



# Asian National Stop TB Partnership Forum "Community people's roles in End TB Strategy in Asia"

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**មជ្ឈមណ្ឌលជាតិកំចាត់រោគ របេង និង ហង់ស៊ីន**  
National Center for Tuberculosis and Leprosy Control (CENAT)



**សហគមន៍ប្រយុទ្ធនឹងជំងឺរោគរបេង**  
Cambodia Anti-Tuberculosis Association



# TB Burden in Cambodia

- Cambodia is still one of the 22 HBC with TB in the world
- Incidence rate of TB all forms in 2014 is 390/100,000\*.
- Prevalence rate of TB all forms in 2014 is 668/100,000\*.
- Prevalence rate of Sm+ for age 15 and over in 2011 is 272/100,000.
- Death rate 58/100,000\*

\* Global report 2015



# About CATA (1)

## 1. Background:

Cambodia Anti-Tuberculosis Association(CATA), a local NGO established in 2003, as a TB professional association of individual and institution committed to contribute to the fight against TB in Cambodia.

## 2. Vision:

Make Cambodia free from TB and Lung Disease.



# About CATA (2)

## 3. Mission

Coordinate and advocate for TB free Cambodia and ensure social and community enabling environment through:

- Promoting the institution and the individual to involve in Stop/End TB strategy
- Information sharing, research and capacity building
- Promoting the quality of effective prevention, early detection and treatment of Tuberculosis and Lung disease
- Strengthening the effective enforcement of relevant laws, policies and guidelines.



# About CATA (3)

## 4. Goal

Strengthening the coverage and quality of TB services by increasing commitment of the institution and the individual and promoting the social and community environment.





# Current Projects

Project Name	Coverage Area
Public-Private Mix-DOT in Factory (work place)	14 Factories, Phnom Penh
Active Case Finding among Elderly and other Vulnerable Communities	12 Operational Districts in 8 Provinces.



(1)  
TB Control in Factory (PPM-DOT)





# TB Control in Factory (1)

## 1. Background:

- Factories, the poor ventilated settings where thousands of workers work and share room air are at high risk for TB
- Patients with TB symptoms may receive symptomatic treatment at the factories as factory clinics support only primary health care, leading to diagnostic delay.
- Untreated, some one with chronic TB may face being dismissed from employment due to frequent absenteeism , and bring additional hardship to the vulnerable family.





# TB Control in Factory (2)

## 2. Current Methods:

- Trained peers to conduct peer contact activities.
- Conduct follow up (FU) meetings with peers
- Refer suspected TB case from factory to public health center
- Implement DOT in factories ( work place)



# TB Control in Factory (3)

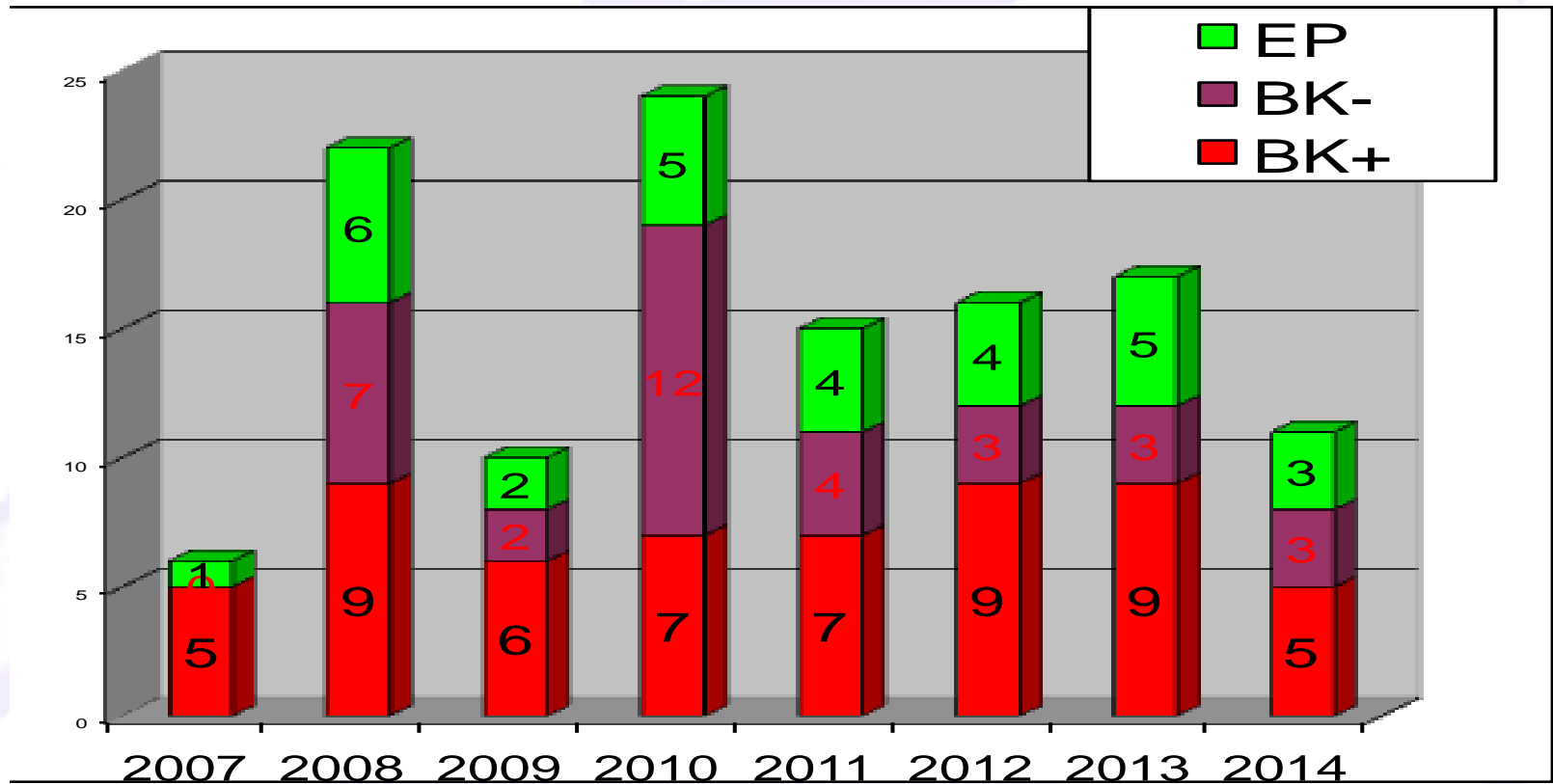
## 3. Results:

- 14 garment factories were implemented.
- 11,553 workers were contacted by peer educators ( 11 months ).
- 12 sessions of FU were conducted
- 108 TB suspects referred to HC (11mths).
- 10 TB cases registered (5s+, 4s- and 1EP) for treatment by DOT in factory (11 months).



# TB Control in Factory (4)

## 4. Cases notified by TB types/years





# TB Control in Factory (5)

## 5. Lesson Learnt:

- Lack of awareness raising activity, the discrimination among workers might be not reduced leading to less number of referral
- Limited budget for FU meeting with Peers is the cause of less peers' activity.
- TB patients can work regularly during the course of treatment( in the exception of 1<sup>st</sup> month therapy of smear positive cases).
- In congregated settings, one case treated can prevent hundreds of co-workers from TB





(2)  
**Active Case Finding  
Among Elderly & Other  
Vulnerable Community**

We are assisting the National Tuberculosis Control Program to reduce the morbidity and mortality among the Cambodia communities, especially the poor, caused by tuberculosis and lung diseases



# Active Case Finding (1)

## 1. Backgrounds:

- TB burden in Cambodia has decreased by  $> 50\%$  by end 2015 compared to 1990 data.
- Cambodia still one of the highest TB prevalence in the world
  - Prevalence all form : 668 cases/100,000 population
  - Prevalence survey in 2011, TB burden in elderly is  $\geq 3$ time higher than the general population.
  - Prevalence/Notification ratio in  $>55$  years = 1.5
- Hypothesis: poor access to TB diagnosis and treatment





# Active Case Finding (2)

## 2. Methods:

- Active case finding using mobile teams equipped with a chest x-ray (CXR) and Xpert machine in 12 Operational Districts.
- 1 to 2 weeks before field operation, each health centre was visited for one day by the team:
  - Volunteers performed door to door **symptom screening** prior to CXR screening day.
  - TB suspects with a positive **CXR were then tested by Xpert MTB/RIF assay**
  - TB cases were registered and put on **treatment**
- Elderly were primarily targeted.
- Project yield and TB notification data were analysed to assess impact on treatment initiation.



# Active Case Finding (3)

## 3. Results (1):

Indicators	Year 1 (2014)			Year 2 (2015)		
	Annual Planned Target	Achieved Target	%	Annual Planned Target	Achieved Target	%
1) #of people screened	113735	68846	61%	57810	56996	99%
(2) #of TB suspects	21840	11995	55%	16830	16043	95%
(3) #of people tested by TB X ray	18055	11650	65%	15810	12147	77%
(4) #of TB suspects tested by Gene Xperts	3276	2520	77%	3478	2084	60%
(5) #of people confirmed as SS +/B+ (yield SS+/B+)	663	397	60%	557	334	60%
(6) #of people confirmed as TB all forms (yield all forms)	1243	1064	86%	1265	1094	86%





# Active Case Finding (4)

## 3. Results (2):

- 12 operational districts visited.
- 193 health facilities visited.
- 23,797 individuals screened by CXR.
- 4,604 (19.0%) individuals were tested using the Xpert MTB/RIF assay,
- Resulting in the detection of 731 (16%) MTB-positive patients.
- Total cases : 2158 (MTB positive + others)



# Active Case Finding (4)

**3. Results (3):** New bacteriologically-positive notifications increased +119.2% for all ages and +262.7% for those ≥55 years during the ACF quarters compared to trend expected notifications.

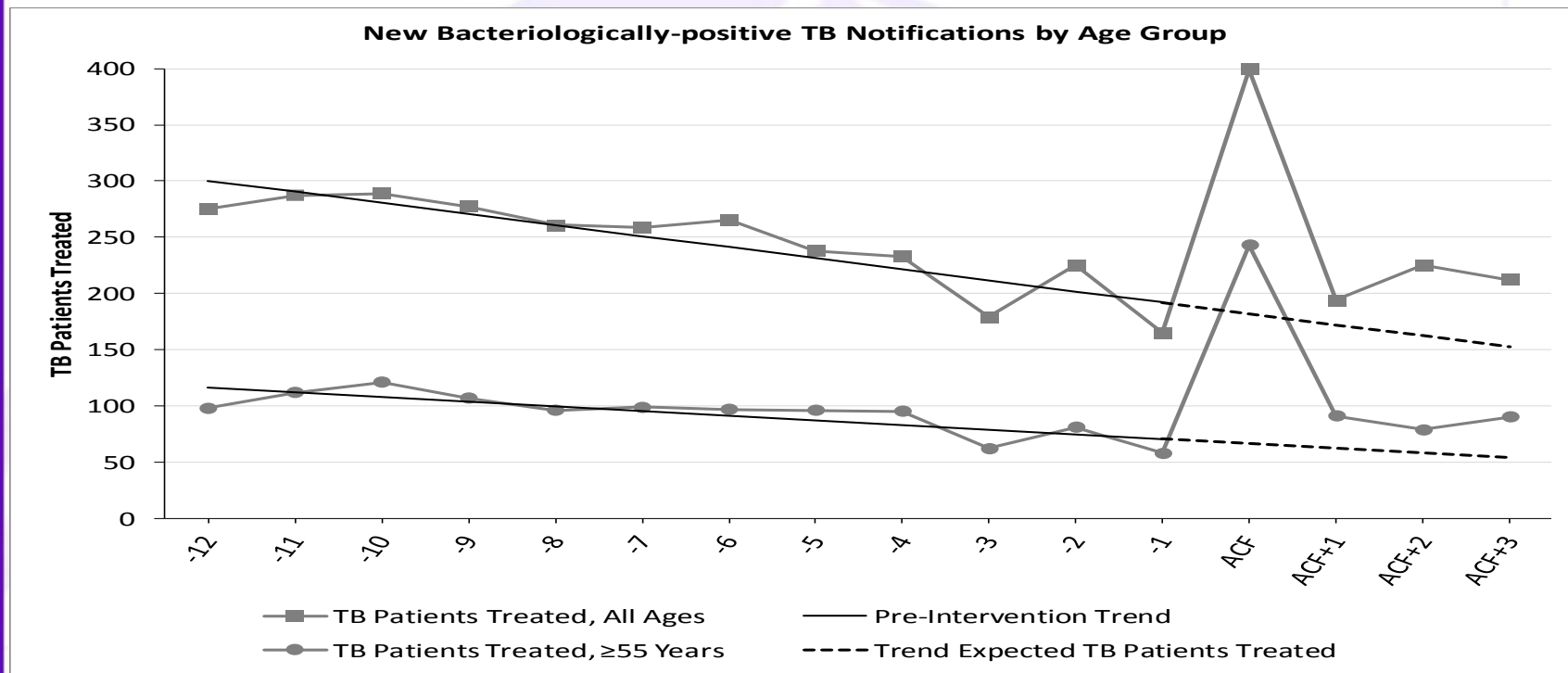
**Changes in New Bac+ and All Forms of TB treatment initiation and reporting in 4 Operational Districts of Year 1**

	Patients Detected (Project Yield)	Actual Intervention Quarter Notifications	Trend Expected Intervention Quarter Notifications	Additional Notifications	Additional Notifications to Yield Ratio
<b>New Bac+, All Ages</b>	<b>319</b>	<b>399</b>	<b>182</b>	<b>217 (+119.2%)</b>	<b>68.00%</b>
Angkor	35	58	24	34 (+141.7%)	97.10%
Battambang	68	115	56	59 (+105.4%)	86.80%
Kong Pisey	110	105	45	60 (+133.3%)	54.50%
Sampovmeas	106	121	57	64 (+112.3%)	60.40%
<b>New Bac+, ≥55 Years</b>	<b>231</b>	<b>243</b>	<b>67</b>	<b>176 (+262.7%)</b>	<b>76.20%</b>
Angkor	29	34	8	26 (+325.0%)	89.70%
Battambang	62	61	13	48 (+369.2%)	66.70%
Kong Pisey	68	71	24	47 (+195.8%)	69.10%
Sampovmeas	62	77	22	55 (+250.0%)	88.70%
<b>All Forms of TB, All Ages</b>	<b>893</b>	<b>1,232</b>	<b>653</b>	<b>579 (+88.7%)</b>	<b>73.10%</b>
Angkor	98	152	68	84 (+122.4%)	69.40%
Battambang	230	445	196	249 (+126.6%)	85.20%
Kong Pisey	318	344	245	99 (+40.3%)	77.00%
Sampovmeas	247	291	143	148 (+103.6%)	57.90%



# Active Case Finding (4)

**3. Results (4):** NTP notifications in intervention period compared to expected notifications based on 3 year trend: New Bac+ notifications were +54.0% and +109.2% higher than expected for all ages and  $\geq 55$  years respectively.





# Active Case Finding (5)

## 4. Lesson Learnt (1):

- The factors contributing to the success are the involvement from stakeholders and the trust to the project for its new technology, and quick diagnosis.
- The conditions for success to be continued are:
  - 1) proper maintenance of all equipment to avoid being broken during implementation,
  - 2) well calculation and implementation of project's resources supplied and demand
  - 3) continue providing transport cost to the poor and those who live far away from HCs, and;
  - 4) The use of communication skills and incentive provided to all stakeholders for better involvement is still key factors for success.





# Active Case Finding (6)

## 4. Lesson Learnt (2):

- The conditions to replicate and expand the successful strategy are:
  - The combination of the team 1 and team 2 to work together for:
    - Increasing the number screened by CXR,
    - Saving fuel needed to supply 2 generators that operated separately.
    - Minimizing interruption of the operation due to unsafe power supply.
  - Procure a set of new CR machine to avoid interruption due to Prima console system error or broken.



# Active Case Finding (7)

## 4. Lesson Learnt (3):

- The strategy used is likely appropriate for ACF but there are some constraints factors as following:
  - Road conditions are bad due to rainy season, causing difficulty to reach the HCs, leading to implementation time is short.
  - Elderly need to look after their grandchildren at home and sometime cannot come to HCs.
- The project screens/tests a lot of patients per day for a long period of time, so it may cause to damage the material. To avoid that and ensure the project run smoothly, CATA seeks fund to buy new equipment especially CR and X-ray machine for security.



# Active Case Finding (8)

## 5. Conclusion:

- ACF using mobile teams was able to increase access to TB diagnosis, especially the elderly people.
- Compare to baseline data, the intervention can detect and treat many patients who previously missed routine TB services.
- We recommend to consider targeted ACF interventions in other settings where access to diagnosis and treatment is limited.





**Thank You for Your Attention**