma release assay (IGRA).



³ For Indicator One: For 2018, the governments of 18 USAID priority countries had data available to report; for 2019, the governments of 16 countries had data available to report; for 2020, the governments of 20 countries had data available to report; for 2021, the governments of 18 countries had data to report. See Appendix for a complete list of countries.

According to WHO, in 2021 an estimated 42 percent of global TB cases were not diagnosed or reported. As not all individuals with presumptive TB are diagnosed at health facilities, it is critical to find missing cases within communities through case-finding efforts. Active and intensified case-finding strategies—including interventions to detect TB infection and identify individuals recommended for TPT—continue to be a critical component of USAID’s approach to addressing the challenge of finding missing cases to reduce the burden of TB.

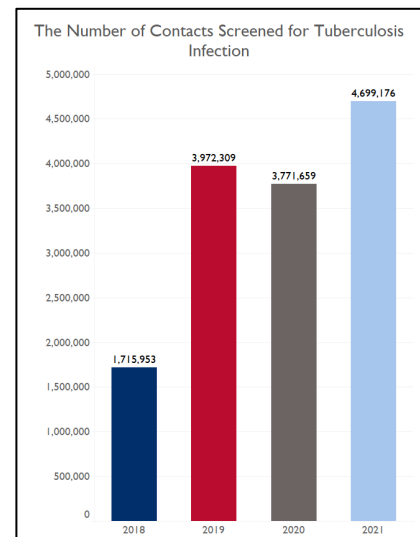
After COVID-19 lockdown and mitigation measures hampered screening and case-finding efforts in 2020 (as shown in graph), countries reversed the downward trend and were able to progress on recovery in 2021. As countries continue to recover from the pandemic’s lingering impact, USAID will continue to focus the limited resources on screening for TB to reach pre-pandemic levels.

Indicator Two: The number of close contacts screened for TB infection⁴

To collect consistent data on Indicator Two, USAID calculated the indicator as follows:

- The number of those “screened” for TB infection⁵ is the number of individuals who are in close contact with TB-positive individuals screened for active TB disease (based on country-specific protocols), less the number of contacts diagnosed with active TB disease.

The number of close contacts screened for TB infection increased by 25 percent between 2020 and 2021, with close to one million more contacts screened in 2021. This is a significant achievement and is consistent with the overall strong recovery of prevention efforts across USAID’s TB priority countries.



Throughout the COVID-19 pandemic, TB platforms, including screening approaches, were utilized to respond to the pandemic. In some countries, experience and expertise in conducting TB contact investigation interventions informed COVID-19 contact tracing approaches, and some countries jointly screened for both diseases. Both of these examples illustrate how TB platforms can continue to be adapted and utilized to respond to COVID-19 and to address future emerging airborne pandemics.

⁴ For Indicator Two: For 2018, the governments of 17 USAID priority countries had data available to report; for 2019, the governments of 15 countries had data available to report; for 2020, the governments of 20 countries had data available to report; for 2021, the governments of 21 countries had data available to report. See Appendix for a complete list of countries.

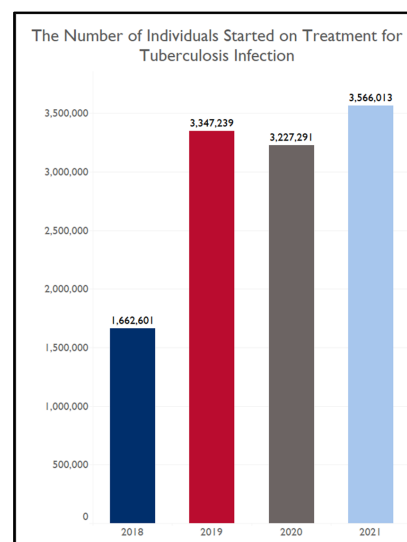
⁵ Because individuals who have TB infection (as opposed to those ill with active TB disease) do not exhibit any signs and symptoms, programs that prevent TB and care for cases of the disease do not commonly use the terminology “screening” for TB infection. In addition, active TB-screening protocols and the types of data collected vary by country.

Indicator Three: The number of individuals, including close contacts, started on treatment for TB infection⁶

To collect consistent data on Indicator Three, USAID defined technical terms as follows:

- The “number of individuals started on treatment for TB infection” is comprised of those who are eligible for TPT (i.e., individuals ruled out for active TB disease and who meet other criteria), as specified in national guidelines or protocols on TPT. This also includes all household contacts (including children under five) of notified, bacteriologically confirmed new and relapsed pulmonary TB cases, and people living with HIV (PLHIV).

Similarly, the number of individuals enrolled on TPT increased by 10 percent from 2020 (surpassing 2019’s pre-COVID levels), with close to 340,000 additional individuals put on TPT in 2021.



In the immediate aftermath of COVID-19, USAID formulated a robust response, providing countries with strong technical support and prioritizing the availability of and access to medicines, including TPT. USAID worked with National TB Programs to expand differentiated service delivery models and adopt innovative approaches to ensure eligible individuals received TPT. These included multi-month medicine dispensing, telemedicine, and reducing the number of clinic visits needed for TB contacts to receive TPT, in conjunction with intensifying active case finding strategies. However, with limited resources, significant challenges remain in testing for TB infection, particularly among HIV-negative adult contacts. This ultimately limits the number of people eligible to start TPT.

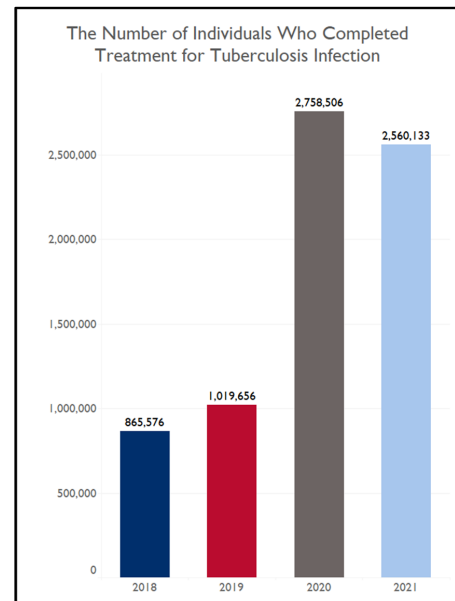
⁶ For Indicator Three, the governments of all 23 priority countries had data available to report in 2018, 2019, and 2020. For 2021, the governments of 23 countries had data available to report. See Appendix for a complete list of countries.

Indicator Four: The number of individuals who complete treatment for TB infection⁷

To collect consistent data for Indicator Four, USAID defined technical terms as follows:

- "The number of individuals who complete treatment for TB infection" is the number of individuals who completed a recommended (based on national guidelines and protocols) TPT. Current TPT periods range from three months (with shorter regimens) to 36 months for PLHIV in settings with a high-burden of TB.⁸

In 2021, reported data shows that countries maintained a similar level of achievement as compared to 2020. However, it is probable that a higher level of TPT completion was likely attained, as six countries were unable to report on this indicator for 2021.



It typically takes an individual six months to complete TPT, which can be challenging for those requiring treatment. Although shorter TPT regimens are becoming more widely available, cost is a limiting factor in enabling countries to quickly scale up these regimens. However, USAID has and continues to prioritize support to countries in ensuring successful treatment completion for those enrolled on TB, drug-resistant TB (DR-TB), and TB preventive therapies.

CONCLUSION

Even prior to the onset of COVID-19, the world was not on track to meet the UNHLM target of enrolling 30 million people on TPT by 2022, due to resource limitations, and the pandemic's impact further stalled advancement. In 2021, however, there was progress across all four prevention indicators, reversing the prior downward trend. Countries' performance on three indicators exceeded 2020 results, due in part to USAID's strong technical support, nimble and proactive engagement with countries' National TB Programs, and the prioritization of adopting innovative approaches to address the formidable challenges posed by the pandemic, such as multi-month medicine dispensing, telemedicine, integrated contact investigations, and remote treatment adherence support.

⁷ For Indicator Four: For 2018, the governments of 17 USAID priority countries had data available to report; for 2019, the governments of 16 countries had data available to report; for 2020, the governments of 20 countries had data to report; for 2021, the governments of 18 countries had data available to report. See Appendix for a complete list of countries.

⁸ Given the differences in the reporting and treatment periods, the cohort of people reported under Indicator Three (started TPT) is not necessarily the same cohort of people who completed treatment for TB infection reported under Indicator Four.

While COVID-19 has had a devastating impact on TB diagnosis and care, progress in prevention efforts in 2021 demonstrates TB programs' ability to adapt to provide uninterrupted services to those in need. This progress was made despite resource challenges, as TB efforts continue to remain underfunded (the recently launched [Stop TB Partnership's Global Action Plan to End TB 2023-2030](#) indicates a \$250 billion gap between now and 2030). The mitigation of COVID-19's impact also demonstrates how, through integrated approaches, existing TB platforms can be utilized to respond to both TB and emerging infectious diseases, like COVID-19—effectively utilizing limited resources to achieve results for multiple diseases.

TB prevention, like all TB care and treatment efforts, will ultimately require continued political commitment and increased resources from the global community to regain lost progress and swiftly accelerate interventions to meet the 2022 UNHLM targets and the renewed targets, expected to be announced in September 2023.

Appendix

	Indicator One	Indicator Two	Indicator Three	Indicator Four
2018	The governments of 18 USAID priority countries had data available to report: Afghanistan, Bangladesh, Burma, Cambodia, the Democratic Republic of Congo, India, Indonesia, Kenya, Kyrgyz Republic, Malawi, Mozambique, Nigeria, the Philippines, South Africa, Tajikistan, the United Republic of Tanzania, Uzbekistan, and Zambia	The governments of 17 USAID priority countries had data available to report: Bangladesh, Burma, Cambodia, Ethiopia, India, Indonesia, Kenya, Kyrgyz Republic, Malawi, Mozambique, Nigeria, South Africa, Tajikistan, the United Republic of Tanzania, Ukraine, Uzbekistan, and Zambia	The governments of all 23 USAID priority countries had data available to report.	The governments of 17 USAID priority countries had data available to report: Afghanistan, Bangladesh, Burma, the Democratic Republic of Congo, Ethiopia, India, Kenya, Kyrgyz Republic, Malawi, Mozambique, Nigeria, the Philippines, the United Republic of Tanzania, Uganda, Ukraine, Vietnam, and Zambia
2019	The governments of 16 countries had data available to report: Afghanistan, Bangladesh, Burma, the Democratic Republic of Congo, India, Indonesia, Kenya, Malawi, Mozambique, Nigeria, the Philippines, South Africa, Tajikistan, the United Republic of Tanzania, Uzbekistan, and Zambia	The governments of 15 countries had data available to report: Bangladesh, Burma, the Democratic Republic of Congo, Ethiopia, India, Indonesia, Kenya, Malawi, Mozambique, Nigeria, South Africa, the United Republic of Tanzania, Ukraine, Uzbekistan, and Zambia	The governments of all 23 USAID priority countries had data available to report.	The governments of 16 countries had data available to report: Afghanistan, Burma, the Democratic Republic of Congo, Ethiopia, India, Indonesia, Kenya, Kyrgyz Republic, Malawi, Mozambique, Nigeria, the United Republic of Tanzania, Uganda, Ukraine, Vietnam, and Zambia
2020	The governments of 20 countries had data available to report: Afghanistan, Bangladesh, Burma, Cambodia, India, Indonesia, Kenya, Kyrgyz Republic, Malawi, Mozambique, Nigeria, the Philippines, South Africa, Tajikistan, Uganda, the United Republic of Tanzania, Uzbekistan, Vietnam, Zambia, and Zimbabwe	The governments of 20 countries had data available to report: Afghanistan, Bangladesh, Cambodia, the Democratic Republic of Congo, Ethiopia, India, Indonesia, Kenya, Kyrgyz Republic, Malawi, Mozambique, Nigeria, Tajikistan, Uganda, Ukraine, the United Republic of Tanzania, Uzbekistan, Vietnam, Zambia, and Zimbabwe	The governments of all 23 USAID priority countries had data available to report.	The governments of 20 countries had data available to report: Afghanistan, Bangladesh, Burma, Cambodia, the Democratic Republic of Congo, India, Indonesia, Kenya, Kyrgyz Republic, Malawi, Mozambique, Nigeria, South Africa, Uganda, Ukraine, the United Republic of Tanzania, Uzbekistan, Vietnam, Zambia, and Zimbabwe

	Indicator One	Indicator Two	Indicator Three	Indicator Four
2021	The governments of 18 countries had data available to report: Cambodia, Democratic Republic of Congo, India, Indonesia, Kenya, Kyrgyz Republic, Malawi, Nigeria, Pakistan, Philippines, South Africa, Tajikistan, Tanzania, Uganda, Uzbekistan, Vietnam, Zambia, and Zimbabwe.	The governments of 21 countries had data available to report: Afghanistan, Bangladesh, Cambodia, Democratic Republic of Congo, Ethiopia, India, Indonesia, Kenya, Kyrgyz Republic, Malawi, Mozambique, Nigeria, Pakistan, Philippines, South Africa, Tajikistan, Tanzania, Uganda, Uzbekistan, Vietnam, and Zimbabwe.	The governments of 23 countries had data available to report: Afghanistan, Bangladesh, Burma, Cambodia, Democratic Republic of Congo, Ethiopia, India, Indonesia, Kenya, Kyrgyz Republic, Malawi, Mozambique, Nigeria, Pakistan, Philippines, South Africa, Tajikistan, Tanzania, Uganda, Uzbekistan, Vietnam, Zambia, and Zimbabwe.	The government of 18 countries had data to report: Afghanistan, Bangladesh, Democratic Republic of Congo,* Ethiopia, India, Indonesia, Kenya, Kyrgyz Republic, Malawi, Nigeria, Philippines, South Africa, Tanzania, Uganda, Uzbekistan, Vietnam, Zambia, and Zimbabwe. * The Democratic Republic of Congo data for this indicator represent a fiscal year (2021).