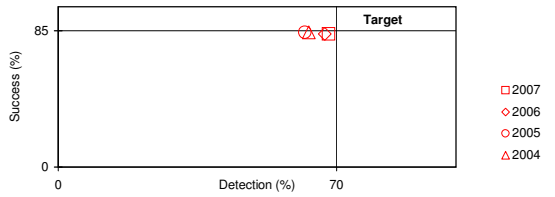
Iran

Surveillance and epidemiology

Population (thousands)[a] 71 208

Estimates of epidemiological burden, 2007[b]	All	In HIV+ people
Incidence		
All forms of TB (thousands of new cases per year)	15	0.5
All forms of TB (new cases per 100 000 pop/year)	22	0.7
Rate of change in incidence rate (%), 2006–2007	**-4.4**	**-0.6**
New ss+ cases (thousands of new cases per year)	6.9	0.2
New ss+ cases (per 100 000 pop/year)	9.7	0.2
HIV+ incident TB cases (% of all TB cases)	3.1	–
Prevalence		
All forms of TB (thousands of cases)	20	0.2
All forms of TB (cases per 100 000 pop)	**27**	0.3
2015 target for prevalence (cases per 100 000 pop)	**25**	–
Mortality		
All forms of TB (thousands of deaths per year)	1.8	0.1
All forms of TB (deaths per 100 000 pop/year)	**2.6**	0.2
2015 target for mortality (deaths per 100 000 pop/year)	**2.1**	–
Multidrug-resistant TB (MDR-TB)		
MDR-TB among all new TB cases (%)	5.0	–
MDR-TB among previously treated TB cases (%)	48	–

New ss+ case detection and treatment success

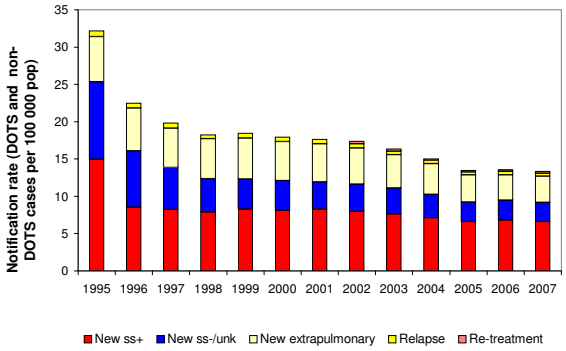


Note: case detection rate is for the year indicated. The associated treatment success rate is for one year prior.

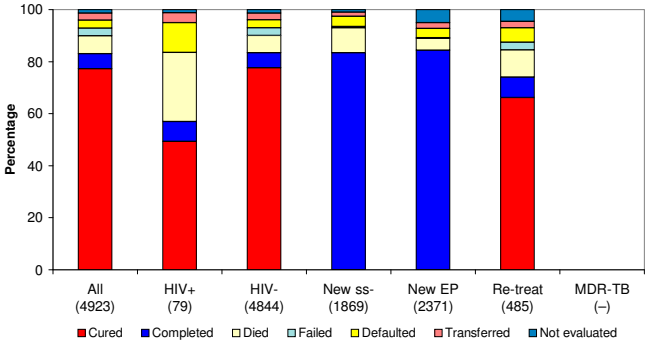
Total notifications, 2007

Notified new and relapse cases (thousands)	9.3
Notified new and relapse cases (per 100 000 pop/yr)	13
Notified new ss+ cases (thousands)	4.7
Notified new ss+ cases (per 100 000 pop/yr)	6.6
as % of new pulmonary cases	72
sex ratio (male/female)	1.0
DOTS case detection rate (% of estimated new ss+)	**68**
Notified new extrapulmonary cases (thousands)	2.5
as % of notified new cases	28
Notified new ss+ cases in children (<15yr) (thousands)	0.1
as % of notified new ss+ cases	1.1

Case notifications



Treatment outcomes, 2006 cohorts



Note: Numbers under the bars are the numbers of patients included in the cohort.

	2000	2001	2002	2003	2004	2005	2006	2007
DOTS coverage (%)	96	100	100	100	100	100	100	100
Notification rate (new & relapse cases/100 000 pop)	18	18	17	16	15	13	13	13
% notified new & relapse cases reported under DOTS	100	100	100	100	100	100	100	100
Notification rate (new ss+ cases/100 000 pop)	8.1	8.3	8.0	7.6	7.1	6.6	6.8	6.6
% notified new ss+ cases reported under DOTS	100	100	100	100	100	100	100	100
Case detection rate (all new cases, %)	56	57	57	57	57	54	57	59
Case detection rate (new ss+ cases, %)	59	61	61	62	63	62	67	68
Treatment success (new ss+ patients, %)	85	85	85	84	84	83	83	–
Re-treatment success (ss+ patients, %)	76	76	74	77	74	76	74	–

Note: notification, case detection and treatment success rates are for the whole country (i.e. DOTS and non-DOTS areas combined).

DOTS expansion and enhancement

Overview of services for diagnosis of TB and treatment of patients

Description of basic management unit –

Number of units (DOTS/total), 2007 355/ 355

Location of NTP services

Rural –

Urban –

NTP services part of general primary health-care network? Yes

Location where TB diagnosed

Rural –

Urban –

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 / 4(HR)

Treatment free of charge All patients in all units

External review missions last: –

next: –

Political commitment

National strategic plan? Yes (2008 – 2010)

Mechanism for national interagency coordination? Yes (established 2001)

National Stop TB Partnership? Yes (established 2004)

Financial indicators, 2009 (see final page for detailed presentation)

	%
Government contribution to NTP budget (incl loans)	–
Government contribution to total cost TB control (incl loans)	–
Government health spending used for TB control	–
NTP budget funded	–

Per capita health financial indicators, 2009

	US$
NTP budget per capita	–
Total costs for TB control per capita	–
Funding gap per capita	–
Government health expenditure per capita (2005)	–
Total health expenditure per capita (2005)	–

DOTS expansion and enhancement (continued)

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[a]		EQA	% adeq perf		Number	per 5 000 000[a]		Number	per 10 000 000[a]		EQA	% adeq perf	
2007	314	0.4	0	314	93	%	27	1.9	0	2	0.3	0	0	–	%
2008	314	0.4	0	314	–		27	1.9	0	2	0.3	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, 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. EQA column shows number of labs 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	No	No

Monitoring and evaluation system, and impact measurement

NTP publishes annual report? Yes (since 2004)

% of BMUs reporting to next level in 2007

Case-finding 100 % Treatment outcomes 100 %

Burden and impact assessment		last	next
In-depth analysis of routine surveillance data	Yes	2003	2012
Prevalence of disease survey	Yes, sub-national survey	1999	–
Prevalence of infection survey	No	–	–
Drug resistance survey	–	–	–
Mortality survey	No	–	–
Analysis of vital registration data	No	–	–

Development of human resources, 2007

Number of TB posts 0 Percentage of TB posts filled 0 %

Note: percentage calculation restricted to categories of posts for which both the total number of posts and the number of posts filled reported.

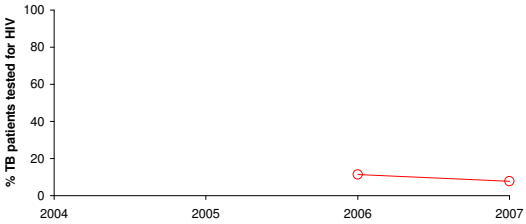
MDR-TB, TB/HIV and other challenges

	2005	2006	2007
Multidrug-resistant TB (MDR-TB)	number (% of estimated ss+ MDR-TB)		
Estimated incidence of ss+ MDR cases	761	738	715
Diagnosed and notified	27 (3.5)%	32 (4.3)%	43 (6.0)%
Registered for treatment	24 (3.2)%	32 (4.3)%	35 (4.9)%
GLC	–	–	–
non-GLC	24	32	35

Detection and treatment of HIV in TB patients, 2007

TB patients for whom the HIV test result was known	732
as % of all notified TB patients	7.7
TB patients with positive HIV test	171
as % of all estimated HIV+ TB cases	35
HIV+ TB patients started or continued on CPT	16
as % of HIV+ TB patients notified	9.4
HIV+ TB patients started or continued on ART	24
as % of HIV+ TB patients notified	14

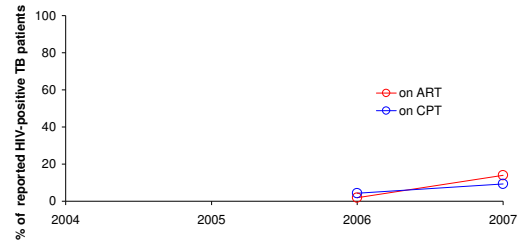
HIV testing for TB patients



Screening for TB in HIV-positive patients, 2007

HIV+ patients in HIV care or ART register	1 888
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	–

CPT and ART for HIV-positive TB patients



High-risk groups, 2007

Number of close contacts of ss+ TB patients screened	9 938
Number of TB cases identified among contacts	47
% of contacts with TB	0
Contacts started on IPT	–
% of contacts without TB on IPT	–

Contributing to health system strengthening

Practical Approach to Lung Health (PAL), 2007

Number and proportion of health facilities with PAL services

Number of health-care facilities providing PAL services 0 As % of total number of health-care facilities –

Engaging all care providers

Public-Public and Public-Private approaches (PPM), 2007

Number of Providers collaborating with the NTP[c]

	Number collaborating (total number of providers)		% total notified TB	
			Diagnosed	Treated
Public sector	500	(500)	46	46
Private sector	–	(–)	22	22

International Standards for Tuberculosis Care (ISTC)

ISTC endorsed by professional organizations? –

by which organizations:

0

ISTC included in medical curriculum? Yes

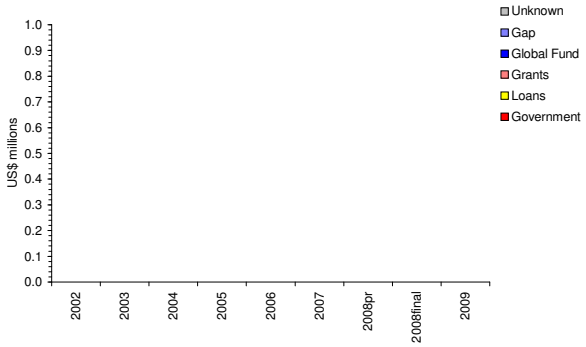
Enabling and promoting research

Programme-based operational research, 2007

Operational research budget (% of NTP budget) – %

Financing

NTP budget by source of funding

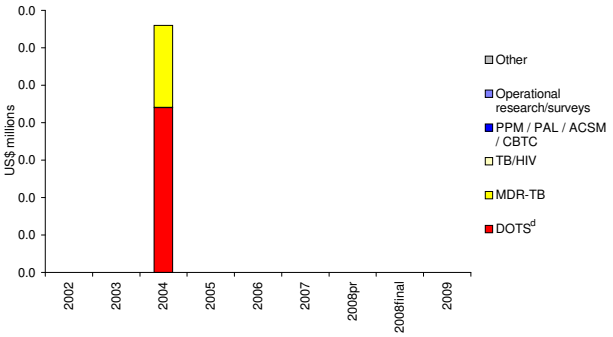


NTP budget line items in 2009

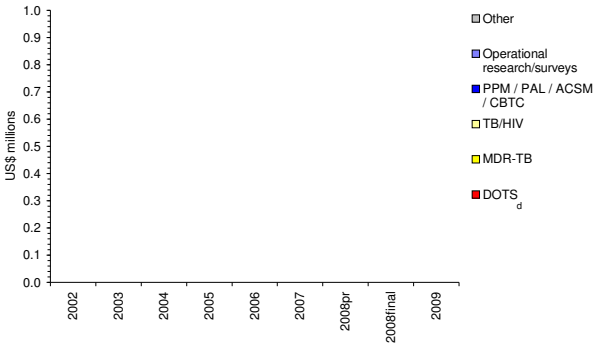
Data not reported

First-line drugs
NTP staff
Prog. management & supervision
Lab supplies & equipment
MDR-TB
TB/HIV
PPM/PAL
ACSM/CBTC
Operational research / surveys
Other

NTP budget by line item



NTP funding gap by line item



Footnotes

a World population prospects – the 2006 revision. New York, United Nations Population Division, 2007.

b For data sources and analytical methods, see annexes 2 and 3 of *Global tuberculosis control: epidemiology, strategy, financing: WHO report 2009.* Geneva, World Health Organization, 2009 (WHO/HTM/TB/2009.411). The report is also available on-line at www.who.int/tb/publications/global_report.

c For a definition of public and private sector and the categories of provider considered in each case, see Chapter 2 of the above-mentioned report and the 2008 WHO TB data collection form.

d DOTS includes the following components: first-line drugs, NTP staff, programme management and supervision, and laboratory supplies and equipment.