Viet Nam

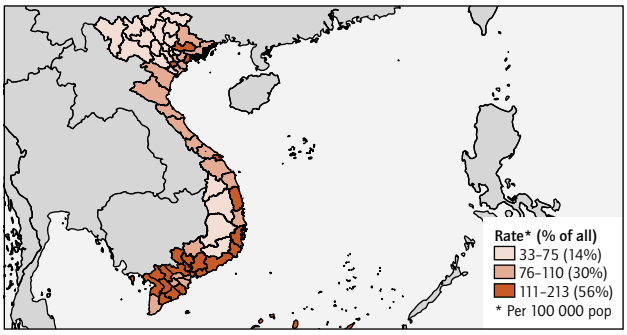
The preliminary results of the 2007 national survey of the prevalence of TB disease indicate that prevalence is higher than previously estimated. Although estimating TB incidence from the prevalence of TB disease is not straightforward, the survey also suggests that TB incidence may be higher, and the case detection rate lower, than previously estimated. Survey findings have prompted the NTP to accelerate implementation of PPM, ACSM and other components of the Stop TB Strategy, especially among population groups that have difficulty in accessing health-care services.

SURVEILLANCE AND EPIDEMIOLOGY

Population (thousands)[a] 87 375

Estimates of epidemiological burden, 2007[b]	ALL	IN HIV+ PEOPLE
Incidence		
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	**–1.0**	**1.8**
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)	**220**	6.9
2015 target for prevalence (cases per 100 000 pop)	**182**	–
Mortality		
All forms of TB (thousands of deaths per year)	21	3.1
All forms of TB (deaths per 100 000 pop/year)	**24**	3.5
2015 target for mortality (deaths per 100 000 pop/year)	**16**	–
Multidrug-resistant TB (MDR-TB)		
MDR-TB among all new TB cases (%)	2.7	–
MDR-TB among previously treated TB cases (%)	19	–

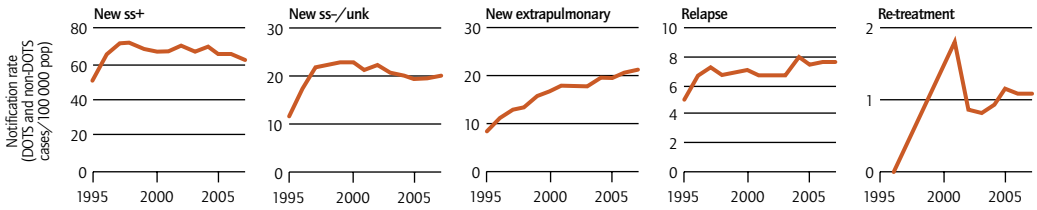
TB notification rate (new and relapse), 2007



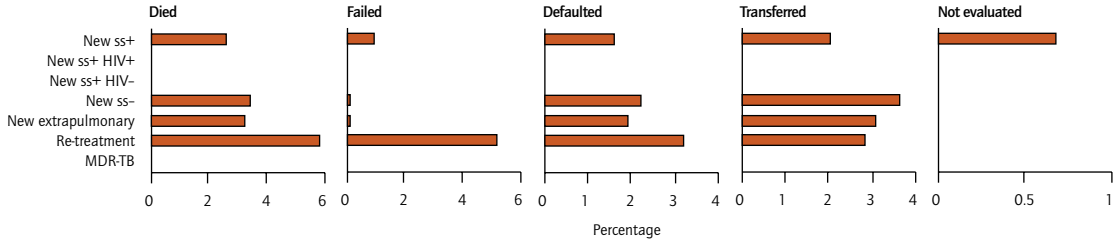
Total notifications, 2007

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+)	**82**
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

Case notifications



Unfavourable treatment outcomes, 2006 cohorts



	2000	2001	2002	2003	2004	2005	2006	2007
DOTS coverage (%)	100	100	100	100	100	100	100	100
Notification rate (new & relapse cases/100 000 pop)	114	113	117	112	117	112	113	111
% notified new & relapse cases reported under DOTS	100	100	100	100	100	100	100	100
Notification rate (new ss+ cases/100 000 pop)	67	68	70	68	70	65	65	62
% notified new ss+ cases reported under DOTS	100	100	100	100	100	100	100	100
Case detection rate (all new cases, %)	58	59	61	59	62	60	61	61
Case detection rate (new ss+ cases, %)	82	84	87	86	89	84	86	82
Treatment success (new ss+ patients, %)	92	93	92	92	93	92	92	–
Re-treatment success (ss+ patients, %)	79	85	85	85	84	83	83	–

Note: notification, case detection and treatment success rates are for the whole country (i.e. DOTS and non-DOTS cases combined).

DOTS EXPANSION AND ENHANCEMENT

Overview of services for diagnosis of TB and treatment of patients

Description of basic management unit	District TB unit
Number of units (DOTS/total), 2007	680/680
Location of NTP services	
Rural Commune health post	
Urban –	
NTP services part of general primary health-care network?	Yes
Location where TB diagnosed	
Rural District TB unit	
Urban –	
Diagnosis free of charge?	Yes (all suspects)
Treatment supervised?	All patients in all units
Intensive phase	Health-care worker
Continuation phase	Health-care worker
Category I regimen	–
Treatment free of charge	–
External review missions	last: 2006
	next: 2011

Political commitment

National strategic plan?	Yes (2007–2011)
Mechanism for national interagency coordination?	Yes (established 2008)
National Stop TB Partnership?	Yes (established 2008)

Financial indicators, 2009

(see final page for detailed presentation)	%
Government contribution to NTP budget (incl loans)	39
Government contribution to total cost TB control (incl loans)	69
Government health spending used for TB control	3.3
NTP budget funded	100

Per capita health financial indicators, 2009

	US$
NTP budget per capita	0.1
Total costs for TB control per capita	0.3
Funding gap per capita	0
Government health expenditure per capita (2005)	9.6
Total health expenditure per capita (2005)	38

Quality-assured bacteriology

National reference laboratory?	Yes

All TB laboratories performing EQA of smear microscopy or DST under the supervision of the National Reference Laboratory

	Smear				Culture		DST			
	Number	per 100 000	EQA	% adeq perf	Number	per 5 000 000	Number	per 10 000 000	EQA	% adeq perf
2007	737	0.8	–	–	17	1.0	2	0.2	2.0	–
2008	–	–	–	–	30	1.7	–	–	–	–

Note: for routine diagnosis, there should be at least one laboratory providing smear microscopy per 100 000 population. To provide culture for diagnosis of paediatric, extra-pulmonary and ss-/HIV+ TB, as well as DST of re-treatment and failure cases, most countries will need one culture facility per 5 million population and one DST facility per 10 million population. EQA column shows number of laboratories for which EQA was done. Adeq perf; adequate performance for microscopy based on results of EQA.

System for managing drug supplies and laboratory equipment

	Central level			Peripheral level		
	2005	2006	2007	2005	2006	2007
Stock-outs of laboratory supplies?	–	No	Yes	–	No	–
Stock-outs of first-line anti-TB drugs?	Yes	No	–	No	No	Yes

Monitoring and evaluation system, and impact measurement

NTP publishes annual report?	–
% of BMUs reporting to next level in 2007	
Case-finding	–
Treatment outcomes	–

Burden and impact assessment		last	next
In-depth analysis of routine surveillance data	–	–	–
Prevalence of disease survey	Yes	2007	–
Prevalence of infection survey	–	–	–
Drug resistance survey	Yes, national	2006	–
Mortality survey	–	–	–
Analysis of vital registration data	–	–	–

MDR-TB, TB/HIV AND OTHER CHALLENGES

Multidrug-resistant TB (MDR-TB)

	2005	2006	2007
	Number (% of estimated ss+ MDR-TB)		
Estimated incidence of ss+ MDR cases	4 170	4 185	4 199
Diagnosed and notified	– (–%)	– (–%)	– (–%)
Registered for treatment	– (–%)	– (–%)	– (–%)
GLC	0	0	0
non-GLC	–	–	–

MDR-TB, TB/HIV AND OTHER CHALLENGES (*continued*)

Detection and treatment of HIV in TB patients, 2007

TB patients for whom the HIV test result was known	14 377
as % of all notified TB patients	15
TB patients with positive HIV test	627
as % of all estimated HIV+ TB cases	5.2
HIV+ TB patients started or continued on CPT	–
as % of HIV+ TB patients notified	–
HIV+ TB patients started or continued on ART	–
as % of HIV+ TB patients notified	–

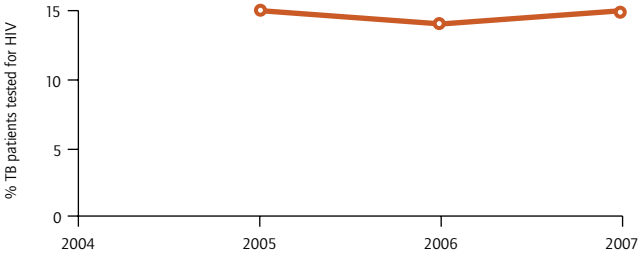
Screening for TB in HIV-positive patients, 2007

HIV+ patients in HIV care or ART register	–
Screened for TB	–
as % of HIV+ patients in HIV care or ART register	–
Started on TB treatment	–
as % of HIV+ patients in HIV care or ART register	–
Started on IPT	–
as % of HIV+ patients without TB in HIV care or ART register	–

High-risk groups, 2007

Number of close contacts of ss+ TB patients screened	–
Number of TB cases identified among contacts	–
% of contacts with TB	–
Contacts started on IPT	–
% of contacts without TB on IPT	–

HIV testing for TB patients



CPT and ART for HIV-positive TB patients

Data not reported

CONTRIBUTING TO HEALTH SYSTEM STRENGTHENING

The NTP is integrated into a relatively strong primary health-care system. However, reforms aimed at decentralizing and separating disease-specific control programmes from clinical services are ongoing and may affect the NTP, which is working to ensure effective services for referring patients and exchange of information where separation is anticipated. A further challenge, the large private health care sector throughout the country where first-line and second-line anti-TB drugs are often used irrationally, is being addressed by the NTP through scale-up of PPM.

Practical Approach to Lung Health (PAL), 2007

Number of health-care facilities providing PAL services	–	As % of total number of health-care facilities	–

ENGAGING ALL CARE PROVIDERS

Public-public and public-private approaches (PPM), 2007

Number of providers collaborating with the NTP[c]

	Number collaborating (total number of providers)	% total notified TB Diagnosed	Treated
Public sector	42 (–)	3.2	4.6
Private sector	– (–)	–	–

International Standards for Tuberculosis Care (ISTC)

ISTC endorsed by professional organizations?	–
By which organizations:	–
ISTC included in medical curriculum?	–

EMPOWERING PEOPLE WITH TB, AND COMMUNITIES

Advocacy, communication and social mobilization (ACSM)

A KAP survey is planned for 2008. On World TB Day, all provinces hold meetings to raise awareness of TB at community level, and TB is featured in radio and television programmes. Advocacy meetings for managers in the health sector have been organized in 8 provinces. Advocacy meetings for political leaders have also been organized in 8 regions (which cover 60/64 provinces), one outcome of which was a letter to the Ministry of Health requesting greater support for provincial efforts in TB control, including support for recruitment and retention of adequately-qualified staff.

Community participation in TB care and Patients' Charter

Community involvement in TB control is in place in hard-to-reach areas as part of the primary health-care package. The project is currently being geographically expanded to cover all hard-to-reach areas in the country. Community-based care is also provided by voluntary treatment supporters in many areas. No data on use of the Patients' Charter were reported in 2008.

ENABLING AND PROMOTING RESEARCH

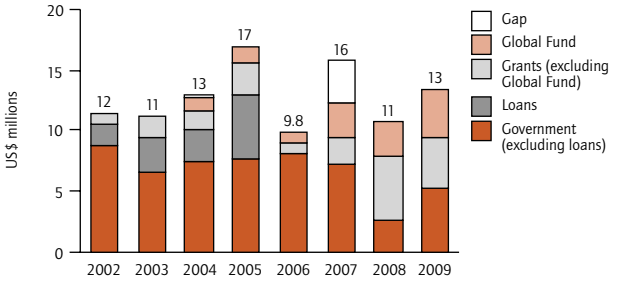
Programme-based operational research, 2007

Operational research budget (% of NTP budget)	0.6%

FINANCING

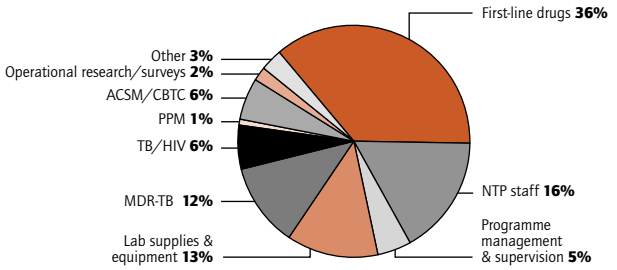
a. NTP budget by source of funding

Decreased funding from the government in 2008–2009, compensated for by increased funding from donors



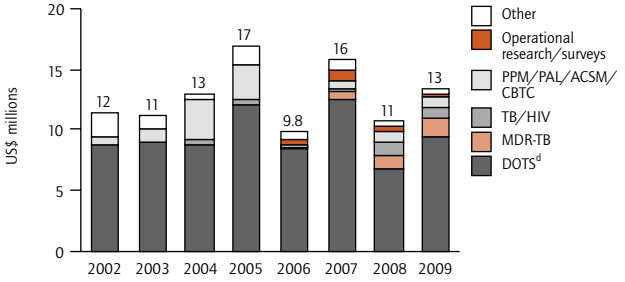
b. NTP budget line items in 2009

Largest component of budget is for DOTS (71%), followed by MDR-TB



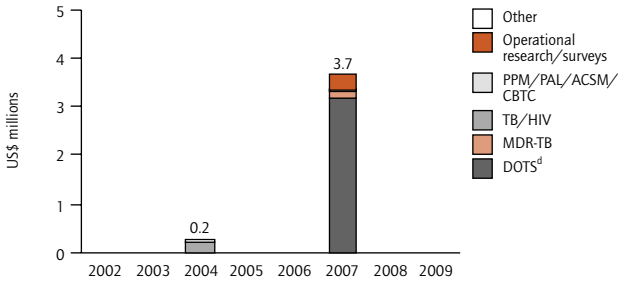
c. NTP budget by line item

Increased budget for MDR-TB in 2008 and 2009; within DOTS decreased budget for NTP staff and programme management



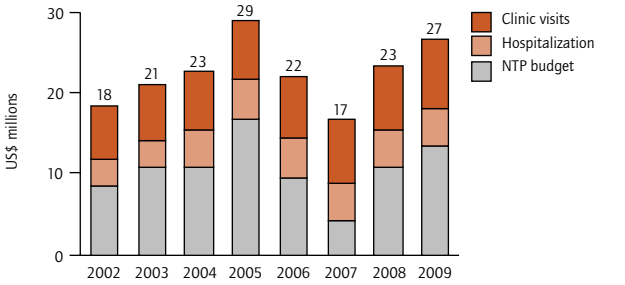
d. NTP funding gap by line item

No funding gap was reported for 2008–2009



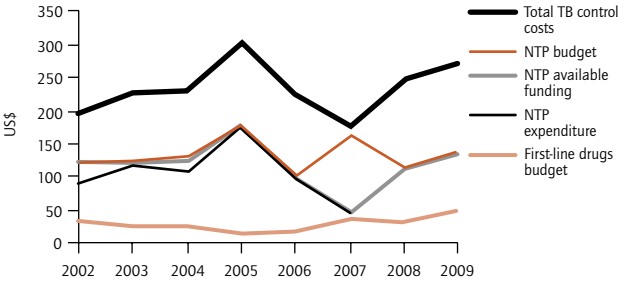
e. Total TB control costs by line item[1]

Cost of clinic visits based on 66 visits per TB patient; hospitalization costs based on estimate that there are 6481 TB beds



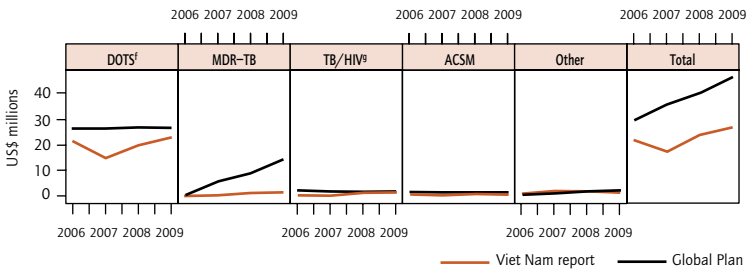
f. Per patient costs, budgets and expenditures[2]

Expenditure comparatively low in 2007; Fluctuation in all indicators



g. Global Plan compared with country reports[e]

Targets for MDR-TB patients to be treated in Global MDR/XDR-TB Response Plan much higher than scaling-up planned by NTP



h. NTP budget and funding gap by Stop TB Strategy component (US$ millions)

	2009 BUDGET	GAP
DOTS expansion and enhancement	9.5	0
TB/HIV, MDR-TB and other challenges	2.3	0
Health system strengthening	0	0
Engage all care providers	0.1	0
People with TB, and communities	0.8	0
Research and surveys	0.3	0
Other	0.4	0

SOURCES, METHODS AND ABBREVIATIONS

[a–g] Please see footnotes page 169.

[1] Total TB control costs for 2002–2007 are based on expenditure, whereas those for 2008–2009 are based on budgets. Estimates of the costs of clinic visits and hospitalization are WHO estimates based on data provided by the NTP and from other sources. See Methods for further details.

[2] NTP available funding for 2004–2007 is based on the amount of funding actually received, using retrospective data; available funding for 2002–2003 and 2008–2009 is based on prospectively reported budget data, and estimated as the total budget minus any reported funding gap.

– indicates not available or not applicable; pop, population; ss+, sputum smear-positive; ss–, sputum smear-negative pulmonary; unk, pulmonary – sputum smear not done or result unknown.