

Intensified TB Case Finding in Voluntary HIV Counseling and Testing Centres in India

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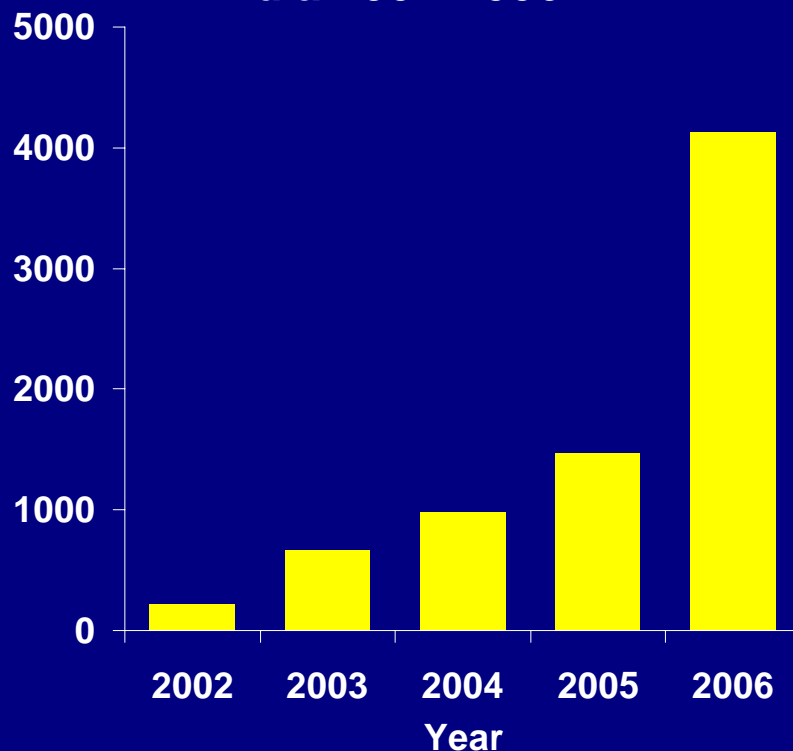
TB and HIV in India

- High TB burden country
 - 1.8 million TB cases per year
 - DOTS expansion completed (2006)
- HIV burden
 - 2.46 million PLHA (2006)
 - 0.36% of adult population
 - Higher HIV prevalence in Southern & North-Eastern States

HIV Counseling and Testing Services

- Rapid expansion of VCT Centre network
- VCT Centres usually located in health facilities
- Trained staff conduct pre- and post-test HIV counseling

Number of VCT Centres, India 2002-2006



Why do Intensified TB Case Finding in VCT Centres?

- VCT clients have high HIV prevalence
 - HIV prevalence at VCT centres median 10.8% in India (2006)*
- Detect TB cases earlier than through passive case finding
 - Reduced morbidity and mortality
 - Improve health facility infection control
- Enhance TB case detection

*National AIDS Control Organization, 2007



Intensified TB Case Finding in VCTs

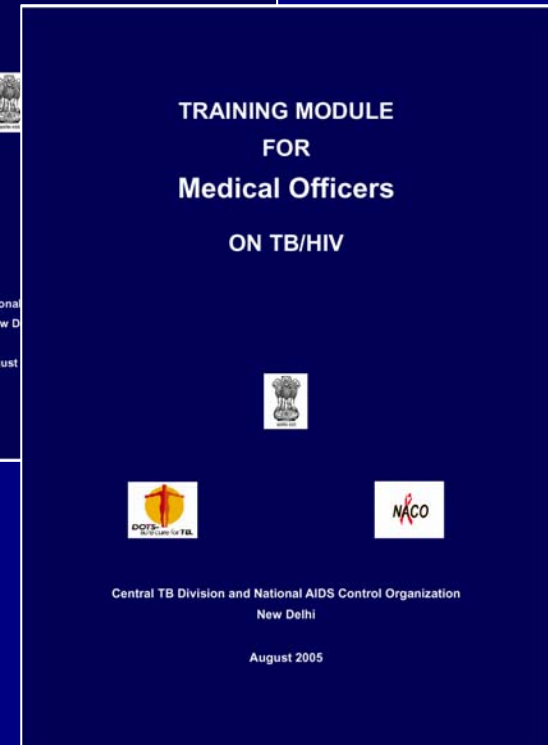
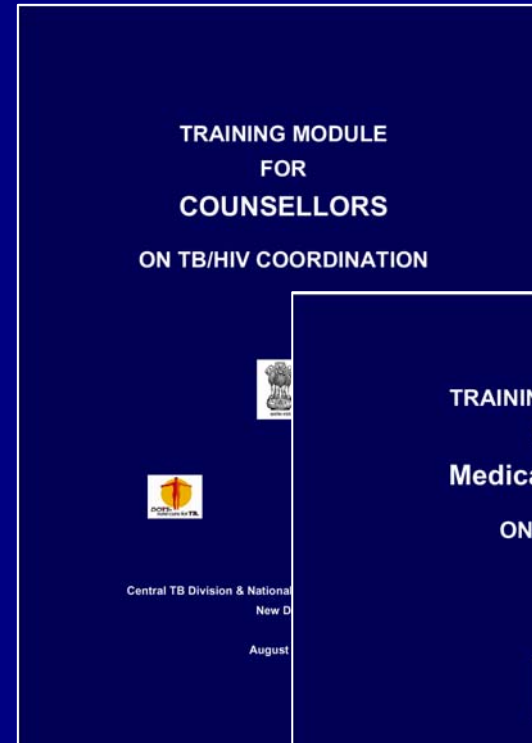
- **2003-4: Pilot test of ICF in 5 VCTs***
 - Simple symptom-based screening
 - Referral mechanism to microscopy centers tested
 - Training developed
 - Recording and reporting developed
- **2005: Incorporation of ICF into national TB and HIV guidelines**

**Shetty et al, IJTLID, publication pending*



Training for ICF in VCT Centres

- TB-HIV training modules developed
- Local TB programme managers responsible for training
- TB-HIV training completion monitored by National TB Programme
- Enabled by: State TB-HIV coordination committee, state TB-HIV consultants (WHO, GFATM)



How ICF works in India (1)

- Counselors expected to ask all VCT clients about TB symptoms during pre-test counseling
- Clients with symptoms referred to Microscopy Center with routine sputum referral form



How ICF works in India (2)

- Counselor records all referrals on line list
- TB programme supervisory staff check lab/TB register monthly
 - Referral completion
 - Diagnostic outcome
 - TB treatment start
- Monthly VCT reports

Form - I.1 LIST OF PERSONS REFERRED FROM VCTC TO RNTCP

LINE LIST FOR THE MONTH OF : July 07. REPORTING MONTH : September 07.

NAME OF VCTC : G.P.H.C. Palahady. NAME OF DISTRICT : Namakkal.

Sl. No.	Complete Name & Complete Address	Age	Sex	Marital Status	Date of Referral	Name of RNTCP Unit	Live Person received at RNTCP	Date of Referral to RNTCP	Date of Referral to RNTCP	Date of Referral to RNTCP	To be completed by STS			
											Diagnosed as TB	Diagnosed as TB	Diagnosed as TB	Diagnosed as TB
F	Babu	28	M	Married	10-7-07	Nallur	Yes	10-7-07	10-7-07	10-7-07				
R	Chokkan	50	M	Married	10-7-07	Nallur	Yes	10-7-07	10-7-07	10-7-07				
G	Appa	50	M	Married	10-7-07	Nallur	Yes	10-7-07	10-7-07	10-7-07				
A	Nallayarasundar	56	M	Married	10-7-07	Nallur	Yes	10-7-07	10-7-07	10-7-07				

Sign of Counselor : [Signature] Signature of STS : [Signature]
 Sign of MO-VCTC : [Signature] Signature of DDO / CTO / MO-TC : [Signature]
 Date of Completion : [Date] Date of Completion : [Date]

INTEGRATED COUNSELLING AND TESTING CENTRE, Gen. Primary Health Centre, NAMAKKAL.

Form - II REPORT OF HIV-TB ACTIVITIES AT VOLUNTARY COUNSELLING TESTING

Report for the Month of : July 07. Reporting Month : September 07.

Name of VCTC : G.P.H.C. Palahady. Name of the district : Namakkal.

I. TOTAL NUMBER OF CLIENTS ATTENDING VCTC :

a) No. of clients who received Pre-test Counselling	170
b) Out of above (a), No. detected to be HIV Positive	3
c) No. of HIV Positive and HIV Negative Follow-up Clients who attended VCTC	

II. REFERRAL OF SUSPECTED TUBERCULOSIS CASES FROM VCTC TO RNTCP

	HIV positive	HIV Negative
a) No. of persons suspected to have TB referred to RNTCP Unit	3	1
b) Out of above (a) referred cases No. who have reached RNTCP Unit	1	1
c) Out of above (b) No. who have undergone complete investigation	1	1
d) Out of the above persons undergoing complete investigation, No. diagnosed as having		
(i) Sputum Positive TB		
(ii) Sputum Negative TB		Nil
(iii) Extra-Pulmonary TB		
e) Out of above (d), diagnosed TB patients, number receiving IACTS		

III. REFERRAL OF DIAGNOSED TB PATIENTS FROM RNTCP TO VCTC

a) No. of TB patients attending VCTC (preferred or direct walking)	
b) Out of above (a), No. Tested for HIV	Nil
c) Out of above (b), No. detected to be HIV Positive	

IV. ITC ACTIVITIES

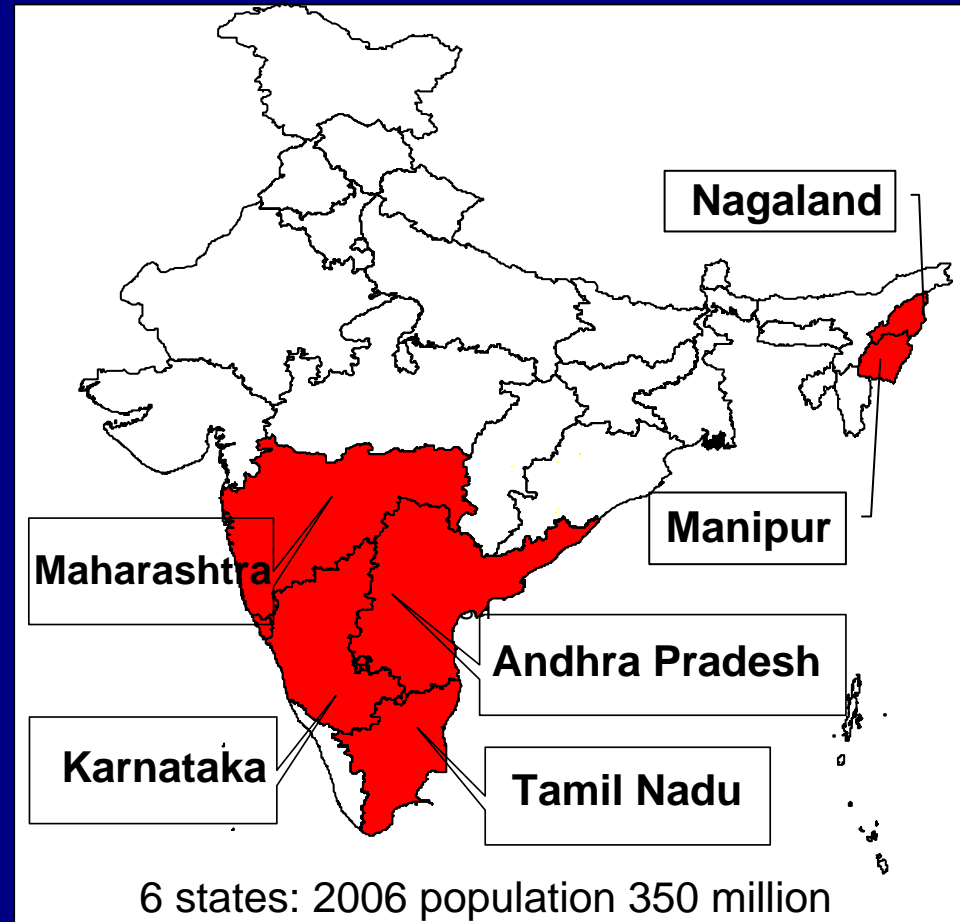
No. of clients / patients receiving information / counselling on TB : 170

Name & Signature of Medical Officer : [Signature]
 G.P.H.C. Palahady, Namakkal.

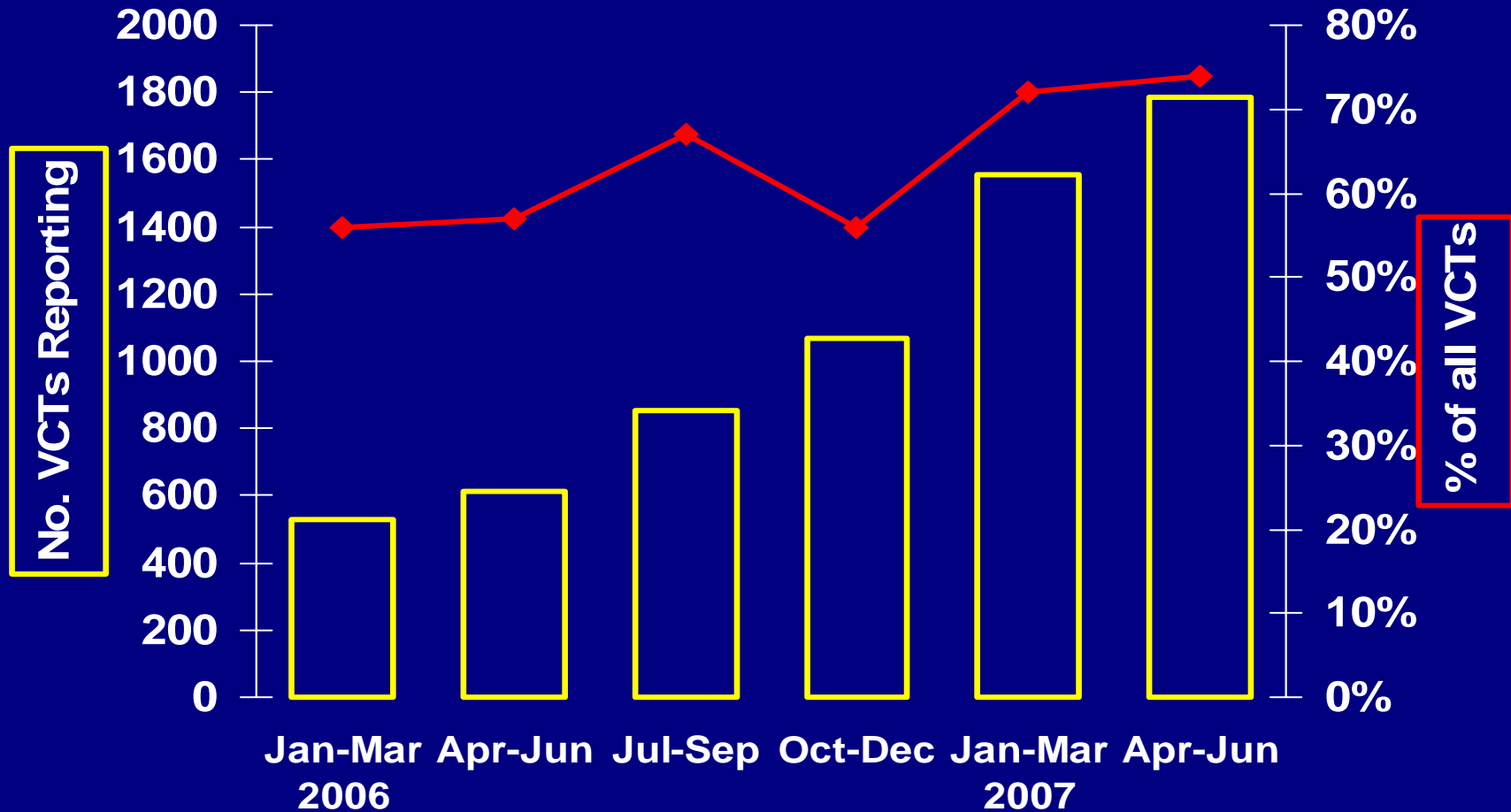


Methods

- Compiled monthly reports from 2,413 VCTs Jan 2006 – June 2007
- 6 high-HIV prevalence states (with 69% of India's HIV burden)
- Compiled reports from 351 antenatal HIV testing centers in Andhra Pradesh and Mumbai, Dec 2006 – Feb 2007



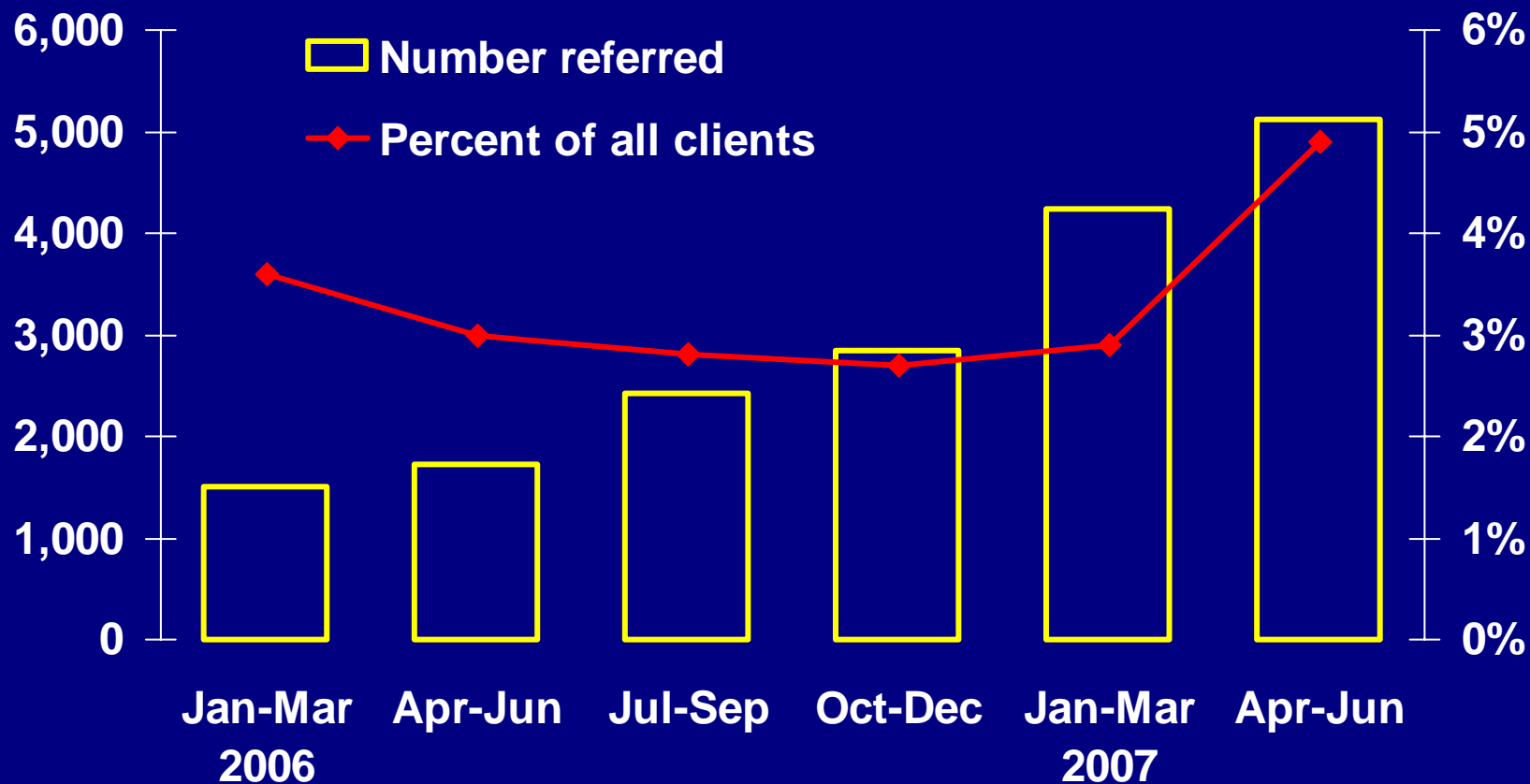
Number of VCTs Reporting on TB Intensified Case Finding



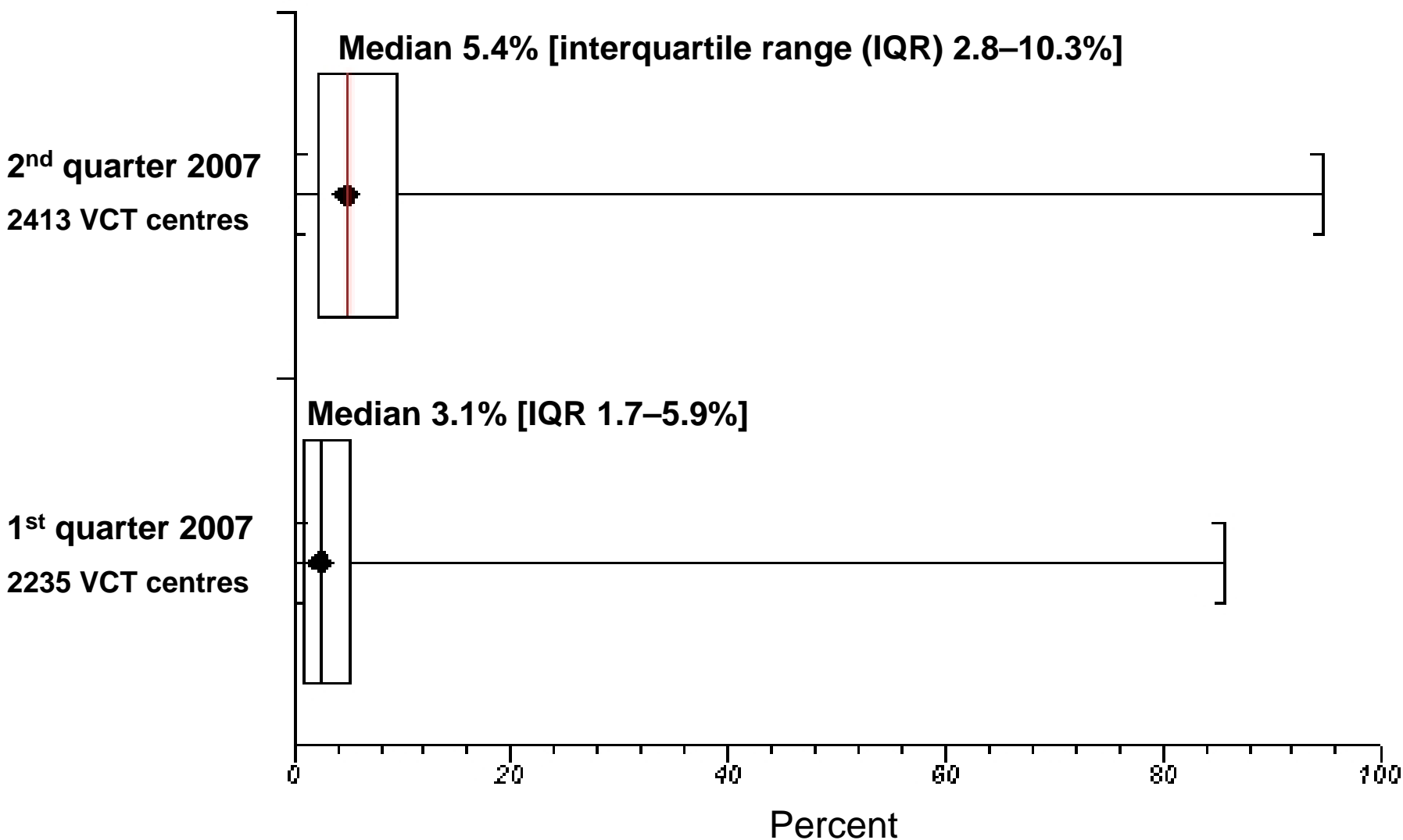
Training on TB-HIV

Target group	Trained (2005 – 2006)
Medical Officers	19,339
VCT Counselors	3,368
TB programme officers	739
TB programme staff	1,290

Referral of VCT clients for TB screening



Boxplot: Percent of VCT Clients Referred by VCT Centres as TB Suspects, 2007

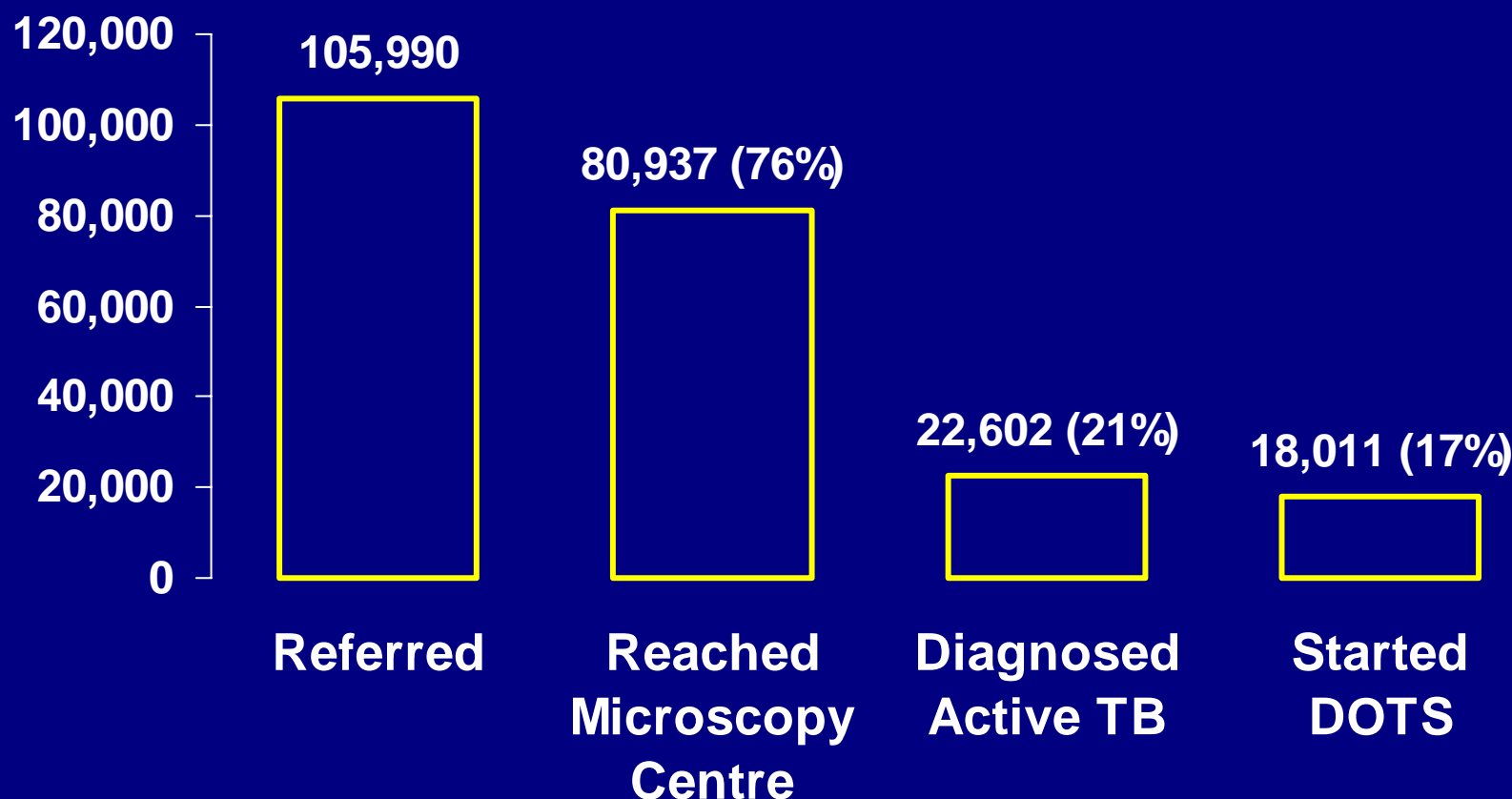


VCT Clients Referred for TB Screening, Jan 2006 – June 2007

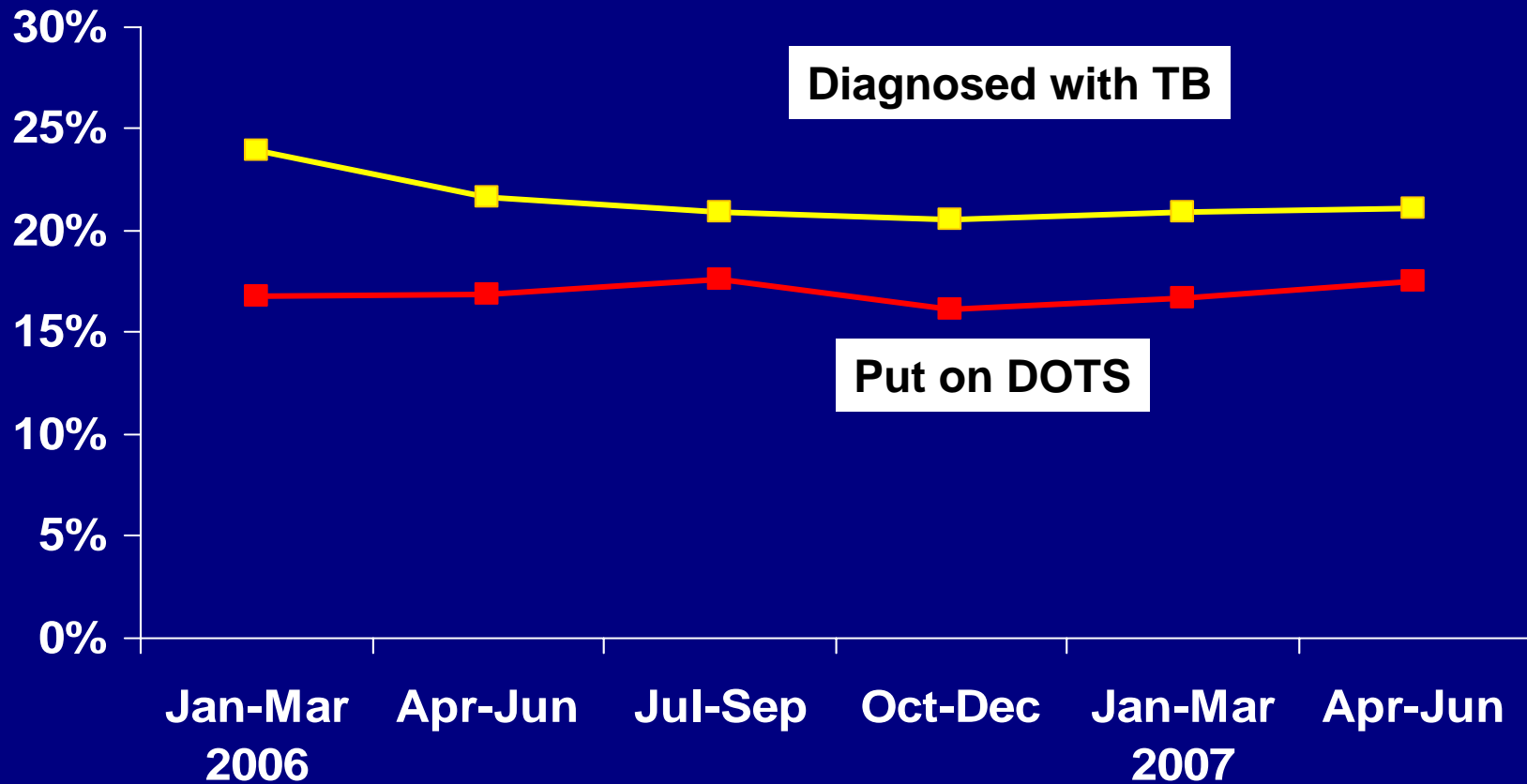
	HIV-Positive	HIV-Negative
Client Encounters	864,669	2,354,357
Referred*	43,094 (5.0%)	62,965 (2.7%)

*p <0.001

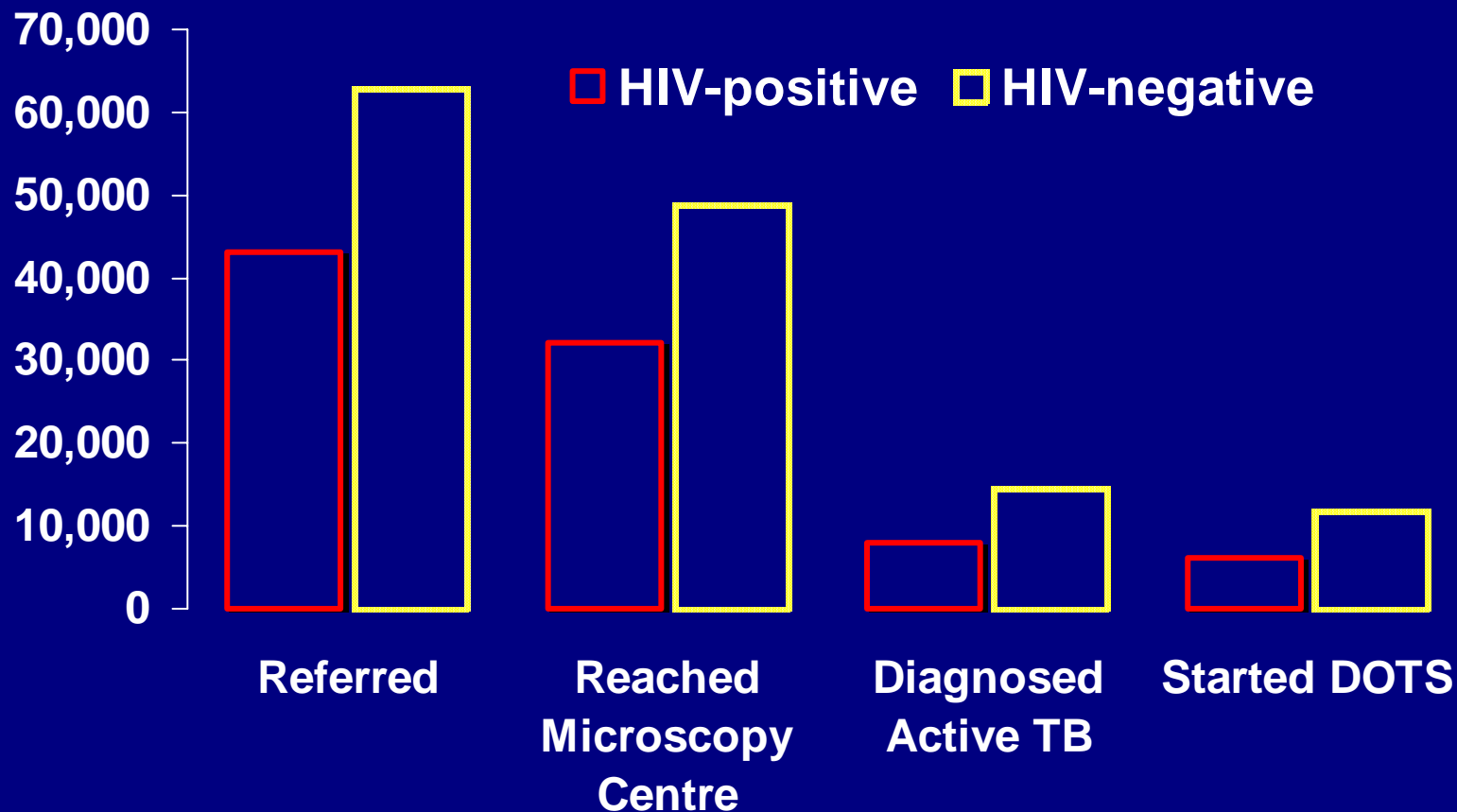
Outcomes of VCT Clients Referred for TB Screening, Jan 2006 – June 2007



Proportion of Referred VCT Clients Diagnosed with Active TB and put on DOTS, Jan 2006 – Jun 2007



Outcomes of VCT Clients Referred for TB Screening, Jan 2006 – June 2007



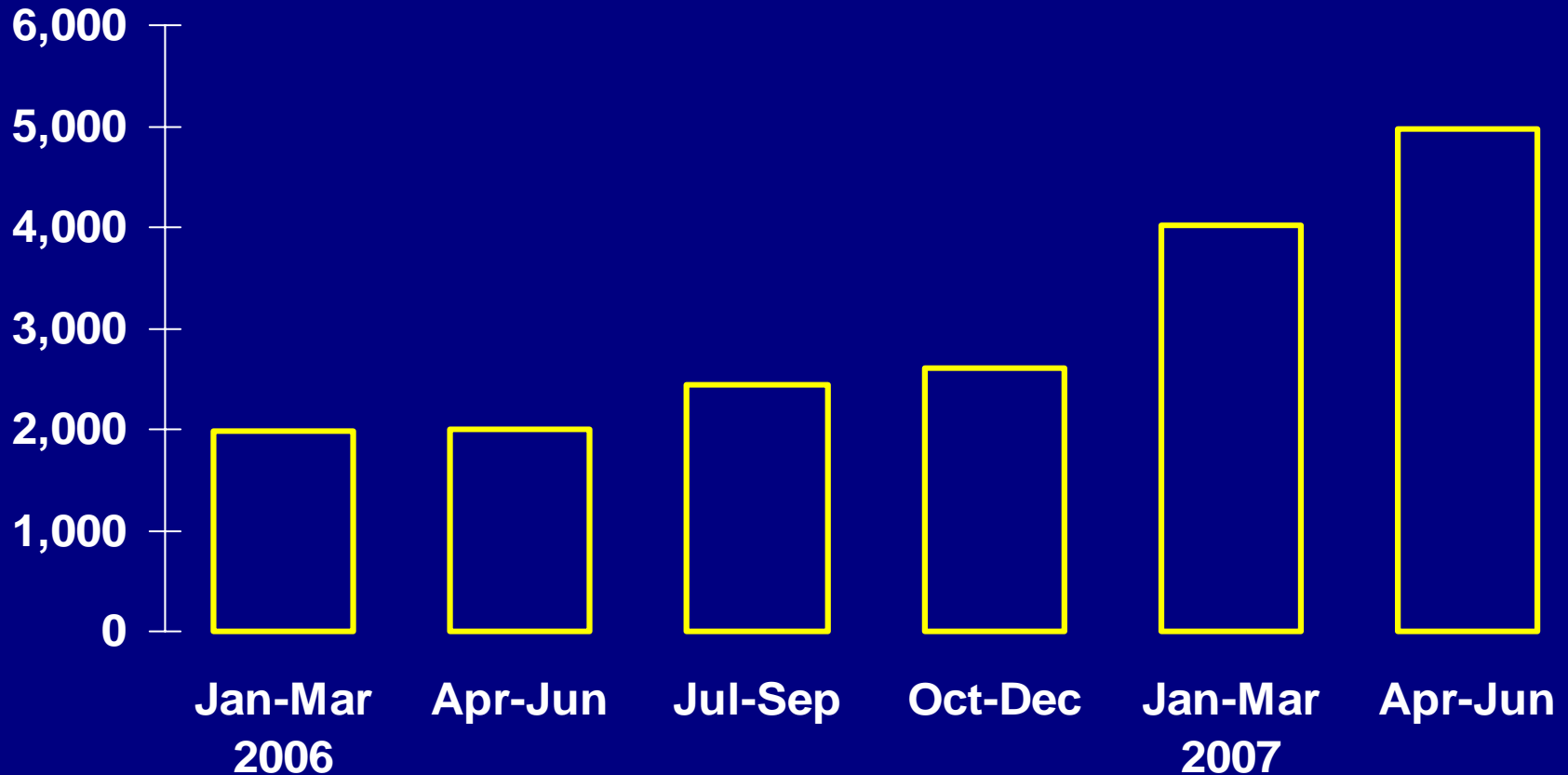
Outcomes of VCT Clients Referred for TB Screening, Jan 2006 – June 2007

	HIV-Positive	HIV-Negative
Referred	43,094	62,965
Reached	32,158 (71%)	48,814 (73%)
Diagnosed TB*	8,000 (19%)	14,622 (23%)
Started DOTS*	6,087 (14%)	11,938 (19%)

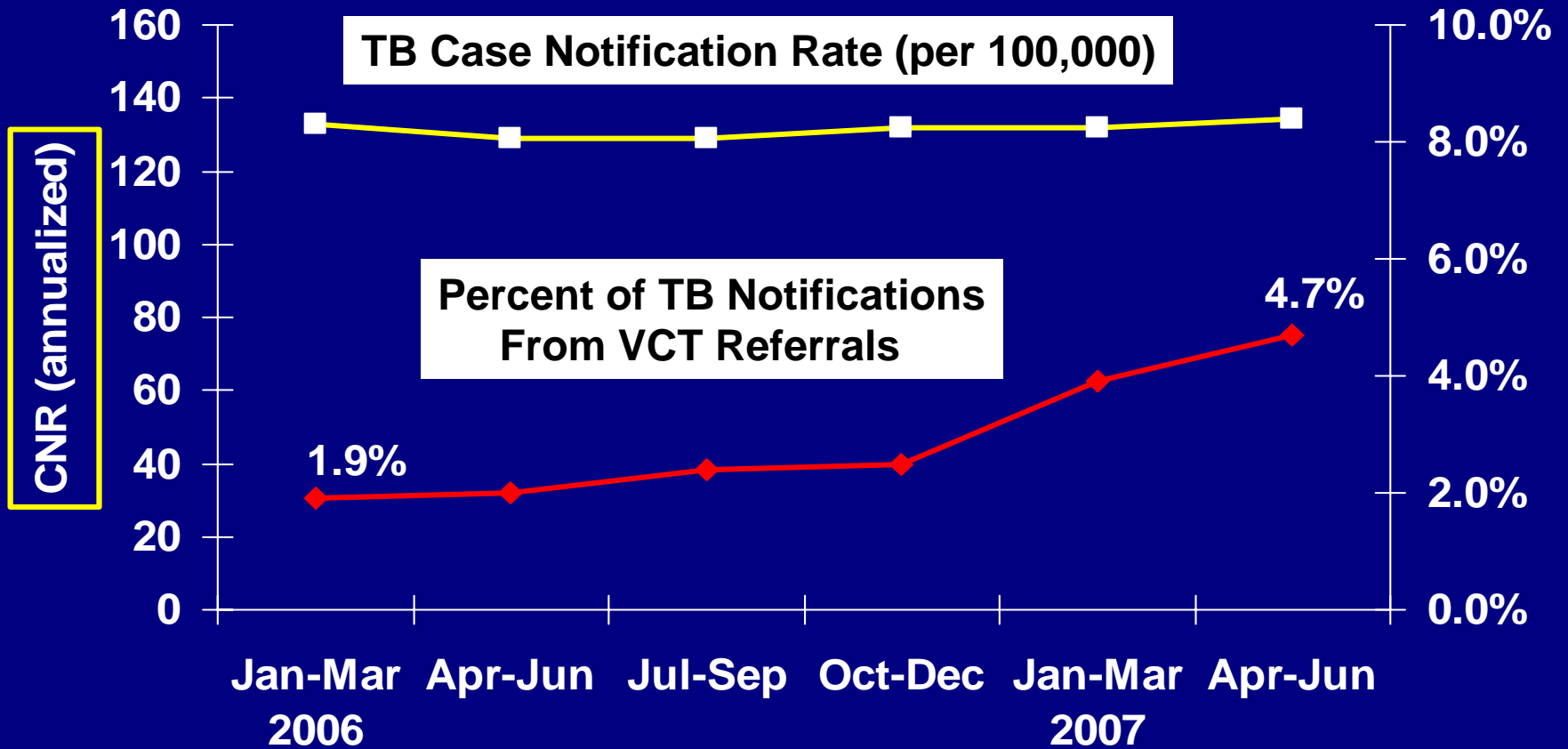
*p <0.001



Number of TB Cases among VCT Clients, Jan 2006 – June 2007



Contribution of ICF at VCT Centres



Challenges

- Ensuring that the activity becomes sustained and automatic
- Reducing recording and reporting burden on field staff
- Monitoring quality and validity of VCT reports
- Interpreting results – how much TB to expect in VCT?

ICF in Antenatal Testing Centers

- Andhra Pradesh & Mumbai, Dec 2006 – Feb 2007 (high HIV prevalence areas)

Antenatal HIV tests done	195,212 (100%)
Clients referred as TB suspects	894 (0.4%)
TB Cases Identified	95 (0.05%)

- Approximate TB prevalence 50 per 100,000 similar to general population

Summary (1)

- **Intensified case finding at VCT centres is feasible on a large, nationwide scale**
 - **TB programme training**
 - **HIV programme resources and support**
 - **Modest external technical support**

Summary (2)

- In India, more TB among HIV-negative than HIV-positive VCT client referrals
 - Reason not understood
- Contribution of VCT centre ICF to TB case notification is increasing
- No evidence for extending ICF to antenatal HIV screening in India

Next Steps

- **Scaling up ICF to all 4000+ VCT's nationwide**
- **Implementing ICF in ART centres**
- **Expanding ICF to HIV NGO's working with high HIV prevalence populations**
- **Simplifying recording and reporting**
 - **Minimal information needed for programme improvement**

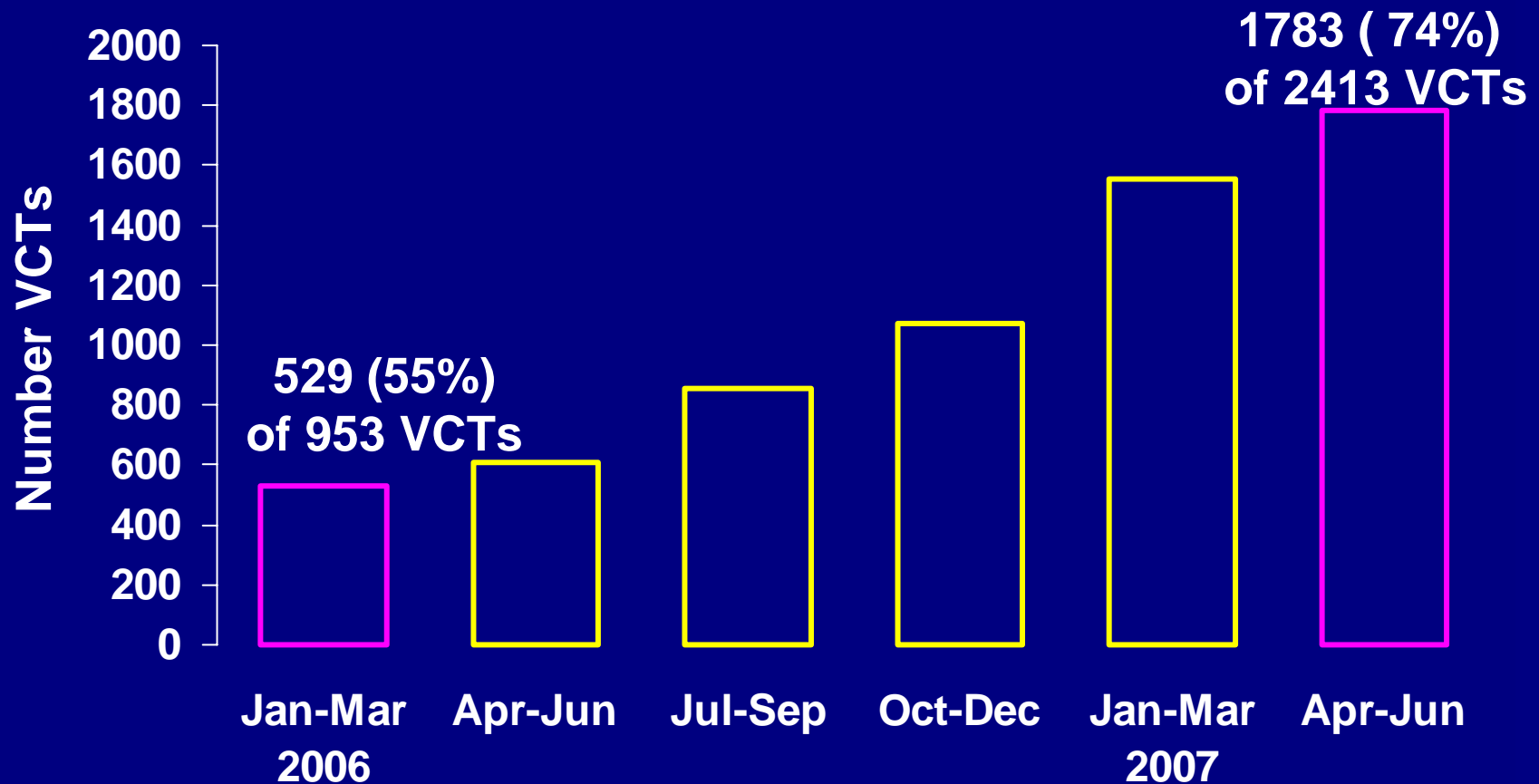
Acknowledgements

- National AIDS Control Organization
- State AIDS Control Societies
- State TB Cells
- Dozens of District TB Officers
- Hundreds of RNTCP Programme Staff (STS) and Lab Technicians
- Thousands of VCT Counselors
- WHO & GFATM TB-HIV Consultants

- **“The art of epidemiologic reasoning is to draw sensible conclusions from imperfect data.”**
 - **George Comstock, 1990**



Number of VCTs Reporting on TB Intensified Case Finding



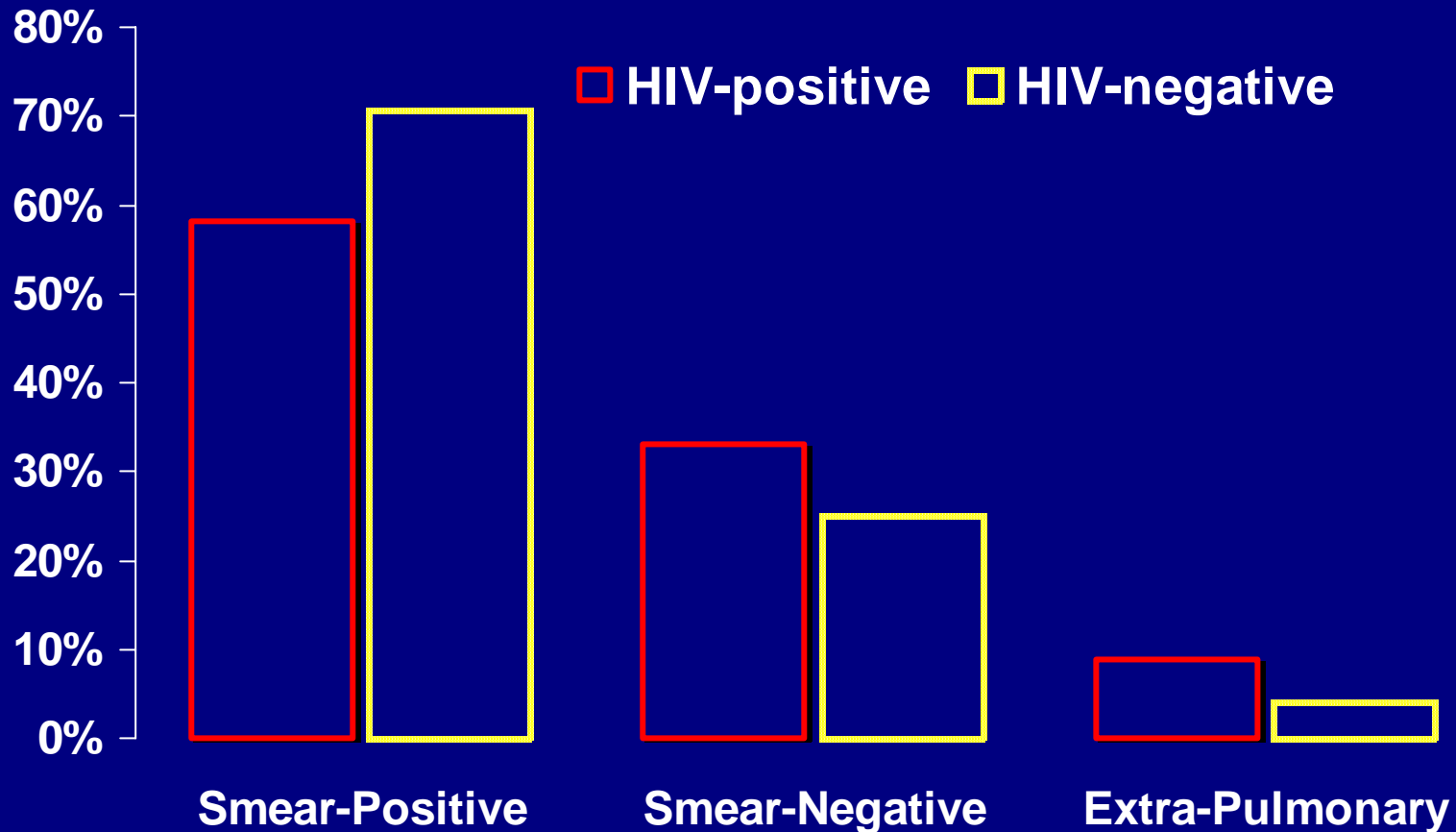
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*p <0.001



Type of TB Diagnosed



N=22,602 diagnosed TB cases

p < 0.01 for difference in TB type distribution between HIV-positive and HIV negative



Proportion of Referred VCT Clients Diagnosed with Active TB, Jan 2006 – Jun 2007

