



UZBEKISTAN TUBERCULOSIS ROADMAP OVERVIEW, FISCAL YEAR 2024

This is an overview of the USAID/Uzbekistan FY 2024 Tuberculosis (TB) Roadmap, implemented with the FY 2023 budget. The roadmap was developed in consultation with the National Program (NTP) and with the participation of national and international partners involved in TB prevention and care in the country.

Uzbekistan is on the World Health Organization (WHO) list of high-burden multidrug-resistant TB (MDR-TB) countries globally. According to the latest WHO Global TB Report, the 2022 incidence of TB was 29,000 or 83 per 100,000 population; 16 percent of new cases and 31 percent of previously treated cases are estimated to have MDR-TB. The overall case detection rate is 49 percent, while the MDR-TB/rifampicin-resistant (RR-TB) case detection rate is only 29 percent. Bacteriological confirmation among cases was 71 percent, and 96 percent of individuals were tested with WHO-recommended molecular diagnostics at the time of diagnosis, according to WHO.

The Government of Uzbekistan has adopted comprehensive health reforms, including the National Strategy Concept of Healthcare Improvement for 2019-2025, which explicitly outlines TB reduction goals. In January 2023, the President of the Republic of Uzbekistan issued a new decree that operationalizes the TB National Strategic Plan (NSP), the central guiding policy for the State TB Program in the coming years. TB NSP 2021-2026 aims to reduce the TB incidence rate by 50 percent and the number of TB deaths by 75 percent by 2025, compared with 2015 levels. The NTP aims to achieve UNHLM's TB diagnosis and treatment targets, focusing on individuals with DR-TB, childhood TB, and preventive treatment of TB. The NTP's strategic plan aligns with the USAID's five main technical areas:

1. **Reach:** Providing universal access to diagnosis of all forms of TB, including M-XDR TB, by promoting rapid molecular tests, including M-XDR TB diagnostics with molecular and drug-susceptibility testing (DST) and lab capacity strengthening.
2. **Cure:** Ensuring access to quality, person-centered TB services for all forms of TB, including innovative outpatient services, shortened regimens, and TB services to reach and treat locally defined high-risk groups.
3. **Prevent:** Scaling up TB infection preventive treatment with intensified contact investigation and infection control.
4. **Innovate:** Supporting operational research in TB prevention, diagnosis, treatment, and care.
5. **Sustainable Systems:** Strengthening the country's response to combat TB through innovation and strengthening health systems, including expanding NTP's capacity to



manage all TB activities and increasing domestic financing and sustainability for TB services.

The proposed FY2023 USAID TB budget for Uzbekistan is \$6 million. With this level of funding, USAID will support the following technical areas:

REACH

TB diagnosis

Uzbekistan has made significant progress in increasing rapid TB diagnostics coverage. Currently, 117 GeneXpert platforms are available nationwide, including 22 machines with Extremely Drug Resistant TB (XDR TB) diagnostic capability and 10-color modules. USAID will support the NTP in the following areas:

- Implementing and scaling up new screening and rapid diagnostic methods and tools, including—
 - Mobile chest X-ray with AI and CAD.
 - Xpert and Xpert Ultra with network optimization and staff training.
 - Drug susceptibility testing (DST).
 - Whole Genome Sequencing (WGS) technology.
- Supporting the National Reference Laboratory (NRL) in implementing WGS technology for the accurate determination of the Mycobacterium TB genome and the detailed study of genotypes and drug susceptibility.
- Strengthening functional specimen transport networks and improving TB diagnosis quality and technical assistance (TA).
- Training lab technicians, introducing laboratory information management systems (LIMS), and strengthening quality management systems (QMS) for international certification.
- Training primary health care (PHC) and TB specialists to interpret lab test results and transform the smear microscopy laboratory network into specimen collection centers.
- Aiming to achieve 100 percent molecular testing of all presumptive TB cases and increase the share of bacteriologically confirmed TB.
- Partnering with NTP and WHO to improve and scale up TB case finding among children by introducing and adopting the best screening and testing tools (Xpert Ultra and DST) for nasopharyngeal, gastric, and sputum aspirates.



- Intensifying implementation of stool test sampling in Tashkent oblast to improve childhood TB diagnosis and increase the number of laboratory-confirmed TB cases.

Engaging all care providers

FY 2024 activities will support NTP in establishing closer collaboration between PHC and TB staff, hospitals and outpatient clinics, laboratories, and doctors in a few pilot sites, further scaling up the best practices of case finding. USAID will enhance the integration of PHC and TB services by implementing timely and accurate electronic dissemination of test results to all care providers involved in TB case finding.

USAID will continue supporting NTP in integrating TB services and primary care providers working under Social Health Insurance by developing and proposing a mechanism for incentivizing PHC providers through contractual performance-based re-allocation of hospital resources to PHC for TB case finding.

In FY 2024, USAID activities will continue to focus on TB contact investigation by improving collaboration and coordination between TB, PHC, epidemiological services, and multidisciplinary teams (MDT). USAID will support the development of TB contact investigation recording and reporting forms to strengthen the accountability of facilities and improve data quality.

USAID will continue to support improving the collaboration of TB specialists with infectious disease doctors, endocrinologists, and specialists of other disciplines in the management of individuals with TB/HIV and scaling up TB case findings.

Community TB care delivery

USAID aims to enhance TB case detection, treatment outcomes, and public awareness to combat the disease through a multifaceted approach encompassing innovative technologies, community engagement, and advocacy initiatives and will support in the following areas:

- Enhancing Active Case Finding (ACF) through coordination meetings with community stakeholders, including community members, organizations, youth and women's committees, local governments, and religious committees.
- Collaborating to enhance TB case finding among vulnerable groups such as potential and returning migrants, People Living with HIV (PLHIV), and TB contacts.
- Supporting NGOs/CSOs in utilizing innovative technologies like video-supported treatment (VST) and family-observed treatment to reach vulnerable groups and improve treatment outcomes.
- Continuing collaboration between healthcare facilities and NGO/CSO outreach workers through a Multidisciplinary Team (MDT) approach.



- Conducting public outreach on TB issues through various channels, including media, faith-based organizations, women's committees, activists, and journalists, to raise awareness and fight stigma.
- Supporting CSOs participating in government social contracting mechanisms to deliver TB services in communities.
- Facilitating advocacy meetings among stakeholders to develop terms and conditions for CSO access to state funding for pilot projects in TB services.
- Partnering with local NGOs to improve TB contact investigation and screening among key populations in pilot sites, such as the Tashkent region.
- Supporting NTP in expanding community-based TB screening using portable X-ray and computer-aided diagnostic (CAD) systems.

CURE

Drug-susceptible TB (DS-TB) treatment

USAID supports activities to improve TB diagnosis and treatment and implements an electronic surveillance system. In FY 2024, USAID activities will continue the expansion of a people-centered model of TB care by improving collaboration between TB and PHC services, maintaining a well-functioning specimen transportation system, improving communication between TB doctors and laboratory specialists, and coordinating activities between TB hospitals and outpatient treatment facilities. To trace and prevent unfavorable treatment outcomes, such as loss to follow-up (LTFU), a multidisciplinary team consisting of a social worker, psychologist, and a lawyer, where needed, will support individuals with home-based care, telephone counseling, and increased access to needed support and medical services.

USAID will train PHC providers and TB specialists to adopt the best treatment practices and algorithms.

USAID will continue implementing the VST model, training healthcare workers in VST methods, and providing tablets, phones, and connectivity. USAID will work to expand VST to include children and adolescents up to 18 years old.

Multidrug-resistant TB (MDR-TB) treatment

USAID will support the NTP in following areas:

- Assisting Uzbekistan's efforts to prepare for a Drug Resistance Survey (DRS), expected to be completed by fall 2023, to address the lack of routine surveillance for anti-TB drug resistance.



- Overcoming barriers to detecting and treating DR-TB, such as promoting GeneXpert tests, implementing new treatment regimens like modified all oral shorter treatment (mSTR) and BPaL, and shifting towards a more people-centered model of care.
- Utilizing person-centered care principles advanced through training of TB health providers in psychosocial counseling, involvement of psychologist-volunteers, and continuing medical education delivered via the Center for Innovative Distance Learning and Monitoring (CIDLM).
- Developing Standard Operating Procedures (SOPs) for clinical audits to strengthen evidence-based decision-making; healthcare providers will be trained to monitor and manage individuals with TB adverse events.
- Strengthening capacity-building efforts of the National TB Program's central-level Concilium, enhancing knowledge of regional doctors in DR-TB clinical management, and facilitating regular online Consilia of TB doctors for case management discussions and training activities.
- Improving the timely diagnosis and treatment initiation of individuals with DR-TB, scaling up mSTR and BPal treatment regimens, implementing outpatient treatment models with expanded Video Supported Treatment (VST), and monitoring individual progress through established sample transportation systems.

PREVENT

Prevention

FY 2024 activities will continue promoting improved infection and prevention control practices and other safety measures, especially in high-risk settings and among high-risk groups. USAID will update the infection control manual and train healthcare workers on the revised version.

USAID and WHO provided technical assistance to improve the national clinical guidelines on latent TB infection (LTBI) management, diagnostic algorithms, and LTBI recording standards. FY 2024, training of PHC providers and TB specialists will continue on updated guidelines to find people with LTBI and provide timely preventive TB treatment, especially for high-risk groups, including household contacts, children, and individuals with suppressed immune systems.

In FY 2024, USAID will support the extension of QuantiFERON Gold in the Tub test in other oblasts, previously successfully introduced in the pilot region. USAID will advocate for and support expanding TPT coverage, adopting the best diagnostic methods, introducing novel TPT treatment regimens, and strengthening national recording and reporting systems for TB preventive treatment.



INNOVATE

Research

The Uzbekistan TB research network is not very effective for conducting comprehensive research; the process requires the involvement of non-governmental/civil society and a defined research strategy with priorities.

In FY 2024, USAID will conduct a Feasibility study on QuantiFERON Gold in Tub test implementation in the country with a cost-efficiency analysis. USAID will also support the TB Drug Resistant Survey at the central (NRL) and Oblast level. The overall activity will technically be led by the WHO.

Scale up of New Tools

USAID donated two ultraportable X-rays with AI CAD systems and implemented an innovative TB screening method among contacts and key populations in hard-to-reach areas of Tashkent oblast. It also conducted training of radiologists, PHC, and TB physicians in the oblast.

USAID supported the implementation of the QuantiFERON test in Tashkent oblast to improve the diagnosis of LTBI. Laboratory staff in the oblast, along with the PHC and TB staff, were trained on the topic.

In FY 2023, USAID will support the expansion of innovative approaches in screening (X-ray), diagnosis of LTBI (QuantiFERON), and TB in children (stool test) in other oblasts, based on NTP staff experience gained in pilots.

SUSTAIN

Commitment and Sustainability

USAID will support MOH and NTP in preparation for co-facilitating the UN High-Level Meeting in September 2023 and continue advocating for increasing domestic resources and national funding for TB response and shifting from an ineffective and inefficient model of TB care towards the delivery of sustainable, high-quality, person-centered services. In partnership with NTP, USAID will work with local communities and organizations that are vital in reaching out and providing TB care and treatment.

FY 2024 USAID activities will continue examining barriers to improving TB services operations and sustainability at each step of the TB continuum of care, identifying how to address these gaps through coordination between responsible entities, adjusting provider payment incentives, and optimizing the services delivery network and funds flow. USAID will continue supporting ongoing health financial reforms with the support of the newly recruited TB Financing Advisor and by organizing a working group on TB financing with the involvement of all major role players and invited consultants. The current objective of the working group is to develop TB Diagnostic Related Groups to determine payments for the State Health Insurance Fund to cover the hospitalization expenses of individuals with TB. USAID will support MOH in piloting



the social health insurance in the Syrdarya Region for TB services and advocate for social contracting for CSOs to access state funding to implement TB control community-based services for the population.

Capacity and functioning systems

In FY 2023, USAID will continue supporting Uzbekistan in all areas mentioned above, including improving the quality of medical products system assurance and increasing the supply of quality-assured essential medical products of health importance, implementing GMP standards, supporting Medicines Quality Control Laboratories (MQCL) to follow international standards and maintaining post-marketing surveillance for TB medicines in Uzbekistan. FY 2024 USAID activities will continue improving supply forecasting, quantification, inventory management, distribution, use of early warning systems for stock levels, and aDSM implementation. USAID will continue to strengthen the pharmacovigilance system.

Monitoring and evaluation (M&E) and Health Management Information Systems (HMIS) [and implementation of the Performance-Based Monitoring and Evaluation Framework (PBMEF)]

In FY 2023, USAID will support Uzbekistan through the TB DIAH mechanism to address the country's priority needs through the Performance Based Monitoring and Evaluation Framework (PBMEF). More specifically, support will be provided to NTP in assessing gaps and strengths in Uzbekistan's TB M&E and surveillance system, analyzing the current structure, function, and scope from the health facility level to the national level, and developing a TB M&E plan.

USAID will continue introducing and implementing the TB register and customizing it to national requirements and needs, including adding TB clinical, pharmacy, and specimen transportation modules, aDSM, and knowledge management modules, ensuring the operational internal and external linkages between TB register modules and external systems. Simultaneously, USAID will support NRL in introducing the laboratory information management system to manage samples and associated data effectively. USAID will ensure its compatibility and interoperability with the TB register.

All mechanisms receiving FY 2023 funds will continue maintaining Activity Monitoring, Evaluation, and Learning Plans (AMELP) aligned with the PBMEF core and extended indicators. Note that one core indicator related to private sector notification is not applicable as all TB services in Uzbekistan are provided through the public sector.

Human Resources for Health (HRH)

The development of human resources for TB control was reflected in the Program on Fighting TB in the Republic of Uzbekistan for 2011-2015 and 2019-2021. The current NSP for 2021-2025 includes planning the comprehensive implementation plan for the sustainable development of human resources for TB control. However, there is no comprehensive plan for TB HR



development; NTP is at the initial stage of analyzing the existing human resources with the gaps and challenges.

In FY 2024, USAID will assess long-term staffing needs in the Tashkent oblast and develop an HR plan to implement full-scale TB activities. Results of the assessment and plan of HR development will be shared with MOH, NTP Uzbekistan, and Tashkent Oblast Health Administration for further consideration, an adaptation of the budget, and optimization of HR resources. USAID will support sharing the experience accumulated in the pilot region, Tashkent oblast, with other administrative entities in different areas of TB care, including the HR component.