COUNTRY PROFILE

Thailand

Although the NTP has begun to introduce PPM activities and to address the specific challenges posed by border areas and urban areas, case detection and treatment success rates have not improved substantially over the past 5 years. Routine data collection and budgeting are still hampered by decentralization following the reform of national health services. Collaborative HIV/TB activities are in place and, for 2006, data were available for the first time; 42% of TB patients were tested for HIV, and 80% of HIV patients were screened for TB. Management of MDR-TB has begun in some settings but does not follow WHO guidelines, and data on the number of patients tested and treated are not available.

SURVEILLANCE AND EPIDEMIOLOGY, 2006

JUNVEILLANGE AND EPIDEMIULUUT, 2000	
Population (thousands) ^a	63 444
Estimates of epidemiological burden ¹	
Incidence (all cases/100 000 pop/yr)	142
Trend in incidence rate (%/yr, 2005–2006) ²	0.0
Incidence (ss+/100 000 pop/yr)	62
Prevalence (all cases/100 000 pop) ²	198
Mortality (deaths/100 000 pop/yr) ²	20
Of new TB cases, % HIV+b	11
Of new TB cases, % MDR-TB) ^c	1.7
Of previously treated TB cases, % MDR-TB ^c	35
Surveillance and DOTS implementation	
Notification rate (new and relapse/100 000 pop/yr)	89
Notification rate (new ss+/100 000 pop/yr)	46
DOTS case detection rate (new ss+, %)	73
DOTS treatment success (new ss+, 2005 cohort, %)	75
Of new pulmonary cases notified under DOTS, % ss+	62
Of new cases notified under DOTS, % extrapulmonary	14
Of new ss+ cases notified under DOTS, % in women	29
Of sub-national reports expected, % received at next reporting level	l ^d 96
Laboratory services ³	
Number of laboratories performing smear microscopy	937
Number of laboratories performing culture	65
Number of laboratories performing DST	18
Of laboratories performing smear microscopy, % covered by EQA	92
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	42
Of TB patients tested for HIV, % HIV+	26
Of HIV+ TB patients detected, % receiving CPT	65
Ut HIV+ IB patients detected, % receiving ART	32

WHO South-East Asia Region (SEAR)

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



Case notifications

Notification rates rose steeply from 1997 to 2001, but have stablilized since then



Unfavourable treatment outcomes, DOTS

Treatment success rate remains well below the target; significant increase in treatment failures in 2005 cohort



DOTS expansion and enhancement	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
DOTS coverage (%)	_	1.1	4.0	32	59	70	82	100	100	100	100	100
DOTS notification rate (new and relapse/100 000 pop)	_	0.4	6.0	27	49	56	81	80	88	88	92	89
DOTS notification rate (new ss+/100 000 pop)	_	0.2	3.2	13	25	29	46	42	46	45	47	46
DOTS case detection rate (all new cases, %)	-	0.3	4.0	18	33	38	55	55	60	60	63	60
DOTS case detection rate (new ss+, %)	-	0.3	5.1	22	40	47	74	67	73	73	76	73
Case detection rate within DOTS areas (new ss+, %)e	-	29	128	67	68	67	91	67	73	73	76	73
DOTS treatment success (new ss+, %)	-	78	62	68	77	69	75	74	73	74	75	-
DOTS re-treatment success (ss+, %)	_	57	55	55	68	_	49	62	62	56	58	_

IMPLEMENTING THE STOP TB STRATEGY ¹	
DOTS EXPANSION AND ENHANCEMENT	
Political commitment, standardized treatment, and monitoring	and evaluation system
Achievements Produced 5th annual report of NTP activities 	 Planned activities Revise national TB control manual Host 4th external review of NTP
Quality-assured bacteriology	
Achievements Revised national guidelines for sputum smear microscopy 	 Planned activities Establish culture and DST facilities in 5 additional laboratories Strengthen EQA programme Translate training packages into Thai language
Drug supply and management system	
 Provided first- and second-line anti-TB drugs free of charge to all Thai citizens in collaboration with NHSO 	 Planned activities Make anti-TB drugs available free of charge to non-Thai citizens
TB/HIV, MDR-TB AND OTHER CHALLENGES	
Collaborative TB/HIV activities Achievements Improved reporting on collaborative TB/HIV activities; data now available to central NTP Introduced provider-initiated HIV counselling and testing for TB patients Introduced intensified TB case-finding among people with HIV/AIDS Referred HIV-positive TB patients to NAP for ART and CPT	 Planned activities Revise guidelines for collaborative TB/HIV activities Improve recording and reporting system Strengthen TB/HIV coordinating body
 Diagnosis and treatment of multidrug-resistant TB Achievements Developed guidelines for management of MDR-TB and implemented them in selected health facilities Initiated DRS of new and re-treatment cases 	 Planned activities Revise MDR-TB guidelines and recording and reporting forms Field-test recording and reporting system in selected provinces Assess magnitude of XDR-TB among MDR-TB cases based on DRS data Conduct training in management of MDR-TB in large hospitals
 High-risk groups and special situations Achievements Included screening for TB in prisons and among other vulnerable groups in NTP plan Initiated special project for TB control in urban areas 	 Planned activities Develop referral system to allow follow up of TB patients after release from prison
HEALTH SYSTEM STRENGTHENING, INCLUDING HUMAN RESOURCE DEVI	ELOPMENT
 Achievements Involved Ministry of Justice, NAP and NGOs in process of planning for TB control Built capacity through pilot testing of electronic database management system in some provinces Set up indicators to monitor certified hospitals Advocated for inclusion of TB treatment success rate as one of the 	 Planned activities Introduce SMART electronic recording and reporting system, developed by National Health Security Office, in hospitals Implement human resource development plan for TB Strengthen laboratory facilities in a phased manner

indicators used by the office of health inspectors

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

THAILAND

ENGAGING ALL CARE PROVIDERS	
 Achievements Pilot tested implementation of PPM in 15 hospitals in Bangkok, including provision of first- and second-line anti-TB drugs Scaled up involvement of private hospitals in TB control Used ISTC to promote involvement of non-NTP providers in TB control 	 Planned activities Strengthen referral system between hospitals where PPM is being pilot tested and existing health centres Introduce ISTC to collaborating private hospitals Strengthen monitoring of PPM collaborators to ensure that guidelines are followed Engage doctors in private hospitals in TB control activities Launch recording and reporting systems in private hospitals
EMPOWERING PEOPLE WITH TB, AND COMMUNITIES	
Advocacy, communication and social mobilization Achievements • Organized campaign for World TB Day	 Planned activities Organize World TB Day campaign Engage various media to promote TB control
 Community participation in TB care Achievements Involved community members in suspect identification and referral in some areas, following training 	 Planned activities Develop model for community involvement in slum area of Bangkok Launch "Royal Project" on King's birthday, focusing on community participation in TB care Continue training community members in suspect identification and referral Encourage cured patients to act as treatment supervisors
Patients' Charter Achievements The Patients' Charter was published in 2006 and was therefore not available for use in countries until then.	Planned activitiesNone reported
RESEARCH, INCLUDING SPECIAL SURVEYS AND IMPACT MEASUREMENT	
 Achievements Implemented active population-based surveillance and enhanced TB control in collaboration with Thailand TB active surveillance network Studied technical capacity of provincial health staff on HIV surveillance, prevention and treatment among TB patients Conducted 3rd national DBS 	 Planned activities Conduct prevalence of disease survey Finalize DRS along Thai–Cambodia border area

Conducted 3rd national DRS
Carried out DRS on the Thai–Myanmar border

GLOBAL TUBERCULOSIS CONTROL | WHO REPORT 2008 | 151

FINANCING THE STOP TB STRATEGY

NTP budget by source of funding

NTP budget data since 2004 are for the TB cluster in Bangkok only; at this level most funding is from the government



NTP budget by line item

Since 2004 NTP budget data are for the TB cluster in Bangkok only; at this level most of the budget is for DOTS



In 2002, the NTP budget was managed at central level and covered all inputs specific to TB control for the entire country. This changed in 2003, when a new health insurance system was introduced. As part of this system, budgets for clinical care (including TB diagnosis and treatment) are allocated to provincial and district hospitals on the basis of fixed per capita rates. It is not known how much of these budgets is being used for TB control, and therefore the total budget for TB control in Thailand cannot be estimated. The full cost of TB control (including costs associated with use of general health facilities) cannot be calculated accurately either, because the most recent costing study was undertaken more than 10 years ago.

Progress made with the reporting of financial data in South Africa since 2006, which like Thailand has a decentralized system for management of TB control, illustrates two ways in which an up-to-date and comprehensive assessment of the cost of TB control in Thailand could be made. The first would be to send the WHO financial data collection form to each province in Thailand, and to aggregate these reports at national level. A second approach would be to use the WHO planning and budgeting tool to carry out a detailed costing study, as was done for all provinces in South Africa in 2007.

SOURCES, METHODS AND ABBREVIATIONS

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

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 347/100 000 pop and mortality 27/100 000 pop/yr.
 To ensure adequate laboratory services coverage there should be at least one laboratory providing smear microscopy per 100 000 population, one culture facility per 5 million population and one DST facility per 10

million population. — 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.

Incidence, prevalence and mortality estimates include patients infected with HIV. Estimates of burden based on prevalence survey in 1991–1992. Incidence rate assumed to be constant in absence of contrary evidence, but estimated prevalence and mortality rates declining with growing proportion of cases treated.