USAID Cure Tuberculosis Project

Year 1 Annual Results October 1, 2019 – September 30, 2020

The Cure Tuberculosis project is a five-year activity (2019-2024) implemented by JSI Research & Training Institute, Inc. (JSI) in partnership with University Research Co., LLC (URC) which aims to strengthen the Kyrgyz government's ability to diagnose, treat, and cure people with drug-resistant tuberculosis (DR-TB).

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-PURPOSE 1 Increased DR-TB case detection

SUB-PURPOSE 2 More patients cured of DR-TB

SUB-PURPOSE 3 Prevention of DR-TB Infections

SUB-PURPOSE 4 Improved enabling environment

KEY FIGURES
(2019 DATA)

TB notification rate:
79 per 100,000

TB mortality rate:
3.9 per 100,000

SUB-GRANTEE ORGANIZATIONS

- National Red Crescent Society
- Association of Village Health Committees
- TB People
- Hospital Association of the Kyrgyz Republic

YEAR 1 OBLASTS

MONITORING AND EVALUATION (M&E)

- Conducted **baseline assessments** in all project functional areas in all pilot oblasts
- Established **project M&E system**, database and indicators
- Strengthened **M&E capacity** of project sub-grantees
- Revised and printed NTP **recording and reporting forms**
- Designed facility-based survey using international Quality of TB Services Assessment (QTSA) methodology; adapted tools to Kyrgyz context
- In Year 2, will continue strengthening **national M&E systems** by revising M&E guidelines and tools

GENDER

- In Year 1, **10,437** people participated in project trainings and workshops from health facilities, civil society and communities; **11 times more women than men**
- **Gender-disaggregated indicators** collected and analyzed
- **Gender-based approach** in social and behavior change and targeted case-finding strategies

SUSTAINABILITY

- All project activities geared towards **national self-reliance**
- New TB financing methods developed in Year 1 **institutionalized**
- Sputum transportation system transferred to the **state budget**
- Medical information systems (MIS) rolled out in Year 1 critical for **evidence-based use of data**
- Restructuring of Oblast TB Centers and DR-TB Concilia will improve **effectiveness of TB services** and case management
- **Capacity-building** of TB specialists at all levels of the system; training curricula institutionalized through post-graduate institute
- Strong partnerships with **civil society and communities** ensure patient-centered support

CHALLENGES AND SOLUTIONS

- The **COVID-19 epidemic** in Kyrgyzstan emerged in late March and affected all aspects of the project, TB services and the health system
- The project implemented a number of activities to mitigate the impacts of COVID-19 and **preserve essential TB functions**:
  - policy reform
  - treatment monitoring
  - awareness-raising
  - infection control
  - patient support
  - information systems
- Leadership and structural changes in key partner organizations required **relationship-building efforts**

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Cure Tuberculosis Project Page (JSI)

Cure Tuberculosis Fact Sheet (USAID)

SUB-PURPOSE 1

Increased DR-TB case detection

KEY FIGURES (2019 data)

RR/MDR-TB cases notified 1,359

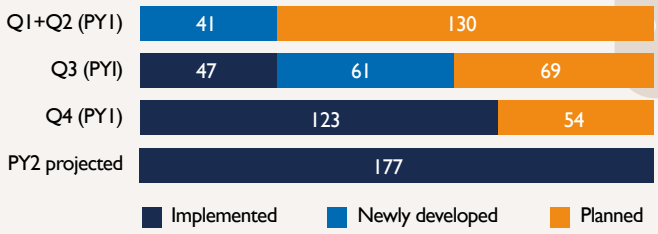
63% Bacteriological diagnosis coverage

77% GeneXpert coverage

LABORATORIES AND DIAGNOSTIC NETWORKS:

- Implemented the **optimization of the laboratory network** in Chui Oblast with revised diagnostic algorithms
- Implemented the **Quality Management System** (QMS):
  - Developed and adapted **123 standard operating procedures** (SOPs) (70%) of the 177 required for peripheral laboratories conducting microscopy and GeneXpert testing (Figure 1)
- Updated the **QMS Manual** for the NRL, developed corresponding SOPs and trained 12 NRL specialists
- Developed **SOPs for sputum collection** at PHC level; trained nurse focal points from 9 facilities in Chui Oblast to train lower-level facilities on sputum collection

Figure 1. Development and implementation of SOPs at PHC laboratories in Chui Oblast, 2020.



- Developed standard reporting forms on **turn-around time** for molecular genetic tests, culture and DST and other lab indicators, and trained staff

MEDICAL INFORMATION SYSTEMS:

- Installed the **Laboratory Data Management Information System** (LDMIS) in 48 facilities nationwide
  - In Year 1, **202 health workers** are using LDMIS, with **72,000 TB test results** in the system
- Created a **GeneXpert personification module** in LDMIS to automate input and link test results to individual patients

COMMUNITY-BASED CASE DETECTION:

- Trained **6,911 community leaders** countrywide on disseminating TB information and reducing stigma
- Trained **93 religious leaders** on TB to spread awareness, identify presumptive cases and reduce stigma
- **333,789 people** were reached with TB information through information sessions, WhatsApp groups and public awareness campaigns
- **19 people** with presumptive TB were referred for testing

CONTACT INVESTIGATION:

- Conducted a **baseline assessment** of contact investigation in health facilities in Chui Oblast
- Implemented **expanded contact investigation** guidelines in 2 pilot rayons of Chui Oblast, including extended timeframe and processes for identifying and monitoring contacts
- Trained **206 specialists** from PHC and SES on updated guidelines

COVID-19:

- Helped NRL split diagnostic testing for TB and COVID-19 between **day and night shifts** with appropriate infection control measures
- Trained **10 NRL specialists** on precautions during COVID-19 testing

WANT TO KNOW MORE?

- ▶ Animated infographics video on LDMIS (in Russian)

- ▶ Video on the role of religious leaders in fighting TB (in Russian)

SUB-PURPOSE 2

More patients cured of DR-TB

KEY FIGURES

86% RR/MDR-TB cases enrolled on treatment

Treatment success rates:

79% DS-TB

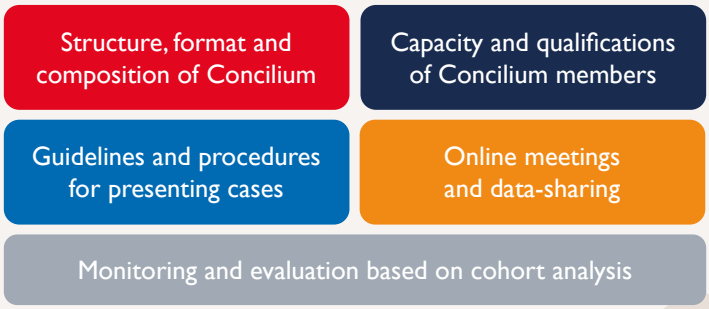
55% RR/MDR

58% XDR-TB

DR-TB CLINICAL MANAGEMENT:

- Revised the **clinical guidelines** on DR-TB management; approved by the MOH and trained 52 TB doctors and nurses
- Conducted a **baseline assessment** of Concilium functions:
  - Results show low effectiveness and capacity, unclear responsibilities and procedures → treatment delays and prescription of ineffective regimens
- Started the **reform of DR-TB Concilia** with a pilot in Chui Oblast, through changes in:
  - Structure (restructuring, capacity-building)
  - Procedures (guidelines for presenting cases, videoconferencing)
  - Methodology (cohort analysis) (Figure 2)

Figure 2. Elements of DR-TB Concilium reform.



- Developed an **advanced DR-TB training curriculum** for Concilium members; adopted by the post-graduate institute
- Implemented the **Electronic Medical Record** in **14 TB hospitals**; **620 users** and data on **7,259 patients**

COMMUNITY-BASED TREATMENT SUPPORT:

- Developed an algorithm and tools for the coordination of civil social organizations with the health care system for TB patient **case management**
- Returned **25 patients** to treatment who were lost to follow-up or refused treatment
- Provided social support to **161 TB patients** at risk of treatment interruption:
- Provided support to **41 patients** transitioning from the penitentiary system
- **198 patients in need** received food and hygienic packages worth 879,990 soms
- Mobilized **361,060 soms** of financial assistance for **251 vulnerable TB patients** through community advocacy

Priority groups:

- migrants
- former prisoners
- homeless people
- people living with HIV
- disadvantaged groups

Social support includes:

- food and hygiene packages
- patient support groups
- individual counseling
- training on infection control measures
- Directly-Observed Treatment (DOT)

DRUG MANAGEMENT:

- Conducted a **baseline assessment** of drug and adverse events management and adverse events management
- Developed **drug management and active drug safety monitoring (aDSM) tools**
- Revised **drug management SOP**

COVID-19:

- Developed a regulation on **video-controlled treatment** (video DOT) to ensure TB treatment adherence under COVID-19 restrictions
- Created virtual **WhatsApp patient support groups** with the consent of TB patients and disseminated information online

WANT TO KNOW MORE?

- Success story on Strengthening Oblast Concilium for Better Tuberculosis Treatment Monitoring
- Success story on Uninterrupted Treatment for Tuberculosis Patients amid COVID-19 crisis
- Story on psychological support to TB patients
- Video on community-based treatment support (in Russian)

SUB-PURPOSE 3

Prevention of DR-TB infections

KEY FIGURES

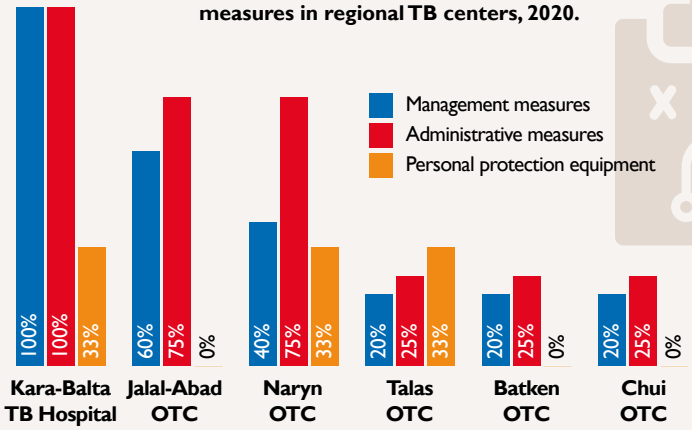
TB incidence rate among health care workers (2019 data)

96 per 100,000

INFECTION CONTROL

- Conducted **6 baseline assessments** of infection control (IC) in Chui, Talas, Jalal-Abad, Naryn and Batken Oblast TB Centers and Kara-Balta TB Hospital
  - Results showed **poor IC measures** overall, with slightly better administrative and management measures and very poor environmental control measures and PPE (Figure 3)
- Developed **4 IC Plans** based on the baseline assessment results for the Chui, Talas, Naryn and Jalal-Abad OTCs for 2020-2021
- Assessed IC measures in **18 PHC organizations** in Naryn, Batken, and Jalal-Abad Oblasts
  - Results showed a similar picture at PHC facilities as for OTCs

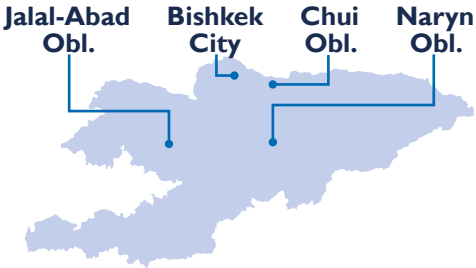
Figure 3. Baseline assessment results of infection control measures in regional TB centers, 2020.



* Environmental control measures are 0% across OTCs
** Aggregate scores of 18 IC indicators

SOCIAL AND BEHAVIOR CHANGE RESEARCH

Conducted **qualitative formative research** on behaviors related to TB diagnosis and treatment among target groups in **4 areas**



Enrolled **547** participants

- migrants and their families
- former prisoners
- people who misuse substances
- people living with HIV
- homeless people
- general population
- heath care workers and NGO staff

RESULTS

- many **barriers** to getting tested and completing treatment
- many **misconceptions** about TB
- widespread **stigma** against TB patients

STRATEGY

Designed a project **SBC strategy** to address barriers and misinformation with targeted approaches, messages and communication channels to:

- encourage testing
- support completing treatment
- improve infection control
- decrease stigma and discrimination

Started developing the **national SBC strategy**

7 videos prepared showing

- patient treatment adherence
- psychosocial support
- role of religious leaders in fighting TB
- nutrition for TB patients
- infection control

COVID-19:

- Provided technical assistance to **strengthen IC guidelines** at the NTP MDR-TB ward re-purposed to treat patients with COVID-19, dividing the ward into three zones depending on potential level of contamination
- Provided IC trainings to **49 NTP** staff on management of patients with COVID-19, personnel and process management, and medical waste management and disinfection measures
- Set up a system of **medical brigades** who work in the COVID-19 zone for 14 days followed by 14 days of self-isolation; Cure Tuberculosis staff pooled their own funds to buy surgical scrubs for the COVID brigades (video)

WANT TO KNOW MORE?

- Evaluation of factors affecting the behavior of target groups in health care-seeking and tuberculosis treatment

- "Honeymoon in the Red Zone:" video on humanitarian donation to the NTP COVID brigades and infection control
- Video on psychosocial support to TB patients (in Russian)
- Animated video on nutrition for TB patients (in Russian)
- Animated video on ventilation and infection control (in Russian)

SUB-PURPOSE 4

Improved enabling environment

KEY FIGURES

Financing resources committed to TB services at PHC level (2019 data): **4.9%**

1,001 Individuals trained in components of the WHO End TB Strategy

FINANCING FOR TB SERVICES

- Developed a **financing standard for the transportation system** (~ **1 million soms** for Chui and Talas Oblasts) and transferred to Mandatory Health Insurance Fund (MHIF) budget
  - January – September 2020

transported through the transportation system in Chui and Talas

  - MHIF paid **350,200 soms** out of their budget for these services

- Developed a novel **per capita financing standard** for Oblast TB Centers – estimated at **1.6 soms** per population – to cover additional OTC coordination functions
- **Institutionalization:** these financing standards were incorporated into the MHIF 2020 budget and 2021-2022 forecast and signed by the President into the **MHIF Budget Law**
- The **incentive payment system** for successfully-treated TB cases at PHC level is functioning in Chui and Talas Oblasts and some rayons of Jalal-Abad and Osh oblast
  - MHIF allocated **34.2 million soms** for 2020
  - Revised the **Financing of Treated Cases at PHC** software to enable analysis of treatment data

DATA FOR DECISION-MAKING

- Completed the reengineering of the **TB Surveillance Information System** (ES/TB) clinical module
- Achieved **99.6% accessibility** of MIS systems in Year 1 through maintenance support to the NTP
- Developed **50 manuals and 50 training videos** to educate health care workers on LDMIS

Year 1 **822 health care workers** use TB MIS routinely

POLICIES

- Conducted a **situation analysis** in each of the 4 Oblast TB Centers in Chui, Talas, Jalal-Abad and Naryn
  - Results show unclear responsibilities, unnecessary hospitalization, weak M&E
- Developed 3-year **master plans** for each of the 4 OTCs to reform M&E departments and improve coordination functions

Year 1 Developed and adopted **12 governance documents**

STIGMA AND DISCRIMINATION

- Developed a **stigma strategy** through mass media, social media, and interpersonal communication
- Distributed **TB information** through 369 TV, radio, online and print materials
- Developed the NTP website
- Increased reach through social media pages of NTP, MOH, and sub-grantees: **1,711 posts** by these organizations on:

COVID-19

- Developed **COVID-19 module for LDMIS** and installed in **all 12 labs nationwide** performing testing for COVID-19
  - Developed **SMS notification system** to inform patients of test results without having to travel to avoid infection.
  - So far, **238,000 test results** for COVID-19 have been entered in the system
- Developed an MOH order on provision of **TB services under emergency conditions** due to COVID-19:
  - **14-day drug supply** for TB patients
  - **Remote DOT options** (video DOT, online and community-based treatment support)
  - Shifting **Concilium meetings online**
- Disseminated important **TB/COVID-19** information through social media
- **Seconded two project SBC staff to the MOH** to help with the COVID-19 response; helped produce **120 communications materials**
- Developed **COVID-19 module in QTSA** to measure impact of COVID on TB services

WANT TO KNOW MORE?

- Success story on Sustainability of Transportation System and Financing Methods for Tuberculosis
- Success story on Kyrgyz Republic Response to Tuberculosis under COVID-19 Emergency

COVID-19 and Tuberculosis

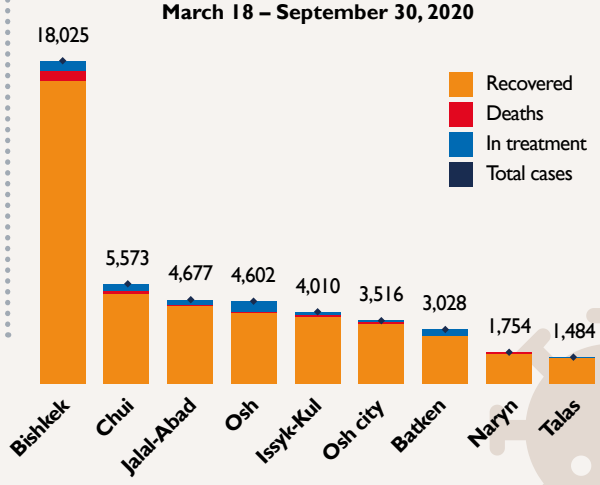
COVID-19 EPIDEMIC IN KYRGYZSTAN

- March 18, 2020: **first 3 cases** of COVID-19 detected
- March 22: **emergency situation** declared (still in effect)
- **Restrictions on movement** → difficult for patients and health workers to visit health facilities
- TB patients at **high risk** of COVID-19 and TB treatment interruption
- NTP MDR-TB ward **re-purposed** for treatment of COVID-19 patients
- NRL tasked with **testing for COVID-19**

COVID-19 cases (as of September 30, 2020):

- 46,669 total cases
- 3,255 cases among health care workers
- 42,879 people recovered
- 1,064 deaths

Figure 4. Total COVID-19 cases reported by Oblast, March 18 – September 30, 2020

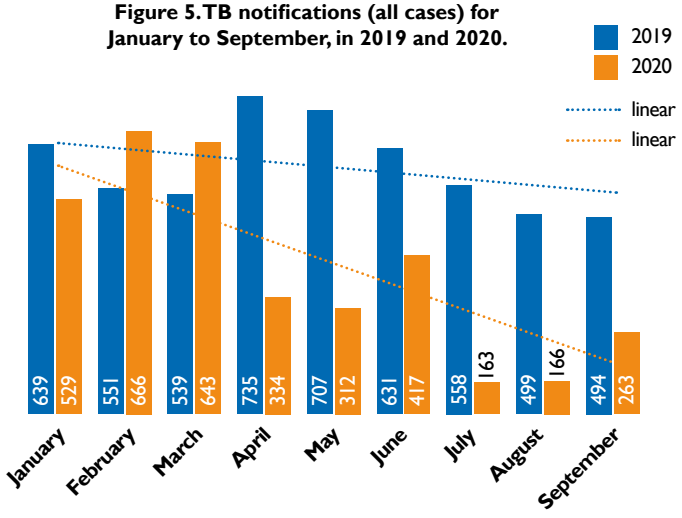


IMPACT OF COVID-19 ON TB SERVICES

TB DIAGNOSIS AND CASE DETECTION

- Number of diagnostic **microscopy tests** conducted at PHC level in all oblasts countrywide has decreased from Q1 through Q3 of 2020
  - May indicate **decrease in presumptive** cases presenting to PHC facilities
- Volume of **sputum samples** sent through the transportation system to the NRL from all oblasts decreased from Q1 to Q3 2020
  - Decreased by 23% overall compared to the same period in 2019
- **TB notifications have steadily decreased** Q1 to Q3 2020, and compared to the same period in 2019 (Figure 5)
- Difficulties sustaining **contact investigations** for TB

Figure 5. TB notifications (all cases) for January to September, in 2019 and 2020.



TB TREATMENT AND CASE MANAGEMENT

- **Volume of DR-TB cases** discussed at Concilia has decreased from Q1 to Q3 2020 in Chui, Naryn, Talas and Batken Oblasts
- MHIF **interrupted incentive payments** for successfully-treated TB cases from July to September
  - May affect the **quality of case management**
- **DR-TB patients on treatment** in the MDR-TB ward of the NTP transferred to outpatient treatment and/or to new regimens
- Difficulties **monitoring treatment** and providing DOT

HEALTH SYSTEM EFFECTS

- Many **health workers** infected
- **Reallocation of resources** towards COVID-19:
  - Funding
  - Health worker personnel
  - Beds, diagnostics, medical equipment, drugs, PPE
- Severe **infection control** challenges throughout the health system

Monitoring the impact:

↳ Cure Tuberculosis developed a **COVID-19 module** as part of the QTSA survey to measure the effects on TB services:

- TB diagnosis and case detection
- Treatment, case management and treatment support
- Patient health-seeking behavior
- Infection control
- Drug management
- Resource allocation

↳ Implementation begins in Quarter 1 of Year 2.