

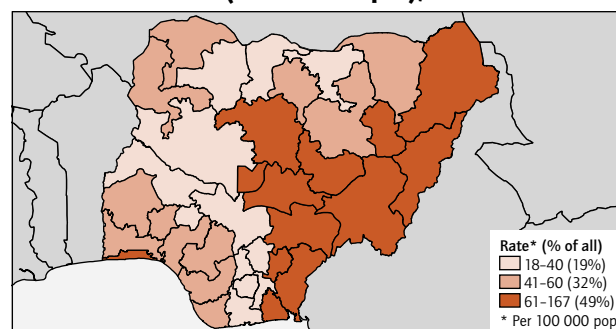
# Nigeria

The Stop TB Strategy is being implemented in all 774 local government areas following increased funding from diverse sources including the Global Fund. At least two health facilities in each area have fully functional DOTS services. The case detection rate has been increasing steadily but remains relatively low. However, although the outcome of treatment was not evaluated for a high proportion of patients, the treatment success rate was 76%. Collaborative TB/HIV activities are being scaled up, and 32% of TB cases are screened for HIV at major health facilities. As part of the programmatic management of MDR-TB, two national and six zonal laboratories are being set up. PPM and community-based TB care activities are being expanded. Major challenges include human resource constraints, coordinating multiple partners, setting up a commodity management system and closing remaining funding gaps.

## SURVEILLANCE AND EPIDEMIOLOGY

<b>Population</b> (thousands) <sup>a</sup>	148 093	
<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)	460	123
All forms of TB (new cases per 100 000 pop/year)	311	83
Rate of change in incidence rate (%), 2006-2007	<b>-2.6</b>	<b>-2.7</b>
New ss+ cases (thousands of new cases per year)	195	43
New ss+ cases (per 100 000 pop/year)	131	29
HIV+ incident TB cases (% of all TB cases)	27	—
<b>Prevalence</b>		
All forms of TB (thousands of cases)	772	62
All forms of TB (cases per 100 000 pop)	<b>521</b>	42
2015 target for prevalence (cases per 100 000 pop)	<b>141</b>	—
<b>Mortality</b>		
All forms of TB (thousands of deaths per year)	138	59
All forms of TB (deaths per 100 000 pop/year)	<b>93</b>	40
2015 target for mortality (deaths per 100 000 pop/year)	<b>18</b>	—
<b>Multidrug-resistant TB (MDR-TB)</b>		
MDR-TB among all new TB cases (%)	1.8	—
MDR-TB among previously treated TB cases (%)	9.4	—

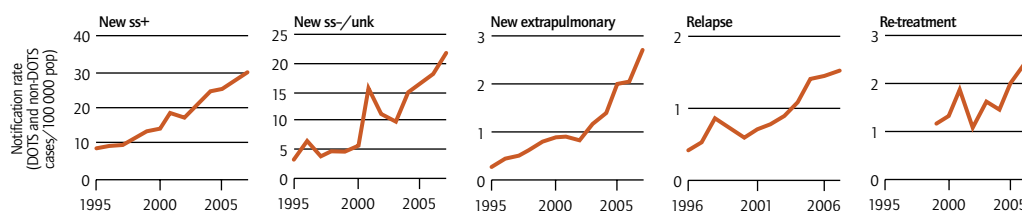
## TB notification rate (new and relapse), 2007



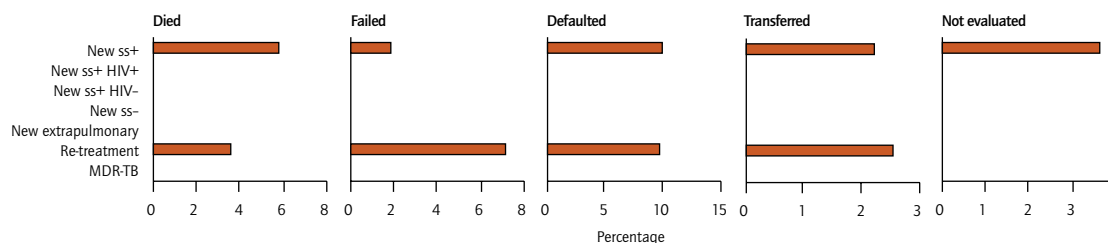
## Total notifications, 2007

Notified new and relapse cases (thousands)	82
Notified new and relapse cases (per 100 000 pop/year)	56
Notified new ss+ cases (thousands)	44
Notified new ss+ cases (per 100 000 pop/year)	30
as % of new pulmonary cases	58
sex ratio (male/female)	1.4
DOTS case detection rate (% of estimated new ss+)	<b>23</b>
Notified new extrapulmonary cases (thousands)	4.0
as % of notified new cases	5.0
Notified new ss+ cases in children (<15 years) (thousands)	1.2
as % of notified new ss+ cases	2.7

## Case notifications



## Unfavourable treatment outcomes, 2006 cohorts



	2000	2001	2002	2003	2004	2005	2006	2007
DOTS coverage (%)	47	55	55	60	65	65	75	91
Notification rate (new & relapse cases/100 000 pop)	21	36	29	33	41	44	49	56
% notified new & relapse cases reported under DOTS	100	66	78	100	100	100	100	100
Notification rate (new ss+ cases/100 000 pop)	14	18	17	21	24	25	28	30
% notified new ss+ cases reported under DOTS	100	81	89	100	100	100	100	100
Case detection rate (all new cases, %)	7.4	12	9.1	9.7	12	13	15	17
Case detection rate (new ss+ cases, %)	12	15	13	15	17	18	20	23
Treatment success (new ss+ patients, %)	79	79	79	78	73	75	76	—
Re-treatment success (ss+ patients, %)	71	71	73	—	73	66	77	—

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	General hospital
Number of units (DOTS/total), 2007	701/774
<b>Location of NTP services</b>	
Rural	Primary health centre
Urban	General hospital
NTP services part of general primary health-care network?	Yes
<b>Location where TB diagnosed</b>	
Rural	Primary and general hospital
Urban	General hospital
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)/6(HE)
Treatment free of charge	All patients in all units
External review missions	last: 2008 next: 2009

**Political commitment**

National strategic plan?	Yes (2006–2010)
Mechanism for national interagency coordination?	Yes (established 2002)
National Stop TB Partnership?	No (planned 2008)

**Financial indicators, 2009**

(see final page for detailed presentation)	%
Government contribution to NTP budget (incl loans)	16
Government contribution to total cost TB control (incl loans)	33
Government health spending used for TB control	4.6
NTP budget funded	57

**Per capita health financial indicators, 2009**

	US\$
NTP budget per capita	0.3
Total costs for TB control per capita	0.4
Funding gap per capita	0.1
Government health expenditure per capita (2005)	8.4
Total health expenditure per capita (2005)	27

**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	794	0.5	347	93%	2	0.1	1	0.1	–	–
2008	1 138	0.8	1 138	–	9	0.3	9	0.6	9.0	–

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

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

NTP publishes annual report?	Yes (since 2000)	Burden and impact assessment	
		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	No – –
		Drug resistance survey	– – –
		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	6 971	6 957	6 934
Diagnosed and notified	– (–%)	– (–%)	45 (0.65%)
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	27 849
as % of all notified TB patients	32
TB patients with positive HIV test	6 275
as % of all estimated HIV+ TB cases	5.1
HIV+ TB patients started or continued on CPT	1 953
as % of HIV+ TB patients notified	31
HIV+ TB patients started or continued on ART	—
as % of HIV+ TB patients notified	—

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

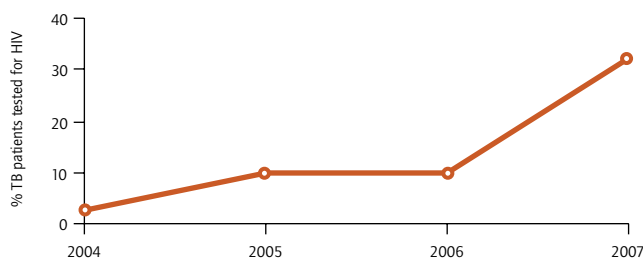
HIV+ patients in HIV care or ART register	233 495
Screened for TB	86 897
as % of HIV+ patients in HIV care or ART register	37
Started on TB treatment	15 418
as % of HIV+ patients in HIV care or ART register	6.6
Started on IPT	76
as % of HIV+ patients without TB in HIV care or ART register	0.03

**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 screened for HIV tripled between 2006 and 2007



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

No data were reported on ART; data on the provision of CPT were reported for the first time



**CONTRIBUTING TO HEALTH SYSTEM STRENGTHENING**

The public health-care system, into which TB control is fully integrated, is constrained by a lack of human resources and difficulties in providing outreach services - particularly in rural areas. A wide range of hospitals and other tertiary institutions that are not yet linked to the NTP are available in urban areas; an unregulated private health sector is a problem throughout the country. Initiatives are ongoing to engage these various providers.

**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
---	---	--	---

**ENGAGING ALL CARE PROVIDERS**

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

	Number collaborating with the NTP <sup>a</sup>		% total notified TB	
	(total number of providers)	Diagnosed	Treated	
Public sector	— (—)	—	—	—
Private sector	410 (—)	4.6	4.6	

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

ISTC endorsed by professional organizations?	Yes
By which organizations:	
Nigeria Medical Association	
ISTC included in medical curriculum?	No

**EMPOWERING PEOPLE WITH TB, AND COMMUNITIES**

**Advocacy, communication and social mobilization (ACSM)**

A KAP survey was conducted in 2008 to refine the ACSM component of the National TB Control Strategy 2006–2010. An ACSM consultant participated in the 2008 national programme review to assess progress towards ACSM targets and drafted recommendations for future ACSM activities.

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

Community-based services are currently implemented in six pilot states in the country, based on national guidelines which are fully in accordance with global policy. Careful attention is given to ensuring high-quality care and raising awareness about TB. Wide expansion of community-based services is planned by the end of 2009.

**ENABLING AND PROMOTING RESEARCH**

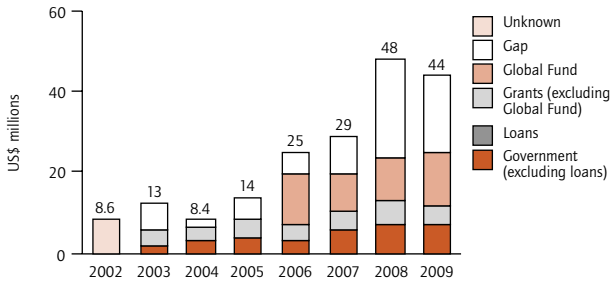
**Programme-based operational research, 2007**

Operational research budget (% of NTP budget)	1.7%
---	------

FINANCING

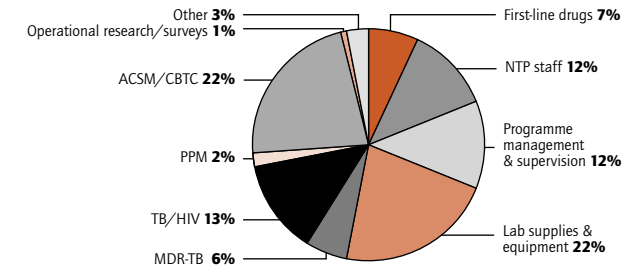
a. NTP budget by source of funding

Increased NTP budget after re-assessment of funding needs; funding has also grown but large funding gaps remain



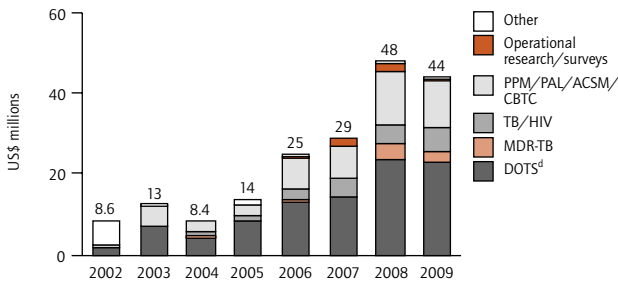
b. NTP budget line items in 2009

Laboratory budget includes introduction of molecular tests at national level; share of budget for ACSM (including community TB care) is large compared with most HBCs



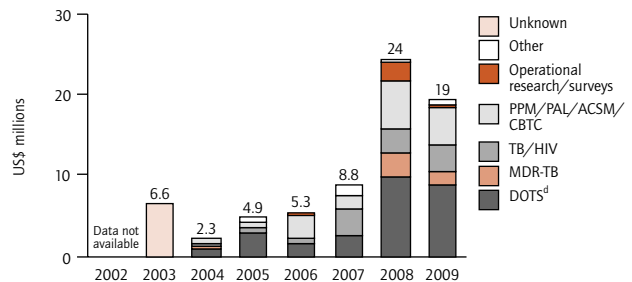
c. NTP budget by line item

Increasing budget for DOTS and ACSM, and to a lesser extent for MDR-TB, with plan to treat 50 MDR-TB patients if approved by GLC



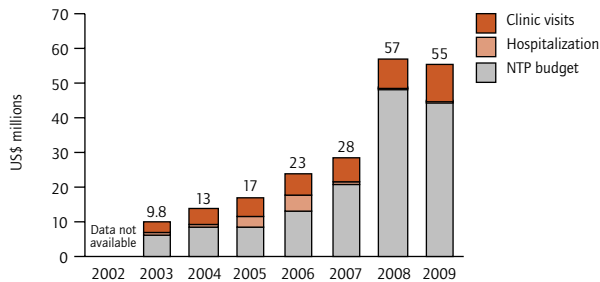
d. NTP funding gap by line item

Funding gap within DOTS mainly for laboratory supplies and equipment



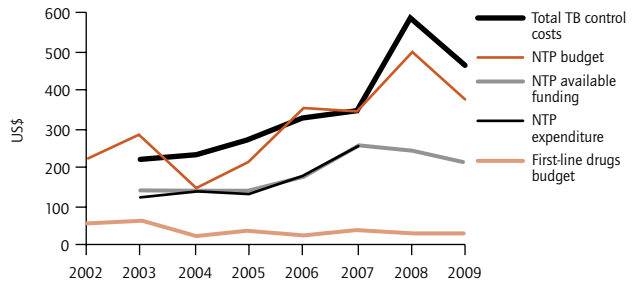
e. Total TB control costs by line item<sup>1</sup>

Hospitalization costs based on estimate that 20–30% of new TB patients were hospitalized for average of 56 days 2005–2006, and 7% of new TB patients hospitalized for 14 days in 2007–2009



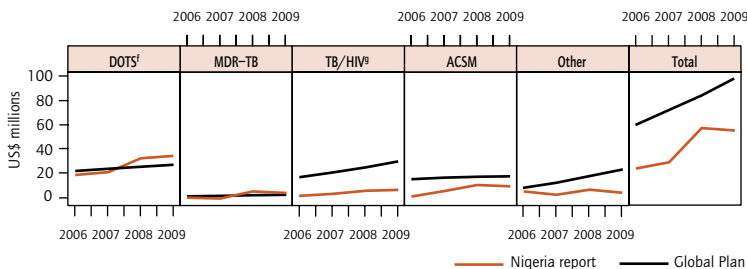
f. Per patient costs, budgets and expenditures<sup>2</sup>

Expenditures have increased in line with available funding, showing good absorption capacity (2003–2007)



g. Global Plan compared with country reports<sup>3</sup>

Country implementation of TB control activities (2006–2007) in line with the Global Plan for DOTS only; country plan (2008–2009) falls short of Global Plan for community TB care and TB/HIV



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

Component	2009 BUDGET	GAP
DOTS expansion and enhancement	23	8.7
TB/HIV, MDR-TB and other challenges	8.7	5.2
Health system strengthening	0.7	0.3
Engage all care providers	1.0	0.5
People with TB, and communities	9.9	3.8
Research and surveys	0.4	0.3
Other	0.7	0.5

SOURCES, METHODS AND ABBREVIATIONS

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

<sup>1</sup> Total TB control costs for 2003–2007 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.

<sup>2</sup> NTP available funding for 2004–2007 is based on the amount of funding actually received, using retrospective data; available funding for 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.