

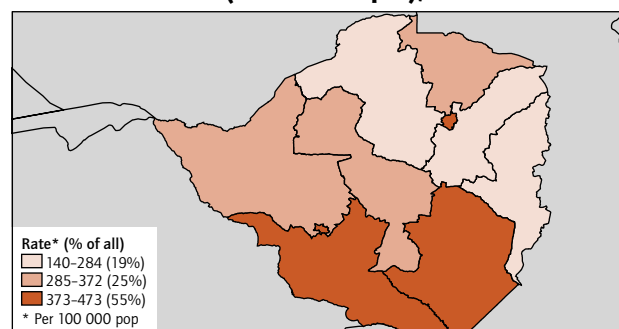
Zimbabwe

The TB control programme has been adversely affected by a lack of adequate financial, human and material resources. The recording and reporting system is unable to provide reliable data on DOTS implementation, collaborative TB/HIV activities or MDR-TB management. Funding from round 5 of the Global Fund grant and the successful round 8 Global Fund application should help revive basic TB control in the country. However, without a functional health-care system, progress is likely to be slow.

SURVEILLANCE AND EPIDEMIOLOGY

Population (thousands) ^a	13 349	
Estimates of epidemiological burden, 2007^b	ALL	IN HIV+ PEOPLE
Incidence		
All forms of TB (thousands of new cases per year)	104	72
All forms of TB (new cases per 100 000 pop./year)	782	539
Rate of change in incidence rate (%), 2006-2007	-2.6	-5.5
New ss+ cases (thousands of new cases per year)	40	25
New ss+ cases (per 100 000 pop./year)	298	189
HIV+ incident TB cases (% of all TB cases)	69	—
Prevalence		
All forms of TB (thousands of cases)	95	36
All forms of TB (cases per 100 000 pop)	714	270
2015 target for prevalence (cases per 100 000 pop)	205	—
Mortality		
All forms of TB (thousands of deaths per year)	35	28
All forms of TB (deaths per 100 000 pop./year)	265	213
2015 target for mortality (deaths per 100 000 pop./year)	70	—
Multidrug-resistant TB (MDR-TB)		
MDR-TB among all new TB cases (%)	1.9	—
MDR-TB among previously treated TB cases (%)	8.3	—

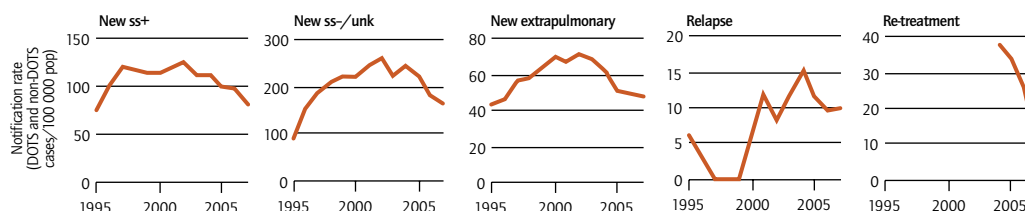
TB notification rate (new and relapse), 2007



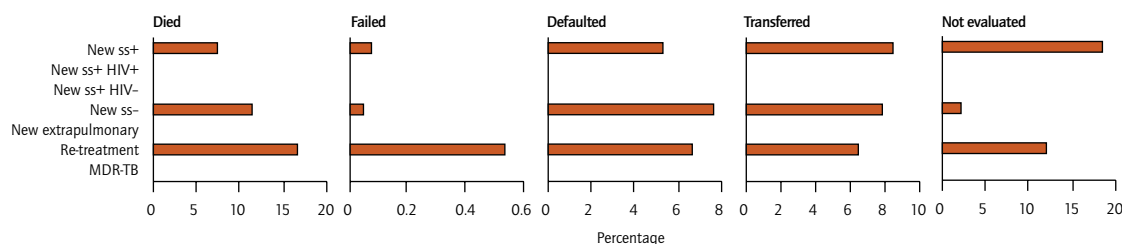
Total notifications, 2007

Notified new and relapse cases (thousands)	40
Notified new and relapse cases (per 100 000 pop./year)	302
Notified new ss+ cases (thousands)	11
Notified new ss+ cases (per 100 000 pop./year)	79
as % of new pulmonary cases	33
sex ratio (male/female)	1.1
DOTS case detection rate (% of estimated new ss+)	27
Notified new extrapulmonary cases (thousands)	6.4
as % of notified new cases	16
Notified new ss+ cases in children (<15 years) (thousands)	0.3
as % of notified new ss+ cases	3.1

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)	402	440	460	411	431	385	335	302
% notified new & relapse cases reported under DOTS	100	100	100	100	100	100	100	100
Notification rate (new ss+ cases/100 000 pop)	114	120	124	112	112	100	96	79
% notified new ss+ cases reported under DOTS	100	100	100	100	100	100	100	100
Case detection rate (all new cases, %)	59	58	57	48	50	45	41	37
Case detection rate (new ss+ cases, %)	45	44	42	36	36	32	32	27
Treatment success (new ss+ patients, %)	69	71	67	66	54	68	60	—
Re-treatment success (ss+ patients, %)	—	61	63	54	53	60	57	—

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	Hospital
Number of units (DOTS/total), 2007	64/64
Location of NTP services	
Rural	Rural health centre
Urban	Urban clinic
NTP services part of general primary health-care network?	Yes
Location where TB diagnosed	
Rural	District hospital
Urban	Hospital
Diagnosis free of charge?	Yes (all suspects)
Treatment supervised?	All patients in some units
Intensive phase	–
Continuation phase	–
Category I regimen	2(HRZE)/4(HR)
Treatment free of charge	All patients in all units
External review missions	last: 2008 next: –

Political commitment

National strategic plan?	Yes (2006–2010)
Mechanism for national interagency coordination?	Yes (established 2008)
National Stop TB Partnership?	No (planned 2009)

Financial indicators, 2009

(see final page for detailed presentation)	%
Government contribution to NTP budget (incl loans)	3.7
Government contribution to total cost TB control (incl loans)	22
Government health spending used for TB control	18
NTP budget funded	46

Per capita health financial indicators, 2009

	US\$
NTP budget per capita	1.3
Total costs for TB control per capita	1.6
Funding gap per capita	0.7
Government health expenditure per capita (2005)	9.2
Total health expenditure per capita (2005)	21

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	180	1.3	0	–	1	0.4	1	0.7	0	–
2008	180	1.3	12	–	1	0.4	1	0.7	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	–	Some units	Some units
Stock-outs of first-line anti-TB drugs?	Yes	Yes	Yes	Yes	Some units	Some units

Monitoring and evaluation system, and impact measurement

		Burden and impact assessment			
		last	next		
NTP publishes annual report?	Yes (since –)				
% of BMUs reporting to next level in 2007		In-depth analysis of routine surveillance data	Yes	2007	2008
Case-finding	98%	Prevalence of disease survey	No	–	2010
Treatment outcomes	98%	Prevalence of infection survey	No	–	–
		Drug resistance survey	Yes, sub-national	1995	–
		Mortality survey	No	–	–
		Analysis of vital registration data	Yes	2007	2008

MDR-TB, TB/HIV AND OTHER CHALLENGES

	2005	2006	2007
	Number (% of estimated ss+ MDR-TB)		
Estimated incidence of ss+ MDR cases	1 669	1 644	1 620
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	5 252
as % of all notified TB patients	13
TB patients with positive HIV test	4 373
as % of all estimated HIV+ TB cases	6.1
HIV+ TB patients started or continued on CPT	4 373
as % of HIV+ TB patients notified	100
HIV+ TB patients started or continued on ART	—
as % of HIV+ TB patients notified	—

Screening for TB in HIV-positive patients, 2007

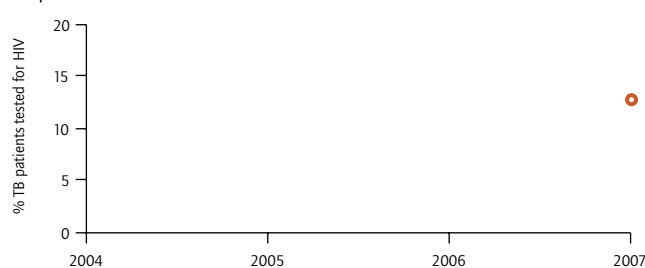
HIV+ patients in HIV care or ART register	142 057
Screened for TB	—
as % of HIV+ patients in HIV care or ART register	—
Started on TB treatment	—
as % of HIV+ patients in HIV care or ART register	—
Started on IPT	—
as % of HIV+ patients without TB in HIV care or ART register	—

High-risk groups, 2007

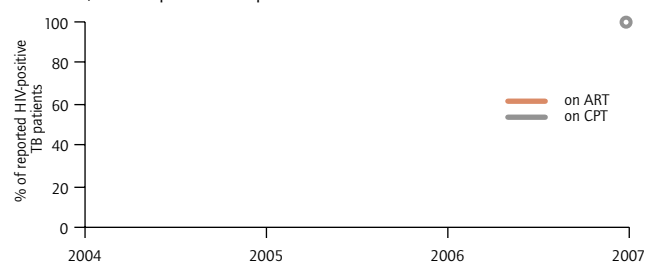
Number of close contacts of ss+ TB patients screened	—
Number of TB cases identified among contacts	—
% of contacts with TB	—
Contacts started on IPT	—
% of contacts without TB on IPT	—

HIV testing for TB patients

2007 is the first year for which data are available on HIV testing among TB patients

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

Data on the provision of ART to HIV-positive TB patients are not available; all HIV-positive TB patients receive CPT

**CONTRIBUTING TO HEALTH SYSTEM STRENGTHENING**

Since they were first introduced, activities to control TB have been fully integrated within primary health-care services. The roles and responsibilities of different levels of the health system are clearly defined for TB control. The main health system challenges are shortages of adequately trained staff due to high turnover and emigration, insufficient access to and availability of laboratory diagnostic services (including reagents, materials and staff), and insufficient funding for supervision, monitoring and evaluation and training at all levels.

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	— (-)	—	—

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)**

In 2008, the main ACSM activity was commemoration of World TB Day. This included events attended by the Minister of Health and several MPs, and broadcasting of three radio programmes that featured TB.

Community participation in TB care and Patients' Charter

There are ongoing efforts to improve the quality and scope of community-based activities, both to ensure the quality of care and to increase the demand for services to control TB.

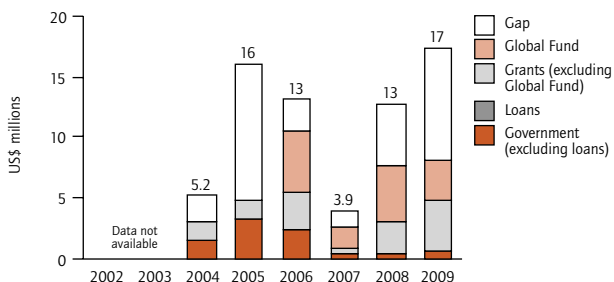
ENABLING AND PROMOTING RESEARCH**Programme-based operational research, 2007**

Operational research budget (% of NTP budget)	3.3%
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FINANCING

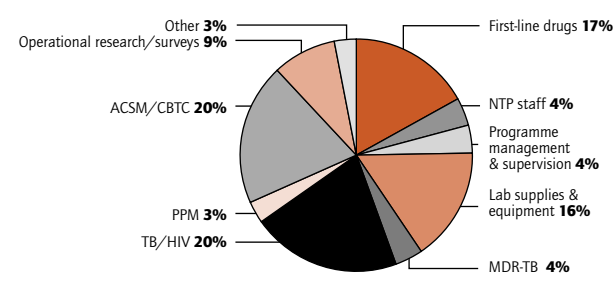
a. NTP budget by source of funding

Increased budget in 2009 with increased funding from external donors other than the Global Fund; large funding gap remains



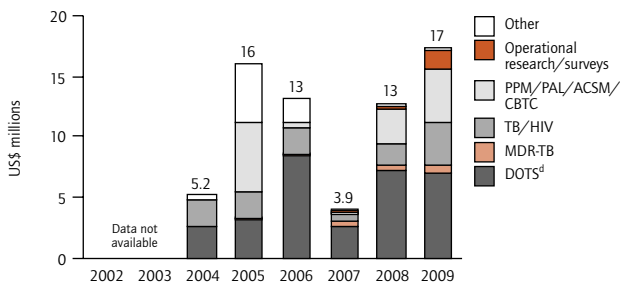
b. NTP budget line items in 2009

DOTS implementation accounts for the highest share of the budget, followed by ACSM; operational research includes surveys of MDR/XDR and HIV among TB patients



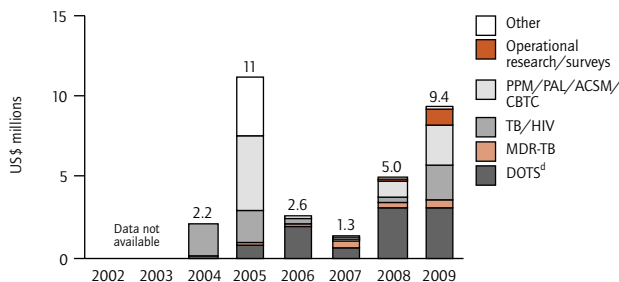
c. NTP budget by line item

Within DOTS, increased budget for laboratory is primarily to equip the second culture and DST laboratory in the capital city



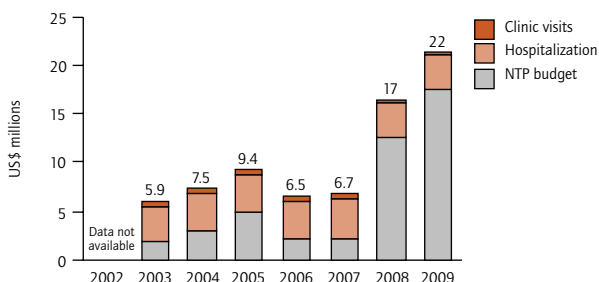
d. NTP funding gap by line item

Funding gap within DOTS mainly for laboratory supplies and equipment



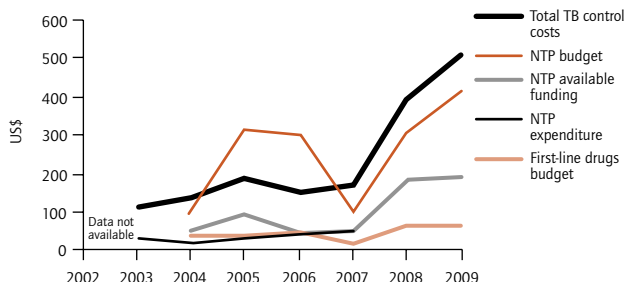
e. Total TB control costs by line item¹

Hospitalization based on estimates that 85% of new ss+ patients and 55% of new ss-/extrapulmonary patients are hospitalized for 14 and 21 days respectively



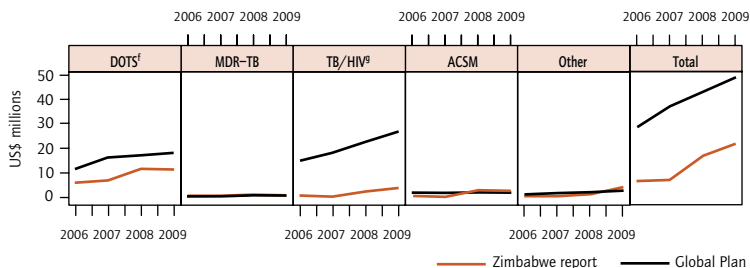
f. Per patient costs, budgets and expenditures²

Increasing cost, budget and available funding per patient from 2007



g. Global Plan compared with country reports³

Country implementation of TB control activities 2006-2007 focused on DOTS only; country plan for 2008-2009 incorporates other elements of Stop TB Strategy; biggest difference with Global Plan is in estimated funding requirements for TB/HIV



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

Component	2009 BUDGET	GAP
DOTS expansion and enhancement	7.0	3.0
TB/HIV, MDR-TB and other challenges	4.3	2.7
Health system strengthening	0.3	0.2
Engage all care providers	0.6	0.6
People with TB, and communities	3.5	1.6
Research and surveys	1.6	1.1
Other	0.3	0.1

SOURCES, METHODS AND ABBREVIATIONS

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

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