TB Impact Assessment Meeting
15-16 October 2009, Geneva
Country: Zambia

Prevalence survey preparation country experience
Nathan Kapata & Nancy Kasese-Chanda
Outline

• Survey background, methodology
• Update on preparation stage
• Survey organization
• Bottlenecks experienced, proposed solutions
• TA
• Adjusted timelines
Map of Zambia

- Launch of the Partnership for Maternal, Newborn & Child health
- Scale up of Maternal Death Review initiative to all provinces
- Establishment of Safe Motherhood Action Groups (SMAGs) in 24 districts
- Strengthened HR at central level
Survey background

- To estimate in a nationwide representative survey the adult (15yrs and older) prevalence of bacteriological confirmed pulmonary TB (PTB) in 2010-2011 in Zambia.
- A sample size approximately 60,000 adults (aged 15 years or more) screened to estimate the prevalence of smear-positive pulmonary TB of $377/100,000$ with 20% precision, a design effect of 2 and an expected participation rate of 85%.
Survey background

- 80 clusters of 750 individuals
- PSU=CSA
Survey organisation

Steering Committee

Data Centre

Survey Coordinator

Technical Advisory Group

Central

Field

Lab  Medical  Data Manager  Logistics  CXR  Team Leader  Team Leader
Thus far-coordination

- Steering committee- Dec 2008
- Technical advisory group- Jan 09
- Established working groups-lab, x-ray, statistics, social mobilization
- Working on -protocol review
  - SOPs
  - Forms, registers
Bottlenecks in preparation

Technical
- Few technical staff in country
- No full time staff

Logistical
- Inadequate funds
- Inadequate dedicated supplies and other resources
- Limited communication facilities
- Challenges with transport
Bottlenecks in preparation

- Sampling issues - PSU based on 2000 data projected. Concerns about accuracy
- HIV testing protocol development due to ethical considerations, possible apathy
- X-ray - safety issues, cost of digital, concern of whether it can withstand terrain
- Lab - capacity to process specimens
- Community concerns - cultural perspectives, participation in urban areas
- Field work - availability of staff for entire period
Possible solutions

• Inter-sectoral coordination and partners
• Lobby funds including local partners
• Technical assistance external
• Collaboration on ZAMSTAR prevalence survey
• Use containerized lab
• Effective social mobilization
International TA

- WHO - all stages
- KNCV - Dr Masja Streateman - protocol development, sampling issues, guidance on SOPs and budgeting and to continue
- Other JATA - Xray
  - CDC - Questionnaires, forms, field work
### Adjusted timelines

<table>
<thead>
<tr>
<th>Activity</th>
<th>Start date</th>
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<tbody>
<tr>
<td>Finalization of protocol</td>
<td>Dec 2009</td>
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<tr>
<td>Ethical review</td>
<td>Jan 2010</td>
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<tr>
<td>Finalization of SOPs, training materials</td>
<td>Feb 2010</td>
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<tr>
<td>Staff training</td>
<td>Mar 2010</td>
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<tr>
<td>Pilot study</td>
<td>April 2010</td>
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<tr>
<td>Amendments, printing</td>
<td>June 2010</td>
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<tr>
<td>Field work starts</td>
<td>July 2010</td>
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Philm Lab CTL Containerized TB Laboratory

World’s First Semi-Mobile, BSL3 TB Culture Facility
to be used for the ZAMSTAR TB Prevalence Survey, 2009-2010

Partners:
- MBART Project
- IZA School of Medicine
- London School of Hygiene and Tropical Medicine
- Zambian Ministry of Health
- Pest Diseases Laboratory

Funding partners:
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Design and construction:
Toga Laboratories
Container fierce:
Air Filter Management Systems
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• MOH
• ZAMBART
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