

Stop TB Partnership Field Guides



March 4, Kigali, Rwanda

➔ Growing Push for Improved TB Case Detection

RECOMMENDATIONS FOR INVESTIGATING CONTACTS OF PERSONS WITH INFECTIOUS TUBERCULOSIS IN LOW- AND MIDDLE-INCOME COUNTRIES
World Health Organization

Improving Tuberculosis Case Detection
A compendium of TB REACH case studies, lessons learned and a monitoring and evaluation framework
Stop TB Partnership

Systematic screening for active tuberculosis
Principles and recommendations
World Health Organization

Patient Pathway Analysis: How-to Guide

The Global Fund
HOW WE WORK | WHERE WE INVEST | NEWS & STORIES
Funding Model
Overview | Catalytic Investments
Funding Process & Steps

<http://bit.ly/1GY9nof>

ZERO TB Initiative

POLICY UPDATE
NEW DIAGNOSTIC TESTS FOR TUBERCULOSIS
DRUG-RESISTANT TUBERCULOSIS (DR-TB) | TB-HIV | ACCURACY
RAPID TB TESTS | PRECISION | MOLECULAR DIAGNOSTICS
World Health Organization



Global Fund's Strategic Initiative on TB



Stop TB and Global Fund Deepen Cooperation to Find Missing Cases of TB

18 December 2017

GENEVA – The Stop TB Partnership and the Global Fund today signed a new collaboration agreement to contribute towards the goal of finding and treating an additional 1.5 million

Work plan of Stop TB and WHO in coordination with other partners

4 key intervention areas:

- Identifying and addressing barriers to find missing TB cases
- **Development of tools and approaches for finding missing TB cases**
- Support uptake of tools and approaches
- Documentation, and experience sharing



Why are we **Missing People with TB?**



Access

Despite a great expansion of TB services from 1990-2005, many people have limited access to care



Services

In many settings, people who are sick with TB have access to health services, yet they are not identified as needing to be tested, or are tested but not diagnosed



Linkages

Many people are receiving care for TB (often substandard), but are not notified to NTPs

TB REACH and Case Detection

- WHO Guidelines focus on answers to specific questions – what to do.
- There are many TB guidelines – Screening, Contact Investigation, Xpert, TB/HIV, PPM Roadmap etc.
- Developing and implementing activities is a large challenge. The science of delivery.
- TB REACH has a wealth of experience with different interventions to improve case detection.
- The Field Guides are meant to help TB programs and partners plan, design and monitor these different interventions.





What are the **Field Guides**?



Access

- Key populations
- Community outreach and screening
- Prisons



Services

- Facility based screening
- Children
- Contact Investigation
- Laboratories
- X-Ray



Linkages

- Private sector engagement
- Strengthening information systems and linkages to care

➔ Consultative Process

- Over 60 experts involved
- Peer reviews and consultations
- Intersections with KNCV FTMP Guide - implementation areas
 - Contact Investigation
 - Private Sector Engagement
 - Community Case Finding
 - Laboratory Networks



➔ What to Look for In Each Guide?



Expectations

- Why use this particular approach?
- What results can be expected?



Intervention Design

- Who to target
- Staffing considerations
- Algorithms



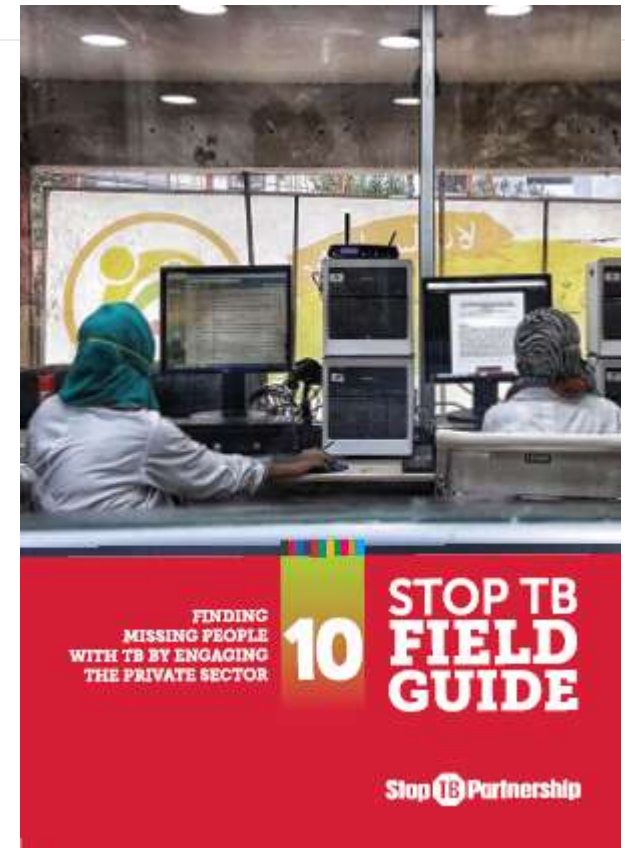
Course Correction/Sustainability

- M&E
- Building a case for sustainability of effective strategies

➔ Finding People in the Private Sector

Why engage with the private sector?

1. To find the people who are missed
2. To find the people with TB early and reduce transmission
3. To reduce impoverishment from the high cost of private health care, and extend financial protection and social support to all patients
4. To accelerate the introduction and uptake of new TB tools by accessing private channels, and pioneer strategic purchasing for universal health coverage (UHC)
5. To reduce suboptimal outcomes (e.g. mortality, morbidity, drug resistance, transmission) due to inappropriate treatment





Who to Engage and How

Who?

- Private GPs
- Private specialists
- Private pharmacies
- Private laboratories
- THPs and informal providers
- Miscellaneous health systems (public and private) that are likely to be involved in TB prevention and care, but not generally linked to the NTP
- Multiple providers

Key Steps

- Decide on which providers to engage
- Decide on how to conduct screening
- Decide on whether providers can participate in diagnosis and treatment
- Decide on notification protocols and other linkages to public sector

Using Contact Investigation to Improve TB Case Detection

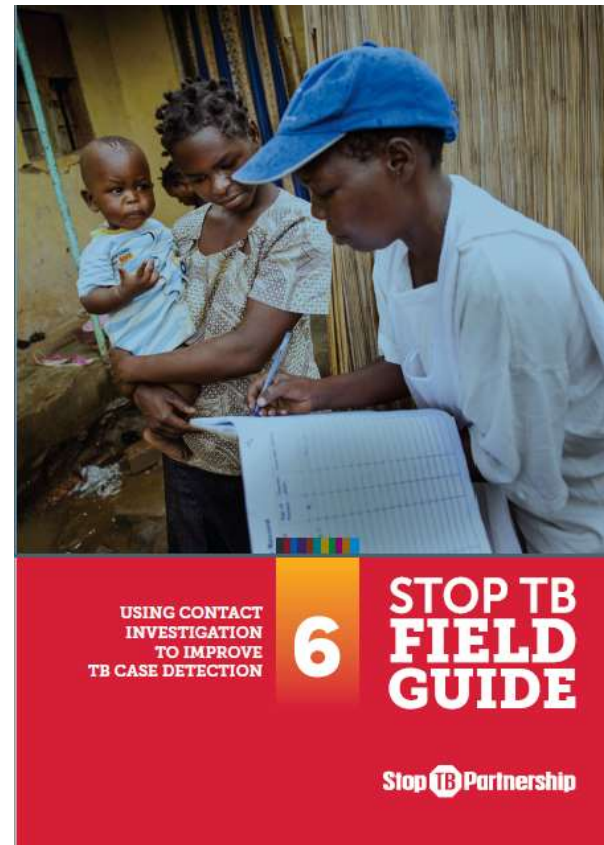


Why Use CI?

- Earlier case detection
- Identify LTBI, especially in children
- Provision of TOI
- Patient education

What to Expect?

- High yield, low NNS
- Increase in notifications among children
- Opportunity to deliver preventive treatment



Designing your CI Intervention

- Step 1:** Define the index case
- Step 2:** Define and prioritize the contacts
- Step 3:** Decide how to access the contacts
- Step 4:** Decide on the staffing
- Step 5:** Determine the timing of the screening; and
- Step 6:** Contact (clinical) evaluation and treatment



CI: What else is in the guide

**In addition – cascade for
Treatment of Infection**

A. Number of index patients eligible for contact investigation

B. Number of index patients for whom contact investigation was done

C. Number of contacts identified

D. Number of contacts reached/verbally tested

E. Number of contacts tested via diagnostic tool (per test)

F. Number of contacts diagnosed (disaggregated by B+ and AF)

G. Number of contacts put on treatment (disaggregated by B+ and AF)

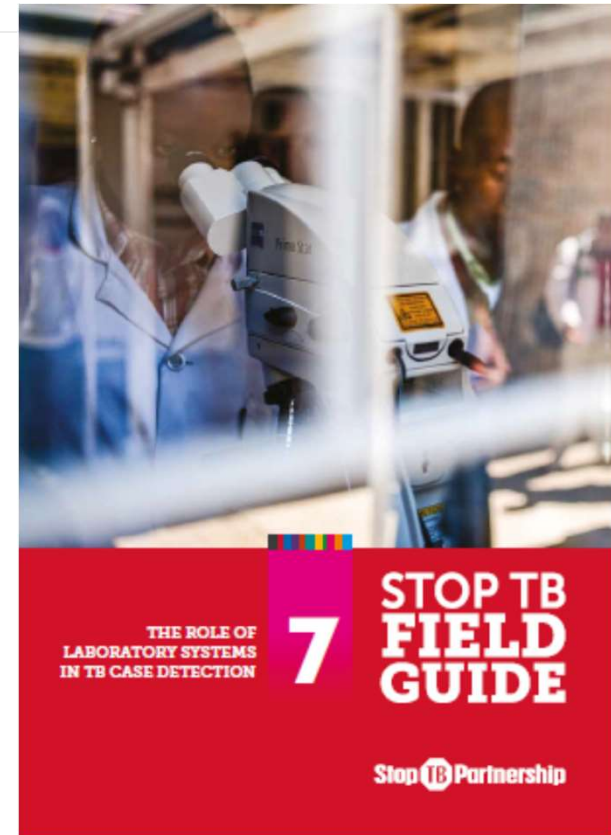
H. Number of contacts successfully treated



The Role of Laboratory Systems in TB Case Detection

When designing interventions - do we ask?

- Will enhanced TB screening activities lead to a persistent increase in the number of laboratory tests over a year?
- Will campaign-like events result in spikes in the number of samples to be tested on select days of the week/month?

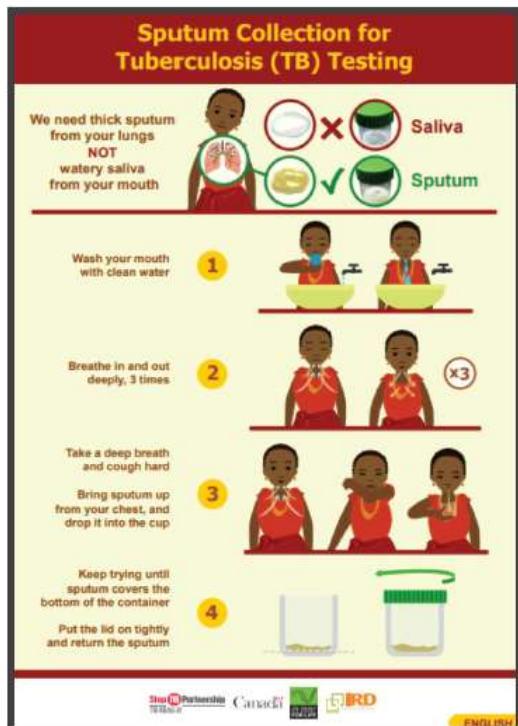


Strengthening Lab Systems – Overview



- Increasing the number of people tested
 - Installing new equipment (GeneXpert)
 - Increasing testing capacity
 - Testing pooled sputum
- Human Resources
 - Hiring new staff
 - Other solutions (staff redistribution and incentives)
 - Training
 - Task shifting
- Sample Collection
- Sputum Transportation Networks

➔ Sample Collection



➔ Sample Transportation

Consideration	Questions
Area of coverage	<ul style="list-style-type: none"> • Will the sample transportation network connect collection sites in communities, health facilities or both? • How many collection sites will be connected to one testing site?
Frequency	<ul style="list-style-type: none"> • How frequently will samples be transported from a collection site to a testing site? • Will samples be collected via a regular, scheduled service or an ad hoc request a sample is collected?
Sample integrity	<ul style="list-style-type: none"> • Will the samples need to be preserved before they are transported to a laboratory for testing? • How will samples be packaged during transport to limit sample contamination and exposure to droplet nuclei?
Transportation method	<ul style="list-style-type: none"> • What kind of transportation methods are available and best suited for the route? • Will the programme procure its own vehicles or will it pay a fee per trip or per sample transported to individuals who already own a vehicle? • Is it possible to integrate TB sample transport with other sample transport services?
Reporting	<ul style="list-style-type: none"> • How will testing IDs be set up to facilitate disaggregated reporting of test results? • How will test results be returned to the collection site and how will patients be linked to treatment?



→ Available Diagnostic Tests

- Smear Microscopy
- Molecular assays
- Urine lipoarabinomannan assays
- Culture

- New tests coming...?

Understanding the issue of false-positive results by smear microscopy

ZN smear microscopy test performance

Sensitivity	40%	Specificity	98%
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Smears performed	TB prevalence among those tested	True positives	False negatives	True negatives	False positives	False positivity rate
5,000	20%	400	600	3,920	80	16.7%
	4%	80	120	4,704	96	54.5%

In this fictitious example, the ZN smear microscopy test performance and number of smears performed are the same for each population, but one population has a TB prevalence that is 5x higher than the other. In the higher prevalence population, 80 false-positive results are recorded among a total of 480 positive test results (400 TP + 80 FP), giving a false-positivity rate of just 16.7%. While this rate is not ideal, historically it has been acceptable in the absence of affordable and scalable diagnostic tests with better performance. By contrast, in the lower prevalence population, 96 false-positive results are recorded among a total of 176 positive test results (80 TP + 96 FP), giving a false-positivity rate of 54.5%.



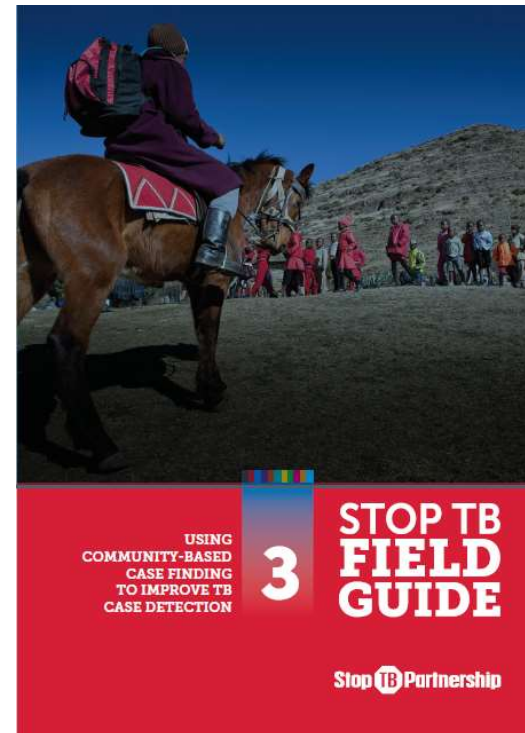
Using community-based case finding to improve TB case detection

POTENTIAL REASONS WHY COMMUNITY-BASED CASE-FINDING IS NEEDED:

1. Limited access to TB services (in terms of distance and costs) is leading to low treatment coverage.
2. A high level of TB stigmatization in the community is preventing people from seeking TB care.
3. There is a high prevalence of TB combined with low treatment coverage.
4. People treated are diagnosed late; a high positivity rate is observed among those tested; many diagnosed cases present with high smear grades when doing microscopy; there is a high death rate among people with TB; there are long delays in care seeking.
5. Numerous risk factors support the transmission or development of TB in the population (e.g. undernutrition, overcrowding, high levels of alcohol or drug use, high HIV prevalence).

WHY ADDRESS THESE GAPS WITH COMMUNITY-BASED CASE FINDING?

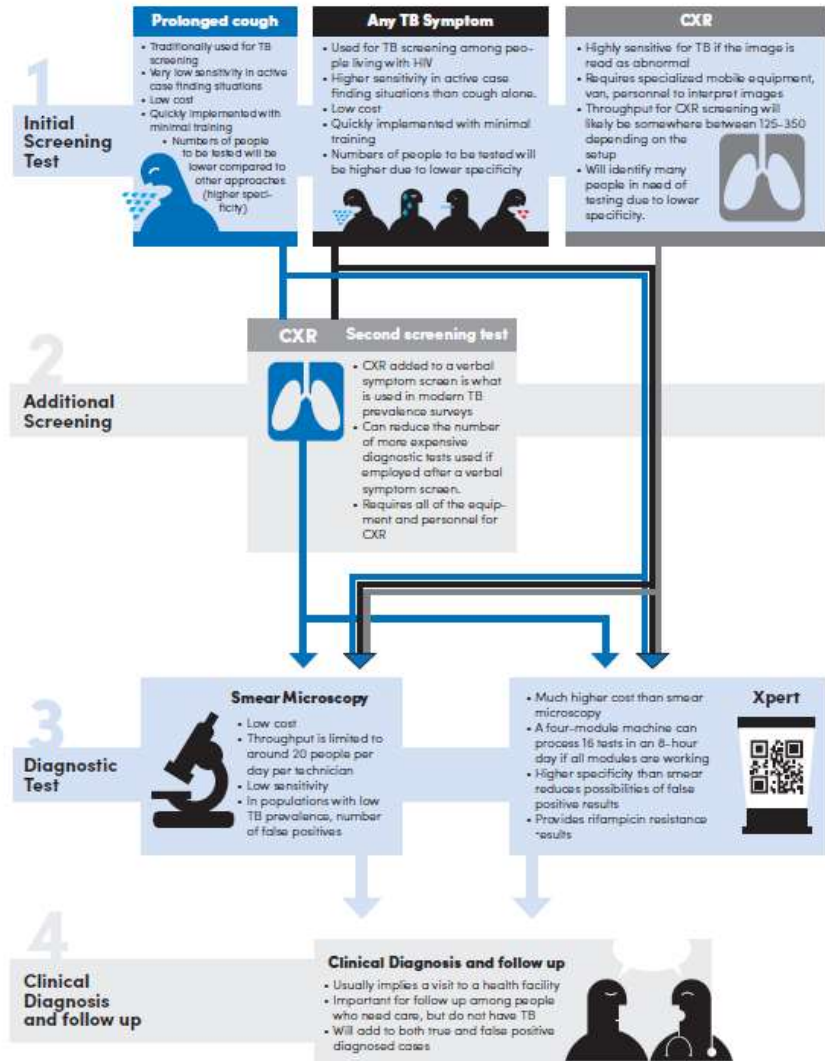
1. High potential for improving TB case detection and reach people with TB currently missed by the health system
2. Opportunities to link with other disease areas or programs in the community
3. Increasing awareness of TB and addressing stigma and discrimination
4. Potential for improving treatment outcomes
5. Facilitating contact investigation



➔ Different Examples/Models

- One off screening days vs community presence
- Outside health workers vs community members
- Door to door vs camps
- Areas with poor access vs high risk groups





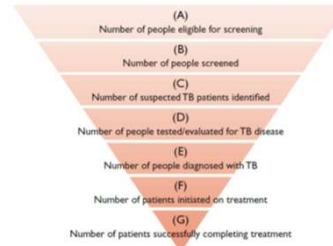
Screening and Testing algorithm options for implementing case finding approaches

➔ Resource considerations

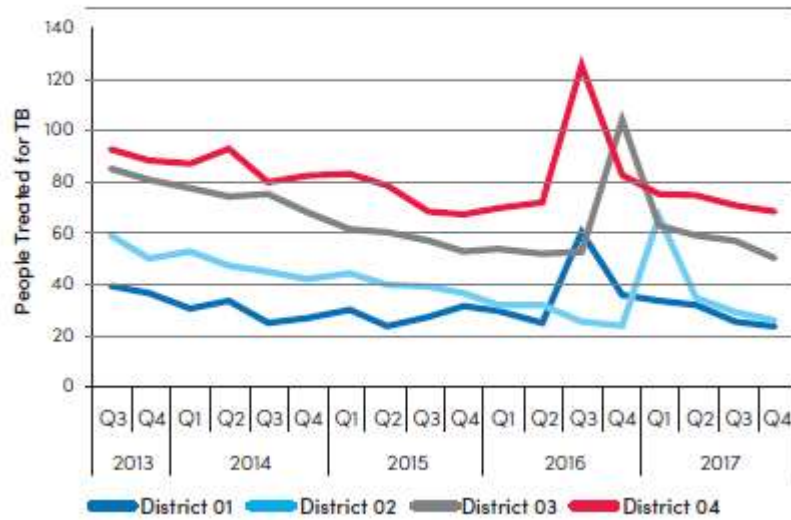
Cost drivers for continuous community-based case finding	Cost drivers for event-based/mobile community case finding
<ul style="list-style-type: none"> • Incentives/compensation schemes for CHWs/volunteers; • Costs involved in setting up a supervisory system; • Communication means; • Transportation costs for CHWs and supervisors, as well as for sputum (when applicable); • Introduction of new diagnostics such as Xpert and their running costs. 	<ul style="list-style-type: none"> • Staff costs of the mobile team; • Transportation costs of moving the team around; • Procurement of a mobile van equipped with the necessary screening and diagnostic tools; • Introduction of new diagnostics such as Xpert and their running costs.



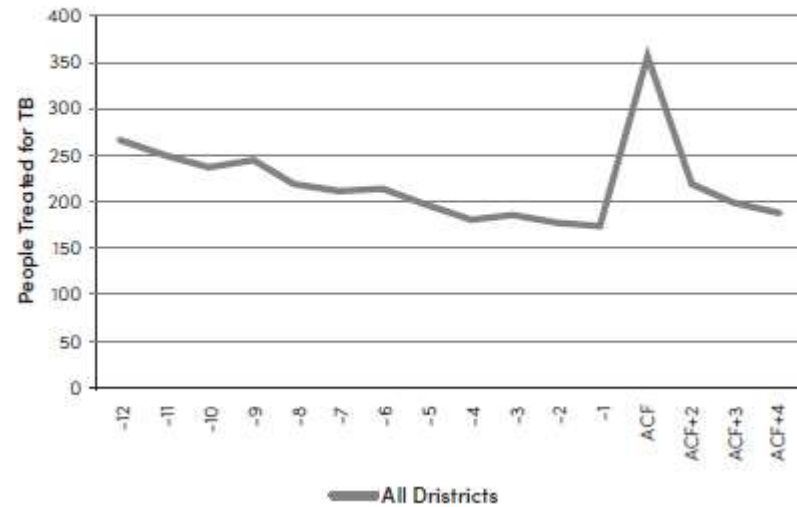
M&E



Impact of mobile CXR screening on TB case notifications in four districts



Summary impact of mobile CXR screening for four districts with active case finding activities standardized into a single quarter





Thank You

Regional Workshops and Training in Q2 2019 to be coordinated

