

How to increase TB detection among inmates in Brazil

Tuberculosis (TB) is a serious public health issue in Brazil, especially in prisons. In 2014, the population of inmates in the country totaled 600 thousand people, which represents 0.3% of the Brazilian population. Of the 70,000 new TB cases diagnosed per year nationwide, 7.3% are prisoners. In 2001, recognizing the high incidence of TB in this population as well as the difficulties involved in implementing healthcare engagements within the prison system, the National Tuberculosis Programme submitted a project to TB REACH, a funding program coordinated by the Stop TB Partnership. The project aims to increase TB detection in prisons in the districts of Rio de Janeiro, Porto Alegre and Charqueadas, utilizing the Xpert® MTB/RIF (Xpert) technology allied to innovative strategies of Advocacy, Communication and Social Mobilization (ACSM). We estimate that by the end of the project, approximately 35 thousand inmates will be assessed.

Initially, the project was implemented in the Central Prison of Porto Alegre. From October to December 2014 and from January to June 2015, TB case detection activities were held in one of the nine galleries of the prison, by spontaneous demand and at the moment an inmate entered the prison. All individuals had been examined with an X-ray and were questioned about the presence of cough. For those with radiological alteration, a sputum sample was taken (when available) for Xpert, culture and antimicrobial susceptibility testing. Samples that were inadequate for the Xpert test were referred for sputum smear microscopy (BK).



5,158 people were examined, comprising 60 from spontaneous demand, 495 (9.6%) who were already incarcerated and 4,603 (89.2%) upon entry into the prison system. Of these 5,158 prisoners, 856 (16.6%) had altered results in X-rays. 768 (89.7%) patient samples were collected for holding BK, culture and Xpert testing. Among the 4,302 inmates who did not present radiological variation, 899 (20.9%) presented cough. For an understanding and evaluation problem of the healthcare team, only 25 (2.8%) cases were examined, with 6 positive test results.

Of the 3,403 (79.1%) of inmates who presented neither radiological variation nor cough, 14 were submitted to additional tests, after a doctor's evaluation, with 4 cases diagnosed with TB.

From the total of 5,158, 157 were diagnosed positively with BK, culture and/or Xpert, representing 19.4% of the people assessed.

The results indicated high TB positivity in the Central Prison of Porto Alegre. The screening for TB at the entry into the prison system, galleries and spontaneous demand, proved to be an important strategy for increasing early detection of TB cases. The elevated prevalence average of more than 3,000 cases per 100,000 inhabitants reveals the existence of a concentrated epidemic in the Brazilian prison system. In addition, ACSM activities among the population already incarcerated may have contributed to the willingness of these inmates to collaborate in the TB screening.

The ACSM activities are also projected to be implemented within the various sectors of the extended prison community, such as the inmates' families and the security and healthcare agents, including targeted messages and appropriate formats.

Brazil

National TB Programme





TB REACH

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



Government
of Canada

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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

Stop TB Partnership Secretariat
Geneva, Switzerland
Email: tbreach@stoptb.who.int
Phone: + (41) 22 791 46 50
Fax: + (41) 22 791 48 86