

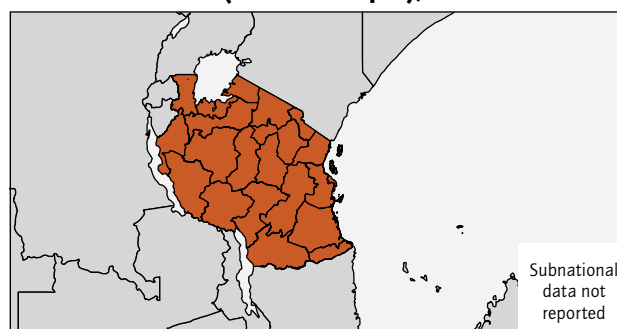
# United Republic of Tanzania

The case detection rate has been relatively stable since 2001 and well below the global target. The treatment success rate for new smear-positive TB cases reached the global target in 2006. Following rapid expansion of collaborative TB/HIV activities, 50% of TB cases are being tested for HIV and 31% and 72% of HIV-positive TB cases are being provided with ART and CPT, respectively. Further expansion of TB/HIV activities, scale-up of community-based TB care, and formal collaboration with the private sector are expected to improve rates of case detection and treatment success. Programmatic management of MDR-TB began in 2007 on a small scale. A survey of the prevalence of disease in 2009 and the results of an in-depth analysis of surveillance data will be used to update existing estimates of the epidemiological burden of TB.

## SURVEILLANCE AND EPIDEMIOLOGY

<b>Population</b> (thousands) <sup>a</sup>	40 454	
<b>Estimates of epidemiological burden, 2007<sup>b</sup></b>	ALL	IN HIV+ PEOPLE
<b>Incidence</b>		
All forms of TB (thousands of new cases per year)	120	56
All forms of TB (new cases per 100 000 pop/year)	297	139
Rate of change in incidence rate (%), 2006–2007	<b>-4.4</b>	<b>-5.2</b>
New ss+ cases (thousands of new cases per year)	49	20
New ss+ cases (per 100 000 pop/year)	120	49
HIV+ incident TB cases (% of all TB cases)	47	–
<b>Prevalence</b>		
All forms of TB (thousands of cases)	136	28
All forms of TB (cases per 100 000 pop)	<b>337</b>	70
2015 target for prevalence (cases per 100 000 pop)	<b>107</b>	–
<b>Mortality</b>		
All forms of TB (thousands of deaths per year)	32	20
All forms of TB (deaths per 100 000 pop/year)	<b>78</b>	49
2015 target for mortality (deaths per 100 000 pop/year)	<b>21</b>	–
<b>Multidrug-resistant TB (MDR-TB)</b>		
MDR-TB among all new TB cases (%)	1.1	–
MDR-TB among previously treated TB cases (%)	7.9	–

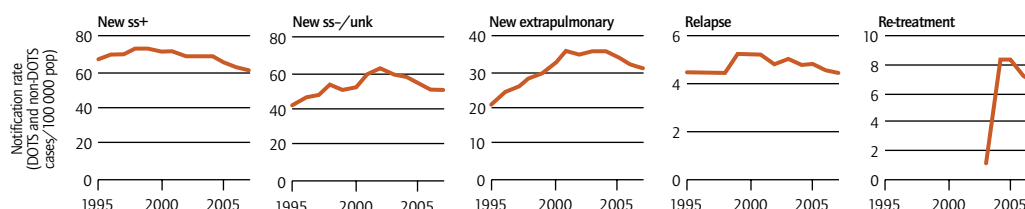
## TB notification rate (new and relapse), 2007



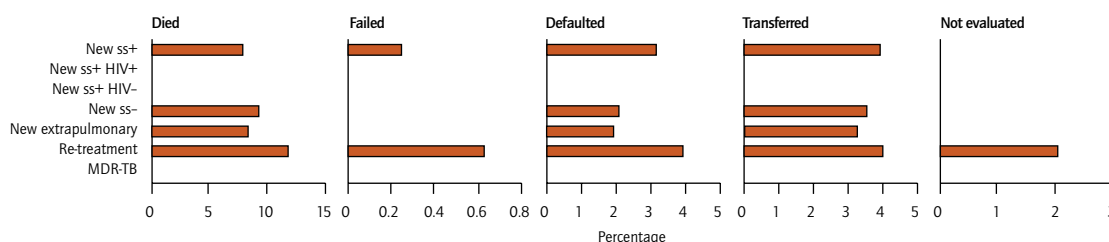
## Total notifications, 2007

Notified new and relapse cases (thousands)	59
Notified new and relapse cases (per 100 000 pop/year)	147
Notified new ss+ cases (thousands)	25
Notified new ss+ cases (per 100 000 pop/year)	61
as % of new pulmonary cases	54
sex ratio (male/female)	1.7
DOTS case detection rate (% of estimated new ss+)	<b>51</b>
Notified new extrapulmonary cases (thousands)	13
as % of notified new cases	22
Notified new ss+ cases in children (<15 years) (thousands)	0.4
as % of notified new ss+ cases	1.7

## 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)	161	177	169	168	167	159	150	147
% notified new & relapse cases reported under DOTS	100	100	100	100	100	100	100	100
Notification rate (new ss+ cases/100 000 pop)	71	71	68	68	69	66	63	61
% notified new ss+ cases reported under DOTS	100	100	100	100	100	100	100	100
Case detection rate (all new cases, %)	46	48	47	47	48	47	47	48
Case detection rate (new ss+ cases, %)	52	51	48	49	51	50	50	51
Treatment success (new ss+ patients, %)	78	81	80	81	81	82	85	–
Re-treatment success (ss+ patients, %)	73	76	77	75	76	77	78	–

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	Hospitals and health centres
Number of units (DOTS/total), 2007	157/157
<b>Location of NTP services</b>	
Rural	Health centers and dispensaries
Urban	Hospitals and health centres
NTP services part of general primary health-care network?	Yes
<b>Location where TB diagnosed</b>	
Rural	Health centres and dispensaries
Urban	Hospitals and health centres
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	2HRZE/4HR
Treatment free of charge	All patients in all units
External review missions	last: – next: –

**Political commitment**

National strategic plan?	Yes (2004–2009)
Mechanism for national interagency coordination?	No (planned 2009)
National Stop TB Partnership?	No (planned 2009)

**Financial indicators, 2009**

(see final page for detailed presentation)	%
Government contribution to NTP budget (incl loans)	29
Government contribution to total cost TB control (incl loans)	39
Government health spending used for TB control	8.2
NTP budget funded	70

**Per capita health financial indicators, 2009**

	US\$
NTP budget per capita	0.6
Total costs for TB control per capita	0.7
Funding gap per capita	0.2
Government health expenditure per capita (2005)	9.5
Total health expenditure per capita (2005)	17

**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	717	1.8	–	–	3	0.4	1	0.2	1.0	–
2008	717	1.7	717	–	3	0.4	1	0.2	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	No	–	No	No
Stock-outs of first-line anti-TB drugs?	No	No	No	No	All units	No

**Monitoring and evaluation system, and impact measurement**

NTP publishes annual report?	Yes (since 1992)	<b>Burden and impact assessment</b>		last	next
% of BMUs reporting to next level in 2007		In-depth analysis of routine surveillance data	Yes	2007	2008
Case-finding	100%	Prevalence of disease survey	Yes, national	–	2009
Treatment outcomes	100%	Prevalence of infection survey	Yes, national	2004	–
		Drug resistance survey	Yes, national	2007	–
		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)		
Multidrug-resistant TB (MDR-TB)			
Estimated incidence of ss+ MDR cases	1 350	1 327	1 301
Diagnosed and notified	10 (0.74%)	13 (0.98%)	169 (13%)
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	31 305
as % of all notified TB patients	50
TB patients with positive HIV test	14 669
as % of all estimated HIV+ TB cases	26
HIV+ TB patients started or continued on CPT	10 541
as % of HIV+ TB patients notified	72
HIV+ TB patients started or continued on ART	4 619
as % of HIV+ TB patients notified	31

**Screening for TB in HIV-positive patients, 2007**

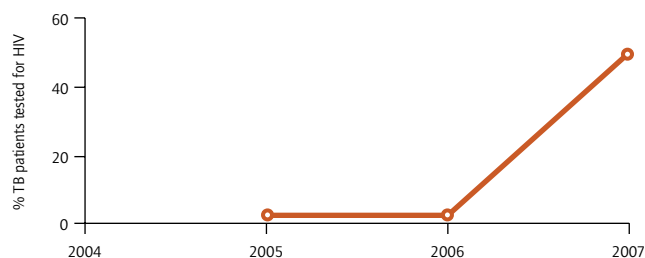
HIV+ patients in HIV care or ART register	—
Screened for TB	—
as % of HIV+ patients in HIV care or ART register	—
Started on TB treatment	—
as % of HIV+ patients in HIV care or ART register	—
Started on IPT	—
as % of HIV+ patients without TB in HIV care or ART register	—

**High-risk groups, 2007**

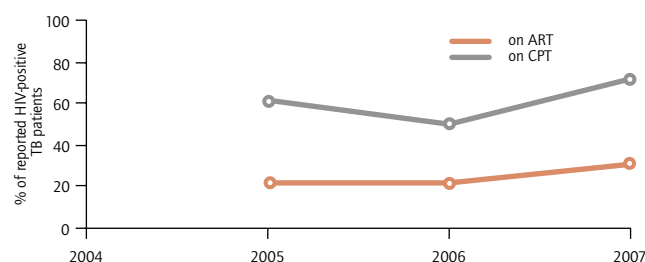
Number of close contacts of ss+ TB patients screened	—
Number of TB cases identified among contacts	—
% of contacts with TB	—
Contacts started on IPT	—
% of contacts without TB on IPT	—

**HIV testing for TB patients**

The proportion of TB patients tested for HIV increased dramatically in 2007, reaching 50%


**CPT and ART for HIV-positive TB patients**

The proportion of HIV-positive TB patients receiving ART and CPT improved between 2006 and 2007


**CONTRIBUTING TO HEALTH SYSTEM STRENGTHENING**

The NTP is fully integrated into the primary health-care system, and planning and budgeting for TB control have been successfully harmonized with sector-wide planning frameworks. Refurbishment of laboratories to support TB diagnosis has helped to strengthen overall laboratory capacity. Shared resources such as transport facilities and the reporting network have been used to reduce transaction costs for the entire health system. Further integration of the procurement system is planned.

**Practical Approach to Lung Health (PAL), 2007**

Number of health-care facilities providing PAL services	0	As % of total number of health-care facilities	0
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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	— (-)	—	—
Private sector	12 (-)	—	—

**International Standards for Tuberculosis Care (ISTC)**

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

**EMPOWERING PEOPLE WITH TB, AND COMMUNITIES**
**Advocacy, communication and social mobilization (ACSM)**

An ACSM strategy has been drafted, and a KAP survey is planned for 2009. A club for former TB patients was recently established.

**Community participation in TB care and Patients' Charter**

The NTP has started to involve patients and communities in delivering care and in activities to sensitize the general population about TB in selected areas of the country. These activities will be scaled up to cover 31 districts by the end of 2010. No data on use of the Patients' Charter were reported in 2008.

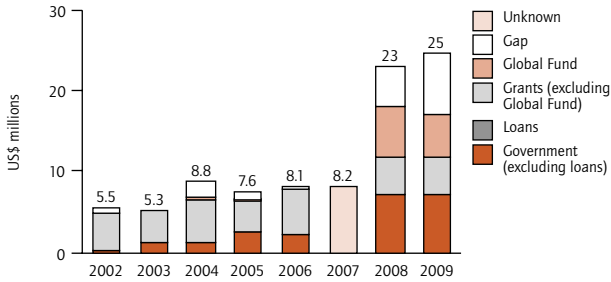
**ENABLING AND PROMOTING RESEARCH**
**Programme-based operational research, 2007**

Operational research budget (% of NTP budget)	—
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FINANCING

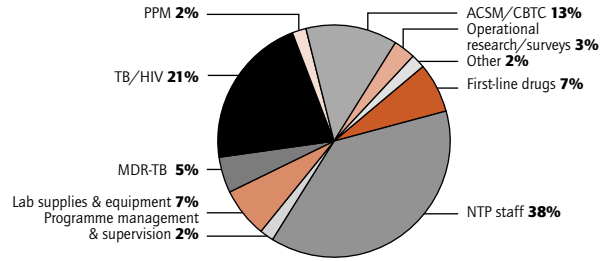
a. NTP budget by source of funding

Increased NTP budget since 2008 reflects new plan for TB control and re-assessment of funding needs; increased funding from government and Global Fund since 2008



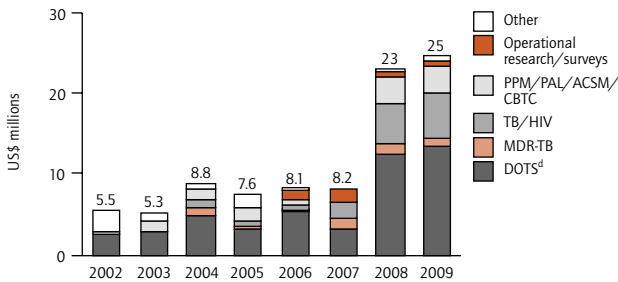
b. NTP budget line items in 2009

Largest component of the budget is NTP staff, unlike other African HBCs, followed by TB/HIV



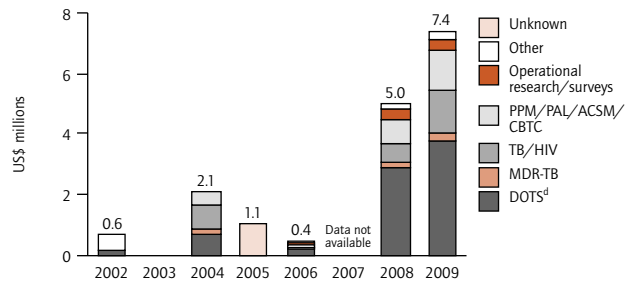
c. NTP budget by line item

Budget for all major components of TB control increased in 2008, notably for DOTS, TB/HIV and ACSM



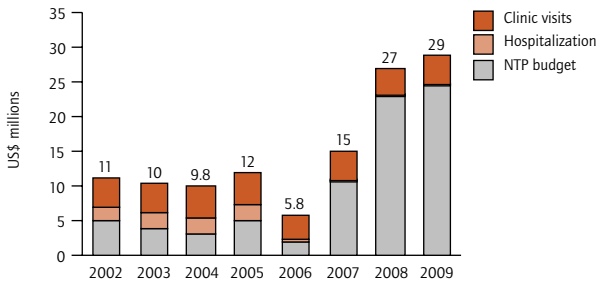
d. NTP funding gap by line item

Funding gap within DOTS mainly for first-line drugs and dedicated NTP staff



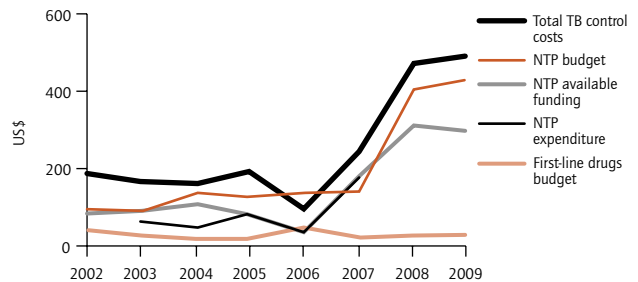
e. Total TB control costs by line item<sup>1</sup>

Cost of hospitalization based on 1900 TB dedicated beds (2002-2005) and 7% of new TB patients hospitalized for 14 days (2006-2009)



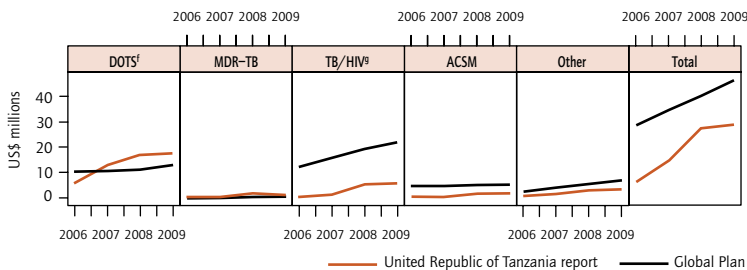
f. Per patient costs, budgets and expenditures<sup>2</sup>

Increasing expenditure, budget and total cost per patient since 2006



g. Global Plan compared with country reports<sup>a</sup>

Country assessment of funding requirements 2006-2007 less than Global Plan, and focused on DOTS; greater similarity with Global Plan 2008-2009, except for TB/HIV, which may reflect funding and implementation of activities by national AIDS control programme as well as NTP



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

Component	2009 BUDGET	GAP
DOTS expansion and enhancement	13	3.8
TB/HIV, MDR-TB and other challenges	6.6	1.7
Health system strengthening	0	0
Engage all care providers	0.4	0.03
People with TB, and communities	3.1	1.3
Research and surveys	0.7	0.4
Other	0.4	0.3

SOURCES, METHODS AND ABBREVIATIONS

<sup>a-g</sup> Please see footnotes page 169.

<sup>1</sup> Total TB control costs for 2002 are based on available funding, whereas those for 2003-2007 are based on expenditure, 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.

<sup>2</sup> 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.