

## Intensified TB Case-Finding in Mine-Sending Communities of South Africa

◆ **To promote** innovative case-finding strategies needed to combat the high incidence of tuberculosis (TB) and HIV in South Africa, TB REACH has funded Interactive Research and Development South Africa (IRD SA) and the Aurum Institute to work with the KwaZulu-Natal (KZN) Provincial Department of Health (PDOH) to increase TB and HIV case detection and treatment initiation among miners. The MINE-TB project relies on three key interventions: performance-based incentives, a mobile phone screening app, and an instructional video for sputum collection.

The project covers over 200 km of the eastern coast of South Africa, including Ugu and eThekweni Districts. Both districts have a high burden of TB and HIV/AIDS and the rate of drug resistant TB (DR-TB) has been steadily increasing.

To reach the populations that do not access government facilities regularly, the project employs community-based screening agents to screen and collect sputum on-the-spot in communities. Sputum samples are collected from all presumptive TB patients who are also referred to the local clinic for HIV counseling and testing. Sputum samples are delivered daily by the screening agents to specified primary healthcare clinics within 24 hours of collection. At the clinics, data on screening and sputum collection are entered into the mobile phone screening app, while specimens are submitted to and tested by the National Health Laboratory System. When the results become available, the data are also entered into the app. The screening agents receive cash incentives based on their performance.

In addition to community screening, the project also employs health screeners at 32 fixed facilities. Thus far over 1,500 TB patients have been identified through facility screening. The project targets not only outpatient visitors, but also healthcare workers and administrative staff.

The mobile phone screening app has been utilized throughout the facility screening. The app, developed from the National Department of Health TB Screening Tool, facilitates immediate data collection, reporting, and patient tracking. Prior to the development of the app, only 40% of patients with HIV, diabetes, and/or TB symptoms had submitted a sputum sample for TB testing. The app, specifically the pop-up message notifying the screener when to collect a sample, improved the rate of sputum collection to 70%.

The MINE TB project also produced a video to ensure sample quality. Available in five South African languages, including English, the video presents information about TB transmission, the difference between sputum and saliva, and step-by-step instructions on how to cough up a sputum sample. The video is shown on cell phones to all patients prior to sputum collection. It is also being shown on tablets, clinic computers and televisions in the waiting rooms of health facilities.



The MINE-TB project is considered by the KZN PDOH as a game changer to optimize systems for TB and HIV screening, linkage to care, and to improve healthcare worker performance. The project operates within the context of the mass screening campaign launched by the National Department of Health on World TB Day 2015.



Interactive Research  
and Development (IRD)

# South Africa

Stop  Partnership



# TB REACH

FINDING AND TREATING  
PEOPLE WITH TB  
IN THE WORLD'S POOREST  
COMMUNITIES



**Government of Canada** **Gouvernement du Canada**

More than nine and a half million people around the world become ill with tuberculosis (TB) each year. About one-third of them fail to get an accurate diagnosis or effective treatment and are more likely to die from this curable disease.

By supporting the many partners working in the field, TB REACH offers a lifeline to these people by finding and treating people in the poorest, most vulnerable communities in the world. In areas with limited or non-existent TB care, TB REACH supports innovative and effective techniques to identify people who have TB, avert deaths, stop TB from spreading, and halt the development of drug resistant strains.

TB REACH has supported a total of 142 projects in 46 countries. To date, 33 million people have been screened for TB in project areas, of which, 1.7 million have received TB treatment, accounting for 856,000 lives saved. Some projects have seen increases in TB notifications of more than 100%.

Our partners are providing evidence for new case finding approaches and are working with community and policy leaders as well as donors such as The Global Fund to integrate those approaches into national strategies that improve TB case detection.

TB REACH was launched in 2010 thanks to a CAD\$ 120 million grant from Global Affairs Canada.

TB REACH acts as a pathfinder, providing fast track funding for innovative projects, monitoring effectiveness and leveraging funding for scale up.

**Stop TB Partnership**

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