The border provinces of North and North-east Thailand are home to some of the country's poorest and most disadvantaged groups, including ethnic minorities, remote populations, and internal and cross-border migrants. These individuals are particularly vulnerable to a wide range of health risks, due to poor living conditions and inadequate access to basic health services. Despite Thailand's relative economic and social stability, which supports a comprehensive national TB program with full DOTS coverage, TB continues to be a significant public health issue, with Thailand one of the 22 high TB burden countries and the issues is acute in the North and the North-east for access to TB screening and treatment.

To help in addressing these barriers, the International Organization for Migration (IOM), in collaboration with national partners at the Bureau of TB in the Ministry of Public Health, National TB Program, Provincial and District Health Offices, and hospitals, has begun implementing a TB Reach Wave 2 project in seven provinces of North and North-east Thailand.

This project has adopted a two-pronged approach to increasing TB case detection, employing both innovative molecular-based diagnostic technology and community mobilization networks. The goal is to detect and diagnose TB in patients, who, because of their sputum smear negative microscopy results, would usually be excluded from follow-up investigations, as well as those patients who are HIV positive suspected of TB co-infection, and patients who are MDR-TB suspects.

By September 2012, a total of 5,446 tests have been performed, with results reported for 94% of the specimens submitted



Thailand

To increase TB case detection, the pilot project has established GeneXpert diagnostic centres in the three provinces of Nakhon Phanom, Payao and Mae Hong Son. The GeneXpert system is a high-sensitivity test platform which can provide rapid diagnosis of TB as well as identifying strain resistance to the first-line anti-microbial agent, rifampicin.

Additionally, networks of community health workers and volunteers have been recruited from within the target areas to link patients requiring TB diagnostic services with the diagnostic centres. Field Coordinators, based in five of the seven target provinces, manage all field activities related to specimen collection, submission and shipment for testing. These project field teams visit target communities to raise awareness, conduct case finding and treatment referral, and provide referral support. Suspected TB cases are encouraged to attend the nearest healthcare facility for testing. Finally, agreements made with TB healthcare providers ensure that all sputum specimens excluded from the standard national protocols are forwarded to our project staff for shipment to the nearest diagnostic centre for GeneXpert testing.

All three GeneXpert sites have been operating at full capacity for six months. By September 2012, a total of 5,446 tests have been performed, with results reported for 94% of the specimens submitted. TB positivity rates ranged from 6.2% to 11.3%. Of the 439 specimens identified as TB-positive by GeneXpert, SS+ samples accounted for only 10% of total submissions, while 396 SS- patients were diagnosed and started on treatment.

The IOM Thailand TB Reach Wave 2 pilot project is reaching those patients who are most in need and who belong to particularly vulnerable groups. While the technology is new to Thailand's healthcare services, IOM is demonstrating that the GeneXpert system is a reliable diagnostic tool that clinicians can use with confidence to rapidly diagnose TB in the most vulnerable populations.

International Organization for Migration (IOM)









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

TB REACH

The first wave of projects increased case detection by an average of 26% compared to the previous year More than nine 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 people among this missing 3 million 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 find people with TB quickly, avert deaths, stop TB from spreading, and halt the development of drug resistant strains.

- TB REACH was launched in 2010 and will run until 2016, thanks to a CAD\$ 120 million grant from the Canadian International Development Agency.
- TB REACH is committed to getting funds to our partners with a very short turnaround time.
- TB REACH has committed nearly \$50 million to partners working on 75 projects in 36 countries covering a wide range of interventions.
- Preliminary analysis from Wave 1 shows that efforts of partners led to an increase of 26% in TB case detection over an area of 100 million people, while some areas saw increases of more than 100%. The average cost per person covered is US \$0.15.

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