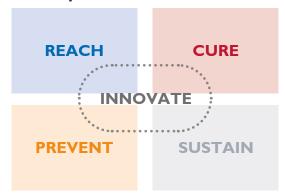




## **USAID** Cure Tuberculosis Project Year 4 Annual Results October 1, 2022 – September 30, 2023

Cure Tuberculosis is a five-year activity (2019-2024) implemented by JSI in partnership with University Research Co., LLC (URC) and United States Pharmacopeia (USP) which aims to strengthen the Kyrgyz government's ability to diagnose, treat, and cure people with drug-resistant tuberculosis (DR-TB). The project activities are aligned with the USAID Global TB Strategy and TB Roadmap implementation pillars: Reach, Cure, Prevent, Innovate, and Sustain.

Cure Tuberculosis works through four sub-grantee organizations and in close collaboration with the Kyrgyz Republic's National Tuberculosis Program (NTP) under the Ministry of Health (MOH) and national partners.



#### SUB-GRANTEE ORGANIZATIONS

- National Red Crescent Society (NRCS)
- Association of Village Health Committees (AVHC)
- TB People in Kyrgyzstan (TB People)
- Hospital Association of the Kyrgyz Republic (HAKR)

#### PROJECT GEOGRAPHICAL ROLL-OUT KYRGYZTB **SERVICE** Sustainability YEAR I YFAR 2 YEAR 3 YFAR 4 YFAR 5 Hand-over and Talas Batken Osh city phase-out Jalal-Abad Osh (Kara-Suu)

### TB IMPACT **INDICATORS** (2022 data)

Case detection rate: 53% Notification rate: 65.5 per 100,000 Mortality rate: 2.5 per 100,000

#### **KEY RESULTS (2019-2022)**

Rapid diagnostic testing: ↑ 75% to 84%

Second-line DST coverage: **↑** 55% to 86%

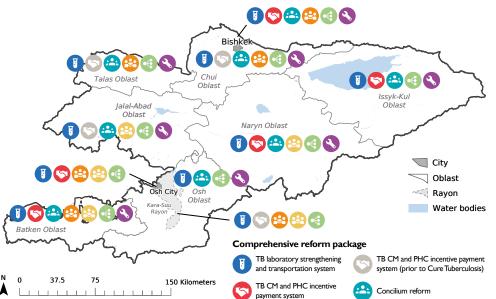
RR/MDR-TB treatment success rate: ↑ 55% to 72%

**XDR-TB** treatment success rate: **↑** 58% to 61%

#### Lab optimization and national transportation system improve quality and access to TB diagnosis

- TB case management (TB CM) and primary health care (PHC) incentive payment system improve clinical management of TB cases at PHC
- Concilium reform strengthens quality and safety of TB treatment through improved clinical monitoring
- Community patient treatment support provides tailored patient-centered services to improve treatment adherence
- TB medical information systems (TB MIS) capture TB patient records to streamline care and provide quality data for evidence-based decision-making
- Restructuring of TB services and reform of Oblast TB Center scope and TB program stewardship and coordination functions, with implementation of TB financing reforms

#### CURE TUBERCULOSIS TB REFORM IMPLEMENTATION



Community patient treatment support Community patient treatment support

(USAID Support to TB Patients)

### Restructuring

#### **DISCLAIMER**

This document is made possible by the generous support of the American people through the United States Agency for International Development (USAID). The contents are the responsibility of JSI and do not necessarily reflect the views of USAID or the United States Government.

#### **USAID** Cure Tuberculosis project

|SI, 15 Razzakov Street, Office 6, Bishkek, Kyrgyz Republic - 720040

**Cure Tuberculosis fact sheet (USAID)** 

Cure Tuberculosis project page (|SI)

# REACH



#### **KEY RESULTS** (2022 data)

Case detection DR-TB notification **Childhood TB** notification

**Bacteriological** diagnosis coverage

**Contact investigation** coverage

**53%** 

333

84% Rapid diagnostic testing

Second-line DST coverage RR/MDR-TB cases notified

RR/MDR among new TB cases

RR/MDR-TB among previously treated cases

USAID core indicators

Key indicators

#### **LABORATORIES & DIAGNOSTIC NETWORKS**

- Optimized **TB laboratory network** in Bishkek with new routing and referral algorithms, and points of sputum collection
- Implemented **TB transportation system** of biological samples and drugs at primary level in Bishkek
- Started establishment of a culture lab in Bishkek TB Center with Bishkek and Chui Oblast catchment area
- GeneXpert (GX) coverage increased from 63% in 2019 to 95% in 2023 (6 months) in Bishkek
- Bacteriological coverage increased from 72% in 2019 to 76% in 2023 (6 months) in Bishkek

Improved turn-around time (TAT)

Sputum-to-lab TAT	Lab performance TAT	Lab-to-clinician TAT
95%	89%*	87%
72h	24h	24h

Faster TB diagnosis

\*GX

- Stool test validation at the National Reference Laboratory (NRL) completed; expanded stool test routine implementation in the NRL and Oblasts
- XDR-TB testing implemented at oblast level on routine basis for early initiation of appropriate treatment regimens thanks to:
  - five 10-color GX platforms procured to improve access to rapid molecular diagnostics at oblast level
  - labs with GX expanded by five new facilities reaching 29 sites nationwide
- Proportion of samples sent for testing before treatment according to Diagnostic Algorithm increased from 50% in 2021 to 87% in 2023 (6 months) nationwide, on average

### TB ACTIVE CASE FINDING (ACF) AND TB CONTACT INVESTIGATION (TB CI)

#### **FACILITY-BASED ACF**

- Completed TBACF pilot in 12 general hospitals in Chui, Naryn Oblasts, Kara-Suu rayon of Osh Oblast and Bishkek leading to routine implementation
- All admitted patients with respiratory disease (11,445) screened for TB
- 100% of presumptive cases (1,086) tested
- TB confirmed in 7.3% of tested cases (79) and all initiated on treatment
- Average time to diagnosis decreased from 3.5 to 2 days

#### **COMMUNITY-BASED ACF**

- Screened 1,446 people from priority groups for TB
- 230 people with presumptive TB identified and referred for testing
- 76% of presumptive cases (174) tested for TB
- TB confirmed in 7% of tested cases (12) and all initiated on treatment

#### TB CI

- Completed TB CI pilot in Naryn, Batken, and two rayons of Chui Oblast
  - 4.6 TB contacts per index case (2,947 total contacts)
  - 128 contacts in need received vouchers to pass free x-ray examination
  - 5.1% active TB cases (66) identified and enrolled on treatment - in line with WHO standards
- Factors of non-completion of TB CI analyzed: no cough, male, young
  - Recommendations developed for TB CI targeting and social support

- Putting Patients First: Central Asia's First Accredited TB Laboratory in Kyrgyzstan.
- Person-centered TB Care in Kyrgyzstan: Going the Extra Mile
- Racing Against Tuberculosis (Medium)
- Stool Testing Transforms Pediatric Tuberculosis Diagnosis in Kyrgyzstan



# **CURE**



#### **KEY RESULTS** (2022 data)

Treatment success rates

81% DS-TB

USAID core indicators

71%

Key indicators

**72%** RR/MDR-TI

61% XDR-TB

9 %
RR/MDR-TB
cases enrolled
on treatment

DR-TB treatment interim results

#### CLINICAL MANAGEMENT AND ACTIVE DRUG SAFETY MONITORING (aDSM)

- Revised DR-TB management clinical guidelines and protocol approved by MOH
- New TB Concilium regulation adopted by the MOH for nationwide implementation and rolled out in Bishkek and Osh cities and Issyk-Kul Oblast
- e-TB Concilium module finalized and routinely implemented in Naryn, Batken, Talas, and Bishkek TB Concilia; Chui, Osh, Issyk-Kul started implementation
- aDSM approach introduced and incorporated in e-TB Register

#### TB CASE MANAGEMENT (CM)

- **TB CM** now routinely implemented at PHC for patient-centered care
  - TB CM team consists of TB and family doctors, nurses and feldshers, with community engagement as needed
- 100% coverage of PHC facilities in Bishkek and Osh; rolled out to Issyk-Kul
  - 797 TB patients treated at PHC (686 in Bishkek, 111 in Osh)
- 2,179 PHC workers trained on TB CM tools nationwide, including on clinical monitoring and aDSM, psychosocial counseling and community-based treatment support options

## COMMUNITY-BASED TREATMENT SUPPORT

- 484TB patients at risk of treatment interruption in all pilot oblasts received psychosocial support through civil society organizations; 94% showed adherence to treatment
  - 255 TB patient support groups conducted with group counseling
  - 2,201 vouchers worth 4.4 million soms extended to purchase food and non-food essentials
  - Over 601,000 soms mobilized for 306 vulnerable TB patients through community advocacy
  - 353 TB patients completed their treatment with support

RR/MDR-TB treatment success rates improved in all initial pilots (Figure 1)

DR-TB sputum conversion improved at six months of TB treatment in pilots (Figure 2)

Figure I. RR/MDR-TB treatment success rate in pilot areas, 2019-2023 (%)

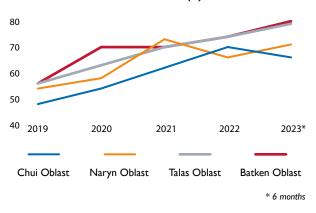
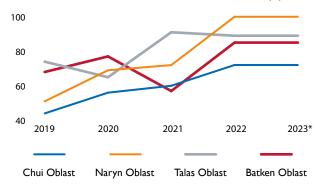


Figure 2. DR-TB cases with negative culture, end of six-month treatment, 2019-2023 (%)



\* 6 months

- With USAID support, health and community leaders make a difference in the lives of people with TB
- <u>USAID-led integration of tuberculosis services at primary health care level in Bishkek leads to enhanced detection and care</u>
- ► In TB treatment, warm attitude of doctors is half of success (Russian)
- ► What's good about the TB case management approach? (Russian)
- Civil society organizations aim to end TB (Russian)

# PREVENT



**KEY RESULTS** (2022 data)



**TB** incidence

31% Children <5 TPT coverage

#### INFECTION PREVENTION AND CONTROL (IPC) IN HEALTH FACILITIES

■ TB IPC policy documents revised and updated



**TB IPC Guidelines** approved by MOH for implementation for the first time in Kyrgyzstan



**6** TB IPC standard operating procedures developed for general hospitals and PHC facilities



TB IPC M&E checklist for TB hospitals developed, integrating TB and general IPC requirements

#### TB PREVENTIVE TREATMENT (TPT)

- Clinical guidelines and protocol finalized and approved for TB infection diagnosis and preventive treatment
- Provided support to 30 children TB contacts on sixmonth TPT with isoniazid in the pilot Sokuluk rayon of Chui Oblast; 18 children completed TPT

#### **SOCIAL & BEHAVIOR CHANGE (SBC) AND STIGMA & DISCRIMINATION**

- 148 health promotion unit and sub-grantee specialists trained to apply SBC approaches in working with populations, priority groups, and TB patients
  - Over 12,000 community and religious leaders and volunteers countrywide trained on SBC in TB
    - Over 184,000 people reached with TB educational information
- Implemented youth engagement approach to inform youth about TB on peer-to-peer basis
  - Trained **I32 volunteer students** 
    - 4,800 peer students and youth covered with information sessions
- Developed a joint workplan for SBC communication for 2023 in collaboration with the Republican Health Promotion Center, NTP, and other stakeholders to harmonize TB information and reduce stigma and discrimination



- **Six videos** created:
  - Four SBC videos using a behavioral journalism approach to show real stories of people affected by TB to encourage testing, treatment, and support of TB patients
  - Two educational videos for health care workers (HCWs) to use during training and workshops

4 SBC videos 2 educational videos

- real stories of TB patients, their families, HCWs, and communities
- educational training materials for HCWs
- Distributed TB information through **TV**, **radio**, **online**, **social** media, and print materials
  - Engaged over 100 journalists who disseminated 436 information materials on TB
  - Reached users through NTP website and 22 social media pages of NTP, MOH, OTCs, and sub-grantees: over 1,700 posts on Facebook, Instagram, and YouTube







- One Young Woman's TB Advocacy Inspires a Village
- World TB Day Campaign Reaches 3.9 Million Kyrgyz People
- Results of media contest on the best coverage of TB (Russian)
- ► False TB information interferes with its treatment (Russian)
- ► Timely screening for TB: help yourself and your loved ones! (Russian)
- ► Tuberculosis can only be treated with TB medicines! (Russian)
- ► What is the right way to collect sputum and send it to the laboratory? (Russian)



# SUSTAIN

KEY RESULTS (2022 data)

TB financing from domestic sources



TB financing committed to PHC level





2,556 individuals trained in components of the WHO End TB Strategy

■ USAID core indicator

Key indicators

#### **HEALTH SYSTEM STRENGTHENING**



Governance documents in TB developed and adopted



National Program Tuberculosis-VI approved by the Cabinet for 2023-2026

#### **FINANCING FOR TB SERVICES**

- TB financing standards developed in Year 1 preserved and institutionalized through MHIF budget law yearly
  - TB transportation system and PHC payment system for successfully treated TB cases becoming more sustainable through state financing and territorial expansion
  - PHC payment system for successfully treated TB cases expanded to Bishkek, Osh, and Issyk-Kul Oblast
  - Payment standards for PHC payment system increased:
     33% to 16,000 soms (\$182) for DS-TB
     38% to 33,000 soms (\$375) for DR-TB
  - 30% reduction in TB cases submitted for payment as successfully treated thanks to strengthened Concilium, TB CM and verification system; redirected cost savings to increase incentive payment per case
- Revised and approved PHC payment system regulation, including new verification methodology for successfully treated cases
  - Strengthened role of TB Concilia in the verification process

- Expanded criteria for verification of treated cases
- 20% decrease in payments for relapses and clinically confirmed TB cases
- MHIF Budget for TB services in 2023 reached 988.8 million soms and planned budget for 2024 increased to over I billion soms due to geographical expansion, including:
  - PHC payment system: 141% planned increase
- January September 2023





transported through the national TB transportation system

#### TB MIS AND DATA MANAGEMENT

- TB MIS implemented across the continuum of care, with nationwide coverage
- Electronic Medical Record (EMR) implemented in all 21
   TB hospitals nationwide with full TB inpatient coverage over 72,800 records
- e-TB Register implemented in 102 facilities with over 16,000 TB patient cards entered
- Laboratory Data Management Information System (LDMIS) used in 151 labs, including all TB labs and TB hospitals, and is being rolled out in PHC facilities nationwide, with more than 2.2 million entries in the system
- Electronic Module for Instrumental Diagnostics (EMID) contains a national database of over 21,000 digital X-ray images for TB
- Achieved 99.6% accessibility of TB MIS systems in Year 4 through maintenance support to the NTP
- Data analysis and management system under development using national TB MIS
  - Calculation of TAT indicators now enabled

#### DRUG MANAGEMENT AND SUPPLY CHAIN

- Medicine Quality Control and Pharmacy Management procedures developed and approved by MOH for implementation throughout the health care system
- Developed template of standard technical specifications for procuring quality-assured medicines and approved with MOH
  - First-ever standard template prioritizing quality over price adopted for the entire health care system
- Facilitated the development of alternative procurement mechanism allowing urgent procurement of quality-assured medicines and medical devices via UN Agencies (including Global Drug Facility) in fast-track mode; pending Cabinet approval
- Strengthened TB medicines supply chain ensures patient access to quality-assured TB medicines

### **WANT TO KNOW MORE?**

- Primary Health Clinics Receive Medical Equipment to Improve TB care in the Kyrgyz Republic
- Bishkek primary health care facilities received medical equipment to treat TB patients (Russian)
- USAID Cure Tuberculosis project procured and delivered medical equipment kits and supplies to PHC facilities in Osh city (Russian)
- The United States donated modern equipment worth 13 million soms to support the fight against tuberculosis (Russian)
- Implementation of EMR and LDMIS in general health care facilities (Russian)



**HCWs** use TB MIS routinely

# CROSS-CUTTING

### **INNOVATE**



#### **REACH**





Introduced **routine stool test** as more patient-friendly diagnostic method to improve TB diagnosis in children; first-ever routine implementation in Central Asia

- ACF approach, including facility and community case-finding, completed piloting and included in the National Program Tuberculosis-VI
- Strengthened TB CI model based on findings of the TB CI pilot
- Introduced routine XDR-TB testing at oblast level to facilitate early initiation of appropriate treatment

#### **CURE**



- **TB CM approach institutionalized** through MOH for patient-centered TB care at PHC
- Community engagement approach used as model by NTP for social contacting for sustainability



**Concilium reforms** improved clinical management leading to marked increase in DR-TB treatment success rates in pilot regions

#### **PREVENT**



- First-ever comprehensive TPT policy developed and approved
- TB IPC policy updated and integrated into general IPC approach



**Youth engagement** approach developed to mobilize medical and journalism students in the fight against TB

#### **SUSTAIN**



- Complex system of TB MIS developed and implemented nationwide for quality data along the full continuum of TB care
- Introduced first-ever routine system in Central Asia to measure TAT, thanks to nationwide implementation of LDMIS
- Implementation of the national TB transportation system at PHC allowed for 95% of samples delivered to labs for testing within the 72-hour standard
- First-ever MOH Procedures on Medicines Quality Control and Pharmacy Management allow launching post-marketing surveillance
- Improved effectiveness of PHC payment system through improved verification allows for cost savings redirected to increase incentive payment per case for more appropriate compensation of HCWs



**Complex TB financing** approach allows for preservation and increase of TB services budget and transfer to state funding for sustainability

#### STRATEGIC INFORMATION

- Four presentations given at international conferences:
  - Three poster presentations at the Union World Conference on Lung Health 2022 on contact investigation, TB lab optimization, and health provider attitudes toward ambulatory treatment (QTSA)
  - One multimedia showcase presentation on behavioral journalism at the International SBCC Summit in Morocco (Dec 2022)
- Nine presentation abstracts accepted for international conferences:
  - Seven oral presentations and one satellite session at the Union World Conference on Lung Health 2023
  - One poster presentation for the American Public Health Association meeting (Nov 2023)

#### **GENDER**

- 16,803 people participated in project trainings and workshops from health facilities, civil society and communities; six times more women participants than men
- Gender-based approach embedded in SBC, targeted case finding and case management strategies
  - 1,243 HCWs trained in TB CM, including gender aspects of TB care (99% women)
  - 12,106 community leaders trained in TB, including gender (86% women)

- **■** Innovation in Action: A New Era for TB Prevention and Control
- Community engagement in TB care: building civil society partnerships for improved patient—centered services in Kyrgyzstan