



CAMBODIA TUBERCULOSIS ROADMAP OVERVIEW, FISCAL YEAR 2024

This is an overview of the USAID/Cambodia FY 2024 Tuberculosis (TB) Roadmap, implemented with the FY 2023 budget; it was developed in consultation with the National Tuberculosis Center in Cambodia (CENAT) and with the participation of national and international partners involved in TB prevention and care in the country.

According to the World Health Organization (WHO), the estimated TB incidence in Cambodia declined from 575/100,000 in 2000 to 423/100,000 in 2011 and 320/100,000 in 2022. Despite reductions in the estimated overall burden, TB case detection has been challenging in recent years. In 2022, the National TB Program (NTP) reported 32,772 people with new and relapse TB, a marked increase from 21,589 case notifications in 2021; however, 2022 notifications only equate to 61 percent of the WHO-estimated incidence. Cambodia reported only 114 people of the estimated 680 people with multidrug-resistant TB (MDR-TB), translating to only 17 percent in the same year. The treatment success rate (TSR) was 95 percent for drug-susceptible tuberculosis (DS-TB) and 85 percent for MDR-TB.

The NTP developed the National Strategy to End TB from 2021-2030 based on the Joint Program Review (JPR) held in June 2019 and critical lessons learned from the current program implementation. The vision of the National Strategy is a Cambodia free of TB with zero deaths, disease, and suffering due to TB by 2050. To fulfill this, the NTP aims to accelerate the reduction of TB incidence by 80 percent and mortality by 90 percent between 2015 and 2030 by focusing on five main objectives:

- Objective 1: Find and treat all tuberculosis cases early using more sensitive screening and diagnostic algorithms and new and more effective treatment regimens emphasizing reaching missing cases.
- Objective 2: Address other program-specific needs and priorities, including community directly observed treatment (C-DOTS), MDR-TB, public-private mix (PPM), TB/HIV, TB-Diabetes, TB in prison, Childhood TB, and TB in migrants.
- Objective 3: Prevent the emergence of TB in susceptible populations using a combination of biomedical, behavioral, social, and structural interventions.
- Objective 4: Build, strengthen, and sustain enabling policies, empowered institutions, human resources with enhanced capacities, and financial resources to match the plan.
- Objective 5: Strengthen the NTP monitoring and evaluation system and research activities.



The proposed FY 2023 USAID TB budget for Cambodia is \$6,505,000. With this level of funding, USAID will support the following technical areas:

REACH

TB diagnosis

In alignment with the new National Strategic Plan (NSP) (2021-2030), USAID will bolster Cambodia's TB diagnostic network, prioritizing enhanced capabilities at the health center level for increased community access and accurate diagnosis. USAID will also expand Cambodia's TB diagnostic network, focusing on health center-level capabilities to improve community access and diagnosis accuracy and support the following areas:

- Using a lab diagnostic network optimization in 2023 to guide resource allocation for improved lab services.
- Assisting the NTP in implementing molecular testing and filling cartridge procurement gaps to prevent stockouts.
- Scaling up Molecular diagnostic tools like GeneXpert and Truenat for primary diagnosis, complemented by chest X-ray (CXR) screening.
- Facilitating software connectivity (Data to Care) to monitor and maintain molecular platforms, reducing diagnostic delays and enhancing case detection.

Continued capacity building for health workers in CXR interpretation, with support for web-based training and quality control systems.

- Exploring pilot programs that use artificial intelligence (AI) for CXR interpretation.
- Reviewing the approach to MDR-TB case detection while supporting a national drug resistance survey (DRS) in 2024.
- Coaching and training to enhance the quality of sputum samples and sample transport systems.
- Addressing challenges in GeneXpert maintenance and cartridge supply chain while implementing connectivity software for monitoring machine functionality.
- Collaborating with the Global Fund will ensure nationwide implementation of connectivity software.

Engaging all care providers

With FY 2023 funds, USAID will continue its support and advocacy efforts with the National TB Program (NTP) and Ministry of Health (MOH) to expand hospital linkages throughout Cambodia, aimed at improving TB case detection, enrollment, and referral processes across the



country. This initiative encompasses scaling up routine and systematic TB screening at triage/outpatient and in-patient wards of Referral Hospitals (RHs) and Health Centers (HCs) to identify individuals with presumptive TB. These individuals will then be referred to quality diagnostic services with links to treatment or care while strengthening proper data recording and reporting through an electronic web-based TB Management Information System (MIS).

USAID's engagement will extend to HC staff and Village Health Support Groups (VHSGs), who will work together to identify and screen household and neighbor close contacts of individuals with TB.

Recognizing that a significant proportion of individuals with TB initially seek care in the private sector, USAID supported the NTP in developing Public-Private Mix (PPM) Guidelines and Standard Operating Procedures (SOP) for 2022-2027. These guidelines broaden the scope of PPM beyond referral to engage private sector providers in TB diagnosis and treatment. With FY 2023 funds, USAID will support the application of these new guidelines and SOPs through cross-cutting private sector quality improvement activities and introducing standards of care for TB services in the private sector.

At a policy level, USAID will collaborate with the Cambodian Medical Association to develop policies linking TB indicators with accreditation and license renewal for private healthcare providers; this initiative encourages private providers' involvement in TB screening and referral. Additionally, USAID will work with the MOH and WHO to update the national TB training curricula and guidelines, ensuring that public health and private providers are equipped with up-to-date information on diagnosing and treating TB infection and TB disease, laying the groundwork for effective implementation of PPM.

Community TB care delivery

With FY 2023 funds, USAID will continue community-based contact investigation among confirmed individuals with TB patients to identify presumptive individuals, a 'seed and recruit' strategy using TB survivor volunteers. This approach combats stigma, enhances awareness, and simplifies diagnosis. USAID will allocate funds to extend TB case-finding activities to cover 27 operational districts. USAID will introduce a school-based screening activity in FY 2023 to identify at-risk children with TB and refer them to health centers, employing innovative screening and diagnostic methods, including stool sampling, to detect cases and facilitate treatment. In 2022, USAID supported a Knowledge, Attitude, Belief, and Practice (KABP) survey to enhance understanding of behavioral patterns in the community. Leveraging the survey findings, FY 2023 funds will be utilized to focus capacity-building efforts for national and subnational implementers on improving Social and Behavior Change (SBC) approaches and applying innovative SBC solutions.



CURE

Drug-susceptible TB (DS-TB) treatment

In FY 2023, USAID will provide support to ensure individuals diagnosed via active or passive case finding are on treatment. To improve adherence and reduce costs for individuals with TB and health systems, USAID will provide technical support to NTP for introducing and implementing the WHO rapid communication guidance on a four-month treatment regimen for drug-susceptible TB, a short, effective course of treatment, allowing faster cure and easing the burden on individuals with TB and the healthcare system. USAID will provide technical assistance to the MOH to support the revision of the DS-TB treatment guideline/SOP and will support healthcare provider (VHSGs and health facility-based providers) capacity-building activities to strengthen TB patient management, including treatment and follow-up, supportive supervision, and training in C-DOTS. Quality of care audits that review the process of TB notification to completion of treatment and verification of cure will be implemented by cross-checking TB patient treatment cards and reviewing TB registers and interviews with individuals with TB. In addition to site monitoring and coaching, USAID will enhance the use and monitoring of TB-MIS to ensure individuals' TB disease status has been tracked and updated according to treatment schedules and completion dates.

Multidrug-resistant TB (MDR-TB) treatment

With FY 2023 funding, USAID will continue supporting the NTP in implementing and introducing a shorter six-month all-oral regimen and strengthening the capacity of MDR-TB healthcare providers on newly developed guidelines for Programmatic Management of Drug-Resistant TB (PMDT). To improve the quality of care, USAID will continue supporting the implementation of PMDT services, improve clinical management, and support transportation for follow-up appointments. USAID will continue providing refresher training or on-site coaching on using the audiometry equipment and monitoring individuals with TB to avoid irreversible hearing loss. USAID will work with the NTP and other partners, including WHO, to ensure a review of the Green Light Committee's findings and recommendations are addressed. USAID will provide focused support to the NTP in implementing active TB drug-safety monitoring and management (aDSM), one of the concerns identified by the previous regional Green Light Committee visit to prevent irreversible side effects from treatment. USAID will help CENAT to establish systematic case mortality audits to better understand the root cause of patient deaths, which can provide insights into future clinical management.

PREVENT

Prevention

In FY 2023, USAID will work with the NTP to introduce a new, safer, shorter, and more effective one-month regimen and once-weekly TB preventive treatments (once a month and once-weekly isoniazid and rifapentine). USAID will also improve coordination via technical working group (TWG) meetings and help mobilize resources on TB preventive therapy (TPT)



drug procurement, management, and distribution to avoid stockout. USAID technical assistance will coordinate with WHO to support the TWG on TPT and facilitate the effective management of the group. USAID will continue to provide technical support to NTP staff and subnational levels on drug management, including planning and forecasting new TPT drugs to prevent drug stockout in the country. To address and prevent caregivers' misperceptions of TPT, USAID will support SBC messaging approaches, raise TB awareness, and conduct screenings in communities and schools; they will also intensify contact investigation (CI) activities by working with healthcare providers and the community, ensuring all close contacts of bacteriologically or clinically confirmed DS and DR-TB get screened, evaluated, and enrolled for treatment until completion. TPT will be improved in USAID's support areas so all eligible close contacts and PLHIV will be enrolled for TPT. USAID will also assist NTP in ensuring full utilization of the TPT module in the TB-MIS to improve the recording and reporting of TPT data.

SUSTAINABLE SYSTEMS

Commitment and Sustainability

With FY 2023 funding, USAID's health system strengthening efforts will continue to bolster the TB response in Cambodia, including support for provinces and communities to enhance ownership and capacity in TB response and domestic funding efforts. USAID will focus on building the skills of commune councils to integrate TB activities into Commune Investment Plans (CIP) and mobilize local resources for TB. Additionally, USAID will work with the Ministry of Health (MOH) to increase multi-sectoral stakeholder engagement through participation in various committees and task forces, advocating for diverse sectoral membership and engaging non-health sectors in TB control activities. Expansion of peer support groups and networks of people living with or affected by TB, under the official registration of "TB People Cambodia," will also be supported to advance a rights-based, people-centered, and gender-based approach to TB programming. Moreover, USAID will support advocacy and piloting new approaches in the private sector in line with the public-private mix policy for TB and the newly approved Cambodian Hospital Accreditation Standards, which includes developing minimum standards for licensing private sector facilities and ensuring staff qualifications for service provision through the health quality improvement project.

Capacity and functioning systems

USAID will expand the implementation of molecular testing as primary diagnostics in their geographic areas. Based on utilization and stock availability, USAID will support gap-filling to enable full nationwide testing scale-up and avoid stock-outs. USAID will work with the Global Fund country team to advocate for the government budget to gradually cover cartridge procurement.



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

With FY 2023 funding, USAID will provide support for disseminating results and outcomes and implementation planning for pivoting the program according to the data if needed. USAID will ensure the evidence base generated from the survey will be applied to USAID programming to optimize case findings and the treatment of individuals with TB.

In 2024, USAID will support conducting the drug resistance survey (DRS). The result of the study will help NTP and partners better understand the burden of MDR-TB, set realistic targets that stakeholders can agree upon, and realign the program.

Human Resources for Health (HRH)

Leadership challenges and staff turnover at CENAT have led to a shortage of knowledgeable personnel. USAID addresses this by supporting human resource development across various areas, including clinical services, M&E, digital technologies, and laboratory services. Embedded advisors have been instrumental in driving progress at CENAT, particularly in lab strengthening and M&E. With FY 2023 funds, USAID will continue supporting an embedded advisor specializing in lab strengthening to enhance the national TB reference laboratory's capacity and improve lab technicians' skills. Additionally, USAID's health quality improvement support strengthened the capacity of health providers in systematic TB screening and care. With FY 2023 funds, USAID will develop new TB clinical training guides and establish a continuing professional development mechanism for in-service training. Support will also extend to enhancing the skills of private health facility staff in identifying suspected TB cases and improving quality standards.