

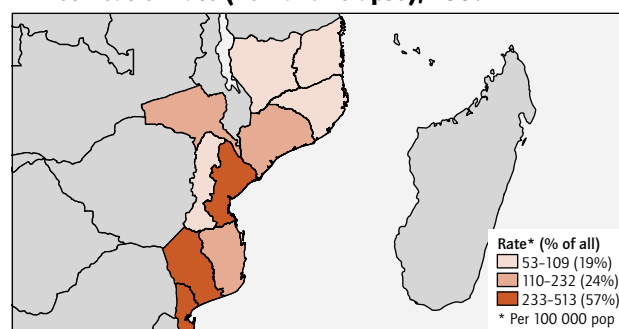
Mozambique

Although the case detection rate has been increasing, the detection rate of new smear-positive cases remains below 50%. Treatment success rates continue to be below target for both new and re-treatment cases. While all districts are implementing DOTS, access to health care is poor given the limitations of the health system infrastructure. Collaborative TB/HIV activities are expanding; in 2007, 70% of notified TB cases were tested for HIV, 33% of HIV-positive patients were put on ART and 93% were given CPT. Programmatic management of MDR-TB has begun. Increased financial flows from the Global Fund and other donors have alleviated funding constraints. However, the shortage of a skilled workforce, slow funding disbursements and weak absorptive capacity continue to limit programme implementation.

SURVEILLANCE AND EPIDEMIOLOGY

Population (thousands) ^a	21 397	
Estimates of epidemiological burden, 2007^b	ALL	IN HIV+ PEOPLE
Incidence		
All forms of TB (thousands of new cases per year)	92	44
All forms of TB (new cases per 100 000 pop/year)	431	204
Rate of change in incidence rate (%), 2006-2007	-2.6	-1.8
New ss+ cases (thousands of new cases per year)	37	15
New ss+ cases (per 100 000 pop/year)	174	71
HIV+ incident TB cases (% of all TB cases)	47	—
Prevalence		
All forms of TB (thousands of cases)	108	22
All forms of TB (cases per 100 000 pop)	504	102
2015 target for prevalence (cases per 100 000 pop)	144	—
Mortality		
All forms of TB (thousands of deaths per year)	27	17
All forms of TB (deaths per 100 000 pop/year)	127	82
2015 target for mortality (deaths per 100 000 pop/year)	18	—
Multidrug-resistant TB (MDR-TB)		
MDR-TB among all new TB cases (%)	3.5	—
MDR-TB among previously treated TB cases (%)	3.3	—

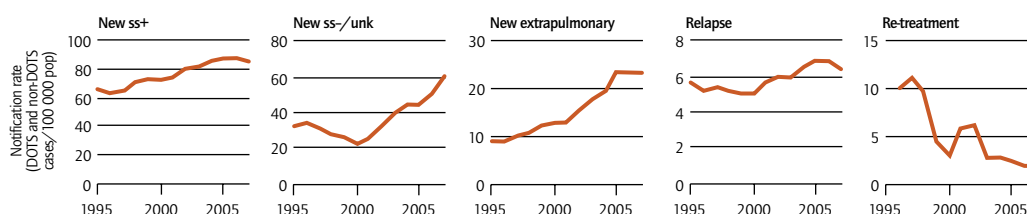
TB notification rate (new and relapse), 2007



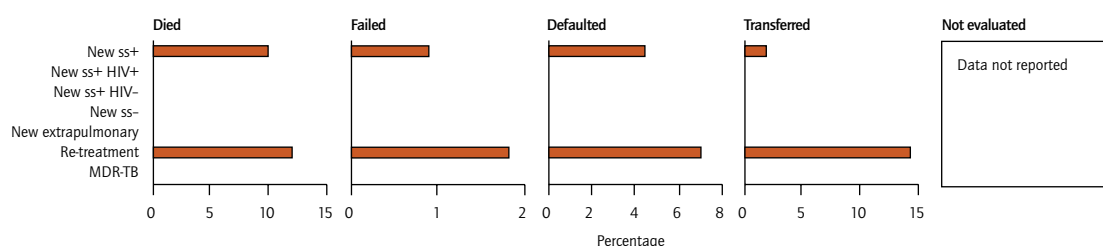
Total notifications, 2007

Notified new and relapse cases (thousands)	38
Notified new and relapse cases (per 100 000 pop/year)	176
Notified new ss+ cases (thousands)	18
Notified new ss+ cases (per 100 000 pop/year)	85
as % of new pulmonary cases	58
sex ratio (male/female)	—
DOTS case detection rate (% of estimated new ss+)	49
Notified new extrapulmonary cases (thousands)	5.0
as % of notified new cases	14
Notified new ss+ cases in children (<15 years) (thousands)	0.3
as % of notified new ss+ cases	1.8

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)	116	118	133	146	155	162	168	176
% notified new & relapse cases reported under DOTS	100	100	100	100	100	100	100	100
Notification rate (new ss+ cases/100 000 pop)	73	75	80	82	85	87	87	85
% notified new ss+ cases reported under DOTS	100	100	100	100	100	100	100	100
Case detection rate (all new cases, %)	28	28	29	31	32	34	36	39
Case detection rate (new ss+ cases, %)	47	45	45	45	46	47	49	49
Treatment success (new ss+ patients, %)	75	78	78	76	77	79	83	—
Re-treatment success (ss+ patients, %)	71	68	67	68	—	70	65	—

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	Centro de saude urbano-Sede (at BMU head-office level)
Number of units (DOTS/total), 2007	169/169
Location of NTP services	
Rural	Centro de saude rural (rural health facility)
Urban	Centro de saude urbano (urban health facility)
NTP services part of general primary health-care network?	Yes
Location where TB diagnosed	
Rural	Centro de saude rural-Sede (at BMU head-office level)
Urban	Centro de saude urbano-Sede (at BMU head-office level)
Diagnosis free of charge?	Yes (all suspects)
Treatment supervised?	All patients in all units
Intensive phase	Health-care worker, community member, family member
Continuation phase	Health-care worker, community member, family member
Category I regimen	2(HRZE)/4(HR)
Treatment free of charge	All patients in all units
External review missions	last: 2006 next: 2009

Political commitment

National strategic plan?	Yes (2008-2012)
Mechanism for national interagency coordination?	Yes (established 2007)
National Stop TB Partnership?	No (planned 2009)

Financial indicators, 2009

(see final page for detailed presentation)	%
Government contribution to NTP budget (incl loans)	26
Government contribution to total cost TB control (incl loans)	40
Government health spending used for TB control	16
NTP budget funded	76

Per capita health financial indicators, 2009

	US\$
NTP budget per capita	1.1
Total costs for TB control per capita	1.4
Funding gap per capita	0.3
Government health expenditure per capita (2005)	9.2
Total health expenditure per capita (2005)	15

Quality-assured bacteriology

National reference laboratory?	Yes
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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	252	1.2	252	97%	1	0.2	1	0.5	1.0	100%
2008	252	1.2	252	–	3	0.7	1	0.5	1.0	–

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	Some units
Stock-outs of first-line anti-TB drugs?	Yes	No	No	Yes	No	Some units

Monitoring and evaluation system, and impact measurement

NTP publishes annual report?	Yes (since 2006)	Burden and impact assessment		last	next
% of BMUs reporting to next level in 2007		In-depth analysis of routine surveillance data	Yes	2006	2009
Case-finding	100%	Prevalence of disease survey	No	–	–
Treatment outcomes	100%	Prevalence of infection survey	No	–	–
		Drug resistance survey	Yes, national	1999	2008
		Mortality survey	No	–	–
		Analysis of vital registration data	No	–	–

MDR-TB, TB/HIV AND OTHER CHALLENGES

	2005	2006	2007
	Number (% of estimated ss+ MDR-TB)		
Estimated incidence of ss+ MDR cases	1 482	1 474	1 464
Diagnosed and notified	115 (7.8%)	129 (8.8%)	163 (11%)
Registered for treatment	77 (5.2%)	129 (8.8%)	163 (11%)
GLC	0	0	0
non-GLC	77	129	163

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	26 548
as % of all notified TB patients	70
TB patients with positive HIV test	12 563
as % of all estimated HIV+ TB cases	29
HIV+ TB patients started or continued on CPT	11 667
as % of HIV+ TB patients notified	93
HIV+ TB patients started or continued on ART	4 105
as % of HIV+ TB patients notified	33

Screening for TB in HIV-positive patients, 2007

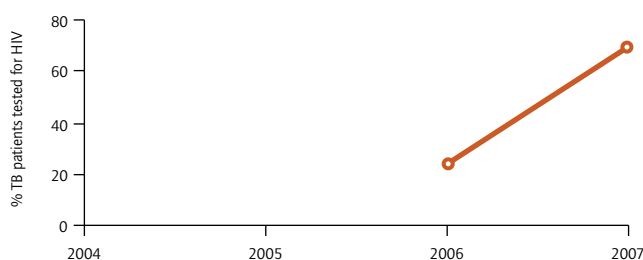
HIV+ patients in HIV care or ART register	326 517
Screened for TB	3 039
as % of HIV+ patients in HIV care or ART register	0.9
Started on TB treatment	12 857
as % of HIV+ patients in HIV care or ART register	3.9
Started on IPT	676
as % of HIV+ patients without TB in HIV care or ART register	0.2

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	—

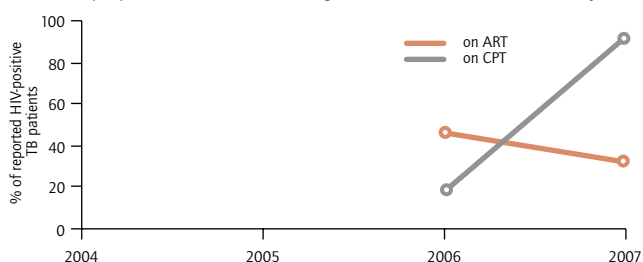
HIV testing for TB patients

Between 2006 and 2007 the proportion of TB patients screened for HIV almost tripled



CPT and ART for HIV-positive TB patients

The proportion of HIV-positive TB patients receiving ART has declined while the proportion of those receiving CPT has increased dramatically



CONTRIBUTING TO HEALTH SYSTEM STRENGTHENING

The main health systems barriers affecting TB control are a shortage of skilled human resources for health and poor access to the primary health-care system into which the NTP is integrated. Improvements in laboratory capacity and training of human resources are benefiting both the NTP and the primary health-care system.

Practical Approach to Lung Health (PAL), 2007

Number of health-care facilities providing PAL services	—	As % of total number of health-care facilities	—
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ENGAGING ALL CARE PROVIDERS

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

	Number collaborating (total number of providers)	% total notified TB	
		Diagnosed	Treated
Public sector	41 (41)	0.9	0.9
Private sector	5 (—)	—	—

International Standards for Tuberculosis Care (ISTC)

ISTC endorsed by professional organizations?	No
ISTC included in medical curriculum?	No

EMPOWERING PEOPLE WITH TB, AND COMMUNITIES

Advocacy, communication and social mobilization (ACSM)

Community forums were organized during World TB Day 2008. A KAP survey is planned for 2009.

Community participation in TB care and Patients' Charter

Community-based activities are continuing through an NGO that supports the NTP. Community volunteers have been trained to provide treatment support, contact tracing, sputum transport and awareness-raising activities, in rural areas. There are volunteers in many districts, but the initiative has not been implemented uniformly. Plans to expand geographical coverage and involve other partners are ongoing. The Patients' Charter is not yet in use.

ENABLING AND PROMOTING RESEARCH

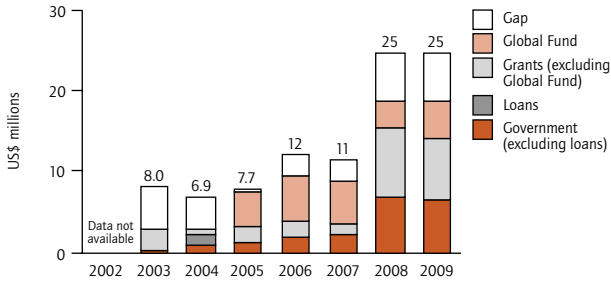
Programme-based operational research, 2007

Operational research budget (% of NTP budget)	0.6 %
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FINANCING

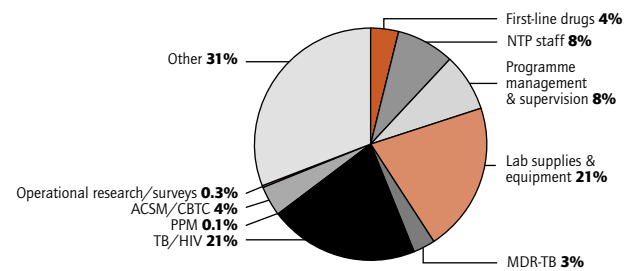
a. NTP budget by source of funding

Greatly increased budget since 2007 following re-assessment of funding needs in line with Stop TB Strategy; funding has also grown from government and donors including the Global Fund (round 7) and USAID



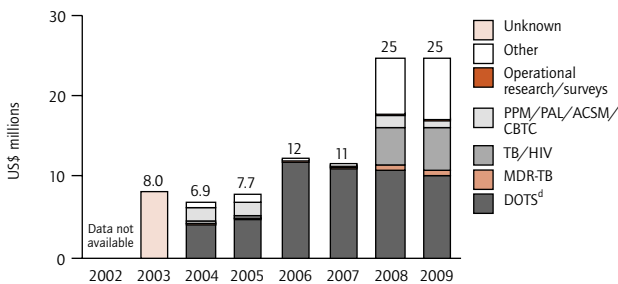
b. NTP budget line items in 2009

Largest components of budget are DOTS (41%), Other (31%) and collaborative TB/HIV activities (21%)



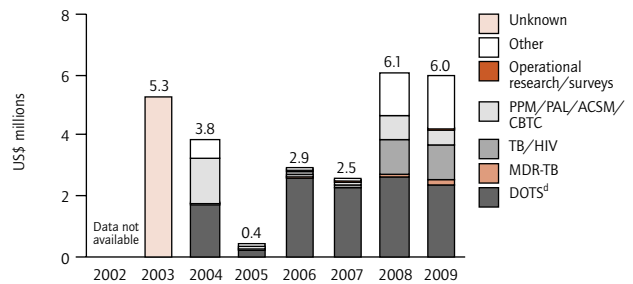
c. NTP budget by line item

Increased budget for TB/HIV, and within Other, increased budget for high-risk groups (prisoners) and childhood TB; budget within DOTS includes establishment of two regional reference laboratories and purchase of new laboratory equipment



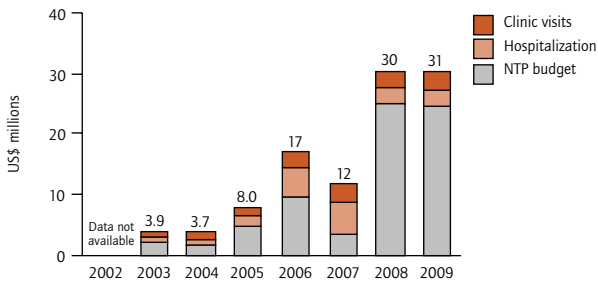
d. NTP funding gap by line item

Funding gap within DOTS mainly for laboratory supplies and equipment, and routine programme management



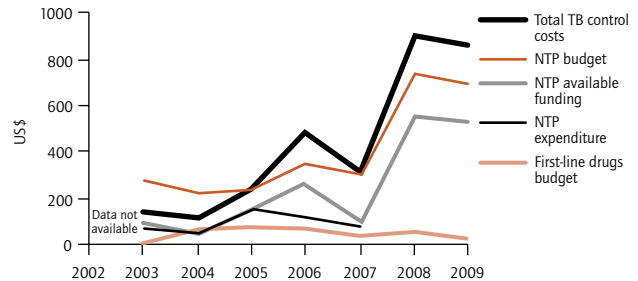
e. Total TB control costs by line item¹

Hospitalization costs 2008–2009 based on reduced number of dedicated TB beds (from 4512 to 2258) in the country; outpatient costs based on 90 visits to a health facility per new TB patient during treatment



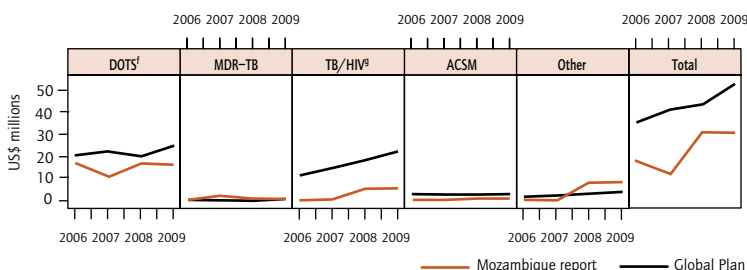
f. Per patient costs, budgets and expenditures²

Large fluctuation in available funding per patient



g. Global Plan compared with country reports³

Implementation of TB control behind Global Plan 2006–2007 but country assessment of funding required 2008–2009 in line with Global Plan – difference for TB/HIV is due to some activities being funded and implemented by national HIV/AIDS control programme



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

	2009 BUDGET	GAP
DOTS expansion and enhancement	10	2.4
TB/HIV, MDR-TB and other challenges	5.9	1.3
Health system strengthening	0	0
Engage all care providers	0.02	0.02
People with TB, and communities	0.9	0.4
Research and surveys	0.1	0.05
Other	7.6	1.8

SOURCES, METHODS AND ABBREVIATIONS

^{a-g} Please see footnotes page 169.

¹ Total TB control costs for 2003–2005 and 2007 are based on expenditure, whereas those for 2006 are based on available funding, and 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 2004–2005 and 2007 is based on the amount of funding actually received, using retrospective data; available funding for 2002–2003, 2006 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.