Successes and remaining barriers to routine TB screening and implementation of IPT in Cambodia
Current Status of HIV in Cambodia

- Total population in 2009: 14 million*
- Main route of HIV Transmission: Heterosexual intercourse
- In 2010:
  - Estimated HIV Prevalence among Adult Pop. is 0.7% **
  - Estimated number of PLHIV who are eligible for ART is 46,500 (CD4 ≤ 350 cell counts)

* National Census in 2009
** NCHADS and NCMCH/MOH
1- HIV Prevalence Among Adult pop. 15-49 between 1995 and 2006
2- AEM-Projected Prevalence of HIV among the general population aged 15-49 year from 2006 to 2012 (With ART available)
3- HIV Incidence * among ANC by Survey year
More than 90% of PLHIV who are eligible for ART, are currently on ART (Q1 2011)
% of PLHIV on ART are still alive at 12 month after ART initiation (A:86.4% and C: 90.9%)
% of PLHIV do not lost to follow up at 12 month is > 90%
% of PLHIV are still on first line regimen at 12 month after ART initiation is > 90%
Current Status of TB in Cambodia

- Cambodia is one of the 22 high-burden countries of TB in the world

- 64% of the total population has been infected with TB *

- Incidence of TB all forms: 495/100,000

- Prevalence of TB all forms: 664/100,000

- Mortality due to TB: 89/100,000

*1997 WHO estimate
HIV sero-prevalence trend among TB cases
**TB/HIV Collaborative Activities**

- 1999: TB/HIV Sub-Committee was set up
- 2002: TB/HIV Framework has been endorsed by MoH
- 2003: TB/HIV Pilot Projects at 4 sites: TB screening at OI and ART service and IPT, but no progress
- 2003: Joint statement between TB and HIV Program:
  - Clearly defined role and responsibility of each Program: LSM
  - Joint training activities
- 2006: SOP for HIV testing among TB patients (PITC)
- 2009: Revised TB/HIV Framework (on progress)
As a Result of the Combined Efforts For Over the Last 10 Year, 1999-2009
## HIV testing and ART among TB Patients

<table>
<thead>
<tr>
<th></th>
<th>2007 (all ODs)</th>
<th>2008 (all ODs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total TB cases registered</td>
<td>36,421</td>
<td>39,820</td>
</tr>
<tr>
<td>Unknown HIV status after TB</td>
<td>31,136</td>
<td>36,942</td>
</tr>
<tr>
<td>registered</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Referred to VCCT</td>
<td>13,535 (43%)</td>
<td>19,963 (54%)</td>
</tr>
<tr>
<td>HIV tested among TB</td>
<td>11,820 (32.4%)</td>
<td>18,645 (46.8%)</td>
</tr>
<tr>
<td>HIV positive</td>
<td>497 (4.2%)</td>
<td>431 (2.3%)</td>
</tr>
<tr>
<td>TB/HIV under CPT</td>
<td>1,101</td>
<td>1,279</td>
</tr>
<tr>
<td>TB/HIV under ART</td>
<td>610</td>
<td>733</td>
</tr>
</tbody>
</table>
## Intensified TB case finding and IPT

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2008/09</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV+ Registered at VCCT</td>
<td>11,641</td>
<td>9,511</td>
</tr>
<tr>
<td>HIV+ clients screened for TB</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(ICF)</td>
<td>5,318 (46%)</td>
<td>5,980 (63%)</td>
</tr>
<tr>
<td>TB diagnosed</td>
<td>1,974</td>
<td>2,159</td>
</tr>
<tr>
<td>Sputum smear+</td>
<td>501 (25%)</td>
<td>522 (24%)</td>
</tr>
<tr>
<td>Sputum smear-</td>
<td>787 (40%)</td>
<td>826 (38%)</td>
</tr>
<tr>
<td>EPTB</td>
<td>686 (35%)</td>
<td>811 (38%)</td>
</tr>
<tr>
<td>IPT (3 sites only)</td>
<td>77</td>
<td>66/44</td>
</tr>
</tbody>
</table>
Challenges in Increasing ICF and IPT

✓ No clear evidence on ruling out TB among PLHIV
  ○ What symptom(s) accurately predict absence of TB?

✓ Screening and diagnostic steps for TB need to be:
  - Simple and feasible
  - Accurate and low cost

➢ Fear of INH resistance from using mono-therapy

➢ Absence of clear model lead to pilots and studies but no widespread implementation
How to Increase the access to ICF and IPT: Linking HIV/STI/RH/MNCH/TB Services at District Level
Evidence Based Approach to Increase ICF & IPT
IDTB study in Cambodia, Thailand, Vietnam*

1,748 consecutively enrolled PLHIV, 8 OP clinics
Extensive workup for TB on all patients including 3
cultures of sputum, blood, urine and LNs (if present)

Algorithm for screening and diagnosis
based on characteristics of TB+ versus TB
negative patients

Screening algorithm incorporated into
National SOP’s approved by MoH April
2010

Linking TB and HIV Services at District Hospital

- **HIV Team**
  - VCT
  - OI/ART (A/C)
  - ICF
  - IPT: 6 M

- **TB Team**
  - TB Ward
  - X Ray

- **Integrated Lab:**
  - HIV testing
  - TST, SSM
  - others

- **TB Diagnosis**
  - Referral Card
  - Cross Follow Up Form

- **Referral Path:**
  - R and F (suspected TB)

- **Discarded TB:**
  - IPT: 36 M
How To Scale Up Rapidly The Implementation of the 5 Is:

- ICF
- IPT
- IC/TB

<= 3 Is

- Immediate ART: MoH Approved in Feb 2010
  => ART be started at CD4 \leq 350 \text{ cc/mm}^3
  => For TB/HIV, ART be started immediately after 2 weeks of TB treatment, regardless CD4.

- Integration of TB and HIV Services through LR
Rapid Scale Up Implementation of 3Is including IPT

- **2009:** 3 to 4 November => 15th Core Group of TB/HIV Meeting
- **2010:** January => WHO Workshop to finalize the Guidelines for 3Is

**January to March 2010:**
- Develop SOP for implementing 3Is at OI/ART site by TWG-TB/HIV
- (In line of Recommendation of the 15th Core Group Meeting and WHO Draft Guidelines for 3Is)

- **23rd of April 2010:** SOP endorsed by MOH  [SOP1.doc](#)
- **29th of April 2010:** Orientation Workshop to start 3Is
  - Joint Statement between NCHADS and CENAT to support the implementation of 3Is including IPT  [Joint Statement.doc](#)
Orientation Workshop on the Implementation Of Three I’s Standard Operating Procedures

Cambodiana Hotel, Phnom Penh, April 29th, 2010
Work Plan to start 3Is (IPT) at OI and ART Site

OI/ART clinicians and TB officers:
- Work Plan: Capacity Building, Coordination, M&E, LSM
Result of Implementation of IPT, from April 2010
IPT implemented by OI and ART Sites in 2010

Adult: 51 sites
Pediatric: 33 Sites

IPT in 28 OI and ART sites
Number of PLHIV on IPT in 2008, 2009 and July 2010 to March 2011

- **2008**: 66 sites, 3 PLHIV on IPT
- **2009**: 43 sites, 3 PLHIV on IPT
- **July 2010 – March 2011**: 813 sites, 22 PLHIV on IPT

**Legend**:
- Yellow bars: IPT Sites
- Line: # PLHIV on IPT

**Additional Information**:
- # of IPT sites
- # PLHIV with TST + on IPT
Remaining Challenges

- Work load for TB and HIV workers at all levels
- Creating conflict of interest and benefit (competition for resources)
- Limited capacity for program management including finance and budgeting, reporting at peripheral level
- Limited capacity to own and monitor the TB/HIV collaborative activities at OD level
- High rate of lost to follow up for reading the result of TST
- Limited access to TB culture for diagnosis in some sites
- Harmonization among partners – needs strengthening
Next steps

Scale up the Implementation of IPT

- **2011:**
  - Expand IPT to 45 OI/ART Sites for Adult (80%)
  - Introduce IPT in 4 Pediatric AIDS Care sites

- **2012:** Country-wide Scale Up

Monitor and evaluate the performance of ICF/ IPT

- Revise Monitoring indicators and reporting format
- Use CQI method for patient level analysis
- Evaluate performance of the TST sites
Thank you