

TB Projects in Bangladesh

Country Profile: Bangladesh (WHO, 2021)

TB Burden Estimates, 2020	Bangladesh Number	Population 2020: 165 million Rate per 100,000 population
Total TB incidence	360,000	218
HIV-positive TB incidence	710	0.43
RR/MDR-TB incidence	3,300	
TB mortality	44,000	27

TB profile, 2020



31%
TB treatment coverage



49%
Children <5 household contact enrolled on TPT



12%
TB case fatality ratio

Effect of COVID-19 pandemic on TB Programming



Challenges

- Reversal of TB gains due to health service restrictions and lock downs
- 77,000 fewer TB cases found in 2020 versus 2019
- MDR-TB hospitalization requirement barrier during COVID-19

Infectious Diseases Detection and Surveillance (From May 2018 to March 2023)

PROJECT DETAILS

- In Bangladesh, IDDS seeks to expand access to rapid, reliable, safe, and integrated molecular diagnostics for TB to all persons who access the diagnostic network.
- The strategies focus on strengthening the overall capacity of the TB diagnostic network encompassing the national and regional TB reference laboratories and GeneXpert (GX) facilities to improve diagnosis and management of TB and drug resistant TB (DR-TB).

SCOPE AND KEY APPROACHES

- 1. TB Diagnostic Network and Systems Strengthened**
 - Strengthen governance of NTRL and RTRLs
 - Develop NTRL and RTRL capacity for quality management systems
 - Improve equipment maintenance system
- 2. Increase Access to TB Diagnostics through NTRL and RTRLs**
 - Introduce new TB diagnostics through RTRLs
 - Develop capacity for diagnosis and management of childhood and EPTB
 - Improve laboratory data management
- 3. Functional Network of GeneXpert Instruments Established**
 - Improve functionality of GX Sites
 - Improve access and utilization of GX
 - Develop a GX External Quality Assurance (EQA) system
- 4. Introduce New Technologies and Tools to Improve TB Diagnosis**
 - Implement Truenat tool in selected sites
 - Implement 10-color GX in selected sites

ACHIEVEMENTS

Renovated & Operanlaized two RTRLs:

- RTRL Shyamoli, Dhaka
- RTRL Raishahi, Raishahi

- Developed and costed National TB Laboratory Strategic Plan (2021–2025)
- Developed ToR for NTRL and RTRLs

- Trained 30 participants on ASPECT Technology for GX sites;
- Provided TA support to scale ASPECT to national roll out

Developed/updated the SOPs/ Guideline for:

- EP TB and stool sample specimens processing
- Preventive Maintenance
- Curriculum for TB lab equipment
- Culture and DST
- Line Probe Assay
- GeneXpert
- Truenat

Introduced Truenat technology in 38 Sites and trained 40 participants

SL-LPA test performed in IDDS-supported laboratories (5)
Duration: FY20 – FY22 Q2
Total Test Performed = 2036

Phenotypic Culture & DST test performed in IDDS-supported laboratories (5)
Duration: FY20 – FY22 Q2
Total Test Performed = 20,952

Xpert test performed in IDDS-supported laboratories (5)
Duration: FY20 – FY22 Q2
Total Test = 49,287
Total MTB = 7,542
Total RR TB = 274

- Trained 15 microbiologists on C&DST testing
- Trained 13 participants on LPA testing

Trained 49 participants on preventive maintenance

Trained 27 laboratory staff and sensitized 34 clinicians on EPTB & Childhood TB case detection

USAID Alliance for Combatting TB in Bangladesh (ACTB) (From August 2020 to December 2023)

PROJECT DETAILS

FHI 360 as a sub-partner on ACTB provides technical assistance to the Government of Bangladesh, the prime - International Centre for Diarrheal Disease Research, Bangladesh (icddr,b) and other key stakeholders to accelerate TB elimination in Bangladesh by bringing technical expertise on MDR-TB, new drugs and regimens, aDSM, TB preventive treatment (TPT) and TB policy/advocacy.

SCOPE AND KEY APPROACHES

- Provide TA on MDR-TB new drugs and regimen introduction, including game-changing all oral MDR-TB regimens (i.e., 9 month, BpAL); support the introduction and institutionalization of quality aDSM systems; revitalize community-based programmatic management of drug-resistant TB (cPMDT) which eliminates current requirement for mandatory hospitalization
- Support programmatic TPT efforts to expand TPT provision and scale-up new regimens (Job Aids, SOPs on TPT and Contact Investigation, Trainings Package)
- Develop policy briefs to contribute to TB advocacy efforts: *Preserving TB services in Bangladesh in the time of COVID* and *TB Free Bangladesh by 2035*.

KEY ACHIEVEMENTS

FHI 360 provides technical assistance to USAID's Alliance for Combatting TB in Bangladesh (ACTB), a coalition of partners led by icddr,b

Roll-out of all-oral treatment regimens for people with drug resistant tuberculosis IN BANGLADESH

BUILD CAPACITY THROUGH:

1. Develop two training packages (accelerated and comprehensive), job aids and a pocket book on the country's new DR-TB guidelines, including all oral regimens
2. Conduct virtual training for ACTB personnel, including medical officers deployed to drug-resistant (DR)-TB care sites
3. Design operational research on a novel short regimen for extensively DR-TB
4. Design tools to assess readiness of DR-TB treatment sites and support analysis of key treatment initiation sites
5. Advance technical quality of active drug safety monitoring and management (aDSM) in DR-TB care through capacity building led by international experts

BENEFIT:

DR-TB patients across Bangladesh will now be able to benefit from all oral short regimens as this is rolled-out nationwide.

DR-TB patients encounter **less serious adverse events** with all oral short regimens compared to the injectable short regimen.