



**Stop TB Partnership**

**18th Stop TB Coordinating Board Meeting  
Hanoi, 4-5 May 2010**

# **TB EPIDEMIC SITUATION IN VIETNAM**

## **Review progress, challenges and prospect**



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**Vietnam NTP Manager**

WELCOME



**HÀ NỘI**

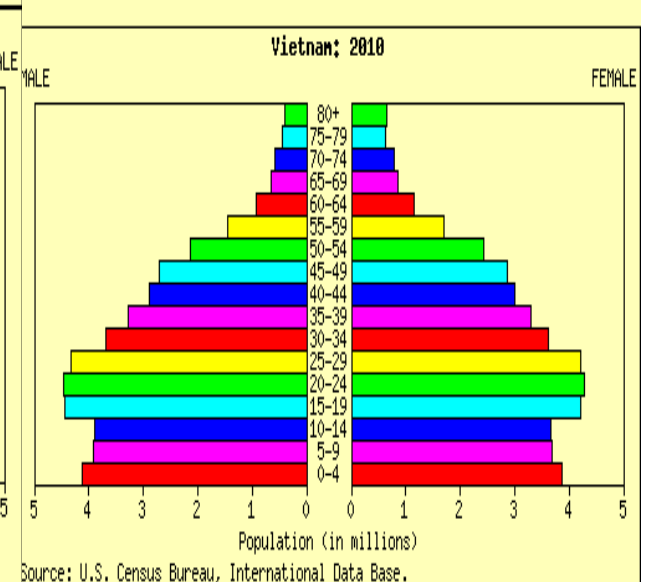
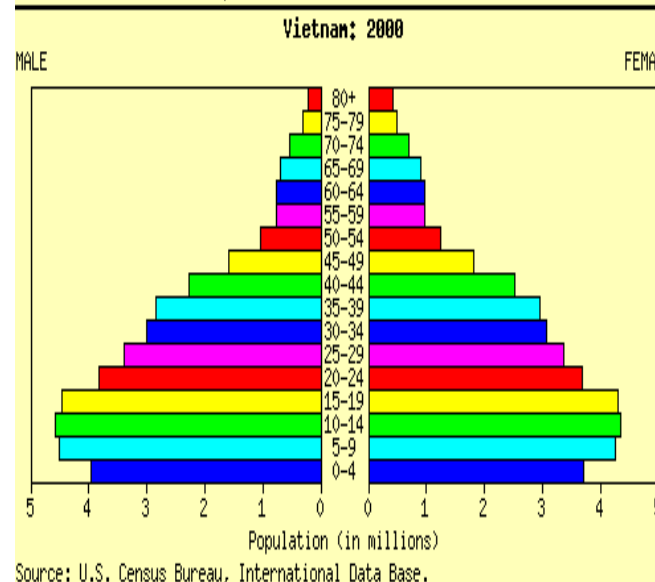
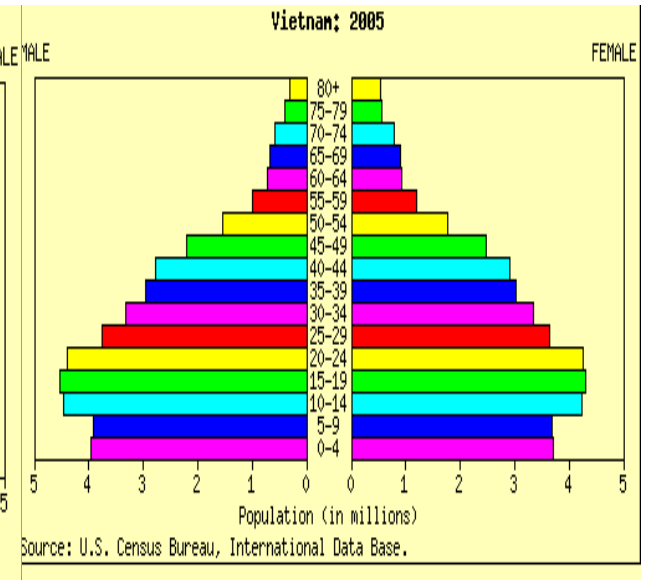
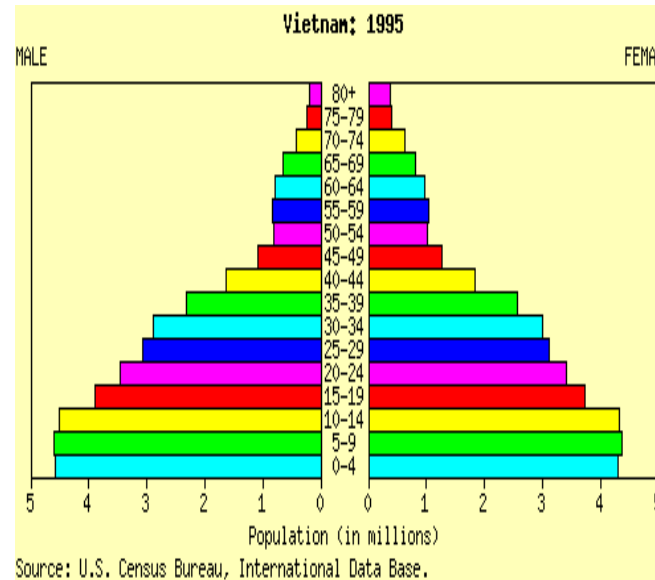


# VIETNAM

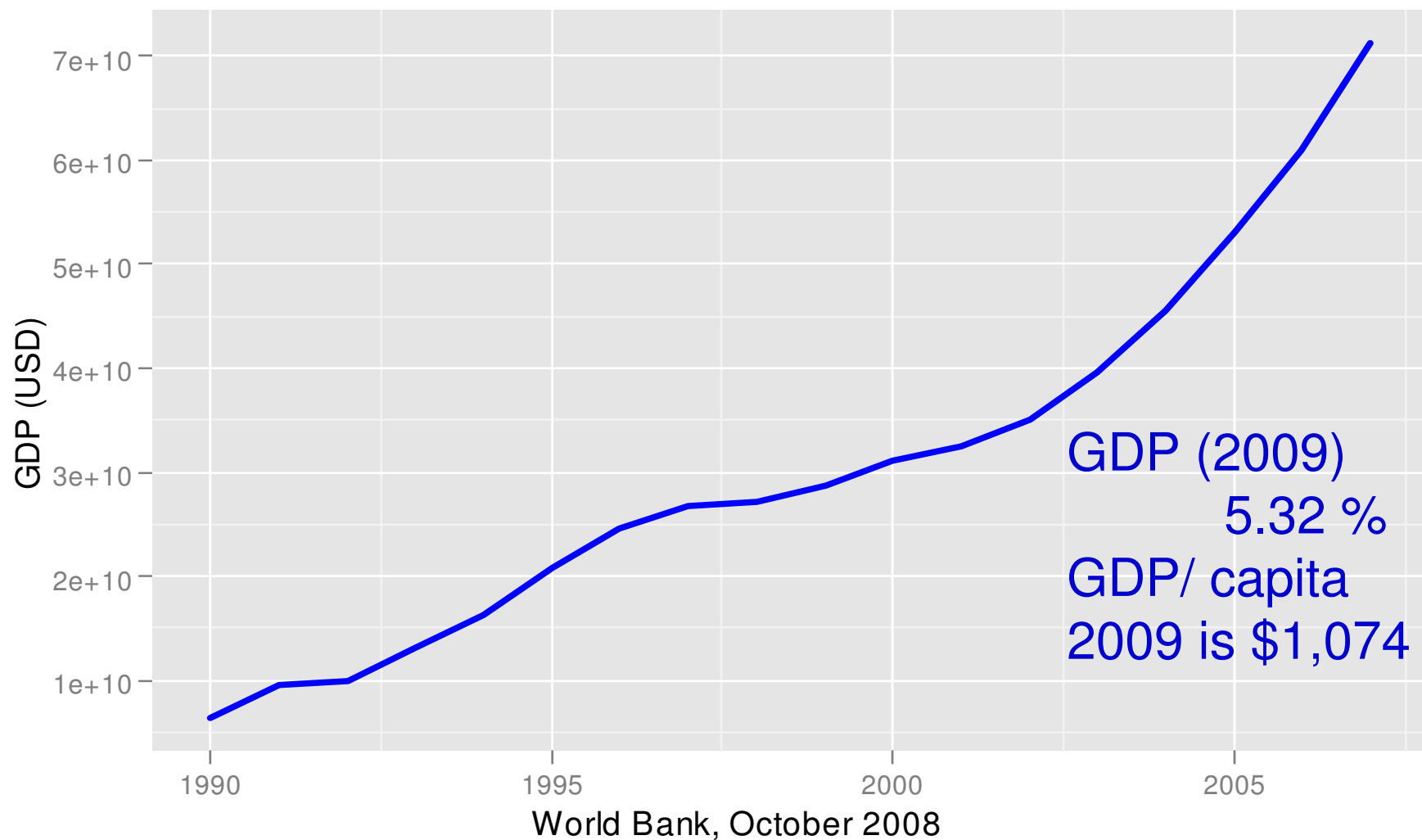
- Surface 330.000 km<sup>2</sup>
- Distance >3.200km
- Long border with China, Laos and Cambodia
- 2 climatic zones
- 4 seasons in the North.

# RAPID AGING OF POPULATION

- **Population 1/4/2009 = 85.8 mil. (increased of 9.5 mil. from 1999)**
- **Compared to 1999 census:**
  - ≤15 decreased (33% → 25%)
  - 15 – 59 y: increased (58% → 66%)
  - ≥ 60 y increased (8% → 9%)
- **54 Ethnic minority groups: 9 mil.**
- **Growth rate of Pop. 1.2% per year**



# RAPID ECONOMIC DEVELOPMENT



# VIETNAM NTP HISTORY



- ❖ **1957:** TB activities set up with small scale
- ❖ **1986:** TB control program modernized according to IUATLD principles
- ❖ **1989:** Introduce DOTS in pilot districts
- ❖ **1992 – 1999:** DOTS expanded nationwide
- ❖ **1995:** TB control - National priority.
- ❖ **1997:** Global targets of > 70% detection rate and > 85% cure rate achieved
- ❖ **2006-2007:** National prevalence survey on TB & COPD

# Global Tuberculosis Control 2009

## VIETNAM

**Population** (thousands)<sup>a</sup> 87 375

### Estimates of epidemiological burden, 2007<sup>b</sup>

	ALL	IN HIV+ PEOPLE
<b>Incidence</b>		
All forms of TB (thousands of new cases per year)	150	12
All forms of TB (new cases per 100 000 pop/year)	171	14
Rate of change in incidence rate (%), 2006–2007	<b>–1.0</b>	<b>1.8</b>
New ss+ cases (thousands of new cases per year)	66	4.2
New ss+ cases (per 100 000 pop/year)	76	4.8
HIV+ incident TB cases (% of all TB cases)	8.1	–

### Prevalence

All forms of TB (thousands of cases)	192	6.0
All forms of TB (cases per 100 000 pop)	<b>220</b>	6.9
2015 target for prevalence (cases per 100 000 pop)	<b>182</b>	–

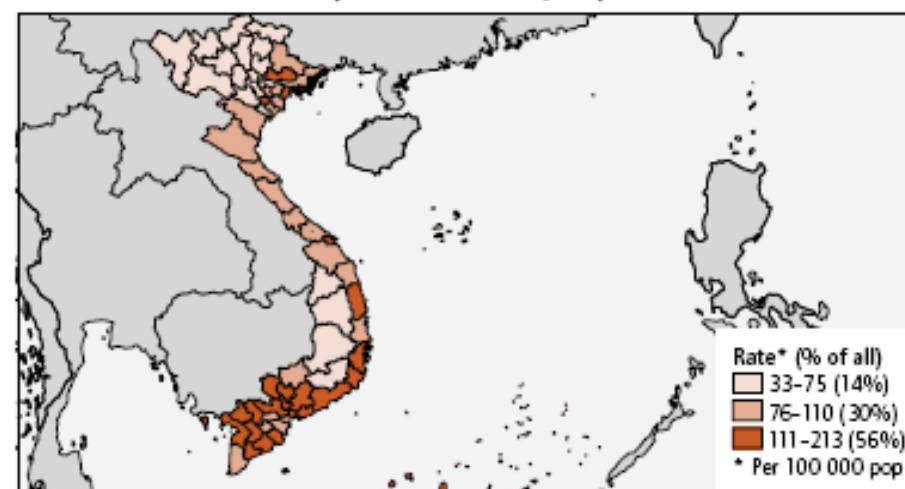
### Mortality

All forms of TB (thousands of deaths per year)	21	3.1
All forms of TB (deaths per 100 000 pop/year)	<b>24</b>	3.5
2015 target for mortality (deaths per 100 000 pop/year)	<b>16</b>	–

### Multidrug-resistant TB (MDR-TB)

MDR-TB among all new TB cases (%)	2.7	–
MDR-TB among previously treated TB cases (%)	19	–

### TB notification rate (new and relapse), 2007



### Total notifications, 2007

Notified new and relapse cases (thousands)	97
Notified new and relapse cases (per 100 000 pop/year)	111
Notified new ss+ cases (thousands)	54
Notified new ss+ cases (per 100 000 pop/year)	62
as % of new pulmonary cases	76
sex ratio (male/female)	2.8
DOTS case detection rate (% of estimated new ss+)	<b>82</b>
Notified new extrapulmonary cases (thousands)	19
as % of notified new cases	21
Notified new ss+ cases in children (<15 years) (thousands)	0.1
as % of notified new ss+ cases	0.2



# ESTIMATES FROM THE 1<sup>st</sup> NATIONAL PREVALENCE SURVEY OF TB IN VIETNAM (VINCOTB 06)

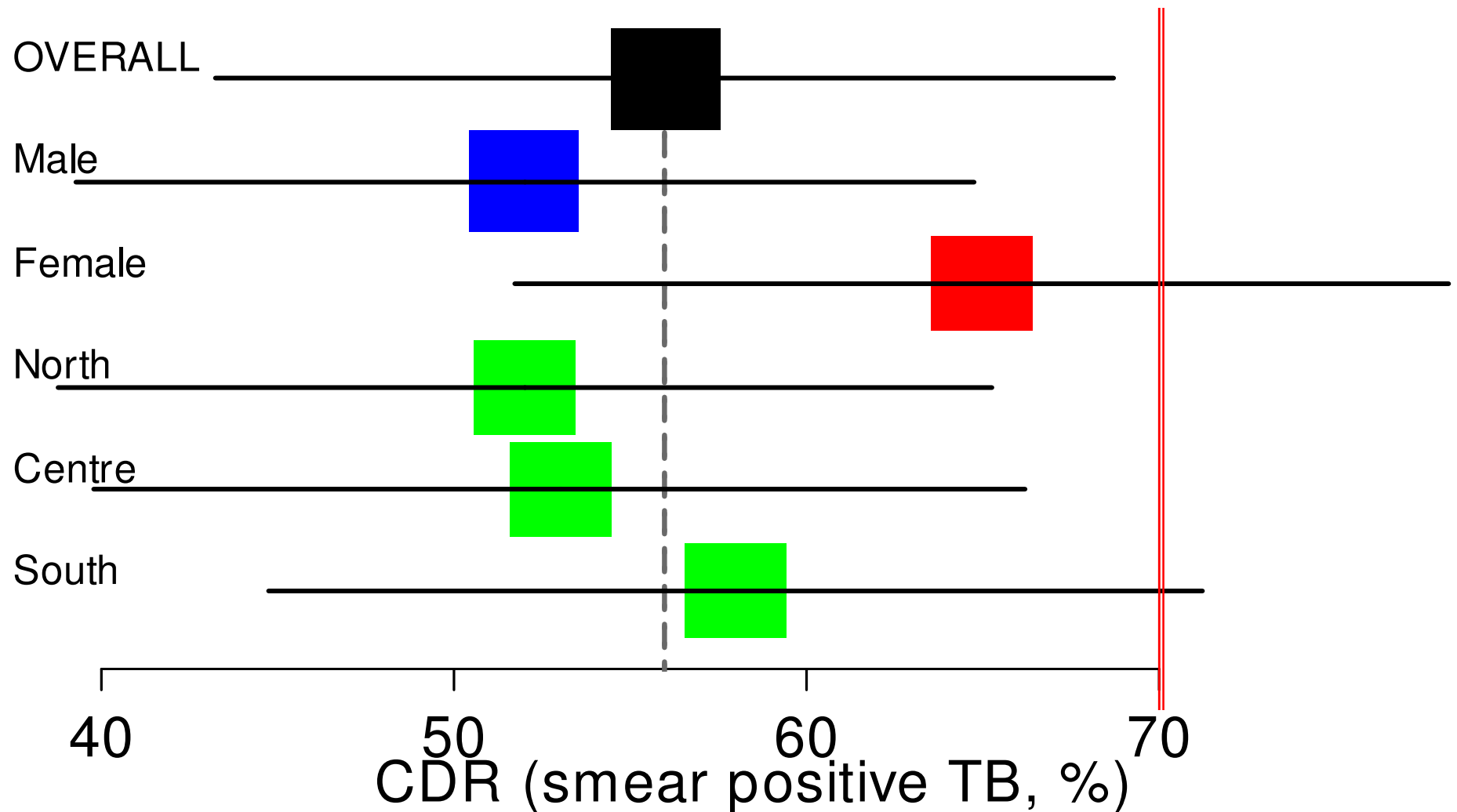
Category	Prevalence /100 k 95% CI	Estimated number of Pts	
		minimal	maximal
PTB AFB(+) new	114	73,845	117,771
PTB AFB(+) all forms	145	92,704	151,122
PTB Culture (+)	189	128,328	190,470
Microbiologically confirmed PTB	226	154,164	226,516
PTB AFB(+) (/100k aged ≥15)	Whole country 197		



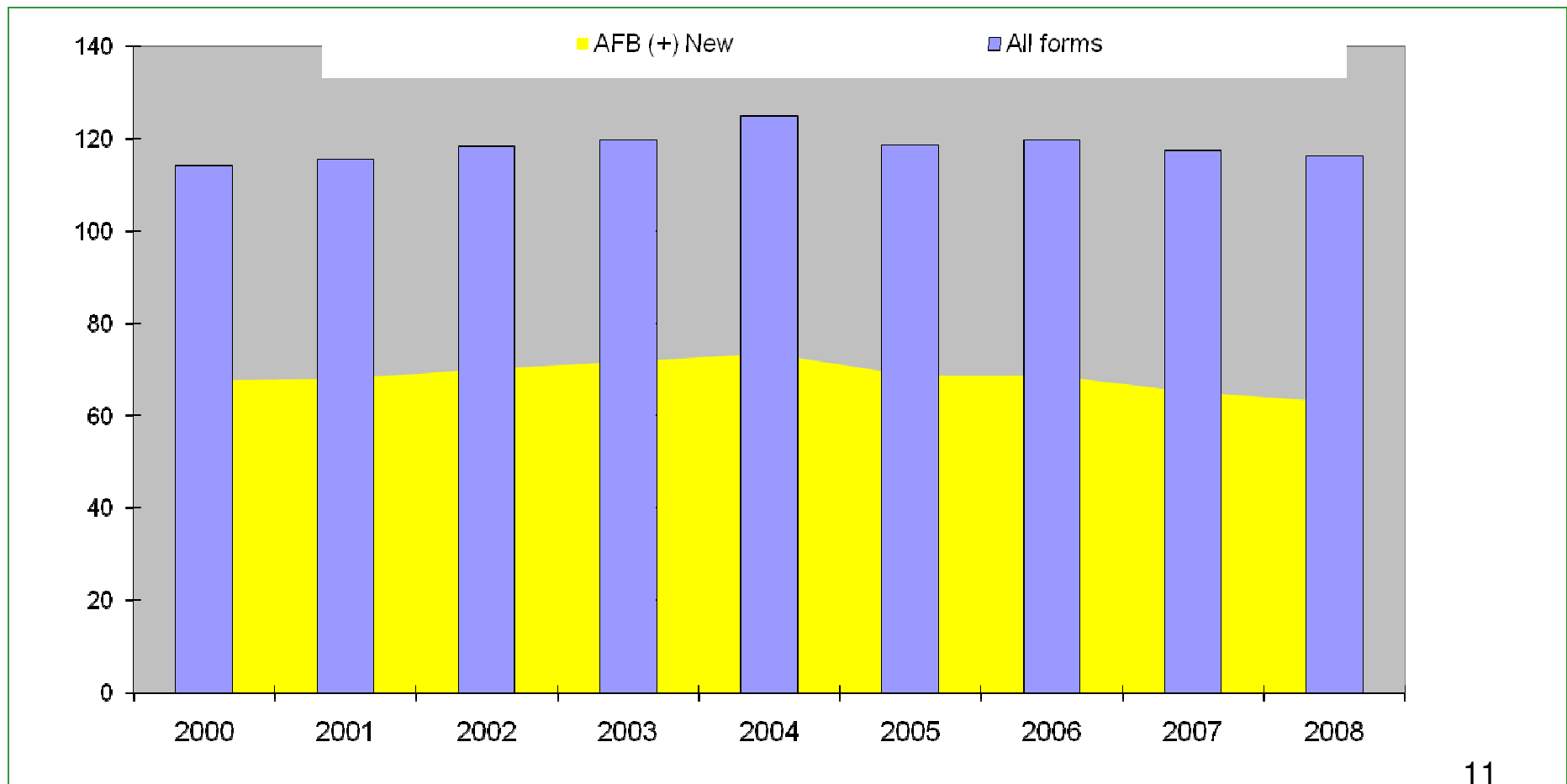
# ESTIMATION OF CASE DETECTION NOTIFICATION/ESTIMATED INCIDENCE (%, 2007)

Source	Low	Point estimate	High
Onion method: Expert's estimation	36	52	63
Prevalence survey CDR = $\text{PDR} / (\text{PDR} + 1/d)$	41	56	68

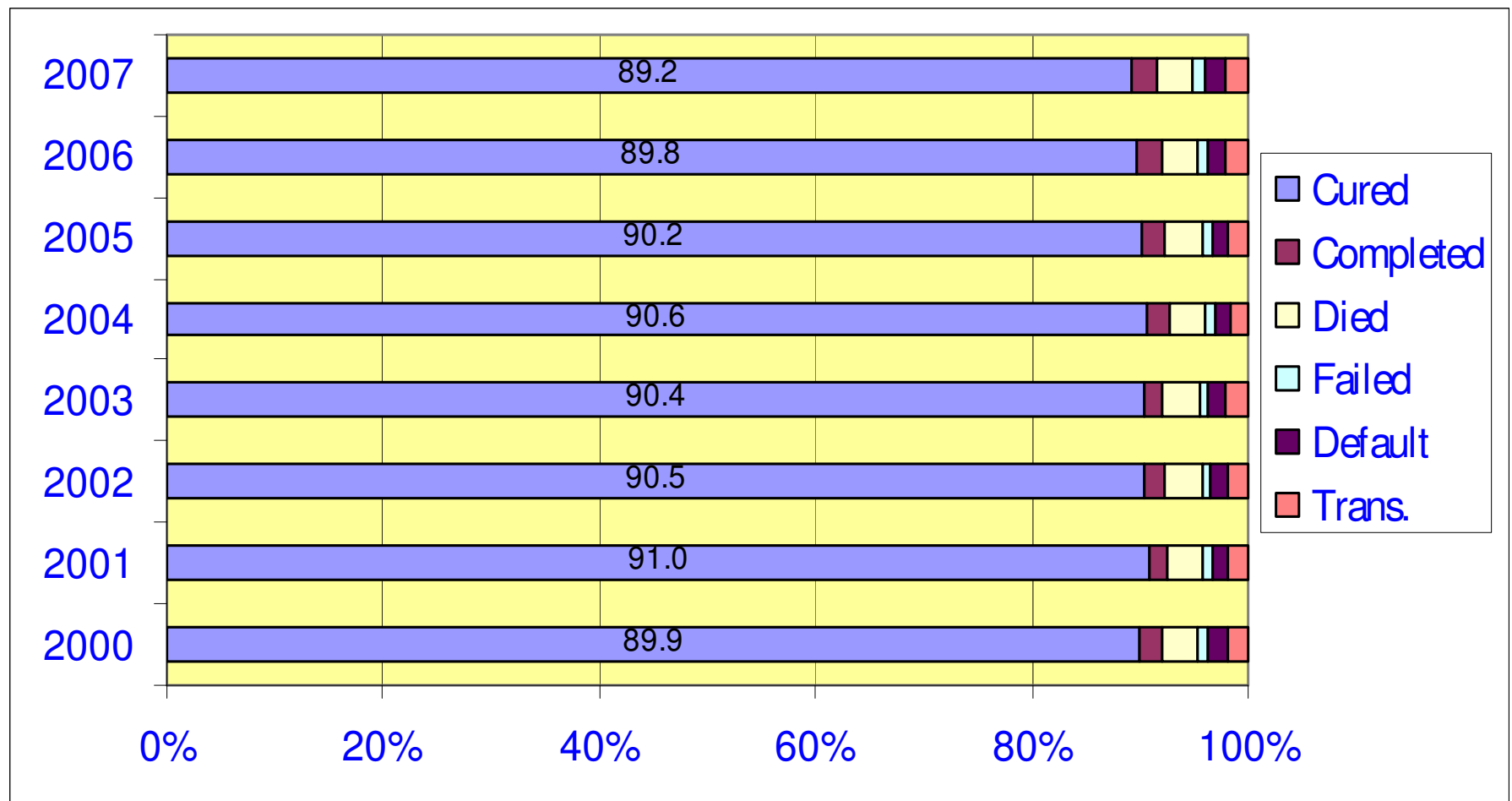
# CASE DETECTION RATES IN 2007



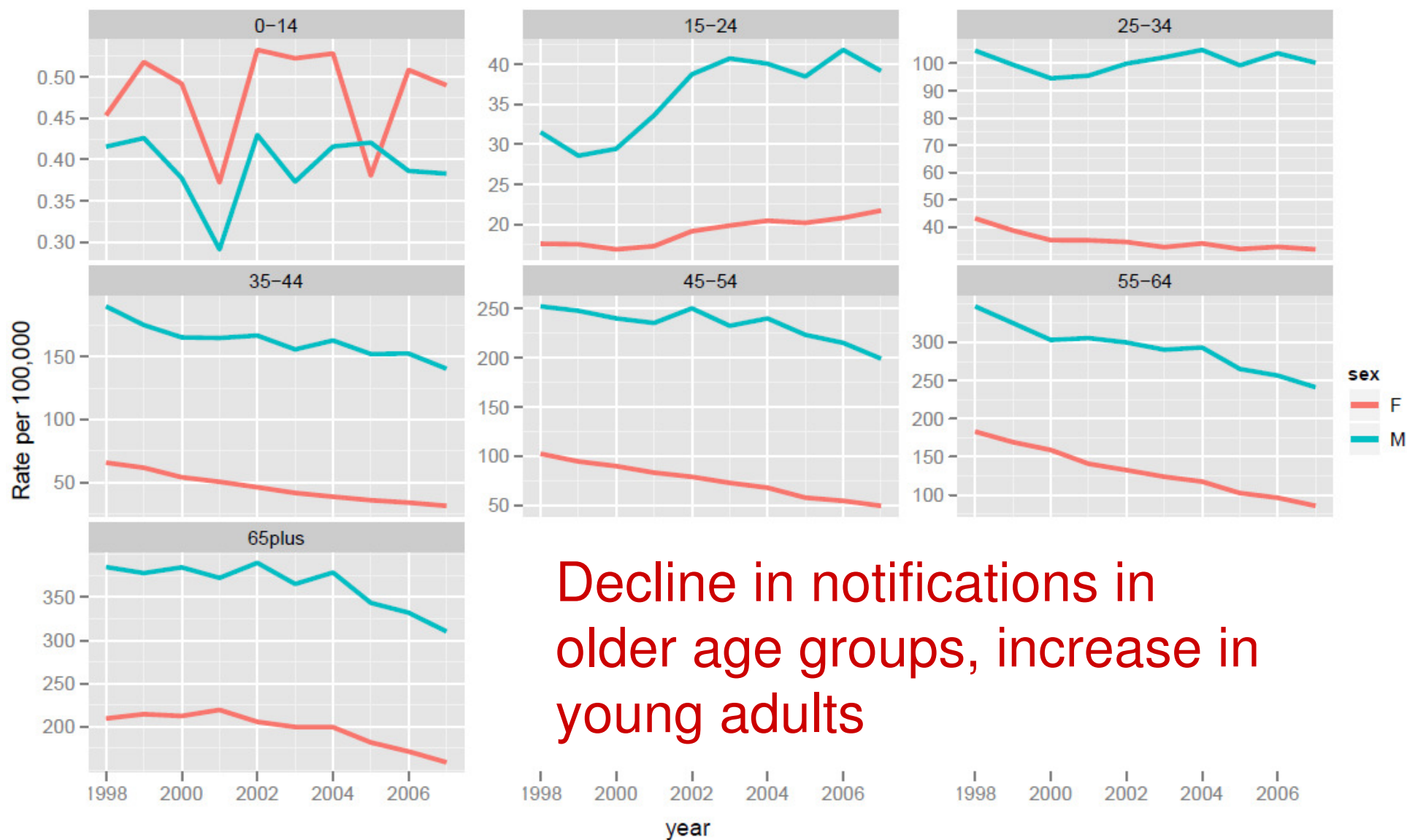
### CASE NOTIFICATION



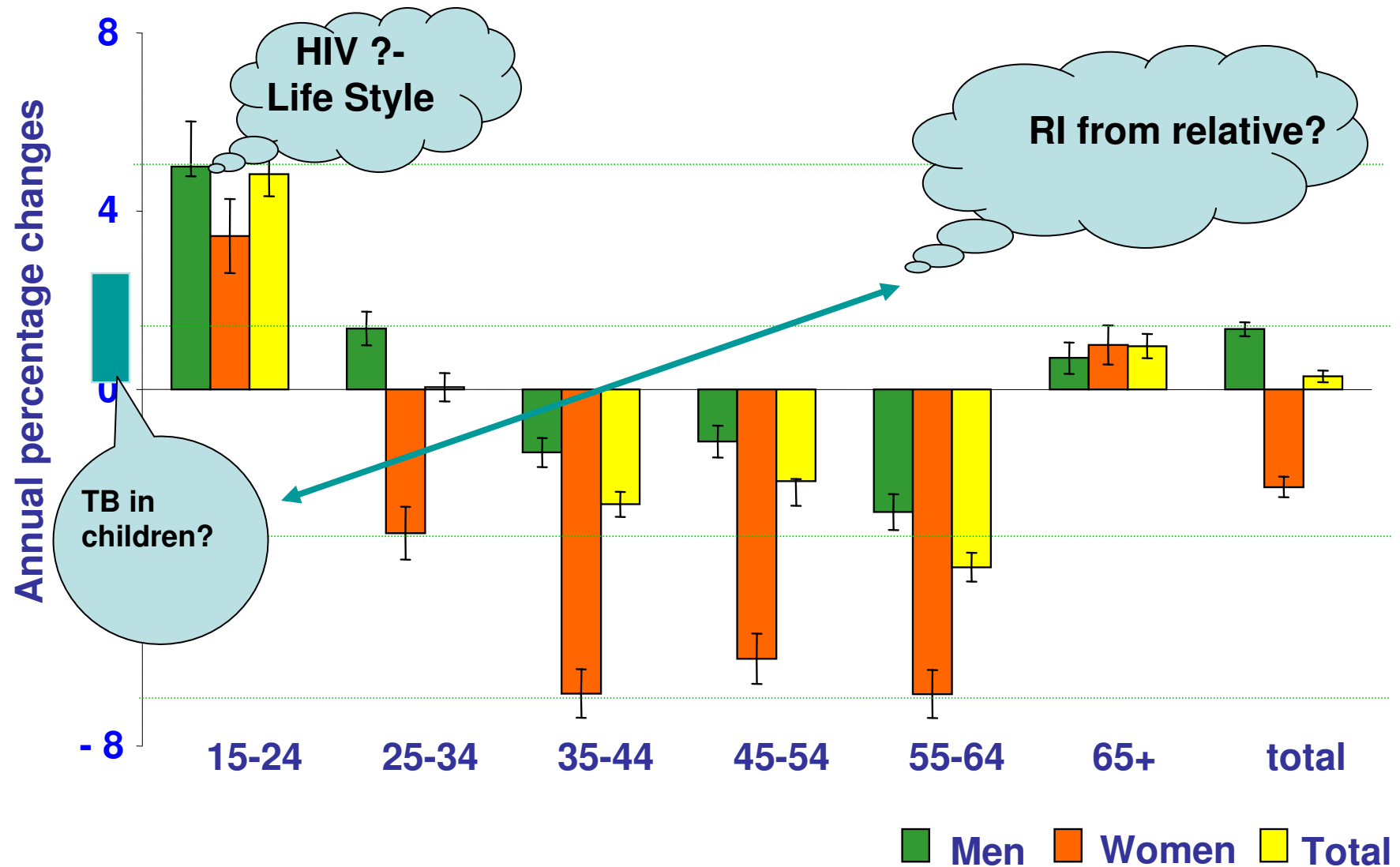
## TREATMENT OUTCOME



# IN-DEPTH ANALYSIS OF SURVEILLANCE DATA

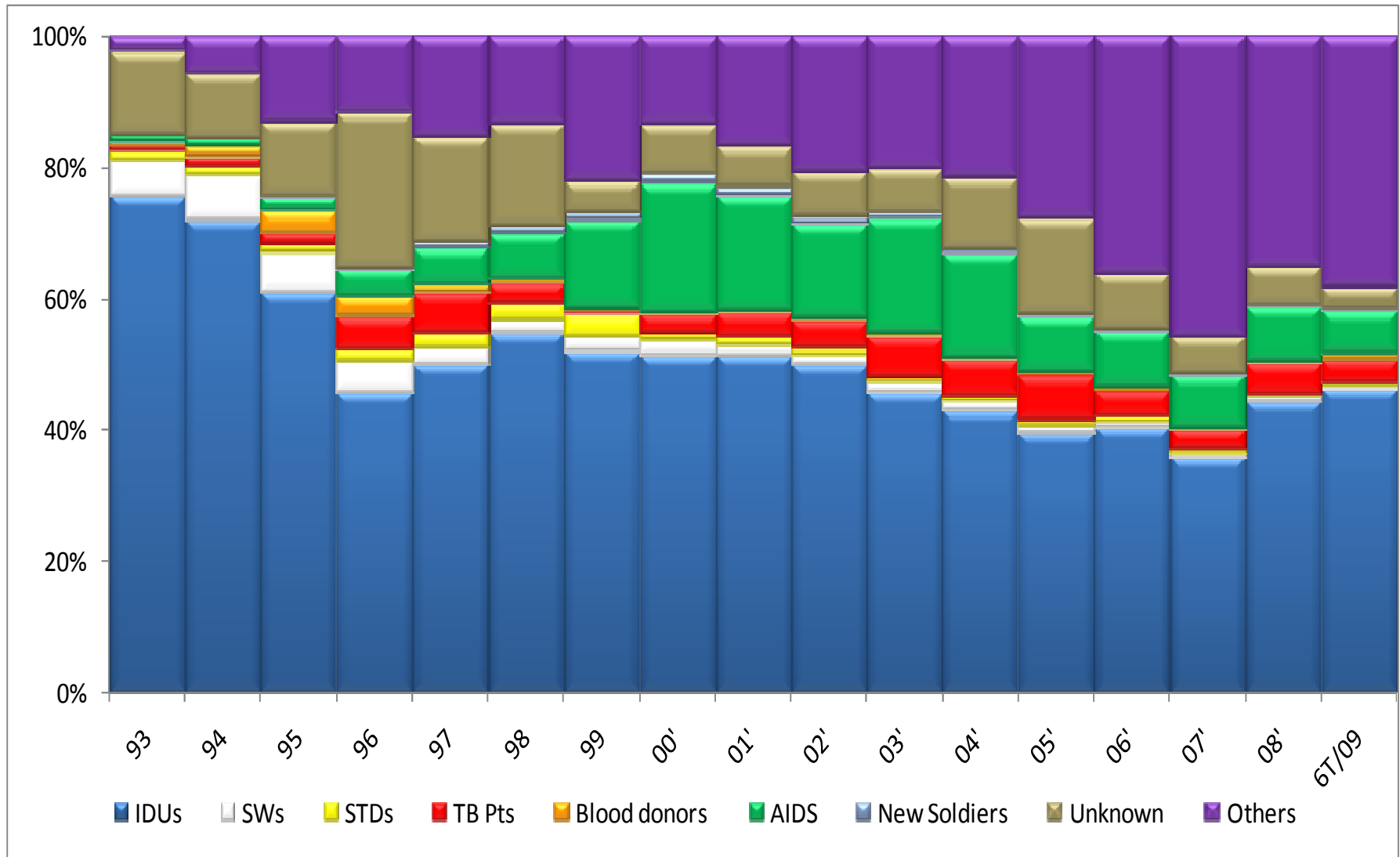


# TRENDS IN NOTIFICATIONS



*Int' workshop on data analysis of VTN NTP, Nov' 2005*

# GROUP DISTRIBUTION AMONG NEWLY DETECTED HIV INFECTION (%)





# THE ESTIMATED MDR-TB BURDEN IN VIETNAM FOR 2007-2015

Year	Est. New Sm+	Est.RTX Sm+	Est. MDR New Sm+	Estimated MDR RTX Sm+	Estimated Total Sm+ MDR Burden
2007	66109	8892	1785	1716	3501
2008	61558	8280	1662	1598	3260
2009	57356	7714	1549	1489	3038
2010	53412	7164	1442	1383	2825
2011	49718	6687	1342	1291	2633
2012	46265	6223	1249	1201	2450
2013	43041	5789	1162	1117	2279
2014	40099	5393	1083	1041	2124
2015	37410	5032	1011	971	1982
			12285	11807	24092

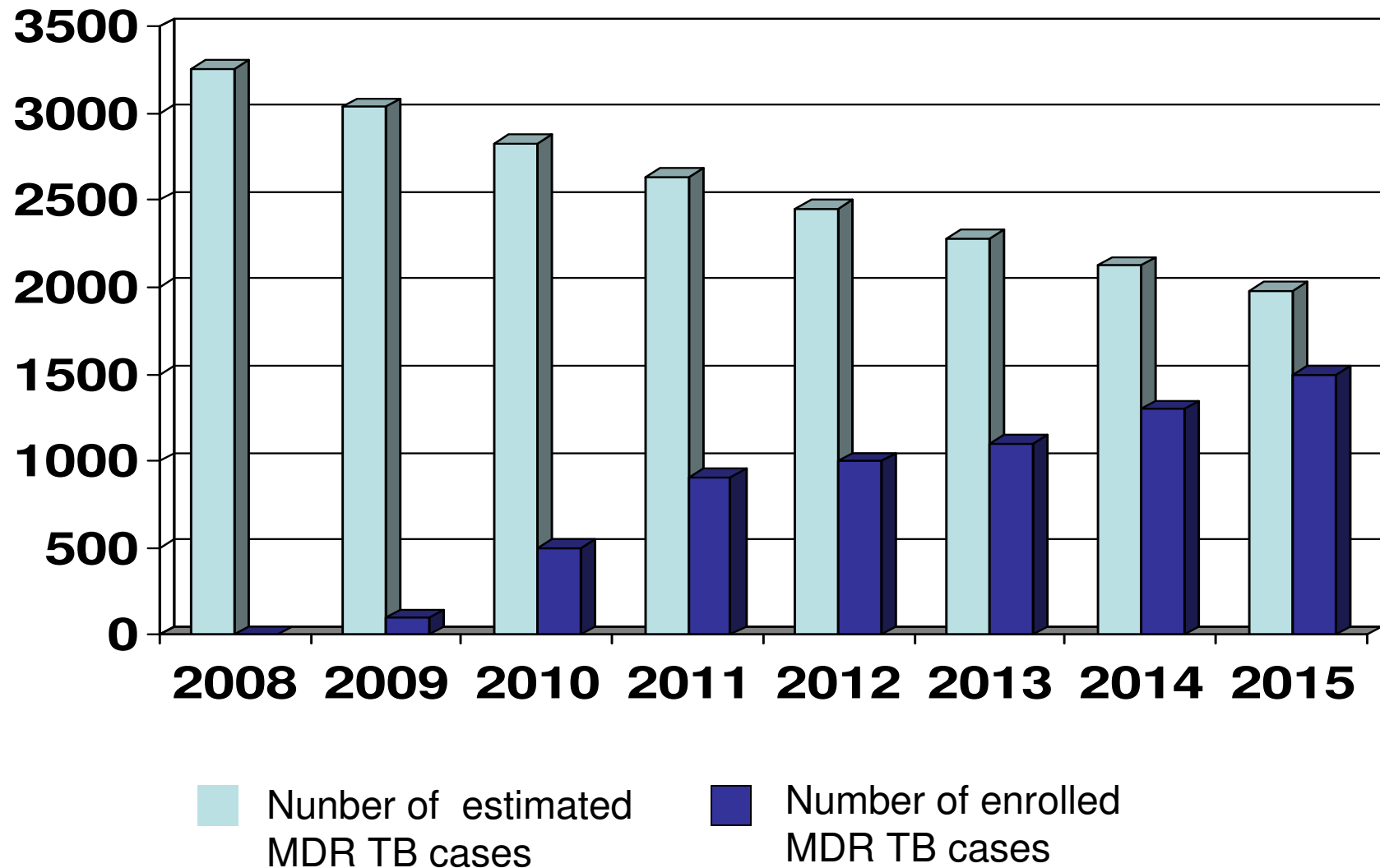
The estimations were made by using the WHO Planning and Budgeting Tool projected TB incidence estimates and by applying the 2.7% of MDR-TB among new smear(+), and 19.3% MDR-TB among re-treatment smear(+).

# MDR TB RESPONSE

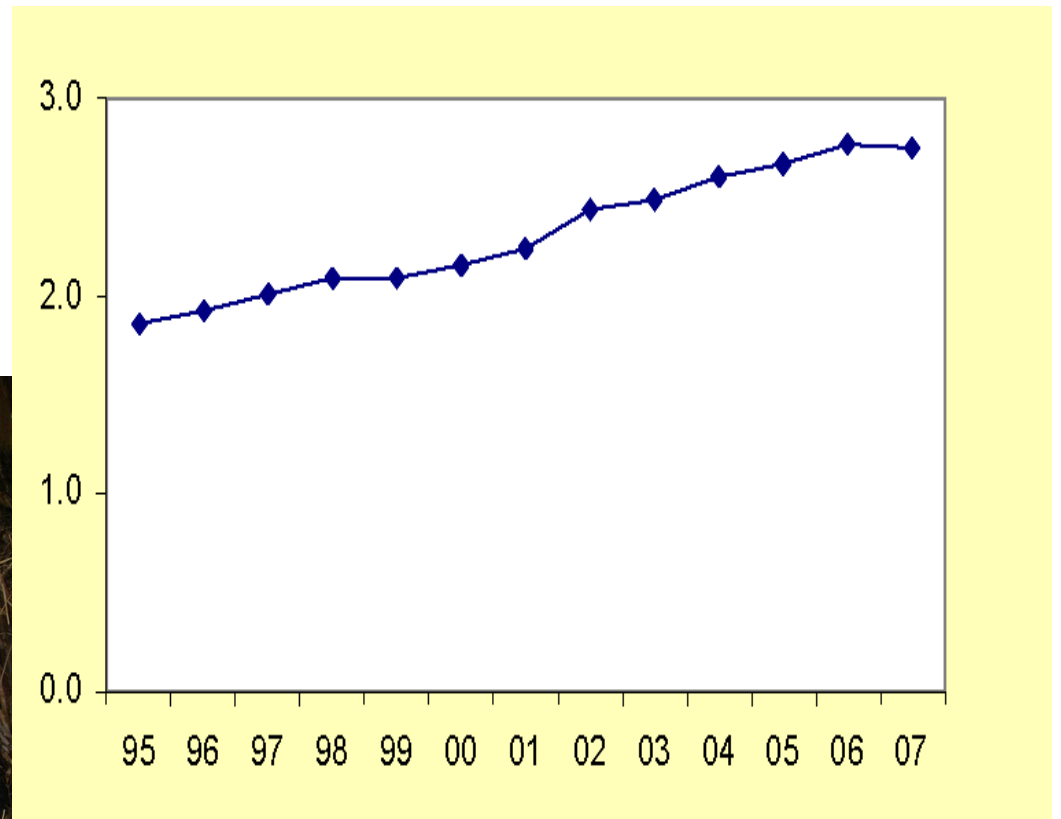
- **Goal:** To control the epidemic of MDR-TB by diagnosing and treating 76% of estimated cases by 2015
- **Targets:**

Burden	2008	2009	2010	2011	2012	2013	2014	2015
Number of estimated cases of MDR-TB (a)	3260	3038	2825	2633	2450	2279	2124	1982
Number of patients newly enrolled on treatment (b)	0	100	500	910	1000	1100	1300	1500
Enrolled patients as % of estimated total number of cases (a/b)		3.3	17.7	34.5	40.8	48.3	61.2	75.7

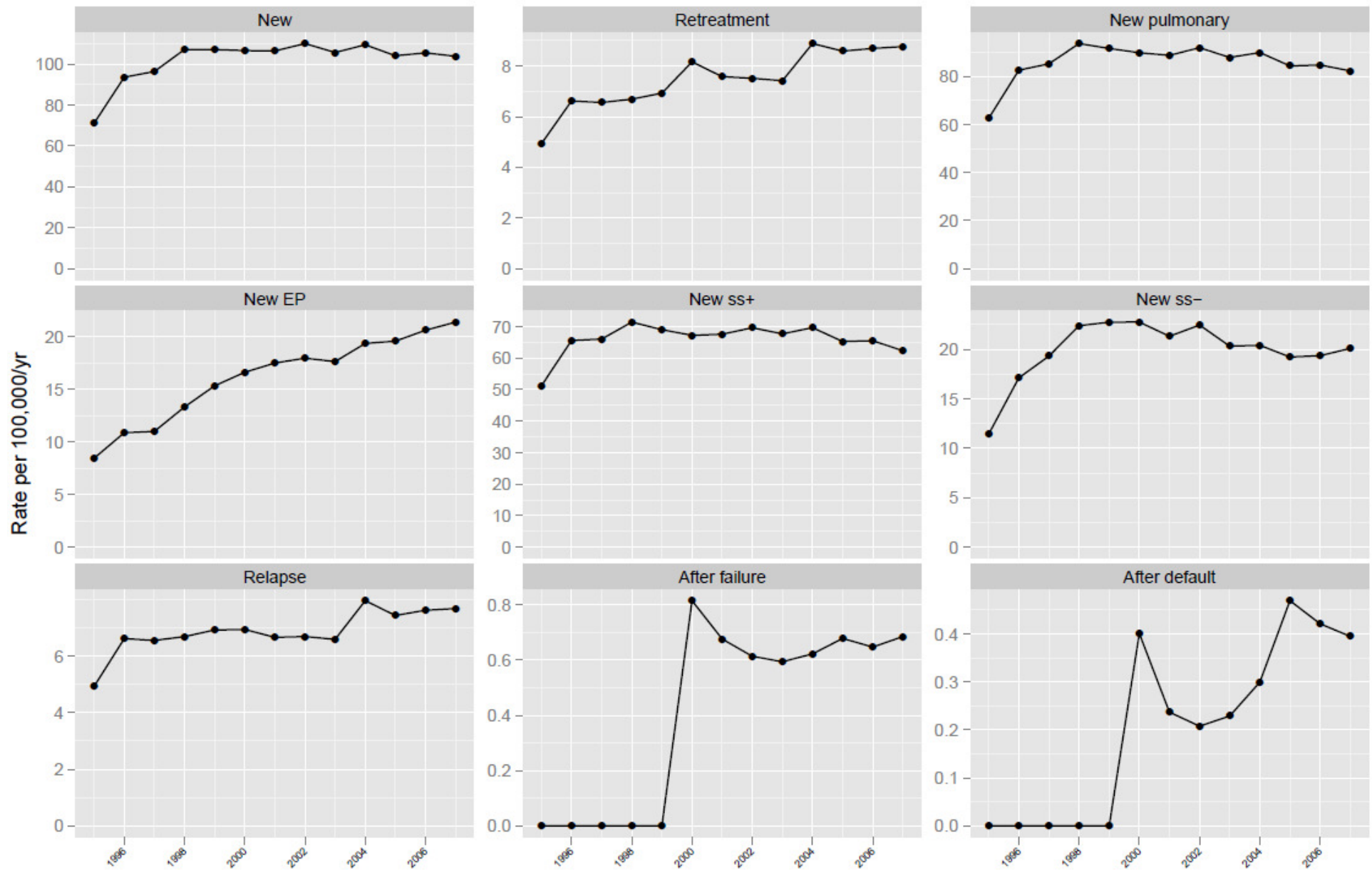
# MDR TB RESPONSE



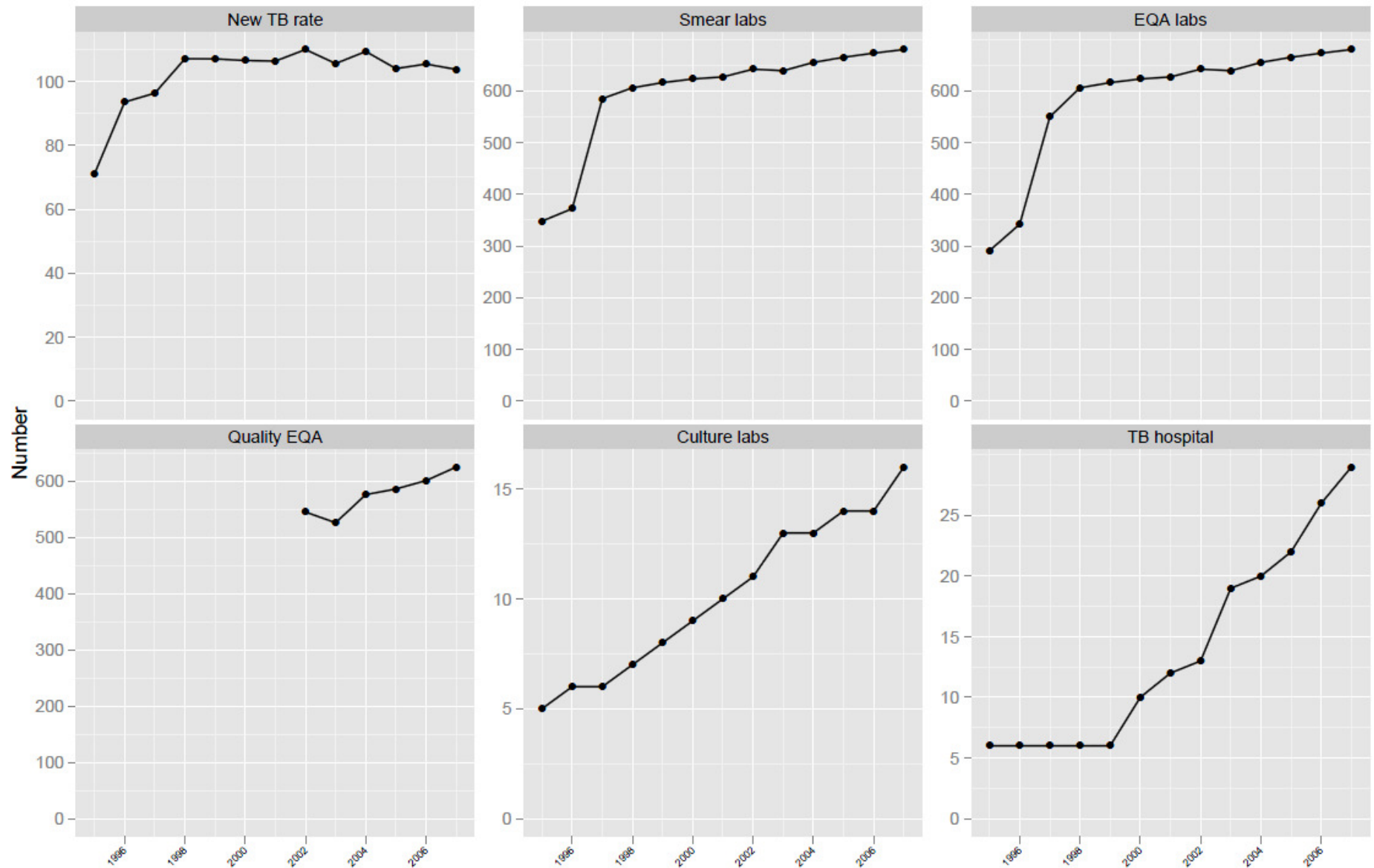
# INCREASE IN M/F RATIO OVER TIME (NOTIFICATION)



# TRENDS IN NOTIFICATIONS



# TRENDS IN CASE FINDING EFFORT



34.2 Trends in infrastructure and human resource in Viet Nam

# TB NOTIFICATION AND PREVALENCE

Year	PTB AFB(+) NEW	Other PTB AFB(+)	PTB AFB (-)	EPTB	All forms
2005	55,492	7,301	16,343	16,636	95,772
2006	56,476	7,493	16,681	17,758	98,408
2007	54,457	7,658	17,554	18,675	98,344
2008	53,484	7,534	19,056	18,610	98,684
<b>Prevalence</b>	<b>95,808</b>	<b>26,005</b>	<b>68,427</b>		<b>190,340</b>

- Prevalence survey suggested that a significant amount of TB cases is still not yet detected by NTP in community

➡ Increase case detection is key issue of TB control in Vietnam



# CONCLUSION ON TB EPIDEMIOLOGY IN VIETNAM

- Flat TB incidence over past 10 years
- Decline of age-specific TB incidence in adults, - 2%/year over past 10 years
- TB/HIV and MDR TB are newly challenges that urgently need to be responded adequately

# THE NEEDS

1. Keep TB control high on the political agenda
2. Increase case detection and reporting
  - Strengthen ACSM to further increase investigations in suspects
  - PPM / PALnationwide
  - Contact tracing investigations
  - Improve TB screening including at-risk groups (e.g. diabetics, HIV, etc...)
  - Active case finding in closed settings
  - Electronic case-based web-based recording and reporting
3. Explore new diagnostic procedures and algorithms, including decentralization of quality-assured CXR
4. Further study causes of increased sex-ratio, study reasons for increased incidence in young men
5. Implement a second prevalence survey after 5 years, with measurements of health seeking behaviour

# MAIN CHALLENGES

## 1. Human resources:

- Not enough health workers **working in NTP** due to the high risk and low income, and aging of current TB staff
- Over 50% of the present district TB **staff is new and untrained.**
- Coordination of health care facilities at district levels

## 2. TB policies and regulation:

- Inadequate regulation of TB drugs in pharmacy market
- TB notification law need to be enforced in practice

## 3. TB-HIV:

- 3Is activities are needed to be strengthening but VAAC system is not yet responded adequately due to many factors
- ART for TB/HIV patients is improved but not yet met the needs

## 4. MDR-TB:

- MDR-TB is an emerging threat but at present the capacity to diagnose and treat is limited.
- SLD supplying mechanism is not flexible

# MAIN CHALLENGES

## 5. Closed Settings:

- In total, around 200,000 people lives in closed settings in Vietnam. TB & MDR TB prevalence in this setting are higher than in the general population.
- Human resource for TB control in these setting is also very limited

## 6. PPMD:

- Significant amount of TB suspects seeking for health care in private sector and general hospital (VINCOTB study), but collaboration of these facilities with NTP at all levels are not yet clear and need to be reinforced

## 7. Partnerships and civil society:

- Mass organizations at the community level need a clear mechanism for engaging civil society in TB control to combat the current threats.

## 8. M & E, supervision and info management:

- eTB surveillance and management system of NTP has newly established and need to expanded nationwide, need invest more hardware and human resource.
- The system is not yet capture MDR TB piloting management.

# IMMEDIATE STEPS

1. Mobilize all GOs and NGOs; national and international partners to be involved in TB control (*socialization of TB control*) by

## VIETNAM STOP TB PARTNERSHIP

2. Scale up PAL, PPM, PMDT, TB/HIV, Pediatric TB.
3. Invest to Human resource for TB control system.
4. Mobilize financial resources (GFATM, Government / Non - Government investment and others)
5. Develop Master Plan 2011-2015: Multisectorial approach including Impact measurement of TB control by 2nd TB prevalence survey 2012.

# PROSPECT FOR FURTHER COLLABORATION



- Vision: Vietnam contributes to the global fight “Towards a world free of TB”
- Vietnam Stop TB partnership will serve as conjunctive point of national and international partners who wants to be winner in TB Elimination BATTLE in Vietnam and on the world
- VNTP is the technical and management core for all partners, new or long standing, health profesional or non-health profesional, to contribute their efforts in TB control
- Vietnam NTP always has willingness to join with other countries and international organization in term of research, sharing experiences and technical supports





towardS mdg target



**THANK YOU FOR ATTENTION!**

