



PHOTO: AIBEK CHAKIEV

# CURE TUBERCULOSIS

## OVERVIEW

The USAID Cure Tuberculosis project assisted the Kyrgyz government to diagnose, treat, and cure people with tuberculosis, with a special focus on drug-resistant tuberculosis. The project strengthened systems, tools, resources, and human capacity to improve the Kyrgyz Republic's response to tuberculosis in line with international recommendations.

## KEY RESULTS (2019-2024)

**Increase drug-resistant tuberculosis (DR-TB) case detection.** Strengthen laboratory and diagnostic services and expand case detection and contact investigation capabilities in communities and health facilities.

- The project **optimized laboratory TB diagnosis** in Chui, Naryn, Talas, and Batken Oblasts and Bishkek. The project supported the establishment of a quality management system for laboratories, while an expanded TB transportation system of biological samples and the switch from paper-based to digital technologies resulted in the **delivery of 98% of sputum samples to laboratories within the 72-hour standard**. Routine calculation of diagnostic turn-around time indicators is now enabled.
- Cure Tuberculosis supported the National Reference Laboratory (NRL) to implement whole genome sequencing and to introduce the **first-ever routine implementation in Central Asia of an innovative, child-friendly stool test to improve TB diagnosis in children**.
- With project support, the **NRL became the first lab in Central Asia to receive accreditation according to international quality standard ISO 15189** to perform microscopy, drug susceptibility testing, and molecular genetic tests.

- **Routine testing for extensively-drug resistant TB (XDR-TB) was introduced at oblast level** for the first time to facilitate early initiation of appropriate treatment, thanks to five project-procured 10-color GeneXpert (GX) platforms, expanding the number of facilities with GX technology to 29 sites nationwide.
- The project continued to support the nationwide adoption of digital solutions across the continuum of care, enabling **151 facilities to utilize the laboratory data management information system (LDMIS)** for real-time TB test results. The system was also adapted for COVID-19 testing, bolstering the national pandemic response. Recognizing its input and adaptability, the Ministry of Health (MOH) **adopted the system for implementation across the health care system**, starting with the largest medical facility, the National Hospital.
- An **electronic module for instrumental diagnostics** developed by the project helped digitize X-ray images and now contains a national database of over 44,700 digital X-ray images for TB, with the capacity to store other diagnostic test results.
- Nationally, rapid diagnostic testing coverage increased from 70% in 2018 to 90% in 2023 and bacteriological diagnosis coverage increased from 61% in 2018 to 73% in 2023, demonstrating **significant improvements in TB diagnosis**.
- The project implemented a **TB active case-finding (ACF) approach in 12 general hospitals** in Chui, Naryn, and Osh Oblasts and Bishkek: 100% of admitted patients with TB signs were tested for TB, and all diagnosed patients initiated treatment. The ACF approach **significantly increased TB case detection**, and has now been scaled up nationwide and included in the National Program Tuberculosis-VI.
- The project piloted an **enhanced TB contact investigation** model in Chui, Naryn, and Batken Oblasts to improve case detection among those in contact with TB patients: pilot results show that the **average number of identified TB contacts per index case almost doubled** and the **proportion of active TB cases detected increased almost four-fold**. All identified TB cases initiated treatment.
- Cure Tuberculosis **trained nearly 43,000 health promotion specialists, community and religious leaders, and volunteers** in target geographical areas on TB-related issues, who then conducted information sessions to raise TB awareness and combat stigma, **reaching over 1.5 million people nationwide**.

**Cure more patients of DR-TB.** Ensure all patients receive correct treatment regimens with high-quality drugs and complete their treatment thanks to improved patient-centered care.

- Cure Tuberculosis developed and updated **clinical protocols, guidelines, and strategies** on DR-TB management, drug management, adverse events management, and TB case management (TB CM); all have now been **institutionalized by the MOH**.
- The project reformed the TB Concilium to improve its effectiveness; new TB Concilium guidelines and protocols have been approved by the MOH and rolled out to all oblasts, strengthening clinical monitoring of TB cases. **TB Concilia can now convene online and share data electronically**; the e-TB Concilium module developed as part of the e-TB Register is now routinely implemented by all TB Concilia.
- **TB CM is routinely implemented at primary health care (PHC) nationwide**; with PHC providers trained in TB CM tools. The TB CM approach includes an enhanced incentive payment system for successfully treated TB cases to motivate health care workers to provide better patient-centered care.
- The project's **TB medical information systems (TB MIS)** are utilized by all TB hospitals and 102 facilities at PHC level to store and manage electronic patient records. The MOH adopted the electronic system for storing inpatient medical history (electronic medical record, EMR) for **implementation throughout the health care system** starting with the National Hospital. The e-TB Register centralizes all TB case-based information for treatment monitoring and data reporting.
- **Over 2,500 TB patients** received psychosocial support, food and hygiene packages, and/or financial assistance through civil society organizations and the engagement of local government and communities to help them complete treatment.
- As a result of improved clinical monitoring and patient-centered case management, the **treatment success rate for DR-TB increased** from 56% in 2019 to 74% in 2023.

**Prevent DR-TB infections.** Improve infection prevention and control (IPC) in health facilities and laboratories and improve patient, provider, and at-risk people's behaviors around preventing, detecting, and treating TB.

- Cure Tuberculosis-pioneered **clinical guidelines and protocol on TB infection diagnosis and preventive treatment** and **TB IPC guidelines** were approved by the MOH for implementation for the first time in Kyrgyzstan. The TB IPC policy was integrated into the general IPC approach in health care.
- The project aims to **change the behaviors of patients and communities** towards embracing TB testing, treatment, and patient support. As part of these efforts, the project **created 33 videos** showcasing real stories and educational content on TB, disseminated to target audiences through project partners, sub-

grantees, and various media channels. The project also built a pool of **200 journalists** committed to reporting on TB in an accurate and non-stigmatizing way.

- The project implemented a **youth engagement approach** to inform youth about TB on a peer-to-peer basis and encourage health-conscious behaviors resulting in over 8,000 young people reached with information sessions on TB.

**Improve the enabling environment.** Improve TB-related policies, optimize financing for TB services, enhance the use of TB data for decision-making, and reduce stigma and discrimination.

- Cure Tuberculosis collaborated with the government to enhance TB treatment and prevention policies, influencing the **adoption of over 60 regulatory documents**, reforming TB services in all oblasts and Bishkek, and contributing to the development of the National Program Tuberculosis-VI for 2022-2026 and its approval by the Kyrgyz Cabinet, and the revision and adoption of the Public Health Law with new provisions on TB.
- Since 2019, the project partnered with the Mandatory Health Insurance Fund (MHIF) to establish financing standards and mechanisms for different aspects of TB treatment. These **financing methods, now institutionalized and secured in the MHIF budget law**, cover areas like the TB transportation system of biological samples, the coordination of TB services at the primary level, and incentive payment system for successfully treated TB cases, allowing them to be financed from the state budget. Project advocacy efforts redirected the money saved from optimizing TB services back into the national TB program.
- **TB transportation system of biological samples and PHC payment system for successfully treated TB cases are now more sustainable** through state financing and territorial expansion to Bishkek and Osh cities and all seven oblasts.
- The project helped expand the results-based payment system for PHC providers nationwide, **increasing the number of successfully treated cases paid for at PHC ten-fold** from 2017 to 2022. In tandem, thanks to the project-developed improved verification system coupled with the strengthened TB Concilium and TB CM approach, **TB cases submitted for payment as successfully treated dropped by 30%** in 2023 by eliminating errors, with cost savings redirected to increase the incentive payment amount per case.
- Project-facilitated **Medicine Quality Control and Pharmacy Management procedures** enabling post-marketing surveillance of medicines and regulating storage, management and distribution of medicines approved by the MOH for implementation throughout the health care system for all medicines, with a first-ever standard technical specifications template prioritizing quality over price for procuring quality-assured medicines. The project also helped **amend the procurement law** to allow the government to procure quality-assured drugs from international sources from the state budget.
- The project provides technical support to the National TB Program (NTP) and Republican Health Promotion Center to develop an **annual work plan on social and behavior change (SBC)**. This aids in the harmonized dissemination of TB information and efforts to reduce stigma and discrimination through the NTP and other stakeholders. The project has also provided technical assistance to develop an SBC strategy within the National Program Tuberculosis-VI for the first time.
- **TB data analysis and management system** is being developed using the national TB MIS; today, over 4,700 health care workers use the TB MIS routinely. Thanks to TB MIS, the country's TB recording and reporting system is being transformed, shifting to a more efficient electronic format, enhancing data management and use of data for evidence-based decision-making.
- **Over 8,600 individuals**, spanning health care, finance, civil society, and media, **were trained on WHO End TB Strategy components**.

### **Gender Equality and Female Empowerment**

- During training sessions, Cure Tuberculosis highlights gender aspects affecting TB diagnosis and treatment, such as barriers to health care and gender-based stigma. More than **3,800 health care workers participated in training** sessions that include different approaches to counseling women and men on TB. The project also trained nearly 43,000 village health committee members, health promotion unit specialists, community and religious leaders, volunteers, and others. The **majority of participants in project-led training sessions are women**.

**Project Duration:** July 2019 – July 2024

**Budget:** \$20.2 million

**Implementing Partners:** JSI in partnership with the University Research Co., LLC (URC) and U.S. Pharmacopeia (USP)

**Key Partners:** Ministry of Health, National Tuberculosis Program, Mandatory Health Insurance Fund

**Contact Information:** Office 6, 15 Razzakov Street, Bishkek, tel.: +996 (312) 988 102