Nigeria

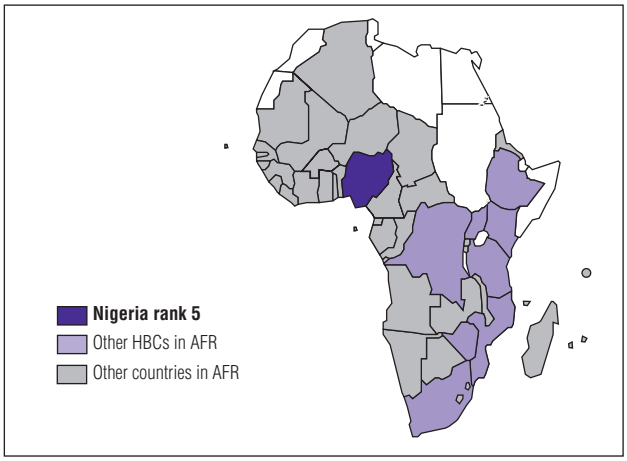
As DOTS has become available to an increasing proportion of the population, the case notification rate in Nigeria has increased. However, the case detection rate, even within DOTS areas, is still well below target. A planned prevalence survey, combined with increasingly well managed routinely collected surveillance data, will help determine more precisely how many people with TB go untreated in Nigeria. Treatment outcomes in Nigeria are typical of countries in Africa: many patients die while on treatment or are reported as having defaulted (the latter may include patients who have actually died). The planned expansion of activities targeted at HIV-positive TB patients is likely to lead to improved treatment outcomes, if the necessary funds can be raised. Large funding gaps exist, and there have been delays in the release of funding.

SURVEILLANCE AND EPIDEMIOLOGY, 2006

Population (thousands)[a]	144 720
Estimates of epidemiological burden[1]	
Incidence (all cases/100 000 pop/yr)	311
Trend in incidence rate (%/yr, 2005–2006)[2]	**-1.3**
Incidence (ss+/100 000 pop/yr)	137
Prevalence (all cases/100 000 pop)[2]	**616**
Mortality (deaths/100 000 pop/yr)[2]	**81**
Of new TB cases, % HIV+[b]	*9.6*
Of new TB cases, % MDR-TB[c]	*1.9*
Of previously treated TB cases, % MDR-TB[c]	*9.3*
Surveillance and DOTS implementation	
Notification rate (new and relapse/100 000 pop/yr)	49
Notification rate (new ss+/100 000 pop/yr)	28
DOTS case detection rate (new ss+, %)	**20**
DOTS treatment success (new ss+, 2005 cohort, %)	**75**
Of new pulmonary cases notified under DOTS, % ss+	61
Of new cases notified under DOTS, % extrapulmonary	4
Of new ss+ cases notified under DOTS, % in women	40
Of sub-national reports expected, % received at next reporting level[d]	100
Laboratory services[3]	
Number of laboratories performing smear microscopy	694
Number of laboratories performing culture	0
Number of laboratories performing DST	0
Of laboratories performing smear microscopy, % covered by EQA	60
Management of MDR-TB	
Of new cases notified, % receiving DST at start of treatment	–
Of new cases receiving DST at start of treatment, % MDR-TB	–
Of re-treatment cases notified, % receiving DST	–
Of re-treatment cases receiving DST, % MDR-TB	–
Collaborative TB/HIV activities	
National policy of counselling and testing TB patients for HIV?	Yes (to all patients)
National surveillance system for HIV-infection in TB patients?	Yes
Of TB patients (new and re-treatment) notified, % tested for HIV	10
Of TB patients tested for HIV, % HIV+	21
Of HIV+ TB patients detected, % receiving CPT	–
Of HIV+ TB patients detected, % receiving ART	–

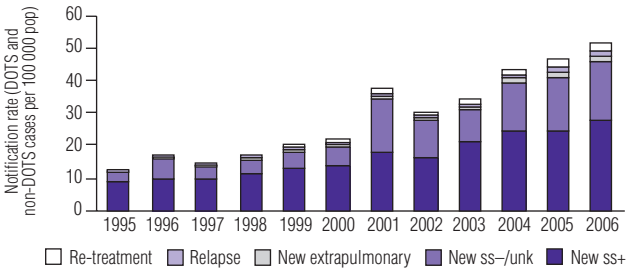
WHO Africa Region (AFR)

Rank based on estimated number of incident cases (all forms) in 2006



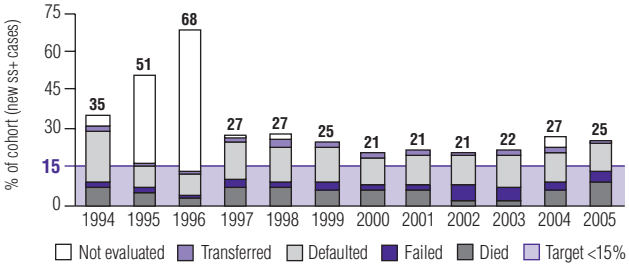
Case notifications

Notifications continue to increase alongside expanding DOTS coverage



Unfavourable treatment outcomes, DOTS

Treatment success rate remains below the target; increase in reported deaths may be result of improved reporting; default rate continues to be high



DOTS expansion and enhancement	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
DOTS coverage (%)	47	30	40	45	45	47	55	55	60	65	65	75
DOTS notification rate (new and relapse/100 000 pop)	12	13	14	17	20	21	23	23	33	41	44	49
DOTS notification rate (new ss+/100 000 pop)	8.7	9.5	9.8	11	13	14	15	15	21	24	25	28
DOTS case detection rate (all new cases, %)	6.5	8.3	6.5	7.1	7.5	7.5	7.8	7.1	10	13	14	15
DOTS case detection rate (new ss+, %)	11	11	10	11	12	12	12	11	15	17	18	20
Case detection rate within DOTS areas (new ss+, %)[e]	22	36	26	24	27	25	21	20	25	27	27	27
DOTS treatment success (new ss+, %)	49	32	73	73	75	79	79	79	78	73	75	–
DOTS re-treatment success (ss+, %)	–	71	–	–	74	71	71	73	–	73	–	–

IMPLEMENTING THE STOP TB STRATEGY[1]

DOTS EXPANSION AND ENHANCEMENT

Political commitment, standardized treatment, and monitoring and evaluation system

Achievements

- Adopted DOTS in 102 additional local government areas (LGAs) in 17 states (2 health facilities per LGA), bringing the total number of DOTS LGAs to 701
- Provided 50 additional motorcycles to states to strengthen supervision and defaulter tracing at LGA level

Planned activities

- Expand DOTS to cover all 774 LGAs (100%) and TB/HIV activities to 50 additional LGAs within the country in 2008

Quality-assured bacteriology

Achievements

- Expanded AFB diagnostic services to 102 additional LGAs
- Identified 2 national and 6 zonal reference laboratories

Planned activities

- Equip 2 NRL and 6 zonal reference laboratories
- NRL to supervise activities of zonal reference laboratories, which in turn will provide EQA of peripheral laboratories
- Supranational laboratory in South Africa to provide EQA for DST in NRL

Drug supply and management system

Achievements

- Computerized central medical store at Oshodi and developed quarterly maintenance system
- Identified 6 zonal drug stores
- Deployed 2 pharmacists and a logistician to NTP from federal MoH

Planned activities

- Equip 6 zonal drug stores

TB/HIV, MDR-TB AND OTHER CHALLENGES

Collaborative TB/HIV activities

Achievements

- Set up functional TB/HIV working groups at national level and in 6 states (Adamawa, Benue, Ebonyi, Rivers, Sokoto and Ogun)
- Trained 72 general health workers (GHWs) from 36 DOTS centres on HIV counselling, 36 microscopy staff on HIV testing and 108 staff (from 6 ART centres, 36 DOTS centres and 6 community support groups) on the implementation of collaborative TB/HIV activities
- Produced national strategic framework for implementation of collaborative TB/HIV activities
- Commenced HIV counselling and testing for TB suspects and patients
- Trained 44 LGA health educators in TB and collaborative TB/HIV activities
- Trained 25 GHWs from ART facilities to diagnose and treat TB in line with NTP guidelines
- Trained 120 GHWs from 30 additional DOTS centres in 6 states to implement collaborative TB/HIV activities

Planned activities

- Expand collaborative TB/HIV activities to 6 additional states and ensure continuous functioning of collaborative activities at national level and in 6 states already implementing them
- Train DOTS providers from additional 36 DOTS centres as HIV counsellors
- Begin offering IPT in selected health facilities

Diagnosis and treatment of multidrug-resistant TB

Achievements

- Established national MDR-TB committee to support MoH in coordinating MDR-TB activities in Nigeria, planning for DRS, finalizing and distributing guidelines for management of MDR-TB, and establishing national and zonal reference laboratories
- Developed draft national guidelines for management of MDR-TB
- Identified 2 national and 6 zonal reference laboratories

Planned activities

- Finalize and distribute national guidelines for management of MDR-TB

High-risk groups and special situations

Achievements

- Introduced DOTS in 26 military and 7 prisons hospitals; trained 116 health-care staff in these hospitals
- Established DOTS centre within refugee camp in Oru, Ogun State

Planned activities

- Train 90 GHWs from prisons service and armed forces to provide DOTS services

[1] Unless otherwise specified, achievements are for financial year 2006; planned activities are for financial year 2007.

HEALTH SYSTEM STRENGTHENING, INCLUDING HUMAN RESOURCE DEVELOPMENT

Achievements

- Reviewed curricula of nursing schools, health technology schools and medical colleges to include current TB control strategies
- Planning for TB control involved sector-wide and inter-sectoral collaboration

Planned activities

- Renovate and computerize central medical store
- Equip 38 computers with accessories to strengthen monitoring and evaluation and health information management system at state level

ENGAGING ALL CARE PROVIDERS

Achievements

- Implemented formal PPM activities in 54 of 774 LGAs
- Completed situation analyses and advocacy visits on PPM in 6 states
- Developed national guidelines on PPM activities
- Trained private-for-profit providers in 6 states
- Trained 578 GHWs from 202 private health-care facilities, including mission hospitals, in diagnosis and treatment of TB in line with NTP guidelines

Planned activities

- Expand PPM activities to 15 private health-care facilities per state in 12 states
- Train staff from private for-profit health providers on DOTS implementation
- Promote use of ISTC among private-for-profit health-care providers in TB control
- Set up national PPM steering committee

EMPOWERING PEOPLE WITH TB, AND COMMUNITIES

Advocacy, communication and social mobilization

Achievements

- Implemented ACSM strategy at state and national levels
- Aired jingles on TB control on radio and television at national and state levels
- Developed advocacy kits on TB/HIV
- Organized advocacy visits to policy-makers at state and national levels
- Celebrated World TB Day
- Established functional advocacy committees at state and LGA levels
- Engaged 50 civil society organizations in social mobilization
- Trained 25 journalists on TB/HIV reporting
- Provided sensitization and orientation training on TB and TB/HIV for 2403 community and religious leaders and 2113 youth leaders

Planned activities

- Broadcast TB and TB/HIV messages and documentaries on TV and radio
- Organize community mobilization activities at LGA level

Community participation in TB care

Achievements

- Carried out situation analysis and advocacy visits on community participation in TB care in 6 states (Adamawa, Benue, Delta, Ebonyi, Kebbi and Ogun)
- Identified 24 communities in 12 LGAs for implementation of community-based TB care
- Trained members of 6 HIV community support groups from 6 states (Adamawa, Benue, Ebonyi, Ogun, Rivers and Sokoto) in referral and treatment support for HIV-positive TB patients
- Developed national guidelines for community participation in TB care
- Held national consensus meetings on community involvement in TB care

Planned activities

- Involve treatment supporters and community volunteers in 15 states in providing treatment support, identification of suspects, community education and social mobilization
- Develop national training curriculum for community volunteers and treatment supporters

Patients' Charter

Achievements

The Patients' Charter was published in 2006 and was therefore not available for use in countries until then.

Planned activities

- Adopt Patients' Charter, with input from all stakeholders

RESEARCH, INCLUDING SPECIAL SURVEYS AND IMPACT MEASUREMENT

Achievements

- Drafted protocol for national prevalence of disease survey
- Drafted protocol for survey of prevalence of HIV among TB patients for use during 2008 national survey among ANC attendees and high-risk groups

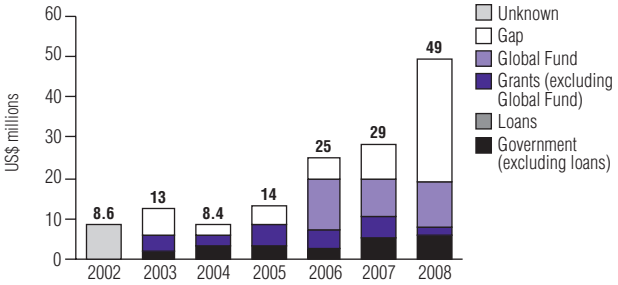
Planned activities

- Conduct national DRS
- Carry out national infection survey and prevalence of disease survey
- Conduct operational research in 5 states on programme-related issues, including health-seeking behaviour of people with TB

FINANCING THE STOP TB STRATEGY

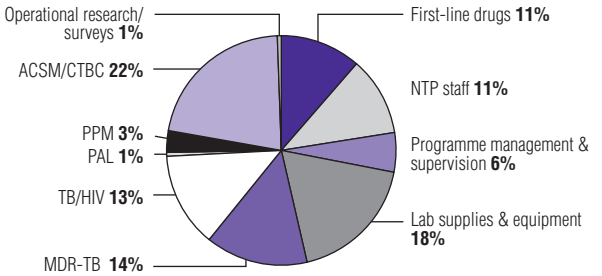
NTP budget by source of funding

Substantial increase in budget requirement for 2008 compared with previous years, with large funding gap



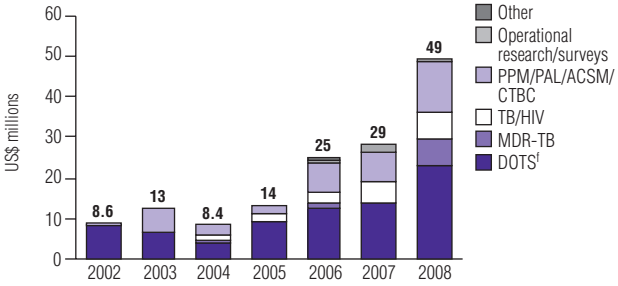
NTP budget by line item, 2008

The largest components of the budget are DOTS (46%) and ACSM/CTBC (22%)



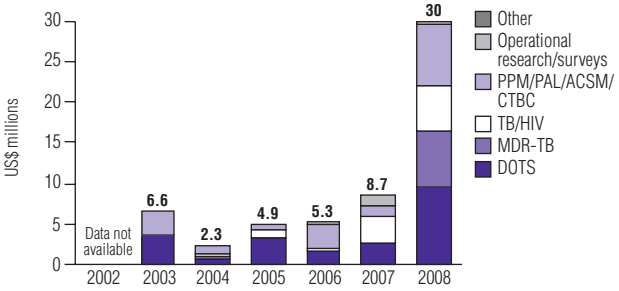
NTP budget by line item

Increased budget for DOTS mainly for laboratory supplies and equipment, reflecting planned DOTS expansion; large investments for TB/HIV and ACSM from 2006 onwards, and for MDR-TB in 2008



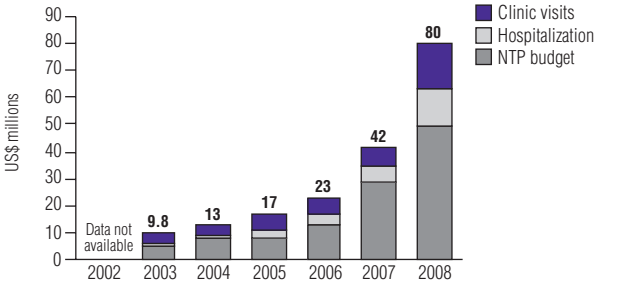
NTP funding gap by line item

Big increase in funding gap for 2008 compared with previous years; funding gap within DOTS component mainly for laboratory supplies and equipment



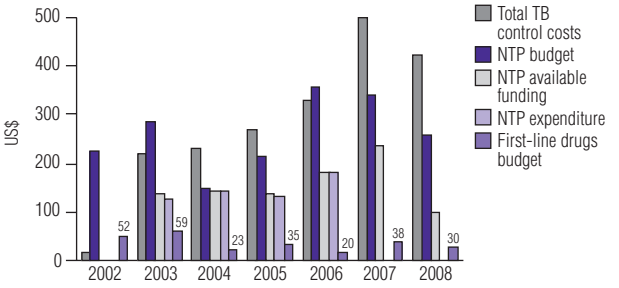
Total TB control costs by line item[4]

Hospitalization costs assume 20% of new ss+ patients and 30% of new ss–/ extrapulmonary patients are hospitalized for an average of 56 days (2005–2008); larger costs in 2008 due to large increase in expected number of patients to be treated



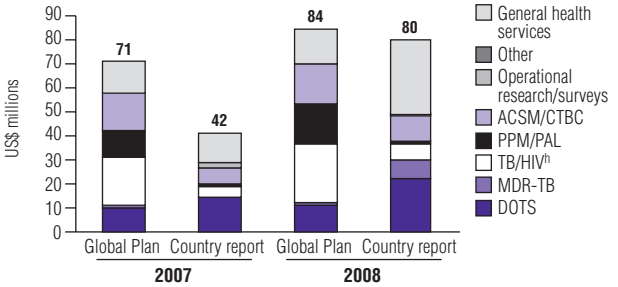
Per patient costs, budgets and expenditures[5]

Increased expenditures per patient; available funding similar to expenditures reflecting good absorption capacity



Comparison of country report and Global Plan:[g] total TB control costs, 2007–2008

Budget for DOTS component higher in country plan compared with Global Plan, because of higher expected number of patients to be treated; targets for MDR-TB patients to be treated in Global MDR/XDR Response Plan much higher than scaling up planned by NTP



NTP budget and funding gap by Stop TB Strategy component

	2007		2008	
(US$ millions)	BUDGET	GAP	BUDGET	GAP
DOTS expansion and enhancement	14	2.6	23	9.5
TB/HIV, MDR-TB and other challenges	4.6	3.2	13.6	12.4
Health system strengthening	0.2	0.2	0.3	0.3
Engage all care providers	1.6	0.9	1.4	0.7
People with TB, and communities	6.0	0.5	11	6.5
Research	2.0	1.3	0.3	0.3
Other	0	0	0	0

Financial indicators for TB

Government contribution to NTP budget (including loans)	20%	12%
Government contribution to total cost of TB control (including loans)	45%	46%
NTP budget funded	69%	39%
Per capita health financial indicators (US$)		
NTP budget per capita	0.2	0.4
Total costs for TB control per capita	0.3	0.6
Funding gap per capita	0.1	0.2
Government health expenditure per capita (2004)	7.0	
Total health expenditure per capita (2004)	23	

SOURCES, METHODS AND ABBREVIATIONS

[a–h] Please see footnotes page 169.

1 Incidence, prevalence and mortality estimates include patients infected with HIV. Incidence estimate originally based on assumption of 10% ss+ case detection rate in 1997 (DOTS and non-DOTS). Trend in incidence estimated from 3-year moving average of notifications from those countries in region judged to be detecting an unchanging proportion of cases.

2 MDG and STB Partnership indicators shown in bold. Targets are 70% case detection of smear-positive cases under DOTS, 85% treatment success, to ensure that the incidence rate is falling by 2015, and to reduce incidence rates and halve 1990 prevalence and mortality rates by 2015. Estimates for 1990 are prevalence 279/100 000 pop and mortality 32/100 000 pop/yr.

3 For routine diagnosis, there should be at least one laboratory providing smear microscopy per 100 000 population. To provide culture for diagnosis of paediatric, extrapulmonary and ss-/HIV+ TB, as well as DST for re-treatment and failure cases, there should be at least one culture facility and one DST facility in each of the 37 states.

4 Total TB control costs for 2003–2006 are based on expenditure, whereas those for 2007–2008 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.

5 NTP available funding for 2004–2006 is based on the amount of funding actually received, using retrospective data; available funding for 2003 and 2007–2008 is based on prospectively reported budget data, and estimated as the total budget minus any reported funding gap.

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