

# Tajikistan

Tajikistan Randomized Controlled Trial (RCT)

*Innovative approaches to improving case notification through mass screening and GeneXpert MTB/RIF usage*

**Stop TB Partnership**  
**TB REACH**

The objectives of this TB REACH project are to increase early case detection, to install a reporting system, and to provide correct and complete treatment of TB. Additional screening for TB in the high-risk populations of diabetics at two large diabetes treatment facilities and inmates at a pre-detention centre is also an important objective. In summary, the project uses the following innovations:

- Mobile phone-based software to screen all patients
- Screening of high risk groups
- Incentives for health workers to maximize case detection and case holding
- Electronic data processing and management
- Use of instructional videos to improve sputum quality
- Mass media communication to increase case detection
- SMS reminders to improve compliance

The above listed innovations are based on proven technologies that have been introduced in other countries but are new to Tajikistan. These models allow enhanced early case detection, treatment and case holding. The project activities will also provide long-term coordination and integration of TB services within the PHC network, which is one of the mandates of the government. Lessons learned will be employed to extend this integration countrywide.



In August 2013, Tajikistan's RCT began conducting a TB REACH intervention to screen at polyclinics in the capital and two other districts, using a simple symptom questionnaire. Using the WHO definition for TB suspects, tailored software was developed and cell phones were procured to enhance identification of those with suspected TB. At the end of the screening process, people with TB symptoms are referred to a sputum collection point. Their sputum samples are then transported to a laboratory for microscopy and GeneXpert testing. Those confirmed as positive for TB are then enrolled into treatment.

According to the WHO Global TB Report (2011), Tajikistan has one of the highest TB prevalence rates - at 382 per 100,000 individuals, and an incidence rate of 206 per 100,000 - in the region. The National TB Program is

a vertical program using passive case detection. In 2011 the case detection rate for smear positive TB cases was 47%. Outside of the TB REACH project, there is no screening of TB suspects at PHC facilities and no records are maintained for any suspects that may have been referred. By screening at PCHs the project expects to increase the case detection rate in the project area to a level of 72% of all TB cases in the intervention area.

The TB REACH project uses 3 GeneXpert machines provided by EXPAND TB. To cover a three year period, 19,800 cartridges are available for use. Capacity development was also an important focus of the project - including trained personnel, a system for collection and transportation of sputum samples to the laboratory, timely delivery of test results to PCH facilities and enrollment of confirmed TB cases.