



## **SOUTH AFRICA TUBERCULOSIS ROADMAP OVERVIEW, FISCAL YEAR 2022**

This is an overview of the USAID/South Africa FY 2022 Tuberculosis (TB) Roadmap, implemented with FY 2021 budget. It was developed in consultation with the National TB Program (NTP) and with the participation of national and international partners involved in TB prevention and care in the country.

TB remains a major public health challenge in South Africa. TB is the leading cause of death in South Africa, accounting for 6.4 percent of all natural deaths in 2017.<sup>1</sup> Among the 30 high TB burden countries, South Africa is ranked eighth, and among the high multidrug-resistant TB (MDR-TB) burden countries, South Africa is ranked ninth.<sup>2</sup> South Africa has an estimated TB incidence of 328,000 TB cases. In 2020, 191,074 (58 percent) TB cases were diagnosed and notified to the NTP.<sup>3</sup> Additionally, in 2020, 6,784 (48 percent) rifampicin-resistant TB (RR-TB)/MDR-TB cases were diagnosed and notified to the NTP.<sup>4</sup>

Through the National Strategic Plan (NSP) for HIV, TB, and sexually transmitted infections (STIs) 2017-2022, the Government of South Africa has committed to achieving the United Nations General Assembly High-Level Meeting (UNHLM) TB targets. The NSP sets forth eight goals:

- Goal 1: Accelerate prevention to reduce new cases of HIV, TB, and STIs, including specifically to reduce TB incidence by 30 percent;
- Goal 2: Reduce morbidity and mortality through the provision of high-quality treatment, care, and support, specifically, by diagnosing 90 percent of TB cases, providing treatment to 100 percent of people with TB, and achieving a treatment success rate (TSR) of 90 percent;
- Goal 3: Expand targeted interventions to reach all vulnerable, key populations;
- Goal 4: Increase the provision and access of social protection and disease prevention;
- Goal 5: Address issues of stigma, justice, and discrimination;
- Goal 6: Promote sustainability in programming by fostering leadership and accountability;
- Goal 7: Mobilize domestic resources and maximize efficiencies to achieve targets and support a sustainable response; and
- Goal 8: Strengthen strategic information systems.

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<sup>1</sup> Department: Statistics South Africa. Mortality and causes of death in South Africa: Findings from death notification, 2017.

<sup>2</sup> World Health Organization. Global Tuberculosis Report, 2019.

<sup>3</sup> World Health Organization. Global Tuberculosis Report, 2021.

<sup>4</sup> Ibid.

The COVID-19 pandemic has had far-reaching effects on the global TB response, threatening to erase years of progress. As a result of COVID-19 and associated measures to control it, one million fewer people in the 23 countries where USAID focuses TB programming had access to TB diagnosis and treatment in 2020, compared to 2019—representing a more than 20 percent decline. In South Africa, there was a nine percent decline in TB case notifications and a 48 percent decline in DR-TB case notifications in 2020, compared to 2019. In September 2020, a report estimated that 308,000 fewer GeneXpert tests were conducted between the beginning of April and end of July 2020 because of COVID-19.<sup>5</sup> The timing and scale of the decrease in testing volumes was consistent across provinces and preceded the rapid rise in COVID-19 cases. This dramatic drop in TB GeneXpert tests conducted is not explained by reduced testing capacity, as this remained unaffected; rather, this decline is likely the result of the severe restrictions imposed on individual movement to curtail the COVID-19 epidemic.

To address the concerning declines in case notifications, USAID, in collaboration with partner governments and the Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund), developed urgent TB program recovery plans in seven of the hardest hit, high-burden TB countries, including South Africa. The [South Africa TB Recovery Plan](#) supports the NTP's larger efforts to mitigate the impacts of COVID-19 on the country's TB responses. USAID continues to work with in-country partners and stakeholders to monitor and mitigate the impact of subsequent waves of COVID-19 resurgences on TB programming in real time. In South Africa, in particular, USAID is an active member of the TB Think Tank working group supporting the National Department of Health (NDOH) to implement key interventions to accelerate the recovery of TB services.

The proposed FY 2021 USAID TB budget for South Africa is \$15 million. With this level of funding, USAID will support the following technical areas:

## **REACH**

### *TB diagnosis*

The National Health Laboratory Services (NHLS) provides TB diagnostic services, mostly through centralized laboratories. GeneXpert is the initial diagnostic test. In addition, the lateral flow urine lipoarabinomannan assay (LF-LAM) was also introduced. Despite a countrywide roll-out of GeneXpert, the percentage of bacteriologically confirmed cases tested with rapid diagnostics remains low. South Africa is one of the leaders in adopting and scaling-up new, high-quality

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<sup>5</sup> National Institute of Communicable Diseases.

diagnostics, however, poor compliance with the diagnostic algorithm continues to be an issue. With FY 2021 funds, USAID will prioritize the following interventions:

- Supporting the NTP to conduct the TB diagnostic network assessment to ensure scale-up access to rapid TB diagnostics and drug-susceptibility testing (DST), the use of data for decision making, and optimizing the laboratory network;
- Conducting service gap analyses in supported facilities to understand the gaps in service provision, particularly in accessing early diagnosis;
- Scaling-up targeted universal testing for TB among high-risk groups through training, job aids, desktop references, and virtual sessions;
- Scaling-up bidirectional screening and testing for TB and COVID-19;
- Using digital chest X-rays (CXR) to improve screening and detection of TB within the community;
- Implementing a mobile clinic model and providing technical assistance (TA) to community healthcare workers and ward-based outreach teams to conduct TB contact tracing; and
- Improving linkage to appropriate treatment for all bacteriologically confirmed TB cases and laboratory confirmed DR-TB cases.

### *Engaging all care providers*

To guide implementation of case finding at the facility level, the NTP continues to implement the 'finding the missing TB cases' strategy. USAID contributed to closing the gap in finding the missing TB cases along the TB cascade through implementation of the continuous quality improvement (CQI) change package at the hospital and primary healthcare level. Since the implementation of the TB CQI package, there has been an increase in TB screening, diagnosis, and treatment initiation, with the testing rates increasing by more than 10 percent in USAID-supported districts.

To further improve case finding both in and outside the facility, the Government of South Africa is implementing a multi-prong active case finding (ACF) strategy. USAID will support these efforts by:

- Supporting the implementation of the NTP CQI change package which focuses on the TB screening and case finding cascade;
- Scaling-up targeted facility-level screening by integrating TB screening activities into other health services including maternal and child health, diabetes, etc.; and
- Engaging with general practitioners across public and private sector sites to strengthen referral pathways and expand access to TB services.

### *Community TB care delivery*

ACF activities aim to bring TB screening and diagnostic services to hard-to-reach and vulnerable populations. The NTP employs best practices garnered from years of experience implementing ACF, particularly in key populations like household contacts, inmates, healthcare workers, etc. USAID is implementing innovative approaches to ACF, contact tracing, and linkage to care at the community level through partnership with nongovernmental organizations (NGOs) and community TB care teams.

Moving forward, USAID will support:

- Implementation of gender-specific interventions once data analysis is completed for the study aiming to understand gender-related barriers to quality treatment;
- Targeted out-of-facility, ACF activities in high TB burden priority areas and districts with a particular focus on vulnerable populations;
- Innovative strategies to further strengthen ACF activities, especially among targeted key populations;
- Continued deployment of community health workers (CHWs) to implement ACF, COVID-19 screening, and to provide TB treatment and care to people in their communities; and
- Strengthened linkage and referral pathways to care at all levels of the TB cascade by helping to develop data applications for use at the community level.

## **CURE**

### *Drug-susceptible TB (DS-TB) treatment*

Linkage to treatment for people diagnosed with DS-TB remains a challenge in South Africa, as reflected in the high lost-to-follow-up rates. Some of the reasons behind these high rates are lack of proper communication between patient and staff on next steps after testing, lack of awareness that testing results are ready, and other competing priorities. Treatment success rates for DS-TB also fall short of the WHO and NSP target of 90 percent. The NTP is implementing a multipronged strategy to improve the TB TSR.

Moving forward, USAID will:

- Work with ward-based outreach teams that routinely conduct home visits to (1) ensure that people with a positive TB test are promptly contacted and initiated on appropriate treatment, and (2) follow-up with people diagnosed with TB to ensure successful completion of treatment;

- Scale-up of treatment support and comprehensive care package to improve successful treatment;
- Operationalize the NTP's standard operating procedures (SOPs) for the provision of TB treatment out of the Centralized Chronic Medicines Dispensing and Distribution (CCMDD) program through the use of enrolled nurses to conduct home delivery of TB medicines, identify eligible patients and register them on CCMDD, and create awareness to increase demand for the service by people with TB. The enrolled nurses will also provide an integrated service package that includes TB and COVID-19 screening;
- Coordinate TB services and management of people with TB at the hospital level, including successful referral of people from hospital to community-level; and
- Support the roll-out of child-friendly formulations to improve successful treatment completion among this population.

### *Multidrug-resistant TB (MDR-TB) treatment*

Improving the programmatic management of people with DR-TB is a priority for the NTP. USAID has supported the improvement of treatment outcomes for people with DR-TB by investing in scale-up of new all-oral shorter treatment regimens and decentralization of MDR-TB care.

Moving forward, USAID will support:

- Continued implementation of second-line drug susceptibility testing in supported districts;
- Scale up of the comprehensive treatment support package, which includes the use of pillboxes and mental health screening;
- Strengthening the quality of care of DR-TB services provided at centers of excellence and decentralized sites;
- Scale up of intensive screening of DR-TB household contacts;
- Implementation and integration of a pharmacovigilance monitoring system into the active drug safety and monitoring (aDSM) system; and
- DR-TB mortality audits to identify contributory factors to high mortality in supported districts.

## **PREVENT**

### *Prevention*

South Africa has one of the highest burdens of TB infection (TBI), especially in high-risk populations. Although a high number of people living with HIV (PLHIV) have received TB preventive treatment (TPT) over time, TPT provision among other high-risk groups has been suboptimal. The draft

revised TPT guidelines address this gap by prioritizing the provision of TPT to other high-risk groups as well. USAID will continue to provide support to scale up TPT by providing TA and targeted service delivery.

Moving forward, USAID will also support:

- Intensifying household contact investigation through use of community TB teams to integrate contact tracing and link people to GeneXpert testing and treatment initiation;
- Strengthening of infection prevention and control (IPC);
- Completing the QuantiFERON (QTF) study, which aims to understand and provide a baseline of the prevalence of TBI, active TB, and progression from latent to active TB among healthcare workers in collaboration;
- Training on, and implementation of, the revised TPT guidelines to expand the provision of TPT to other high-risk groups and introduction of other regimens; and
- Monitoring of the various TPT regimens through TA to roll out tools that will be used to track initiation and outcomes for people on TPT and enable reporting of data at the district, provincial, and national levels.

## **SUSTAINABLE SYSTEMS**

### *Commitment and sustainability*

The Government of South Africa has assumed an increasingly active role in the country's development; many of its domestic NGOs have simultaneously been strengthened and become capable development partners. To further demonstrate the government's commitment to TB and achieve the ambitious UNGA targets, the Government of South Africa signed a statement of [partnership](#) with USAID to commit to continue working together to end TB and to clarify key areas for collaboration. USAID has quarterly meetings with the NTP to discuss priorities and progress toward achieving TB control targets and program components in this SP. In addition, USAID has a TB Steering Committee which is co-chaired by the Deputy Director General (DDG) and USAID for joint monitoring of commitments in the partnership statement. USAID, through direct awards with local organizations, continues to build the capacity of local partners to improve TB services and work to leverage additional domestic resources for TB. Moving forward, USAID will support:

- Operationalization of the multisectoral accountability framework;
- Implementation of locally-generated solutions and promotion of the institutionalization of effective interventions by partnering with and funding local organizations; and

- Strengthening TB program oversight, strategic information support, quality of TB care and program management, policy/implementation support, supply chain management, and capacity building by partnering with governments in supported provinces.

### *Capacity and functioning systems*

Strengthening the procurement and supply chain management system to ensure uninterrupted access to essential TB prevention, diagnostic, and treatment commodities is a priority for the government. To achieve this, collaboration across various stakeholders is essential. USAID is supporting the strengthening of the procurement and supply chain management for TB pharmaceuticals and commodities by helping partners at the facility-, district-, provincial-, and national-levels improve drug forecasting, procurement management, and quality control of stock, including for DR-TB drugs.

Furthermore, improving the availability and use of strategic information is critical for generating the quality, real-time information needed to inform policy development and program implementation. The NTP has prioritized improving quality standards in the recording, reporting, and monitoring of people with TB. USAID supports the Government of South Africa in these efforts by providing TA to aid in the collection and validation of data and use of that data for decision making.

Moving forward, USAID will support:

- Strengthening of the pharmacovigilance system by implementation of the aDSM Roadmap, training of healthcare workers on safety monitoring, rolling-out of an electronic pharmacovigilance monitoring system, and improving reporting of adverse events (AEs) through the EDRWeb (electronic reporting system);
- Improving the procurement and supply chain management system by implementation of the stock visibility system (SVS), a mobile application that enables the electronic communication of medicine availability data from the facility level into upstream electronic stock management systems;
- Building the capacity of human resources for health by training/mentoring healthcare workers to provide quality TB care and services and deploying data captures to improve persisting data issues;
- Improving the collection and use of data for program management at the provincial- and district-levels through targeted support; and
- Strengthening health management information systems (like EDRWeb and Tier.Net) by ensuring the integration of data sources and conducting data quality assessments.