

## COUNTRY PROFILE

# Afghanistan

Despite political instability and limited resources, the NTP of Afghanistan has managed to provide high-quality TB treatment to greater numbers of patients each year for the past decade. Funding has increased, but significant gaps remain. Case detection within DOTS areas was nearly 70% in 2006; full DOTS coverage coupled with the planned collaboration with private providers and expansion of recently introduced community-based TB care should improve the overall rate of case detection.

### SURVEILLANCE AND EPIDEMIOLOGY, 2006

**Population** (thousands)<sup>a</sup> 26 088

#### Estimates of epidemiological burden<sup>1</sup>

Incidence (all cases/100 000 pop/yr)	161
Trend in incidence rate (%/yr, 2005–2006) <sup>2</sup>	-4.2
Incidence (ss+/100 000 pop/yr)	73
Prevalence (all cases/100 000 pop) <sup>2</sup>	231
Mortality (deaths/100 000 pop/yr) <sup>2</sup>	32
Of new TB cases, % HIV <sup>b</sup>	0.0
Of new TB cases, % MDR-TB <sup>c</sup>	3.4
Of previously treated TB cases, % MDR-TB <sup>c</sup>	37

#### Surveillance and DOTS implementation

Notification rate (new and relapse/100 000 pop/yr)	98
Notification rate (new ss+/100 000 pop/yr)	48
DOTS case detection rate (new ss+, %)	66
DOTS treatment success (new ss+, 2005 cohort, %)	90
Of new pulmonary cases notified under DOTS, % ss+	65
Of new cases notified under DOTS, % extrapulmonary	21
Of new ss+ cases notified under DOTS, % in women	68
Of sub-national reports expected, % received at next reporting level <sup>d</sup>	95

#### Laboratory services<sup>3</sup>

Number of laboratories performing smear microscopy	500
Number of laboratories performing culture	1
Number of laboratories performing DST	1
Of laboratories performing smear microscopy, % covered by EQA	100

#### Management of MDR-TB

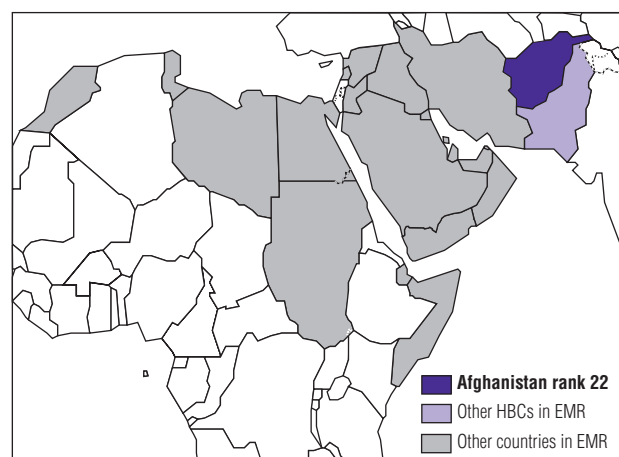
Of new cases notified, % receiving DST at start of treatment	—
Of new cases receiving DST at start of treatment, % MDR-TB	—
Of re-treatment cases notified, % receiving DST	—
Of re-treatment cases receiving DST, % MDR-TB	—

#### Collaborative TB/HIV activities

National policy of counselling and testing TB patients for HIV?	No policy
National surveillance system for HIV-infection in TB patients?	Yes
Of TB patients (new and re-treatment) notified, % tested for HIV	—
Of TB patients tested for HIV, % HIV+	—
Of HIV+ TB patients detected, % receiving CPT	—
Of HIV+ TB patients detected, % receiving ART	—

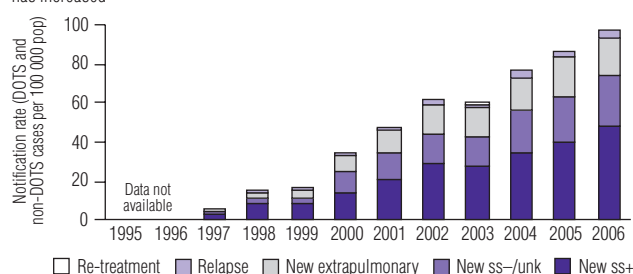
#### WHO Eastern Mediterranean Region (EMR)

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



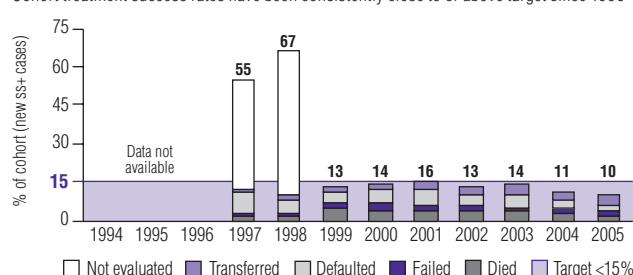
#### Case notifications

Steady increases in ss+ and ss- notifications over the last few years as DOTS coverage has increased



#### Unfavourable treatment outcomes, DOTS

Cohort treatment success rates have been consistently close to or above target since 1999



DOTS expansion and enhancement	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
DOTS coverage (%)	—	—	12	11	14	15	12	38	53	68	81	97
DOTS notification rate (new and relapse/100 000 pop)	—	—	6.6	16	16	34	47	62	60	76	87	98
DOTS notification rate (new ss+/100 000 pop)	—	—	3.2	9.2	8.3	14	22	29	28	34	40	48
DOTS case detection rate (all new cases, %)	—	—	2.8	6.7	7.3	16	23	30	31	42	50	58
DOTS case detection rate (new ss+, %)	—	—	3.1	9.3	8.6	15	24	33	34	44	52	66
Case detection rate within DOTS areas (new ss+, %) <sup>e</sup>	—	—	26	85	64	99	198	88	63	64	65	68
DOTS treatment success (new ss+, %)	—	—	45	33	87	86	84	87	86	89	90	—
DOTS re-treatment success (ss+, %)	—	—	—	78	84	78	—	—	—	—	89	—

**IMPLEMENTING THE STOP TB STRATEGY<sup>1</sup>****DOTS EXPANSION AND ENHANCEMENT****Political commitment, standardized treatment, and monitoring and evaluation system****Achievements**

- Increased number of DOTS centres providing TB diagnosis and treatment from 537 to 803
- Trained more than 2275 doctors, nurses and laboratory technicians on TB diagnosis and treatment following NTP policies
- Strengthened supervision by training health workers, increasing number of supervisory visits and supplying more vehicles for visits
- Produced 2nd annual report of NTP activities

**Planned activities**

- Strengthen managerial capacity at provincial and district levels
- Improve collaboration and coordination with the various partners involved in TB control

**Quality-assured bacteriology****Achievements**

- Commenced preparation for DRS in 2007
- Piloted EQA in Balkh and Kabul provinces, resulting in improved technical performance of sputum smear microscopy in these provinces
- Developed EQA guidelines for the whole country
- Developed laboratory recording and reporting system
- Provided initial training in microscopy to more than 400 laboratory technicians
- Recruited and trained 30 laboratory supervisors in EQA assessment at central, regional and provincial levels

**Planned activities**

- Establish NRL
- Implement EQA countrywide
- Establish effective laboratory supervision system
- Train 4 key NTP staff in culture and DST

**Drug supply and management system****Achievements**

- Signed agreement between NTP and GDF for procurement of anti-TB drugs (4.5 million dollars) for the next 3 years
- Trained 400 pharmacists in drug management and logistics

**Planned activities**

- Introduce routine checking of drug stocks in each province
- Train additional pharmacists on drug management/logistic system of NTP

**TB/HIV, MDR-TB AND OTHER CHALLENGES****Collaborative TB/HIV activities****Achievements**

- Appointed TB/HIV focal point
- Formed TB/HIV working group
- Established sentinel surveillance of HIV infection among TB patients
- Finalized TB/HIV policy, strategy and operational guidelines

**Planned activities**

- Pilot provision of HIV counselling and testing to TB patients in Pul-cherkhi Jail, among injecting drug users in Kabul and based at the National TB Institute (covering a population of 60 000 people)

**Diagnosis and treatment of multidrug-resistant TB****Achievements**

- No activities undertaken given absence of reference laboratory

**Planned activities**

- Ensure adequate supply of second-line drugs
- Establish information system on chronic TB cases
- Begin DST in NRL in 2008

**High-risk groups and special situations****Achievements**

- None reported

**Planned activities**

- Establish cross-border collaboration to ensure effective treatment and notification of TB in Afghani migrants

**HEALTH SYSTEM STRENGTHENING, INCLUDING HUMAN RESOURCE DEVELOPMENT****Achievements**

- Assessed burden of respiratory conditions in primary health-care settings

**Planned activities**

- Improve integration of TB control activities within ongoing process of primary health-care service development

<sup>1</sup> Unless otherwise specified, achievements are for financial year 2006; planned activities are for financial year 2007.

**ENGAGING ALL CARE PROVIDERS****Achievements**

- Recruited national PPM officer
- Conducted situation analysis for PPM
- Established national PPM taskforce committee
- Developed operational plan to begin PPM initiatives

**Planned activities**

- Develop PPM national guidelines
- Develop training modules for private practitioners and private pharmacies
- Launch PPM pilot in Kabul and Balkh provinces

**EMPOWERING PEOPLE WITH TB, AND COMMUNITIES****Advocacy, communication and social mobilization****Achievements**

- Conducted media campaign on TB control (TV and radio)
- Developed and disseminated IEC packages (posters, brochures, cups and leaflets)

**Planned activities**

- Develop guide for journalists explaining terminology used in TB control
- Organize advocacy events for World TB day

**Community participation in TB care****Achievements**

- Organized 35 community events in each quarter for awareness at central and regional levels
- Implemented IEC for patient empowerment and community involvement
- Trained 74 community health workers on community-based DOTS
- Held TB partnership workshop for BPHS implementers

**Planned activities**

- Organize community events for awareness at all levels
- Hold community events for World TB day
- Train trainers for community health workers

**Patients' Charter****Achievements**

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

**Planned activities**

- None reported

**RESEARCH, INCLUDING SPECIAL SURVEYS AND IMPACT MEASUREMENT****Achievements**

- Conducted study on magnitude and determinants of non-compliance with treatment among TB patients in Kabul
- Conducted study on role of private pharmacies in treatment of TB in the central region of Afghanistan

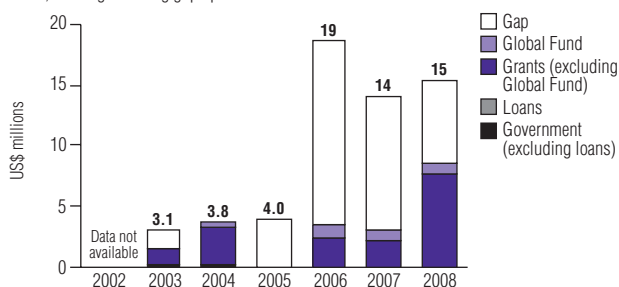
**Planned activities**

- Conduct study to identify all TB cases detected in the health system in Afghanistan
- Establish impact of active case-finding among household contacts of TB patients on case detection rate in Afghanistan
- Indirectly estimate TB burden by determining extent of under-reporting in the health system

**FINANCING THE STOP TB STRATEGY**

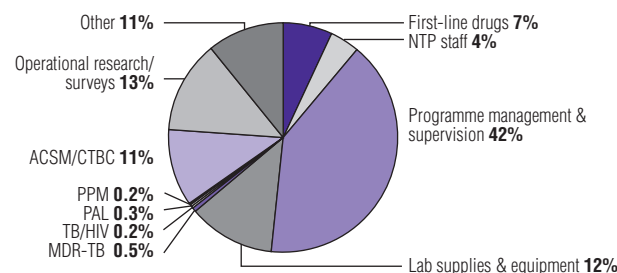
**NTP budget by source of funding**

Increased budget requirement in 2006–2008 reflects plan to strengthen TB control throughout the country; increased funding from donors other than the Global Fund in 2008, but large funding gaps persist



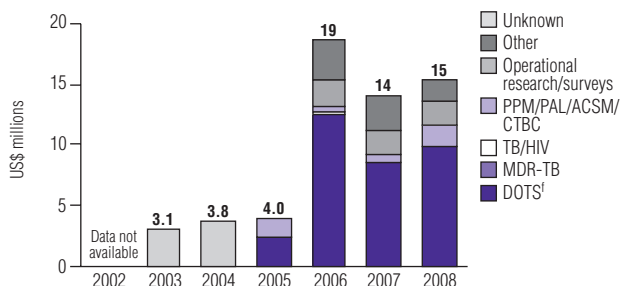
**NTP budget by line item, 2008**

Largest component of budget for DOTS (62%) and, unusually among HBCs, operational research/surveys (13%)



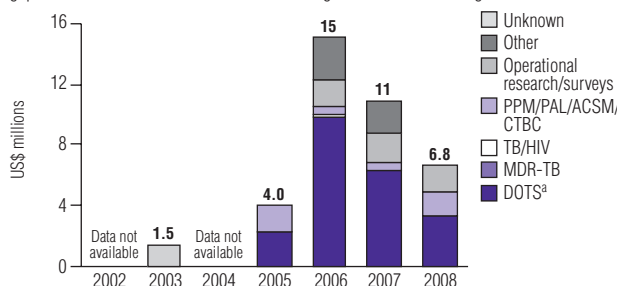
**NTP budget by line item**

Increased budget for community involvement in TB control as well as for laboratories, specifically for establishing a NRL in 2008



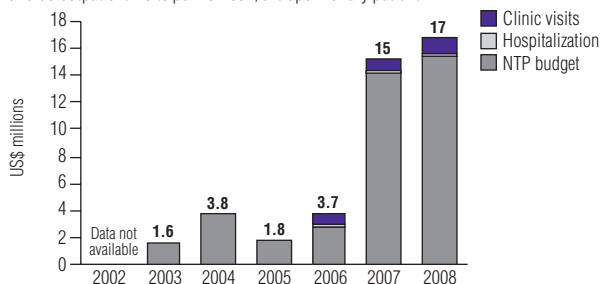
**NTP funding gap by line item**

Funding gaps within DOTS component mainly for laboratory supplies and equipment (2007) and routine programme management and supervision activities (2008). Funding gap has decreased since 2006 but remains large relative to total budget



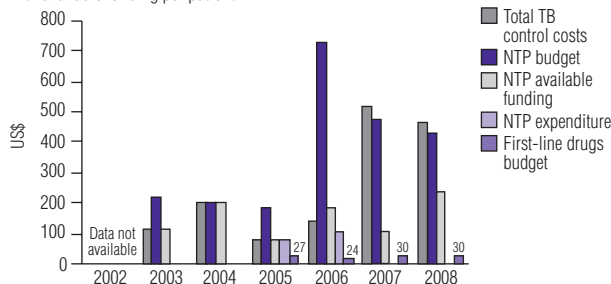
**Total TB control costs by line item<sup>4</sup>**

Costs for clinic visits based on 71 outpatient visits per new ss+ TB patient during treatment and 68 outpatient visits per new ss- /extrapulmonary patient



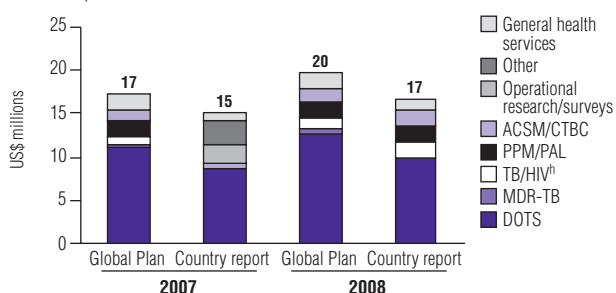
**Per patient costs, budgets and expenditures<sup>5</sup>**

Increased expenditure per patient in 2006; high costs and budget per patient compared with available funding per patient



**Comparison of country report and Global Plan:<sup>9</sup> total TB control costs, 2007–2008**

Country report similar to Global Plan; cost for DOTS higher in Global Plan due to higher forecast of patients to be treated



**NTP budget and funding gap by Stop TB Strategy component**

(US\$ millions)	2007		2008	
	BUDGET	GAP	BUDGET	GAP
DOTS expansion and enhancement	8.7	6.3	9.8	3.3
TB/HIV, MDR-TB and other challenges	0	0	0	0
Health system strengthening	0	0	0	0
Engage all care providers	0	0	0.01	0.1
People with TB, and communities	0.6	0.6	0.05	0.05
Research	0.02	0.02	0.03	1.9
Other	2.8	2.1	1.6	0

**Financial indicators for TB**

Government contribution to NTP budget (including loans)	0.9%	0.8%
Government contribution to total cost TB control (including loans)	7.9%	8.7%
NTP budget funded	22%	56%
<b>Per capita health financial indicators (US\$)</b>		
NTP budget per capita	0.4	0.5
Total costs for TB control per capita	0.5	0.5
Funding gap per capita	0.3	0.2
Government health expenditure per capita (2004)		2.3
Total health expenditure per capita (2004)		14

**SOURCES, METHODS AND ABBREVIATIONS**

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

- Incidence, prevalence and mortality estimates include patients infected with HIV. TB burden originally estimated for 1997, assuming an annual risk of TB infection of 3% based on 1982 national tuberculin survey and other available data, but incidence estimate revised in 2005 assuming ss+ case detection rate of approximately 50%.
- 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 614/100 000 pop and mortality 70/100 000 pop/yr.
- 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, most countries will need one culture facility per 5 million population and one DST facility per 10 million population.
- Total TB control costs for 2003–2004 are based on available funding, whereas those for 2005–2006 are based on expenditure, and 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.
- NTP available funding for 2005–2006 is based on the amount of funding actually received, using retrospective data; available funding for 2003–2004 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.