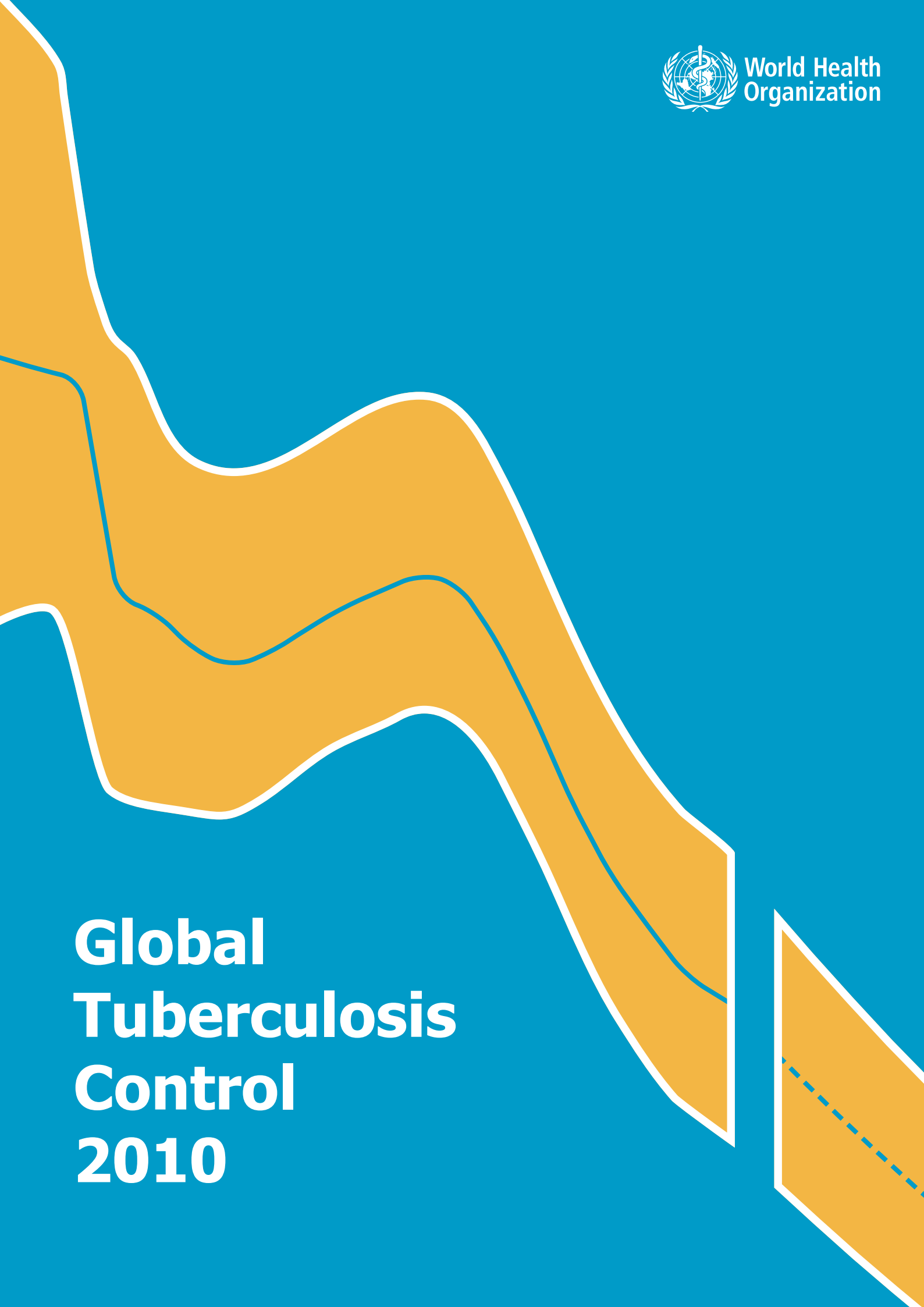
World Health Organization

Global Tuberculosis Control 2010



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Abbreviations

ACSM	advocacy, communication and social mobilization
AFR	WHO African Region
AIDS	acquired immunodeficiency syndrome
AMR	WHO Region of the Americas
ARI	annual risk of infection
ART	antiretroviral therapy
CDR	case detection rate
CPT	co-trimoxazole preventive therapy
CBC	community-based TB care
DOT	directly observed treatment
DOTS	the basic package that underpins the Stop TB Strategy
DRS	drug resistance surveillance or survey
DST	drug susceptibility testing
ECDC	European Centre for Disease Prevention and Control
EMR	WHO Eastern Mediterranean Region
EU	European Union
EUR	WHO European Region
FIND	Foundation for Innovative New Diagnostics
GDF	Global TB Drug Facility
GLC	Green Light Committee
GLI	Global Laboratory Initiative
Global Fund	The Global Fund to fight AIDS, Tuberculosis and Malaria
Global Plan	Global Plan to Stop TB, 2011–2015
GNI	gross national income
HBC	high-burden country of which there are 22 that account for approximately 80% of all new TB cases arising each year
HIV	human immunodeficiency virus
HRD	Human resource development
ICD-10	International Classification of Diseases (tenth revision)
IPT	isoniazid preventive therapy
IRR	incidence rate ratio
ISTC	International Standards for Tuberculosis Care
LED	Light-emitting diode
LPA	Line-probe assay
MDG	Millennium Development Goal
MDR-TB	multidrug-resistant tuberculosis (resistance to, at least, isoniazid and rifampicin)
NGO	nongovernmental organization
NTP	national tuberculosis control programme or equivalent
PAL	Practical Approach to Lung Health
PPM	Public–Private Mix
SEAR	WHO South-East Asia Region
TB	tuberculosis
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNITAID	international facility for the purchase of diagnostics and drugs for diagnosis and treatment of HIV/AIDS, malaria and TB
USAID	United States Agency for International Development
VR	Vital registration
WHA	World Health Assembly
WHO	World Health Organization
WPR	WHO Western Pacific Region
XDR-TB	Extensively drug-resistant TB
ZN	Ziehl-Neelsen

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Summary

The World Health Organization (WHO) has published an annual report on global control of tuberculosis (TB) every year since 1997. The main purpose of the report is to provide a comprehensive and up-to-date assessment of the TB epidemic and progress made in TB care and control at global, regional and country levels. Progress towards global targets set for 2015 is given particular attention. The target included in the Millennium Development Goals (MDGs) is that TB incidence should be falling by 2015. The Stop TB Partnership has set two additional targets, which are to halve rates of prevalence and mortality by 2015 compared with their levels in 1990. Collectively, the WHO's Stop TB Strategy and the Stop TB Partnership's Global Plan to Stop TB have set out how the 2015 targets can be achieved.

This fifteenth annual report[1] contains more up-to-date information than any previous report in the series, following earlier data collection and the completion of the production cycle within a calendar year.

The estimates of the global burden of disease caused by TB in 2009 are as follows: 9.4 million incident cases (range, 8.9 million–9.9 million), 14 million prevalent cases (range, 12 million–16 million), 1.3 million deaths among HIV-negative people (range, 1.2 million–1.5 million) and 0.38 million deaths among HIV-positive people (range, 0.32 million–0.45 million). Most cases were in the South-East Asia, African and Western Pacific regions (35%, 30% and 20%, respectively). An estimated 11–13% of incident cases were HIV-positive; the African Region accounted for approximately 80% of these cases.

There were 5.8 million notified cases of TB in 2009, equivalent to a case detection rate (CDR, defined as the proportion of incident cases that were notified) of 63% (range, 60–67%), up from 61% in 2008. Of the 2.6 million patients with sputum smear-positive pulmonary TB in the 2008 cohort, 86% were successfully treated.

New and compelling data from 15 countries show that efforts by national TB programmes (NTPs) to engage all care providers in TB control (termed public-private mix, or PPM) can be a particularly effective way to increase the CDR. In areas where PPM was implemented, non-NTP providers accounted for around one-fifth to one-third of total notifications in 2009.

In 2009, 26% of TB patients knew their HIV status (up from 22% in 2008), including 53% of patients in the African Region. A total of 300 000 HIV-positive TB patients were enrolled on co-trimoxazole preventive therapy, and almost 140 000 were enrolled on antiretroviral therapy (75% and 37% respectively of those who tested HIV-positive). To prevent TB, almost 80 000 people living with HIV were provided with isoniazid preventive therapy. This is an increase from previous years, but still represents less than 1% of the estimated number of people living with HIV worldwide.

Among TB patients notified in 2009, an estimated 250 000 (range, 230 000–270 000) had multidrug-resistant TB (MDR-TB). Of these, slightly more than 30 000 (12%) were diagnosed with MDR-TB and notified. Diagnosis and treatment of MDR-TB need to be rapidly expanded.

Funding for TB control continues to increase and will reach almost US$ 5 billion in 2011. There is considerable variation in what countries spend on a per patient basis (<US$ 100 to >US$ 1000), and the extent to which countries rely on domestic or external sources of funds. Compared with the funding requirements estimated in the Global Plan, the funding gap is approximately US$ 1 billion in 2011. Given the scale-up of interventions set out in the plan, this could increase to US$ 3 billion by 2015 without intensified efforts to mobilize more resources.

Incidence rates are falling globally and in five of WHO's six regions (the exception is the South-East Asia Region, where the incidence rate is stable). If these trends are sustained, the MDG target will be achieved. Mortality rates at global level fell by around 35% between 1990 and 2009, and the target of a 50% reduction by 2015 could be achieved if the current rate of decline is sustained. At the regional level, the mortality target could be achieved in five of WHO's six regions; the exception is the African Region (although rates of mortality are falling). Prevalence is falling globally and in all six WHO regions. The target of halving the 1990 prevalence rate by 2015 appears out of reach at global level, but could be achieved in three of six regions: the Region of the Americas, the Eastern Mediterranean Region and the Western Pacific Region.

Reductions in the burden of disease achieved to date follow 15 years of intensive efforts to improve TB care and control. Between 1995 and 2009, a total of 41 million TB patients were successfully treated in DOTS programmes, and up to 6 million lives were saved including 2 million among women and children. Looking forwards, the Stop TB Partnership launched an updated version of the Global Plan to Stop TB in October 2010, for the years 2011–2015. In the five years that remain until the target year of 2015, intensified efforts are needed to plan, finance and implement the Stop TB Strategy, according to the updated targets included in this plan. This could save at least one million lives per year.

[1] Two reports were published in 2009. The INTRODUCTION and METHODS sections of this report explain why this was necessary.

Introduction

The World Health Organization (WHO) has published an annual report on global control of tuberculosis (TB) every year since 1997. The main purpose of the report is to provide a comprehensive and up-to-date assessment of the TB epidemic and progress made in TB care and control at global, regional and country levels. This fifteenth annual report[1] contains more up-to-date information than any previous report in the series, following earlier data collection and the completion of the production cycle within a calendar year.

The main part of the report is structured in eight major sections, as follows:

- **Methods.** This section explains how the data used to produce the report are collected, reviewed and analysed.
- **The global burden of disease caused by TB in 2009.** This section presents estimates of incidence, prevalence and mortality (absolute numbers and rates) at global, regional and country levels in 2009.
- **Global targets, the WHO Stop TB Strategy and the Global Plan to Stop TB.** This section defines the global targets for TB control that have been set for 2015, as part of the Millennium Development Goals (MDGs) and by the Stop TB Partnership. It then describes the main components of the Stop TB Strategy and the Stop TB Partnership's Global Plan to Stop TB, which in combination have set out how the global targets can be achieved.
- **Progress in implementing the Stop TB Strategy and the Global Plan to Stop TB.** This section includes analysis of case notifications, treatment outcomes, case detection rates (for all forms of TB), the contribution of public–private mix (PPM) initiatives to case notifications, implementation of collaborative TB/HIV activities and the management of drug-resistant TB. It also features the topic of human resource development and provides an update about the work of the Global Laboratory Initiative, whose goal is to strengthen laboratories worldwide.
- **Financing for TB control.** Recent trends in funding for TB control, including comparisons with the funding requirements estimated in the Global Plan, are presented and discussed. Recent successes in strengthening planning and budgeting for TB control using the WHO TB planning and budgeting tool are showcased.
- **Progress towards the 2015 targets.** This section analyses trends in rates of TB incidence, prevalence and mortality from 1990 to 2009, and assesses whether the 2015 targets can be achieved at global, regional and country levels.

BOX 1

What's new in this report?

This report includes the same wealth of information as previous reports in the series, but four new features are worth highlighting. First, the data are more up-to-date than those included in previous reports. Data up to and including 2009 are presented for almost all key indicators; financial data extend to 2011. Second, estimates of the case detection rate are presented for all forms of TB only (see Box 6). Third, results from several analyses undertaken for the first time in 2010 are included. Examples are: (i) for each of the 22 high-burden countries (HBCs), trends in rates of TB incidence and mortality since 1990 combined with projections of whether the target of halving the 1990 mortality rate by 2015 will be achieved; (ii) estimates of the lives saved by TB control between 1995 and 2009 and projections of the additional lives that could be saved up to 2015, including separate estimates for women and children; (iii) assessment of progress in implementing and financing TB care and control against the targets included in a just-released and updated version of the Global Plan to Stop TB; and (iv) a new and compelling compilation of data showing the contribution that PPM can make to case detection. Fourth, country profiles are available for all countries (rather than the 22 HBCs only) and can be downloaded online at www.who.int/tb/data, always drawing on the latest data available in WHO's global TB database.

- **Improving measurement of the burden of disease caused by TB.** This section summarizes progress at country level in strengthening surveillance (of cases and deaths) and implementing surveys of the prevalence of TB disease, in the context of the policies and recommendations of the WHO Global Task Force on TB Impact Measurement.
- **Conclusions.** This final section draws together the main findings and recommendations in the report.

ANNEX 1 explains the methods that were used to produce estimates of disease burden. ANNEX 2 contains summary tables that provide global, regional and country-specific data for the main indicators of interest. COUNTRY PROFILES for all countries are available online at www.who.int/tb/data; their content is advertised in ANNEX 3.

[1] Two reports were published in 2009. The first report (March) included key indicators up to and including 2007 (for example, estimates of disease burden and case notifications). The second report (published on the web in December) included key indicators up to and including 2008. Two reports were produced in one year in anticipation of a different production cycle in which reports would always contain data up to and including the previous calendar year.

1. Methods

For the 2010 round of data collection, WHO updated the forms that were used in 2009. The main change was that questions on surveillance of MDR-TB, which had previously been asked through a separate data collection effort, were integrated into the global TB data collection form. As in 2009, two versions of the form were developed (a long form and a short form). The short form was adapted for use in high-income countries (that is, countries with a gross national income per capita of ≥US$ 12 196 in 2009, as defined by the World Bank) and/or low-incidence countries (defined as countries with an incidence rate of <20 cases per 100 000 population or <10 cases in total). In consultation with WHO regional offices, a few countries that met the criteria for receiving the short form were instead requested to complete the long form. This included countries that had in previous years provided the more detailed financial data requested on the long form.

Both forms requested data on the following topics: case notifications and treatment outcomes, including breakdowns by age, sex and HIV status; an overview of services for the diagnosis and treatment of TB; laboratory diagnostic services; drug management; monitoring and evaluation; surveillance and surveys of drug-resistant TB; management of drug-resistant TB; collaborative TB/HIV activities; human resource development (HRD); TB control in vulnerable populations and high-risk groups; TB infection control; the Practical Approach to Lung Health (PAL); PPM; advocacy, communication and social mobilization (ACSM); the budgets of national TB control programmes (NTPs) in 2010 and 2011; utilization of general health services (hospitalization and outpatient visits) during treatment; and NTP expenditures in 2009.

A web-based online system (www.stoptb.org/tme) was used to report and validate data in all regions except the European Region (BOX 2).[1] In 2010, data collection was launched in mid-March, about four months earlier than in any previous year, with a deadline of 16 May for all regions except the Region of the Americas (31 May) and the European Region (30 September). Following the deadlines for reporting of data, all reports were carefully reviewed using a system of built-in validation checks (also available to country-based staff reporting data). Follow-up queries were returned to respondents online. By 16 June (the deadline for responding to queries), 147 countries (excluding the European Region) had reported data (for further details, see BOX 2).[2] In the European Region, 21 out of 53 countries reported data by 16 June. Most of the countries that had not reported data by 16 June were high-income countries in western Europe. Taken together, the 168 countries that reported data by the deadline of 16 June account for 99% of the world's TB cases.

All data collected online in 2010 were added to a master dataset that holds the TB-related data that have been compiled by WHO since 1995. Data from the two online systems used in the European Region[3] were also uploaded to the master dataset. All data in the global and European online systems as of the morning of 17 June 2010 were then used, together with historical data reported in previous years, to produce the tables and figures that appear in the main part of the report. Country respondents continue to have the option of updating or adding data to the online system.

The master dataset was updated for a second time on 31 August 2010, using all data in the global and European online systems at this time. This updated dataset was used to create the detailed tables that are included in ANNEX 2, ensuring that data published for all countries were as up-to-date as possible at the time that the report went to press.

Four additional points should be highlighted:

- NTPs sometimes provide WHO with updated information for previous years, for incorporation in the global TB database. As a result, the data presented in this report may differ from those published in previous reports.
- Assessments of progress made in implementing PPM initiatives and of global efforts to strengthen laboratory services and impact measurement draw on information obtained from key informants as well as data received via the online WHO TB data collection form.
- Financial data are presented in real terms, after adjustment for inflation. This allows fair comparison of funding amounts across years, without distortions caused by changes in prices.
- The annual data collection form and database system used by WHO are designed for collecting aggregated national data. They are not recommended for collection of data within countries.[4]

[1] The European Region has its own system for online reporting of data, which is managed jointly by the European Centre for Disease Control and Prevention (ECDC) and the WHO Regional Office for Europe.

[2] The four countries for which data were not reported by 16 June were Canada, Haiti, Brunei Darussalam and Japan. Data were reported for all except Haiti by 31 August 2010 and as a result data for these countries are included in ANNEX 2.

[3] One system for countries of the European Union, managed by the ECDC; the other for all European countries, managed by the WHO Regional Office for the European Region. Two data collection tools are used. Data from the ECDC system are uploaded to the WHO system.

[4] WHO recommendations for recording and reporting within countries are described at: http://www.who.int/tb/dots/r_and_r_forms/en/index.html

BOX 2

Collecting global data on TB – online and with an earlier deadline in 2010

In July 2009, WHO launched a web-based system for collecting global TB data (www.stoptb.org/tme). This system allows representatives of NTPs as well as staff in WHO regional and country offices to complete the annual TB data collection form online. The system has several advantages, such as:

- The task of reporting data can be shared among various colleagues.
- There is no need to complete the report at one time. Users can log on and edit parts of the report as often as necessary before the reporting deadlines.
- Data are checked as they are being entered (real-time validation).
- Users have access to a report that highlights any inconsistencies among different sections of a report and any inconsistencies with data provided in previous years.
- Data entry screens are tailored for use by each country, and are available in English, French and Spanish.
- Users have access to summary tables showing real-time progress in reporting at regional and country levels.
- Users can correct and update data at any time, including after the reporting deadlines for a specific year have passed.

In 2010, the main change in the global system for collection of TB data was to request earlier reporting of data. The online system was opened for reporting in mid-March (instead of June/July), with reporting deadlines in May, with the exception of the European Region for which the deadline was 30 September (though early reporting was encouraged).[1] This change was made to allow the cycle of report production (from data collection to launch of the report) to be completed in a calendar year and in turn the publication of more up-to-date data at the time the report is launched.

By the deadline for responding to follow-up queries of 16 June 2010, 147 countries (excluding the European Region) had reported data. This included 34 (of 36) countries in the Region of the Americas, all countries in the African, Eastern Mediterranean and South-East Asia regions (46, 22 and 11 countries, respectively) and 34 (of 36) countries in the Western Pacific Region. In the European Region, 21 out of 53 countries had reported data by 16 June. Most of the countries that had not reported data by 16 June were high-income countries in western Europe. Taken together, the 168 countries that reported data by the deadline of 16 June account for 99% of the world's TB cases.

The tables and figures published in the main part of the report are based on the data available on 17 June 2010. The data tables published in ANNEX 2 are based on the data available on 31 August 2010. Updates received after 31 August 2010 are available for downloading at www.who.int/tb/data and will be used as part of the dataset for WHO's 2011 global report.

[1] Collection of data in the European Region is managed separately by the WHO Regional Office for Europe and the European Centre for Disease Control and Prevention.

ANNEX 1 provides details about the methods used to produce estimates of the disease burden caused by TB (measured as incidence, prevalence and mortality). In line with the methods explained in this annex, the results provided in the main text of the report and in ANNEX 2 are presented as best, low and high estimates. When the term "range" is used after a best estimate in the main text of the report, the lower and higher numbers correspond to the 2.5th and 97.5th centiles of the outcome distributions produced by simulations. These are distinct from 95% confidence intervals, which are estimated directly from observed, empirical data.

2. The global burden of TB

2.1 Incidence

In 2009, there were an estimated 9.4 million incident cases (range, 8.9 million–9.9 million)[1] of TB globally (equivalent to 137 cases per 100 000 population) (TABLE 1, FIGURE 1). The absolute number of cases continues to increase slightly from year to year, as slow reductions in incidence rates per capita (see SECTION 6) continue to be outweighed by increases in population. Estimates of the number of cases broken down by age and sex have been prepared by an expert group[2] as part of

TABLE 1

Estimated epidemiological burden of TB, 2009. Numbers in thousands except where indicated.[a]

		MORTALITY[b]			PREVALENCE			INCIDENCE			HIV PREVALENCE IN INCIDENT TB CASES (%)		
	POPULATION	BEST[c]	LOW	HIGH	BEST	LOW	HIGH	BEST	LOW	HIGH	BEST	LOW	HIGH
Afghanistan	28 150	11	7.1	15	94	43	160	53	43	64	–	–	–
Bangladesh[d]	162 221	83	60	110	690	320	1 100	360	300	440	0.2	0.1	0.3
Brazil	193 734	4.5	2.2	8.4	100	36	180	87	72	100	12	11	12
Cambodia	14 805	10	7.4	14	100	47	170	65	56	76	6.4	4.5	8.3
China	1 345 751	150	100	220	1 800	740	3 000	1 300	1 100	1 500	1.5	0.9	2.2
DR Congo	66 020	50	36	67	430	200	690	250	200	300	8.4	6.4	11
Ethiopia	82 825	54	38	75	480	220	790	300	240	360	12	8.8	15
India	1 198 003	280	170	430	3 000	1 300	5 000	2 000	1 600	2 400	6.4	3.9	9.8
Indonesia	229 965	62	36	95	660	270	1 100	430	350	520	2.8	1.7	4.3
Kenya	39 802	6.2	3.0	12	110	45	190	120	99	150	44	42	46
Mozambique	22 894	8.8	6.3	12	86	43	130	94	76	110	58	58	58
Myanmar[e]	50 020	29	18	43	300	130	490	200	160	240	11	7.7	14
Nigeria	154 729	110	89	140	830	380	1 400	460	370	550	19	19	19
Pakistan	180 808	60	36	93	640	270	1 100	420	340	500	1.5	1.0	2.2
Philippines	91 983	32	21	45	480	450	510	260	210	310	0.5	0.3	0.8
Russian Federation	140 874	25	17	38	190	65	320	150	120	180	8	7	9
South Africa	50 110	23	10	44	390	160	650	490	400	590	60	54	65
Thailand	67 764	12	7.2	18	130	57	210	93	75	110	17	12	22
Uganda	32 710	9.3	3.9	17	91	39	170	96	78	120	56	39	73
UR Tanzania	43 739	4.0	1.5	9.2	72	27	130	80	75	85	47	33	61
Viet Nam	88 069	32	18	50	290	130	510	180	130	230	4.2	2.9	5.8
Zimbabwe	12 523	10	7.5	14	96	48	150	93	76	110	52	51	52
High-burden countries	**4 297 498**	**1 100**	**930**	**1 200**	**11 000**	**8 900**	**14 000**	**7 600**	**7 100**	**8 100**	**12**	**11**	**13**
AFR	824 401	430	390	470	3 900	3 300	4 600	2 800	2 700	3 000	37	35	39
AMR	929 509	20	16	24	350	280	450	270	260	290	8.5	8.1	8.9
EMR	596 509	99	74	130	1 000	690	1 500	660	590	750	1.6	1.3	2.1
EUR	891 559	62	51	74	560	430	720	420	390	450	5.3	4.9	5.7
SEAR	1 783 587	480	360	630	4 900	3 300	7 100	3 300	2 900	3 700	5.7	4.1	7.8
WPR	1 800 640	240	180	310	2 900	1 900	4 200	1 900	1 700	2 100	1.8	1.4	2.3
Global	**6 826 205**	**1 300**	**1 200**	**1 500**	**14 000**	**12 000**	**16 000**	**9 400**	**8 900**	**9 900**	**12**	**11**	**13**

– Indicates no data reported.

[a] Numbers for mortality, prevalence and incidence shown to two significant figures. Totals for HBCs and globally computed prior to rounding using Monte Carlo simulations.

[b] Mortality excludes deaths among HIV-positive TB cases. Deaths among HIV-positive TB cases are classified as HIV deaths according to ICD-10.

[c] Best, low and high indicate best estimates followed by lower and upper bounds. The lower and upper bounds are defined as the 2.5th and 97.5th centiles of outcome distributions produced in simulations. See ANNEX 1 for further details.

[d] Bangladesh completed a survey of the prevalence of TB disease in 2009. A reassessment of the epidemiological burden of TB, using data from the survey combined with an in-depth analysis of surveillance and programmatic data, will be undertaken in 2011.

[e] Myanmar completed a survey of the prevalence of TB disease in 2010. A reassessment of the epidemiological burden of TB will be undertaken following finalization and dissemination of survey results.

[1] The range is the uncertainty interval that corresponds to the 2.5th and 97.5th centiles of the outcome distributions produced by simulations. See also SECTION 1 and ANNEX 1.

[2] This expert group is convened by the WHO Global Task Force on TB Impact Measurement. See also SECTION 7 of this report.

FIGURE 1

Estimated TB incidence rates, by country, 2009

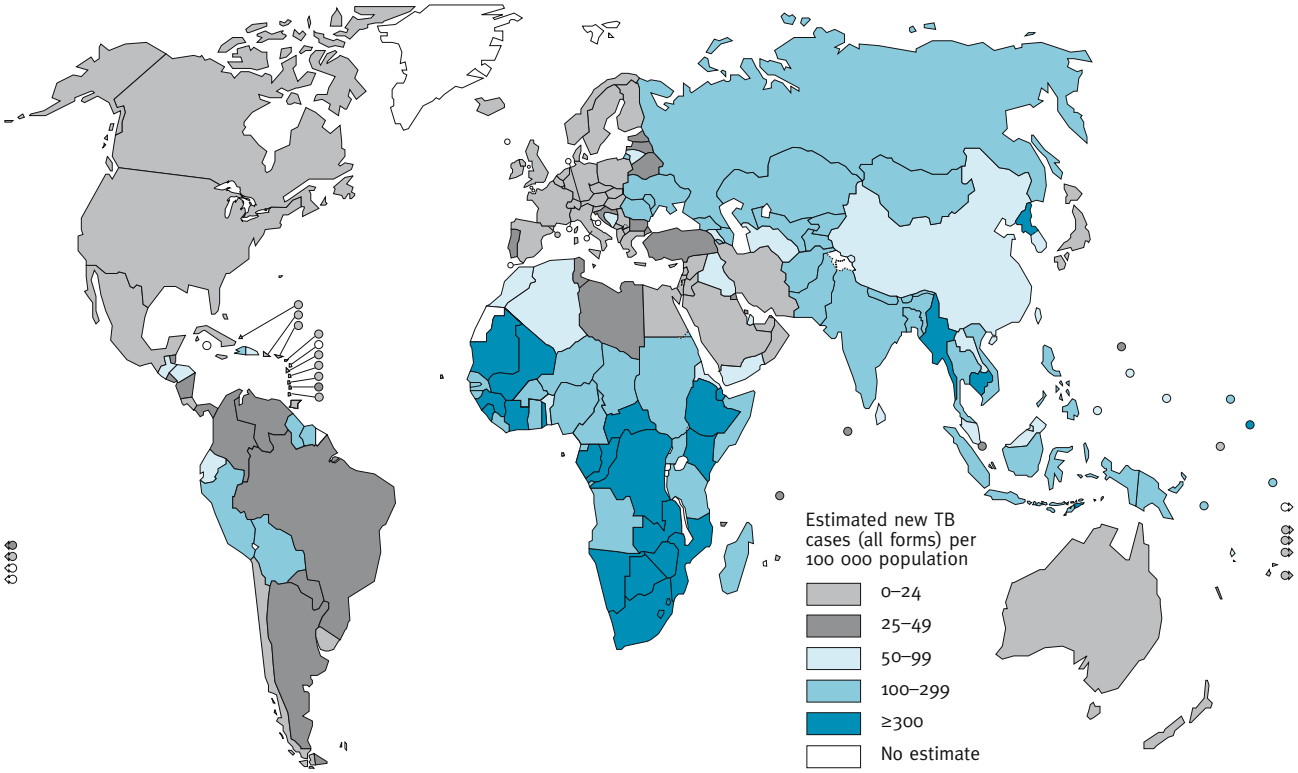
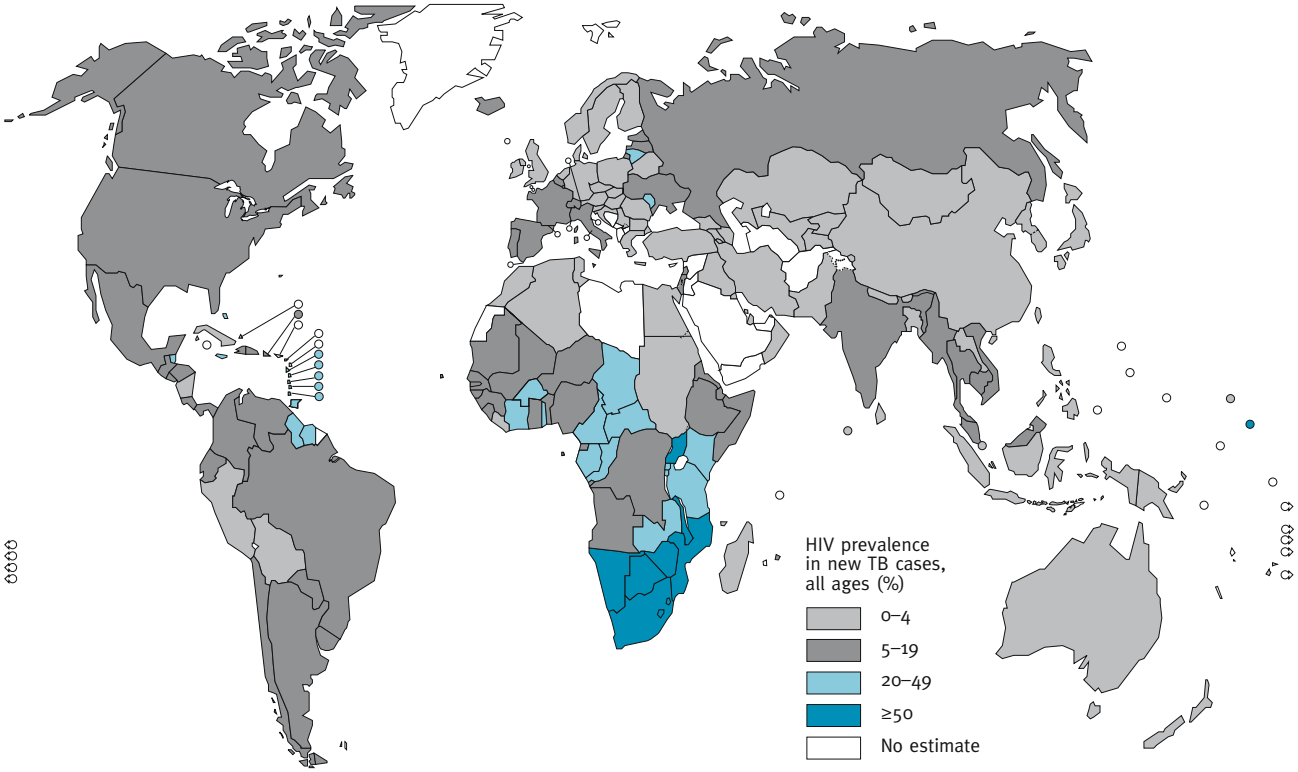


FIGURE 2

Estimated HIV prevalence in new TB cases, 2009



an update to the Global Burden of Disease study.[1] These indicate that women[2] account for an estimated 3.3 million cases (range, 3.1 million–3.5 million), equivalent to 35% of all cases.

Estimates of the numbers of TB cases among women and children need to be improved through more reporting and more analysis of notification data disaggregated by age and sex.

Most of the estimated number of cases in 2009 occurred in Asia (55%) and Africa (30%);[3] smaller proportions of cases occurred in the Eastern Mediterranean Region (7%), the European Region (4%) and the Region of the Americas (3%). The 22 HBCs that have received particular attention at the global level since 2000 account for 81% of all estimated cases worldwide (TABLE 1). The five countries with the largest number of incident cases in 2009 were India (1.6–2.4 million), China (1.1–1.5 million), South Africa (0.40–0.59 million), Nigeria (0.37–0.55 million) and Indonesia (0.35–0.52 million). India alone accounts for an estimated one fifth (21%) of all TB cases worldwide, and China and India combined account for 35%.

Of the 9.4 million incident cases in 2009, an estimated 1.0–1.2 million (11–13%) were HIV-positive, with a best estimate of 1.1 million (12%) (TABLE 1, FIGURE 2). These numbers are slightly lower than those reported in previous years, reflecting better estimates (based on more direct measurements as documented in ANNEX 1) as well as reductions in HIV prevalence in the general population. Of these HIV-positive TB cases, approximately 80% were in the African Region.

2.2 Prevalence

There were an estimated 14 million prevalent cases (range, 12 million–16 million) of TB in 2009 (TABLE 1), equivalent to 200 cases per 100 000 population. As explained in ANNEX 1, prevalence is a robust indicator of the burden of disease caused by TB when it is directly measured in a nationwide survey. When survey data are not available, it is difficult to estimate its absolute level and trend. In those countries where surveys are done and repeated at periodic intervals (see SECTION 7), estimates of the prevalence of TB and trends in rates of TB prevalence will improve.

2.3 Mortality

In 2009, an estimated 1.3 million deaths (range, 1.2 million–1.5 million) occurred among HIV-negative cases of TB (TABLE 1), including 0.38 million deaths (range, 0.3 million–0.5 million) among women. This is equivalent to 20 deaths per 100 000 population. In addition, there were an estimated 0.4 million deaths (range, 0.32 million–0.45 million) among incident TB cases that were HIV-positive (data not shown); these deaths are classified as HIV deaths in the 10th revision of the International Classification of Diseases (ICD-10). Thus in total, approximately 1.7 million people died of TB in 2009. The number of TB deaths per 100 000 population among HIV-negative people plus the estimated number of TB deaths among HIV-positive people equates to a best estimate of 26 deaths per 100 000 population.

2.4 MDR-TB and XDR-TB

There were an estimated 440 000 cases of multi-drug resistant TB (MDR-TB) in 2008 (range, 390 000–510 000).[4] The 27 countries (15 in the European Region) that account for 86% of all such cases have been termed the 27 high MDR-TB burden countries (see also SECTION 4.6). The four countries that had the largest number of estimated cases of MDR-TB in absolute terms in 2008 were China (100 000; range, 79 000–120 000), India (99 000; range, 79 000–120 000), the Russian Federation (38 000; range, 30 000–45 000) and South Africa (13 000; range 10 000–16 000). By July 2010, 58 countries and territories had reported at least one case of extensively drug-resistant TB (XDR-TB).[5]

[1] This study is an update to Lopez AD et al. *Global burden of disease and risk factors*. New York, Oxford University Press and The World Bank, 2006.

[2] Defined as females aged ≥15 years old.

[3] Asia here means the WHO regions of South-East Asia and the Western Pacific. Africa means the WHO African Region.

[4] The latest estimates are for 2008, as published in March 2010 in: *Multidrug and extensively drug-resistant TB (M/XDR-TB): 2010 global report on surveillance and response*. Geneva, World Health Organization, 2010 (WHO/HTM/TB/2010.3). Figures have not been updated for this report.

[5] XDR-TB is defined as resistance to isoniazid and rifampicin (i.e. MDR-TB) plus resistance to a fluoroquinolone and, at least, one second-line injectable agent (amikacin, kanamycin and/or capreomycin).

3. Global targets, the Stop TB Strategy and the Global Plan to Stop TB

3.1 Global targets for TB control

Global targets for reducing the burden of disease caused by TB have been set for 2015 and 2050 (BOX 3). Currently, most attention is given to the targets set for 2015. The target set within the context of the MDGs is to halt and reverse the incidence of TB by 2015. The additional targets set by the Stop TB Partnership are to halve TB prevalence and death rates by 2015, compared with their levels in 1990.

3.2 The Stop TB Strategy

The Stop TB Strategy[1] is the approach recommended by WHO to reduce the burden of TB in line with global targets set for 2015. The strategy is summarized in BOX 4. The six major components of the strategy are: (i) pursue high-quality DOTS expansion and enhancement; (ii) address TB/HIV, MDR-TB, and the needs of poor and vulnerable populations; (iii) contribute to health-system strengthening based on primary health care; (iv) engage all care providers; (v) empower people with TB, and communities through partnership; and (vi) enable and promote research.

BOX 3

Goals, targets and indicators for TB control

HEALTH IN THE MILLENNIUM DEVELOPMENT GOALS SET FOR 2015

- **GOAL 6: COMBAT HIV/AIDS, MALARIA AND OTHER DISEASES**

Target 6.c: Halt and begin to reverse the incidence of malaria and other major diseases

Indicator 6.9: Incidence, prevalence and death rates associated with TB

Indicator 6.10: Proportion of TB cases detected and cured under DOTS

STOP TB PARTNERSHIP TARGETS SET FOR 2015 AND 2050

By 2015: Reduce prevalence and death rates by 50%, compared with their levels in 1990.

By 2050: Reduce the global incidence of active TB cases to <1 case per 1 million population per year.

Achievements in TB control in the years following implementation of DOTS and the Stop TB Strategy, and prospects for the further gains that could be made up to 2015, are highlighted in BOX 5.

3.3 The Global Plan to Stop TB

The Stop TB Partnership's Global Plan to Stop TB, 2006–2015,[2] was launched in January 2006. It set out the scale at which the interventions included in the Stop TB Strategy need to be implemented to achieve the 2015 targets. In 2010, as the mid-point of the original 10-year plan approached, the plan was updated. This updated version of the plan, which covers the five years from 2011 to 2015, includes an updated set of targets.[3] The major targets for 2015 in this updated plan have been defined as follows:

- diagnosis, notification and treatment of approximately 7 million cases;
- a treatment success rate among sputum smear-positive cases of 90%;
- HIV testing of 100% of TB patients;
- enrolment of 100% of HIV-positive TB patients on co-trimoxazole preventive therapy (CPT) and antiretroviral therapy (ART);
- provision of isoniazid preventive therapy (IPT) to all people living with HIV who are attending HIV care services and are considered eligible for IPT;
- testing of 100% of previously treated TB patients for MDR-TB, as well as testing of any new TB patients considered at high risk of having MDR-TB (estimated globally at around 20% of all new TB patients);
- enrolment of all patients with a confirmed diagnosis of MDR-TB on treatment consistent with international guidelines;
- mobilization of US$ 7 billion per year to finance implementation of the Stop TB Strategy, plus around US$ 1.3 billion per year for research and development related to new drugs, new diagnostics and new vaccines.

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1 *The Stop TB Strategy: building on and enhancing DOTS to meet the TB-related Millennium Development Goals*. Geneva, World Health Organization, 2006 (WHO/HTM/TB/2006.368).

2 *The Global Plan to Stop TB, 2006–2015: actions for life towards a world free of tuberculosis*. Geneva, World Health Organization, 2006 (WHO/HTM/STB/2006.35).

3 *The Global Plan to Stop TB, 2011–2015*. Geneva, World Health Organization, 2010 (WHO/HTM/STB/2010.2).

BOX 4

The Stop TB Strategy at a glance

THE STOP TB STRATEGY

VISION	**A TB-free world**
GOAL	To dramatically reduce the global burden of TB by 2015 in line with the Millennium Development Goals and the Stop TB Partnership targets
OBJECTIVES	• Achieve universal access to high-quality care for all people with TB • Reduce the human suffering and socioeconomic burden associated with TB • Protect vulnerable populations from TB, TB/HIV and drug-resistant TB • Support development of new tools and enable their timely and effective use • Protect and promote human rights in TB prevention, care and control
TARGETS	• MDG 6, Target 6.c: Halt and begin to reverse the incidence of TB by 2015 • Targets linked to the MDGs and endorsed by the Stop TB Partnership: — 2015: reduce prevalence of and deaths due to TB by 50% compared with a baseline of 1990 — 2050: eliminate TB as a public health problem

COMPONENTS

1. Pursue high-quality DOTS expansion and enhancement
- a. Secure political commitment, with adequate and sustained financing
- b. Ensure early case detection, and diagnosis through quality-assured bacteriology
- c. Provide standardized treatment with supervision, and patient support
- d. Ensure effective drug supply and management
- e. Monitor and evaluate performance and impact

2. Address TB/HIV, MDR-TB, and the needs of poor and vulnerable populations
- a. Scale-up collaborative TB/HIV activities
- b. Scale-up prevention and management of multidrug-resistant TB (MDR-TB)
- c. Address the needs of TB contacts, and of poor and vulnerable populations

3. Contribute to health system strengthening based on primary health care
- a. Help improve health policies, human resource development, financing, supplies, service delivery, and information
- b. Strengthen infection control in health services, other congregate settings and households
- c. Upgrade laboratory networks, and implement the Practical Approach to Lung Health (PAL)
- d. Adapt successful approaches from other fields and sectors, and foster action on the social determinants of health

4. Engage all care providers
- a. Involve all public, voluntary, corporate and private providers through Public-Private Mix (PPM) approaches
- b. Promote use of the International Standards for Tuberculosis Care (ISTC)

5. Empower people with TB, and communities through partnership
- a. Pursue advocacy, communication and social mobilization
- b. Foster community participation in TB care, prevention and health promotion
- c. Promote use of the Patients' Charter for Tuberculosis Care

6. Enable and promote research
- a. Conduct programme-based operational research
- b. Advocate for and participate in research to develop new diagnostics, drugs and vaccines

4. Progress in implementing the Stop TB Strategy and the Global Plan to Stop TB

This section examines the latest data on implementation of the Stop TB Strategy, and compares progress with the targets included in the Global Plan to Stop TB, 2011–2015 where applicable. The first three topics covered are case notifications, treatment success rates for sputum smear-positive TB patients and case detection rates for all forms of TB. These all illustrate progress in implementing DOTS – the foundation of the Stop TB Strategy. The fourth topic is the engagement of the full range of care providers in TB control (component 4 of the strategy) through PPM. Such engagement is essential to ensure high levels of case detection and treatment success. The next two sections cover collaborative TB/HIV activities and the diagnosis and treatment of drug-resistant TB, both of which fall under component 2 of the Stop TB Strategy.

Boxes are used to feature four topics – laboratory strengthening, HRD, strengthened surveillance and rational use of anti-TB medicines. All four topics are closely related to health-system strengthening (component 3 of the Stop TB Strategy) as well as DOTS and the engagement of all care providers. ACSM, community TB care and research (components 5 and 6 of the strategy) are not discussed because there are limitations in the available data. In future, additional efforts to compile better data on these topics will be needed. The data that are currently available as well as data for all other topics covered in the 2010 data collection form can be viewed and downloaded on the WHO web site (www.who.int/tb/data).

4.1 Case notifications

In 2009, 5.8 million cases of TB (new cases and relapse cases) were notified to NTPs, including 2.6 million new cases of sputum smear-positive pulmonary TB, 2.0 million new cases of sputum smear-negative pulmonary TB (including cases for which smear status was unknown), 0.9 million new cases of extrapulmonary TB and 0.3 million relapse cases (TABLE 2).[1]

Among pulmonary cases, 57% of global notifications were sputum smear-positive. Among the 22 HBCs, the percentage of notified cases of pulmonary TB that were sputum smear-positive was relatively low in Zimbabwe (29%), the Russian Federation (31%), Pakistan (42%),

BOX 5

Achievements in TB control during the period 1995–2009 and prospects for 2010–2015

The DOTS strategy was developed as the internationally recommended approach to TB control in the mid-1990s. DOTS is also the foundation of the Stop TB Strategy, launched by WHO in 2006 to guide TB control efforts during the 10 years from 2006 to 2015. The start of WHO efforts to systematically monitor progress in TB control on an annual basis in 1995 coincided with global promotion and expansion of the DOTS strategy; data compiled since then allow assessment of achievements in TB control between 1995 and 2009 and projections of what further gains could be made up to 2015. Key results are summarized below, with further details provided in SECTION 6.

Patients treated and cured, 1995–2009. A total of 49 million patients were treated in DOTS programmes, of whom 41 million were successfully treated.[1] In 2008, the treatment success rate reached 86% worldwide, and 87% in high-burden countries.

Mortality. Globally, TB mortality has fallen by more than a third since 1990. The Region of the Americas and the Western Pacific Region have already achieved the 2015 target of halving the 1990 mortality rate. Mortality rates are falling in all WHO regions.

Incidence. Globally, incidence rates peaked in 2004. This means that the world is on track to achieve MDG Target 6.c, as are five of WHO's six regions.

Lives saved 1995–2009. Up to 6 million lives were saved through implementation of DOTS and the Stop TB Strategy.[2,3]

Lives that could be saved from 2010–2015. A further 5 million lives could be saved if current efforts in TB control are sustained, including around 2 million women and children. With expansion of treatment for MDR-TB and interventions such as ART for HIV-positive TB patients, even more lives could be saved.

[1] Assuming the treatment success rate in 2008 is maintained in 2009.
[2] Excluding deaths averted among HIV-positive people (classified as deaths attributable to HIV rather than TB in ICD-10).
[3] Compared with a counterfactual scenario defined as the standard of care and case notification rates maintained at 1995 levels.

[1] No distinction is made between DOTS and non-DOTS programmes. This is because by 2007, virtually all (more than 99%) notified cases were reported to WHO as treated in DOTS programmes. Since 2009, the WHO data collection form has made no distinction between notifications in DOTS and non-DOTS programmes.

TABLE 2

Case notifications, 2009

	NEW AND RELAPSE[a]	NEW CASES			RELAPSE	RETREATMENT EXCL. RELAPSE	HISTORY UNKNOWN	PERCENT PULMONARY CASES SMEAR-POSITIVE
		SMEAR-POSITIVE	SMEAR-NEGATIVE/ UNKNOWN	EXTRA-PULMONARY				
Afghanistan	26 150	12 497	6 108	5 730	1 082	208	733	67
Bangladesh	160 875	109 402	25 375	21 999	4 099	–	–	81
Brazil	75 040	39 267	22 144	10 275	3 340	6 478	3 641	64
Cambodia	39 202	17 863	8 378	12 529	432	997	0	68
China	965 257	449 152	439 399	34 169	42 537	17 046	0	51
DR Congo	112 222	73 191	12 941	21 707	4 383	4 442	–	85
Ethiopia	148 936	44 396	52 053	50 228	2 259	1 285	–	46
India	1 351 913	624 617	384 113	233 026	108 361	181 395	–	62
Indonesia	292 753	169 213	108 616	11 215	3 709	1 978	–	61
Kenya	102 997	37 402	44 514	17 438	3 643	7 068	–	46
Mozambique	43 221	19 579	17 019	5 301	1 322	2 308	0	53
Myanmar	128 343	41 357	50 919	31 509	4 558	5 159	–	45
Nigeria	88 589	44 863	37 540	3 560	2 626	5 525	0	54
Pakistan	316 864	111 087	156 364	43 416	5 997	3 203	–	42
Philippines	145 075	87 726	51 653	2 723	2 973	6 581	0	63
Russian Federation	125 545	33 351	72 931	10 945	8 318	30 419	15 265	31
South Africa	403 889	139 468	147 187	97 117	20 117	11 637	0	49
Thailand	63 975	32 810	20 058	9 143	1 964	1 965	–	62
Uganda	41 703	23 113	12 315	4 893	1 382	2 632	–	65
UR Tanzania	71 629	24 953	21 775	13 416	1 486	310	2 411	53
Viet Nam	95 036	51 291	18 612	18 333	6 800	1 331	1 825	73
Zimbabwe	42 504	10 113	24 718	6 636	1 037	3 466	–	29
High-burden countries	**4 841 718**	**2 196 711**	**1 734 732**	**665 308**	**232 425**	**295 433**	**23 875**	**56**
AFR	1 434 049	607 337	472 722	288 834	54 811	54 327	2 716	56
AMR	200 120	110 152	44 464	30 934	10 208	10 930	3 771	71
EMR	464 521	177 213	187 049	87 726	11 724	6 240	737	49
EUR	226 301	67 669	112 228	31 344	15 060	37 927	20 465	38
SEAR	2 124 370	1 028 656	636 755	329 338	127 825	203 598	261	62
WPR	1 331 353	637 484	550 566	85 849	57 436	32 256	6 572	54
Global	**5 780 714**	**2 628 511**	**2 003 784**	**854 025**	**277 064**	**345 278**	**34 522**	**57**

– Indicates no data reported.

[a] NEW AND RELAPSE includes new cases of unknown case type (not displayed in this table).

Myanmar (45%), Kenya (46%) and Ethiopia (46%). A comparatively high proportion of notified cases were sputum smear-positive in Bangladesh (81%), the Democratic Republic of the Congo (85%) and Viet Nam (73%).

4.2 Treatment outcomes

Globally, the rate of treatment success for new sputum smear-positive cases of pulmonary TB who were treated in the 2008 cohort was 86% (TABLE 3). This is the second successive year that the target of 85% (first set in 1991) has been exceeded globally. Of the 22 HBCs, 13 reached the 85% target. This included Kenya and the United Republic of Tanzania, demonstrating that countries in which there is a high prevalence of HIV among TB patients are able to achieve this target. Among WHO regions, three met or exceeded the 85% target: the Eastern Mediterranean Region, the South-East Asia Region and the Western Pacific Region. The treatment success rate was 80% in the African Region, 77% in the Region of the Americas and 66% in the European Region (where death and failure rates are comparatively high). Efforts to increase treatment success rates are warranted in these regions, especially the European Region.

4.3 Case detection rates

The case detection rate (CDR)[1] has been a much-used indicator of national progress in TB control since the mid-1990s. For a given country, it is calculated as the number of notified cases of TB in one year divided by the number of estimated incident cases of TB in the same year, and expressed as a percentage. The considerable attention given to the CDR was in line with the two principal global targets (case detection and treatment success rates) set for TB control during the period 1991 to 2005. The targets of reaching a CDR of ≥70% and a treat-

[1] The CDR is actually a ratio rather than a rate, but the term "rate" has become standard terminology in this context of this indicator.

TABLE 3

Treatment success for new smear-positive cases (%) and cohort size (thousands), 1995–2008

a. Treatment success (%)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Afghanistan	–	–	45	33	86	85	84	87	86	89	90	84	87	88
Bangladesh	71	63	73	77	79	81	83	84	85	90	91	92	92	93
Brazil	17	20	27	40	78	71	55	80	77	76	76	73	72	71
Cambodia	91	94	91	95	93	91	92	92	93	91	93	93	94	95
China	93	94	95	95	95	93	95	92	93	94	94	94	94	94
DR Congo	74	48	64	70	69	78	77	78	83	85	85	86	87	87
Ethiopia	61	71	72	74	74	80	76	76	70	79	78	84	84	84
India	25	21	18	27	21	34	54	60	76	82	86	86	87	87
Indonesia	91	81	54	58	50	87	86	86	87	90	91	91	91	91
Kenya	75	77	65	77	79	80	80	79	80	80	82	85	85	85
Mozambique	39	55	65	–	71	75	78	78	76	77	79	83	79	84
Myanmar	67	79	82	82	81	82	81	81	81	84	84	84	85	85
Nigeria	49	32	73	73	75	79	79	79	78	73	75	76	82	78
Pakistan	70	–	67	23	70	74	77	78	79	82	83	88	91	90
Philippines	60	35	78	71	87	88	88	88	88	87	89	88	89	88
Russian Federation	65	57	67	68	65	68	67	67	61	60	58	58	58	57
South Africa	58	61	68	72	57	63	61	68	67	69	71	74	74	76
Thailand	64	78	58	68	77	69	75	74	73	74	75	77	83	82
Uganda	44	33	40	62	61	63	56	60	68	70	73	70	75	70
UR Tanzania	73	76	77	76	78	78	81	80	81	81	82	85	88	89
Viet Nam	89	89	85	92	92	92	93	92	92	93	92	93	92	92
Zimbabwe	53	32	69	70	73	69	71	67	66	54	68	60	78	74
High-burden countries	53	50	56	62	60	67	72	75	81	84	86	87	87	87
AFR	60	56	64	70	68	71	70	73	73	74	76	75	80	80
AMR	50	51	58	67	79	76	69	81	80	79	78	75	79	77
EMR	79	66	73	57	79	81	82	84	82	83	83	86	88	88
EUR	67	58	72	63	75	75	74	74	75	70	72	70	71	66
SEAR	33	31	29	40	34	50	63	68	79	84	87	87	88	88
WPR	80	72	91	92	91	90	91	90	91	91	92	92	92	93
Global	57	54	60	64	64	69	73	76	80	83	85	84	86	86

b. Cohort size (thousands)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Afghanistan	–	–	2.0	2.9	2.0	3.1	6.3	7.8	6.8	10	10	12	13	13
Bangladesh	11	30	34	38	38	38	41	47	54	63	85	102	104	104
Brazil	46	45	43	30	27	34	41	29	38	43	42	48	38	41
Cambodia	4.4	9.1	12	13	16	15	14	17	19	19	21	19	19	20
China	131	175	189	210	208	214	191	194	267	385	473	470	466	464
DR Congo	16	25	26	33	35	36	41	45	54	62	65	63	66	66
Ethiopia	5.1	11	12	15	21	30	32	37	40	41	39	37	38	41
India	265	291	293	284	345	349	384	396	420	489	507	553	592	616
Indonesia	3.0	12	21	40	46	52	54	76	93	129	159	175	161	166
Kenya	6.5	13	19	22	27	28	31	31	34	41	40	39	38	37
Mozambique	11	13	11	–	12	13	14	15	16	17	18	18	18	19
Myanmar	7.9	9.7	9.2	10	12	17	21	24	27	31	37	40	43	41
Nigeria	9.5	24	11	13	15	16	17	21	28	34	35	40	44	46
Pakistan	0.8	–	2.8	29	3.0	4.1	6.3	15	20	32	48	66	89	100
Philippines	90	126	27	21	37	50	55	59	68	78	81	86	87	85
Russian Federation	0.1	43	0.7	0.7	1.5	3.6	4.1	5.2	6.3	26	26	31	32	32
South Africa	28	45	55	37	81	86	101	99	114	127	135	140	143	144
Thailand	20	0.1	3.7	8.0	14	23	20	27	28	28	30	29	30	33
Uganda	15	15	18	13	14	14	17	19	20	21	21	20	21	23
UR Tanzania	20	21	22	24	24	24	24	24	25	26	25	25	25	24
Viet Nam	38	48	54	55	53	53	54	57	56	58	55	56	54	53
Zimbabwe	9.7	12	12	13	13	14	17	16	14	15	13	16	11	10
High-burden countries	739	967	879	912	1 044	1 119	1 186	1 260	1 450	1 776	1 965	2 087	2 132	2 179
AFR	178	233	267	235	323	363	409	452	491	552	564	563	577	576
AMR	129	134	125	111	110	111	102	105	110	121	119	132	114	108
EMR	46	51	60	89	66	64	52	76	81	98	114	132	156	167
EUR	34	94	24	48	22	41	50	54	60	74	81	98	108	70
SEAR	318	360	376	399	473	512	552	604	661	780	856	938	974	1 009
WPR	296	372	294	313	353	360	346	357	439	575	663	663	661	647
Global	1 001	1 245	1 147	1 195	1 347	1 451	1 512	1 649	1 842	2 200	2 396	2 526	2 589	2 578

– Indicates no data reported.

BOX 6

Moving away from estimates of the case detection rate for sputum smear-positive pulmonary TB

In 1991, the World Health Assembly set two global targets for TB control: to achieve a case detection rate (CDR) of ≥70% for new sputum smear-positive cases of pulmonary TB, and to successfully treat 85% of these cases. The targets were originally set for the year 2000, and later reset to 2005. The CDR is defined as the number of new cases of sputum smear-positive pulmonary TB notified to NTPs, divided by the estimated number of incident cases of sputum smear-positive pulmonary TB that occurred in the same year. Particular attention was given to detecting and curing people with sputum smear-positive pulmonary TB because they are the most infectious – and thus the most likely, without proper treatment, to cause further transmission of TB in the population.

The Assembly's targets galvanized efforts to improve TB control at global and country levels. From 1995 onwards, the DOTS strategy emphasized the detection and treatment of sputum smear-positive cases of pulmonary TB, and monitoring of progress towards both targets was given a (justifiably) high profile at global and country levels. All annual reports on global TB control published by WHO from 1997 to 2009 included estimates of the CDR for sputum smear-positive cases of pulmonary TB.[1]

For the first time, this report does not include estimates of the CDR for sputum smear-positive pulmonary TB. Instead, estimates of the CDR for all forms of TB are presented.[2] The CDR for all forms of TB is defined as the total number of new cases notified to NTPs (shown in TABLE 2) divided by the total number of estimated incident cases of TB (shown in TABLE 1).

There are several reasons for this change. NTPs in all countries are diagnosing, notifying and treating people with all forms of TB, not just those with sputum smear-positive TB (TABLE 2). The Stop TB Strategy (BOX 4), launched in 2006, emphasizes the detection and treatment of people with ***all forms*** of TB. The 2015 global targets set within the context of the MDGs and by the Stop TB Partnership (BOX 3), which are now the focus of national and international efforts to control TB, are defined in terms of reductions in the disease burden (incidence, prevalence and mortality) caused by all forms of TB. The CDR indicator included in the MDG framework is the CDR for all TB cases (BOX 3). Laboratory capacity to diagnose smear-negative culture-positive cases of pulmonary TB is increasing, in line with WHO recommendations to improve bacteriological diagnosis of TB using both smear and culture. Further reasons are the results and recommendations arising from a review and associated updating of the methods used to estimate disease burden (ANNEX 1), conducted between June 2008 and October 2009 by an expert group convened by the WHO Global Task Force on TB Impact Measurement. Among other findings, this review identified reasons why estimating the CDR for sputum smear-positive TB is more difficult than previously thought, compared with the CDR for all forms of TB.[3]

If estimates of the CDR for smear-positive TB are needed for reporting purposes, there are two options. The first is to assume that the smear-positive CDR is similar to the CDR for all forms of TB. If this is not satisfactory, countries and/or international agencies should contact WHO and requests for separate estimates of the CDR for smear-positive TB will be handled on a case-by-case basis.

It should be emphasized that the standard of care for TB diagnosis recommended by WHO is (i) sputum smear microscopy for *all cases* and (ii) expansion of the use of *culture* to diagnose all bacteriologically-positive (not just smear-positive) cases, towards the ultimate goal of using culture (or equivalents such as molecular tests) in the diagnosis of all cases.

[1] In the global report published in December 2009, the CDR for smear-positive cases was estimated as 56–68%, with a best estimate of 62%. New cases include relapse cases.

[2] i.e. smear-positive and smear-negative cases of pulmonary TB, and extrapulmonary cases.

[3] A systematic review of the proportion of all TB cases with sputum smear-positive TB is of particular relevance, and is discussed in section 3.6 of ANNEX 1.

ment success rate of 85% among sputum smear-positive cases of pulmonary TB by 2000 were set by the Forty-fourth World Health Assembly in 1991, with the target year subsequently reset to 2005.

Given uncertainty in estimates of TB incidence, this report places less emphasis on the CDR, compared with past reports (and this will be true of future reports on global TB control as well). In particular, this report (for the first time in the series of reports published since 1997) does not include estimates of the CDR for sputum smear-positive cases of pulmonary TB (BOX 6).

The best estimate of the CDR of all forms of TB in 2009 was 63% (range, 60–67%) (TABLE 4). The highest rates of case detection in 2009 are estimated to be in the European Region (best estimate 80%; range, 74–85%) and the Region of the Americas (best estimate 79%; range, 74–85%), followed by the Western Pacific Region (best estimate 70%; range, 64–78%). The African Region has the lowest estimated rate of case detection (best estimate 50%; range, 48–53%). Among the HBCs, the highest rates of case detection in 2009 are estimated to be in Brazil, the Russian Federation, South Africa, Kenya, the United Republic of Tanzania and China; the lowest rate is in Nigeria.

While estimated rates of TB incidence are falling slowly, notification rates are increasing in the African Region and (particularly since around the year 2000) the Eastern Mediterranean and South-East Asia regions,

TABLE 4

Estimates of the case detection rate for all cases (%), 1995–2009[a]

	1995			2000			2005			2009		
	BEST[b]	LOW	HIGH	BEST	LOW	HIGH	BEST	LOW	HIGH	BEST	LOW	HIGH
Afghanistan	–	–	–	18	15	23	47	39	59	49	41	60
Bangladesh	20	16	25	24	20	30	36	30	45	44	37	54
Brazil	79	66	99	74	62	93	84	70	100	86	72	100
Cambodia	24	19	32	30	25	36	56	48	65	60	52	70
China	37	30	46	34	28	41	69	59	81	75	66	86
DR Congo	40	33	50	35	29	43	40	33	50	46	38	56
Ethiopia	20	17	25	42	35	52	42	35	52	50	42	61
India	76	63	95	64	53	80	61	51	76	67	56	83
Indonesia	9.8	8.2	12	22	18	27	61	51	77	67	56	83
Kenya	46	38	57	50	42	63	71	59	88	85	70	100
Mozambique	43	36	54	31	26	38	35	29	44	46	38	57
Myanmar	10	8.6	13	16	14	20	55	46	69	64	53	78
Nigeria	6.4	5.4	8.1	7.6	6.3	9.5	14	11	17	19	16	24
Pakistan	4.4	3.6	5.4	3.2	2.7	4.0	37	31	46	76	63	93
Philippines	47	39	59	47	39	59	53	44	67	56	47	69
Russian Federation	53	44	67	77	64	97	82	68	100	84	71	100
South Africa	56	47	70	59	49	73	61	51	76	83	69	100
Thailand	55	46	69	40	33	50	64	54	80	69	57	85
Uganda	38	32	47	37	30	46	39	32	48	44	36	54
UR Tanzania	59	50	68	67	59	76	74	68	79	90	84	96
Viet Nam	37	27	45	56	41	68	56	41	68	54	42	72
Zimbabwe	55	46	69	60	50	75	49	41	61	46	38	56
High-burden countries	**44**	**41**	**47**	**42**	**39**	**45**	**55**	**52**	**59**	**64**	**60**	**68**
AFR	38	36	40	38	36	40	42	40	45	50	48	53
AMR	68	63	74	70	66	76	75	70	80	79	74	85
EMR	23	20	26	25	22	28	46	41	53	70	62	79
EUR	62	58	67	76	70	82	80	74	86	80	74	85
SEAR	53	47	60	49	44	56	58	51	66	65	58	74
WPR	41	35	48	40	35	46	66	59	74	70	64	78
Global	**46**	**43**	**49**	**45**	**43**	**48**	**56**	**53**	**59**	**63**	**60**	**67**

– Indicates data not available.

[a] Estimates for all years are recalculated as new information becomes available and techniques are refined, so they may differ from those published previously. If notification data from a country had not been received by 16 June 2010, the notification rate in 2009 was assumed to be the same as in 2008. Estimates for the Philippines will be reassessed in late 2010.

[b] Best, low and high indicate best estimates followed by lower and upper bounds. The lower and upper bounds are defined as the 2.5th and 97.5th centiles of outcome distributions produced in simulations. See ANNEX 1 for further details.

indicating that case detection is improving (see FIGURE 26 in SECTION 6). In the Western Pacific Region, notifications increased sharply between 2002 and 2006, but have since stabilized; here, patterns are strongly influenced by China, which accounts for almost 70% of incident cases in this region (TABLE 1).

Despite difficulties with estimating the case detection rate (BOX 6, ANNEX 1), efforts to increase the percentage of TB cases that are diagnosed and treated according to international guidelines are clearly of major importance. This will be necessary to move towards the 7 million notifications targeted in the Global Plan for 2015 (and eventually, to achieve early detection of all cases).

There are three main reasons why incident cases of TB may not be notified (see also ANNEX 1, TABLE A.1). These are:

- **Cases are diagnosed but not reported.** For people in this category, strengthening surveillance systems, establishing links with the full range of health-care providers and stronger enforcement of legislation regarding notification of cases (where this is mandated by law) will help.
- **Cases seek care but are not diagnosed.** For people in this category, better diagnostic capacity is needed. This could mean better laboratory capacity as well as more knowledgeable and better trained staff, especially in peripheral-level health-care facilities.
- **Cases do not seek care.** For people in this category, reasons could include not recognizing any symptoms of TB and/or no access (financial and/or geographical) to health-care services. To reach cases in this category, health systems need to be strengthened so that basic health-care services are available to more people, and financial barriers to diagnosis (and subsequently treatment) need to be mitigated or removed.

BOX 7

How strengthening surveillance systems can increase notifications of TB cases: an example from China

In China, the NTP provides services through a large network of TB dispensaries. At the same time, a large number of people with TB symptoms seek care from hospitals. Diagnosis of TB and treatment for TB patients are provided by these hospitals. A challenge is that hospitals are not as well-placed to follow the recommended standards of TB care, particularly standards that are designed to help patients to complete treatment. While policies were in place, for several years it proved difficult to ensure that people with TB symptoms were referred from hospitals to TB dispensaries.

In 2004, a new opportunity to improve linkages between the NTP and hospitals arose. In response to the SARS (severe acute respiratory syndrome) epidemic, the government established a web-based communicable diseases reporting system throughout the country. It became mandatory to report 37 infectious diseases, including TB, within 24 hours. By the end of 2008, this system covered all communicable disease centres, 97% of hospitals at county-level or above, and 82% of township level clinics. The system is used by up to 68 000 facilities every day, and about 25 000 cases of infectious disease are reported each day.

Doctors in all health facilities, including hospitals, use this system to report information on people with TB signs and symptoms and refer them to the nearest TB dispensary. The information reported includes essential contact details and the diagnostic status of each person with TB signs and symptoms and each confirmed TB case. Data are available to authorized individuals and institutions as soon as they are entered into the system. Staff who are authorized to access the database browse the data every day. If the referred patients and confirmed cases do not arrive within a day, staff in TB dispensaries retrieve the relevant information from the system and trace anyone who is missing (for example, via telephone or visits to the person's home).

Through collaboration to help implement the TB component of the web-based reporting system, the Ministry of Health succeeded in developing a productive collaboration between hospitals and TB dispensaries. From 2004 to 2007, the proportion of TB suspects and cases referred from hospitals and arriving in TB dispensaries increased substantially, from 59% to 78%. The contribution of hospitals to confirmed cases of sputum smear-positive pulmonary TB doubled, from 16% to 33%. With the web-based reporting system serving as an instrument to put policy into practice, hospitals now contribute about a third of all notifications of sputum smear-positive pulmonary TB in China.

Further details about the web-based surveillance system are provided in BOX 14.

A case study from China, which illustrates how strengthening surveillance can lead to increased notifications of TB cases and an increase in the CDR, is provided in BOX 7. Engagement of all care providers is discussed in the next section. Strengthening of laboratory capacity and human resource development are discussed in BOX 8 and BOX 10, respectively.

4.4 Public–private and public–public mix (PPM) initiatives

In many countries, one of the best ways to increase case detection is for NTPs to establish collaboration with the full range of health-care providers. This is component 4 of the Stop TB Strategy (BOX 4), and its two subcomponents are:

- involvement of all public, voluntary, corporate and private providers through Public-Private Mix (PPM) approaches; and
- promotion of the International Standards for Tuberculosis Care through PPM initiatives.

Efforts to engage all care providers through PPM initiatives, beyond those which fall under the direct responsibility of the NTP (termed "non-NTP providers" in this report), are being introduced and scaled up in many countries. Unfortunately, demonstrating this progress is not always possible. First, it requires that systematic recording and reporting of the source of referral and place of TB treatment is being done. Second, it requires that data reported at the local level are aggregated, analysed and reported at the national level.[1] Often, one or both conditions are not yet met.

Despite this recording and reporting challenge, substantial progress in engaging non-NTP care providers through PPM can be documented for an increasing number of countries. New and compelling data compiled from 15 countries (including nine HBCs) in 2010, which demonstrate the major contribution that PPM can make to case notifications, are summarized in TABLE 5. In these 15 countries, the contribution of PPM initiatives typically ranges from between about one fifth to one third of total notifications, in the geographical areas in which PPM has been implemented. This has been accompanied by maintenance of high rates of treatment success (data not shown).

As also illustrated in TABLE 5, NTPs have used a variety of approaches to engage non-NTP care providers, according to the local context. These include incentive-based schemes for individual and institutional providers in India and Myanmar; a web-based system for mandatory reporting of TB cases by all providers in China

[1] WHO recommends that the source of referral and the place of treatment should be routinely recorded and reported.

TABLE 5

Contribution of PPM to TB case notifications in selected countries

COUNTRY	TYPES OF NON-NTP CARE PROVIDERS ENGAGED	COVERAGE	NUMBER OF CASES NOTIFIED PER YEAR[a]	CONTRIBUTION TO TOTAL NOTIFICATIONS[b] (%)
Angola	Diverse public and private providers	Countrywide	4 591	12%
Cambodia	Pharmacies, private clinics and hospitals	Countrywide	6 550	17%
China	General public hospitals	Countrywide	337 286	37%
Ghana	Diverse public and private providers	Countrywide	2 124	15%
India	Diverse public, private and NGO providers	14 large cities (50 million population)	12 450	36% of new smear-positive cases
Indonesia	Public and private hospitals	Countrywide	38 362	13%
Islamic Republic of Iran	Diverse public and private providers	Countrywide	2 514	25%
Kazakhstan	Prison health services	Countrywide	1 515	8%
Mexico	Social security organizations	43% of the economically-active population	3 438 (2008)	29% of new smear-positive cases
Myanmar	Private practitioners through the professional medical association	26 townships (6.4 million population)	8 526 (2008)	21%
Nepal	Diverse public and private providers	Countrywide	2 519	8%
Nigeria	Private clinics and hospitals	Countrywide	29 418	34%
Pakistan	Private practitioners, NGOs and hospitals	Countrywide	43 162	14%
Philippines	Private clinics and hospitals	30 million population	3 994	28% of new smear-positive cases
United Republic of Tanzania	Private and NGO hospitals	Countrywide	11 492	19%

[a] Data from 2009, except where specified.
[b] Contribution to all notifications **in the geographical areas covered by PPM** is shown, except where specified.

(BOX 7); and reimbursement for TB care delivered by private providers through health insurance, when care conforms with agreed-upon standards, in the Philippines. It is also noticeable that countries have prioritized different types of care providers. This includes pharmacies in Cambodia, private hospitals in Nigeria, public hospitals in China and Indonesia, social security organizations in Mexico and prison services in Kazakhstan.

In general, only a small proportion of targeted care providers collaborate actively with NTPs and contribute to TB case notifications in most countries. For this reason, it is not surprising that NTPs often give first priority to engaging institutional providers with whom establishing collaborative links may be less demanding and, for a given amount of effort, will yield a higher number of notifications. At the same time, involving front-line health workers such as community-based informal providers, private practitioners and pharmacies – who are often the first point of contact for people with symptoms of TB – can help to reduce diagnostic delays and the out-of-pocket expenditures of TB patients. For these reasons, scaling up PPM, in phases if not at once, should aim to systematically map and engage *all* relevant care providers in TB care and control.

4.5 Collaborative TB/HIV activities

Collaborative TB/HIV activities are essential to ensure that HIV-positive TB patients are identified and treated appropriately, and to prevent TB in HIV-positive people.[1] These activities include establishing mechanisms for collaboration between TB and HIV programmes; infection control in health-care and congregate settings; HIV testing of TB patients and – for those TB patients infected with HIV – CPT and ART; and intensified TB case-finding among people living with HIV followed by IPT for those without active TB. Testing TB patients for HIV and providing CPT for HIV-positive TB patients are typically the responsibility of NTPs; national HIV programmes are usually responsible for initiating intensified case-finding among HIV-positive people and provision of IPT to those without active TB. Provision of ART to HIV-positive TB patients is often the responsibility of national HIV programmes, but may also be done by NTPs. When NTPs do not provide ART directly, they are responsible for referring HIV-positive TB patients to ART services.

Further progress in implementing collaborative TB/HIV activities was made in 2009, which consolidated the achievements documented in previous reports. Just over 1.6 million TB patients knew their HIV status in 2009 (26% of notified cases), up from 1.4 million in 2008 (FIGURE 3). The highest rates of HIV testing were reported in the European Region, the African Region and the Region of the Americas, where 86%, 53% and 41% of TB patients knew their HIV status, respectively (TABLE 6). In 55 countries, at least 75% of TB patients knew their HIV status, including 16 African countries (FIGURE 4), up from 50 countries in total and 11 in the African

[1] *Interim policy on collaborative TB/HIV activities*. Geneva, World Health Organization, 2004 (WHO/HTM/TB/2004.330; WHO/HTM/HIV/2004.1).

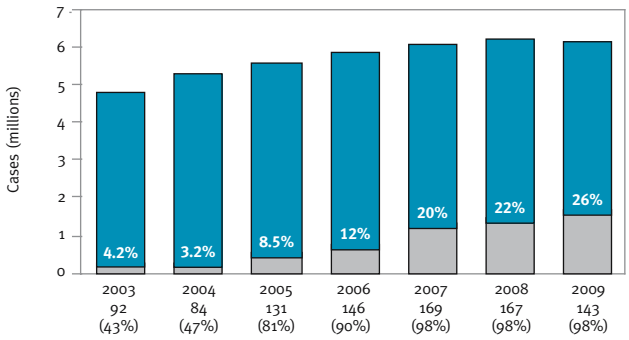
TABLE 6

HIV testing, treatment for HIV-positive TB patients and prevention of TB among people living with HIV, by WHO region, 2009

	NUMBER OF TB PATIENTS WITH KNOWN HIV STATUS (THOUSANDS)	% OF NOTIFIED TB PATIENTS TESTED FOR HIV	% OF TESTED TB PATIENTS HIV-POSITIVE	% OF IDENTIFIED HIV-POSITIVE TB PATIENTS STARTED ON CPT	% OF IDENTIFIED HIV-POSITIVE TB PATIENTS STARTED ON ART	NUMBER OF HIV-POSITIVE PEOPLE SCREENED FOR TB (THOUSANDS)	NUMBER OF HIV-POSITIVE PEOPLE PROVIDED WITH IPT (THOUSANDS)
AFR	788	53	46	76	36	1052	61
AMR	87	41	17	62	73	45	4.6
EMR	41	8.6	3.6	43	50	21	0.5
EUR	244	86	4.9	24	23	239	12
SEAR	316	14	13	75	52	310	0.5
WPR	155	11	9.1	64	16	10	1.6
Global	**1631**	**26**	**27**	**75**	**37**	**1678**	**79**

FIGURE 3

HIV testing for TB patients, all countries, 2003–2009. The number of notified new and retreatment cases is shown in blue and the number of cases for which the HIV status was recorded in the TB register is shown in grey. The percentage of notified TB cases with known HIV status is indicated above the grey bars.[a]



[a] The numbers under each year show the number of countries reporting data on HIV testing followed by the percentage of total estimated HIV-positive TB cases accounted for by reporting countries.

FIGURE 4

HIV testing for TB patients, 2009

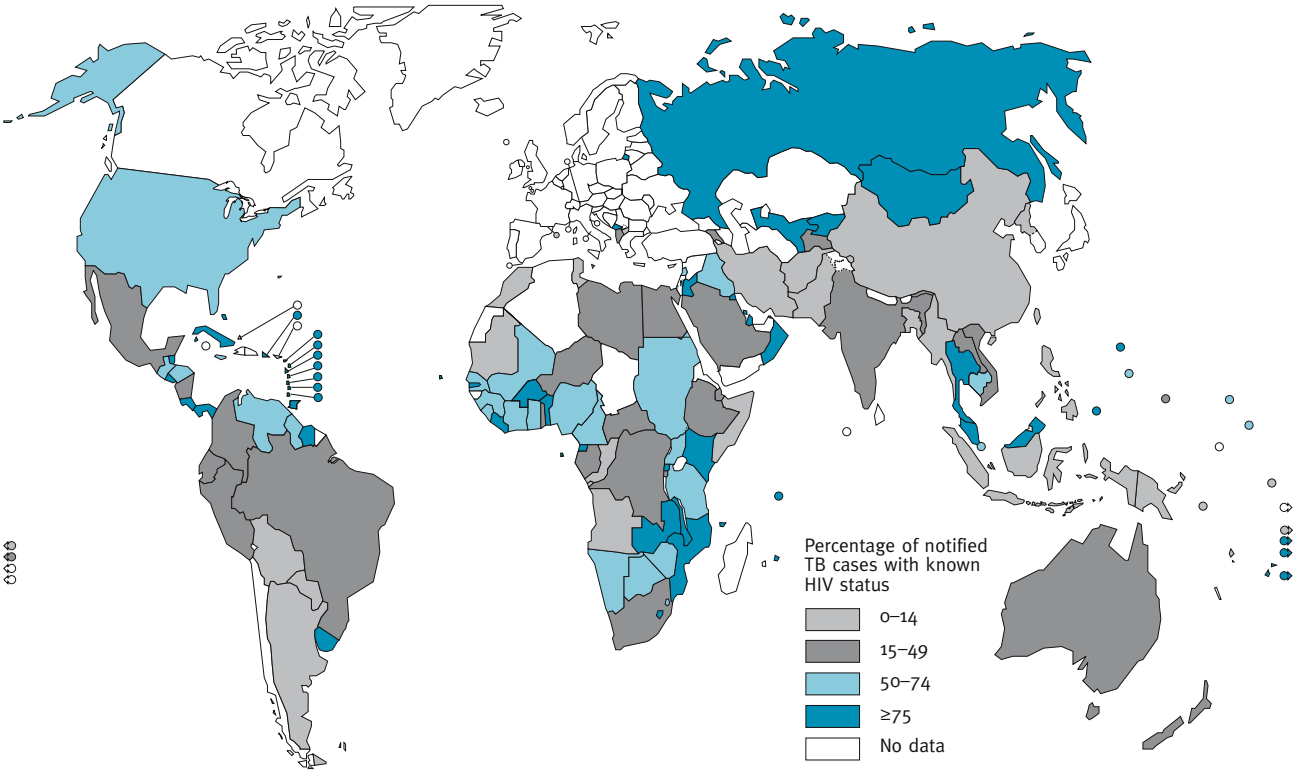


FIGURE 5

Co-trimoxazole preventive therapy and antiretroviral therapy for HIV-positive TB patients, 2003–2009

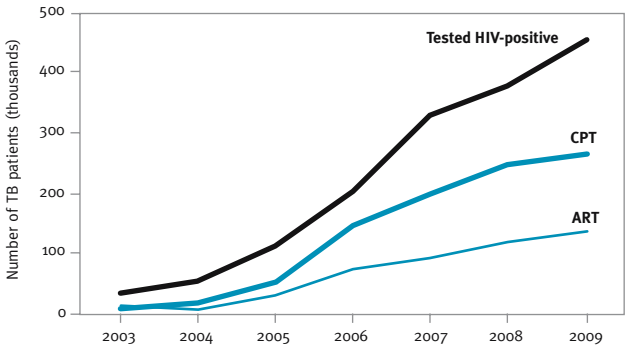
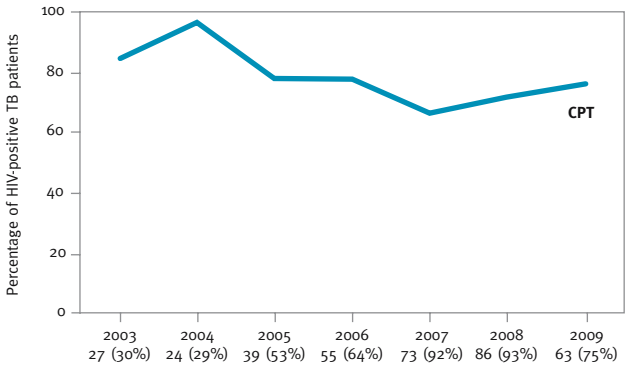


FIGURE 6

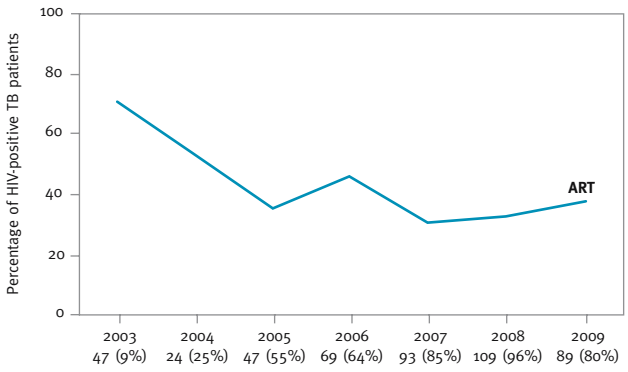
Co-trimoxazole preventive therapy for HIV-positive TB patients, 2003–2009[a]



[a] Numbers under years show the number of countries reporting data followed by the percentage of total estimated HIV-positive TB cases accounted for by reporting countries.

FIGURE 7

Antiretroviral therapy for HIV-positive TB patients, 2003–2009[a]



[a] Numbers under years show the number of countries reporting data followed by the percentage of total estimated HIV-positive TB cases accounted for by reporting countries.

Region in 2008. The number of HIV-positive TB patients enrolled on CPT and ART has been increasing in recent years, especially since 2005 (FIGURE 5). By 2009, almost 300 000 HIV-positive TB patients were started on CPT and almost 140 000 were enrolled on ART. Almost 80% of TB patients who were known to be HIV-positive were started on CPT and almost 40% were enrolled on ART (FIGURE 6, FIGURE 7). Further efforts are needed to reach the Global Plan target of starting 100% of HIV-positive TB patients on both CPT and ART by 2015.

Screening for TB among HIV-positive people and providing IPT to those without active TB have steadily increased, particularly since 2007 (FIGURE 8, FIGURE 9). In 2009, 1.7 million HIV-positive people were screened for TB and close to 80 000 of those without active TB were enrolled on IPT. The numbers screened are equivalent to about one third of the people living with HIV who are on ART, about 10% of the people living with HIV who are estimated to be in need of ART and about 5% of the estimated total number of HIV-positive people worldwide. The numbers started on IPT are less than 1% of the estimated number of people living with HIV. Intensified efforts are needed to approach the Global Plan target of providing IPT to all those attending HIV care services who are eligible for it by 2015.

4.6 Management of drug-resistant TB

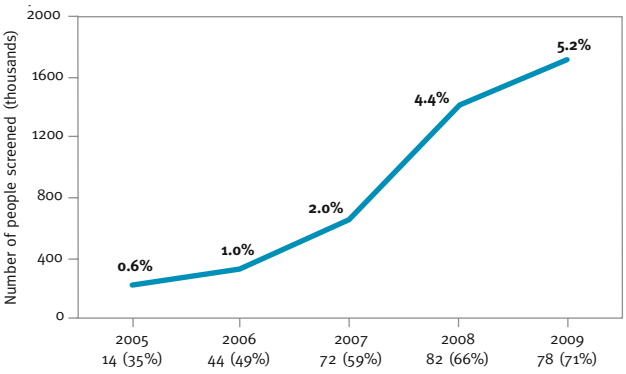
Globally, just over 30 000 cases of MDR-TB were notified to WHO in 2009, mostly by European countries and South Africa (FIGURE 10, TABLE 7). This represents 12% of the estimated number of cases of MDR-TB among all notified cases of pulmonary TB in 2009 (TABLE 7). Country plans suggest that, overall, the numbers of patients diagnosed with MDR-TB and started on treatment will almost double in 2010 and 2011, compared with 2009 (FIGURE 10). Substantial increases in the numbers of patients diagnosed with MDR-TB and started on treatment are expected in the three countries where the estimated number of cases is highest: China, India and the Russian Federation (TABLE 7).

There has been an impressive increase in the share of notified cases enrolled on treatment in projects or programmes approved by the Green Light Committee (GLC), in which patients are known to be receiving treatment according to international guidelines. The number reached around 11 000 in 2009, and is expected to rise to over 30 000 in 2011 (approximately 60% of all notifications of MDR-TB that are projected by countries in that year). This remains a small fraction of the estimated number of TB patients who have MDR-TB (eighth column from right, TABLE 7). Much more rapid expansion of diagnosis and treatment – within and outside projects and programmes approved by the GLC – is needed to approach the targets for MDR-TB that are included in the Global Plan (FIGURE 11).

National data on treatment outcomes among cohorts

FIGURE 8

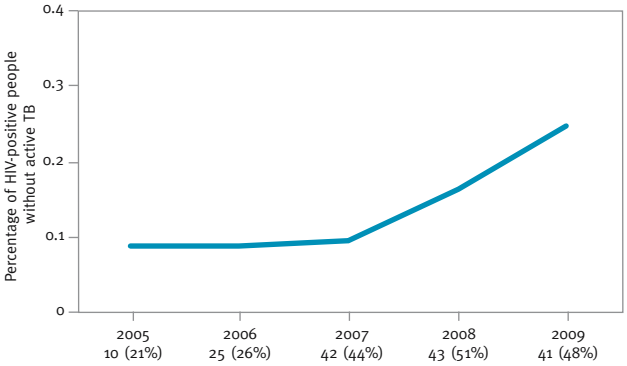
Intensified TB case-finding among HIV-positive people, 2005–2009. The percentage of estimated HIV-positive people who were screened for TB is shown above the line.[a]



[a] Numbers under years show the number of countries reporting data followed by the percentage of total estimated HIV-positive people accounted for by reporting countries.

FIGURE 9

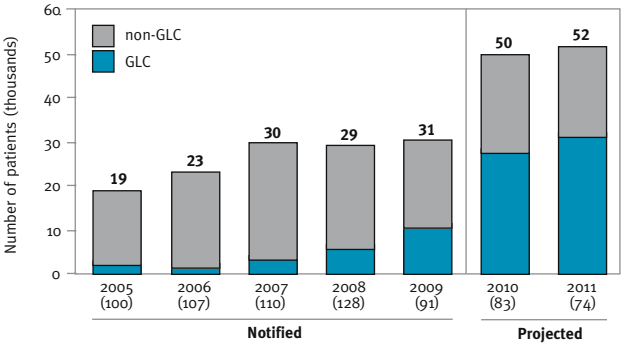
IPT provision among HIV-positive people, 2005–2009[a]



[a] Numbers under years show the number of countries reporting data followed by the percentage of total estimated HIV-positive people without active TB accounted for by reporting countries.

FIGURE 10

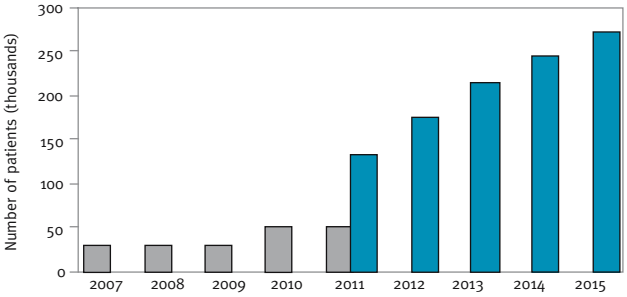
Notified cases of MDR-TB (2005–2009) and projected numbers of patients to be enrolled on treatment (2010–2011)[a]



[a] Numbers under years show the number of countries reporting data.

FIGURE 11

Notified cases of MDR-TB (2007–2009) and projected numbers of patients to be enrolled on treatment (2010–2011) in the 149 countries included in the Global Plan (grey), and targets included in the Global Plan (2011–2015)[a] (blue). Numbers are for smear and/or culture-positive cases of MDR-TB.



[a] The updated version of the Global Plan, covering the years 2011–2015, was launched by the Stop TB Partnership in October 2010.

TABLE 7

Number of MDR-TB cases estimated, notified, enrolled on treatment and expected to be treated, 27 high MDR-TB burden countries and WHO regions

	ESTIMATED % OF ALL NEW TB CASES WITH MDR-TB[a]			ESTIMATED % OF ALL RETREATED TB CASES WITH MDR-TB[a]			TOTAL NUMBER OF ESTIMATED CASES OF MDR-TB IN 2008[a] (THOUSANDS)			ESTIMATED CASES OF MDR-TB AMONG NOTIFIED CASES OF PULMONARY TB IN 2009[b] (A) (THOUSANDS)			NOTIFIED CASES OF MDR-TB IN 2009 (B)	NOTIFIED CASES OF MDR-TB AS % OF ESTIMATED CASES OF MDR-TB AMONG ALL NOTIFIED CASES OF PULMONARY TB (B/A)[c]	CASES OF MDR-TB ENROLLED ON TREAT-MENT IN 2009	EXPECTED NUMBER OF CASES OF MDR-TB TO BE TREATED	
	BEST[d]	LOW	HIGH	BEST	LOW	HIGH	BEST	LOW	HIGH	BEST	LOW	HIGH				2010	2011
Armenia	9.4	7.3	12	43	38	49	0.5	0.4	0.6	0.17	0.14	0.19	156	92	–	380	160
Azerbaijan	22	19	26	56	52	60	4.0	3.3	4.7	–	–	–	–	–	–	–	–
Bangladesh	2.2	0	5.6	15	0	40	9.8	1.0	19	3.2	0.8	7.5	–	–	468	1 119	776
Belarus	12	0	25	42	12	72	0.8	0.3	1.3	0.8	0.4	1.4	–	–	–	–	–
Bulgaria	12	0	25	42	12	72	0.5	0.1	0.8	–	–	–	–	–	–	–	–
China	5.7	5.0	6.6	26	23	28	100	79	120	59	53	66	474	1	458	3 291	6 706
DR Congo	1.8	0	4.3	7.7	0	18	5.6	0.5	11	2.0	0.7	4.2	91	5	352	–	–
Estonia	15	12	20	43	32	54	0.09	0.07	0.12	–	–	–	–	–	–	80	80
Ethiopia	1.6	0.9	2.7	12	6.4	21	5.2	2.4	8.0	1.8	1.1	2.7	233	13	88	539	746
Georgia	6.8	5.2	8.7	27	24	31	0.7	0.6	0.8	0.34	0.29	0.40	–	–	–	–	–
India	2.3	1.8	2.8	17	15	20	99	79	120	66	59	73	1 660	3	1 136	8 000	15 000
Indonesia	2.0	0.5	6.9	15	0	40	9.3	0	21	5.8	1.0	16	–	–	20	250	1 000
Kazakhstan	14	11	18	56	51	62	8.1	6.4	9.7	6.5	5.9	7.2	3 644	56	135	5 163	4 215
Kyrgyzstan	12	0	25	42	12	72	1.4	0.4	2.4	0.7	0.3	1.3	–	–	545	220	210
Latvia	12	9.9	15	32	25	40	0.17	0.14	0.20	–	–	–	–	–	–	135	140
Lithuania	9.0	7.5	11	48	43	52	0.33	0.27	0.39	–	–	–	–	–	–	300	–
Myanmar	4.2	3.2	5.6	10	7.1	14	9.3	6.4	12	4.4	3.4	5.4	815	19	64	125	200
Nigeria	1.8	0	4.3	7.7	0	18	11	1.3	20	1.9	0.6	3.9	28	1	–	80	350
Pakistan	2.9	0	8.0	35	0	75	15	1.2	29	9.8	2.7	22	49	1	368	400	1 100
Philippines	4.0	3.0	5.5	21	15	29	13	8.9	17	6.8	5.3	8.5	1 073	16	491	1 494	2 004
Republic of Moldova	19	17	22	51	49	53	2.1	1.7	2.4	1.3	1.3	1.4	924	71	–	–	–
Russian Federation	16	12	20	42	38	47	38	30	45	30	26	34	7 062	24	8 143	12 000	–
South Africa	1.8	1.5	2.3	6.7	5.5	8.1	13	10	16	6.6	5.5	7.7	7 343	111	4 143	7 301	8 642
Tajikistan	17	11	24	62	53	70	4.0	2.9	5.1	0.9	0.7	1.2	319	35	52	–	–
Ukraine	16	14	18	44	40	49	8.7	6.8	11	6.4	5.8	7.1	808	13	–	–	–
Uzbekistan	14	10	18	50	36	64	8.7	6.5	11	2.6	2.1	3.1	654	25	464	720	1 010
Viet Nam	2.7	2.0	3.6	19	15	25	5.9	3.8	8.1	3.1	2.5	3.8	217	7	307	650	910
High MDR-TB burden countries	**3.9**	**3.5**	**4.3**	**23**	**21**	**24**	**380**	**330**	**450**	**220**	**200**	**240**	**25 550**	**12**	**17 234**	**42 247**	**43 249**
AFR	1.5	1.3	1.8	6.8	5.7	8.1	69	53	110	22	19	26	8 798	40	6 194	9 323	11 382
AMR	2.1	1.8	2.4	12	11	14	8.2	7.3	9.3	5.3	4.8	5.8	2 865	54	3 128	3 205	3 651
EMR	2.5	0.9	5.7	29	14	49	24	11	81	13	6.3	26	496	4	707	1 156	2 063
EUR	12	10	13	41	38	44	81	73	90	50	46	54	13 816	28	9 568	20 354	7 176
SEAR	2.3	1.8	3.1	17	15	19	130	110	170	85	75	99	2 560	3	2 156	9 833	17 309
WPR	4.8	4.2	5.4	23	21	26	120	100	140	71	65	79	2 000	3	1 412	5 729	9 933
Global	**3.3**	**3.0**	**3.6**	**21**	**19**	**22**	**440**	**390**	**510**	**250**	**230**	**270**	**30 535**	**12**	**23 165**	**49 600**	**51 514**

– Indicates data not available.

[a] See Multidrug and extensively drug-resistant TB [M/XDR-TB]: 2010 global report on surveillance and response. WHO/HTM/TB/2010.3.

[b] Calculated by applying the best estimate of MDR to the notified cases of pulmonary TB (a multiplier of 0.9 is used to determine the number of pulmonary cases expected to be culture-positive if tested).

[c] Percentage may exceed 100% as a result of conservative estimates of MDR-TB and/or notification of cases of MDR from a previous year.

[d] Best, low and high indicate the point estimate and lower and upper bounds of the 95% uncertainty interval.

of at least 200 patients are currently limited to nine countries: Brazil, Kazakhstan, Peru, the Philippines, the Republic of Moldova, Romania, South Africa, Turkey and Uzbekistan (FIGURE 12). Rates of treatment success are variable, ranging from below 40% to almost 80%. High rates of default are a common problem (with a median value of 17%).

One of the most important constraints to rapid expansion of diagnostic and treatment services for MDR-TB is laboratory capacity. Without greater capacity to diagnose MDR-TB, the number of cases diagnosed and treated will remain low. Diagnostic testing for drug susceptibility, or DST, among new cases of TB remains almost entirely confined to the European Region and the Region of the Americas (FIGURE 13). Even in these regions, however, the percentage of previously treated patients who were tested for drug resistance was less than 40%, far below the target of testing all previously treated patients by 2015 that is included in the Global Plan.

Recent efforts to strengthen laboratory services, under the umbrella of the Global Laboratory Initiative, are highlighted in BOX 8.

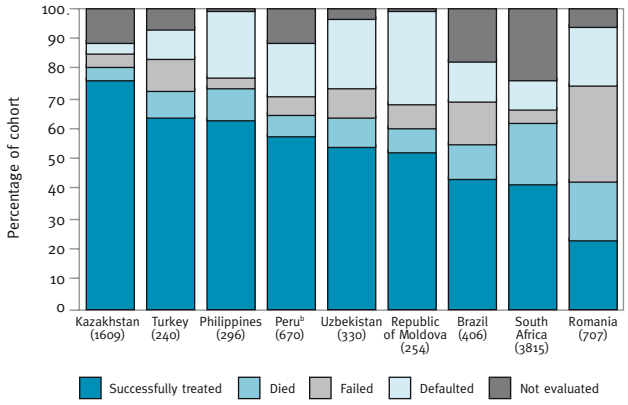
While efforts to improve the diagnosis and treatment of MDR-TB are urgently needed, the existence of MDR-TB and XDR-TB also highlights the paramount importance of preserving the efficacy of the few anti-TB medicines currently used in TB treatment (BOX 9).

Limiting the number of cases of MDR-TB (and drug-susceptible TB) also requires that proper measures for infection control are in place. These measures include personal protection (for example, masks), administrative controls (for example, in waiting areas for people attending outpatient services) and environmental measures such as ventilation systems. The best indicator to assess the quality of infection control is the ratio of the notification rate of TB among health-care workers to the notification rate among the general population. This ratio should be approximately 1. The data required to calculate this indicator are requested on the WHO data collection form, but to date the availability of reliable data is limited. Collection and reporting of data on this indicator need to be improved.

A total of 64 countries reported that training related to infection control was done in 2009. For 35 countries, this included training in tertiary (referral) hospitals. Among 80 countries that provided data, 55 (69%) reported having a focal point for infection control related to TB in at least one of their tertiary hospitals. Of 75 countries that provided data, 36 (48%) had performed an assessment of the status of infection control for TB in at least part of their network of tertiary hospitals in 2009.

FIGURE 12

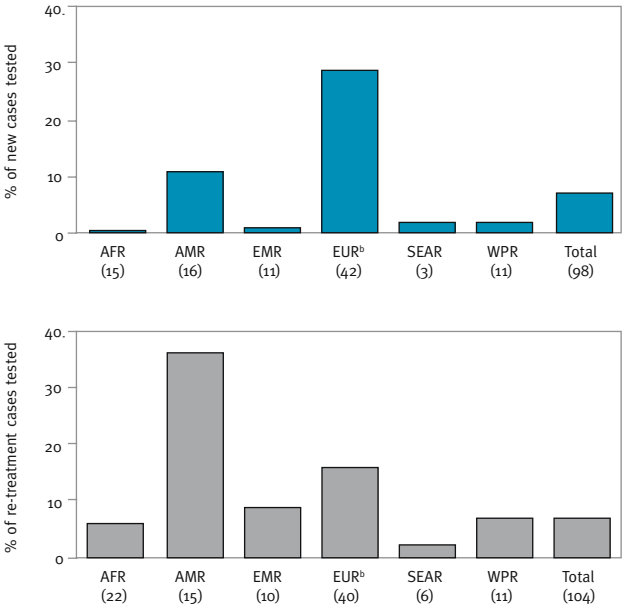
Treatment outcomes for patients with MDR-TB in 9 countries, 2007 cohorts. The total number of patients in each cohort is shown under each country.[a]



[a] Only countries reporting outcomes for >200 cases of MDR-TB with <20% patients still on treatment shown. Countries ranked by proportion successfully treated (cured+completed).
[b] Data for Peru are from 2006.

FIGURE 13

Diagnostic DST for new and re-treatment TB cases, by WHO region, 2009[a]



[a] The numbers under each bar show the number of countries in each region reporting data.
[b] Data for EUR are from 2008 (data for 2009 were incomplete at the time of publication due to later deadlines for reporting).

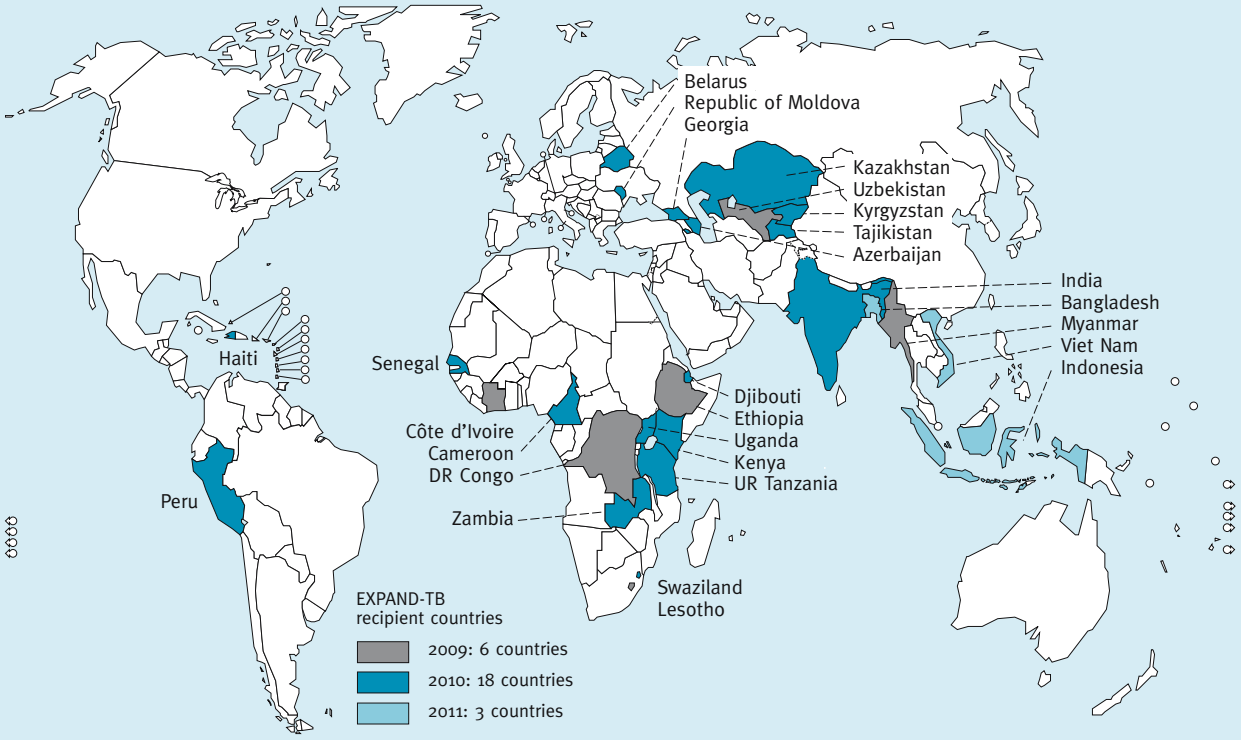
BOX 8

Strengthening laboratory services: GLI and EXPAND-TB

Diagnosis of MDR-TB and improved diagnosis of drug-susceptible TB require substantial strengthening of laboratory services in many countries. To help to address this need, a network of international partners formed the Global Laboratory Initiative (GLI) in 2008; the secretariat is hosted by WHO's Stop TB Department. The GLI works with NTPs, non-governmental organizations, technical and financial partners, and WHO offices to strengthen laboratory services and encourage the adoption of new diagnostic tools once these have been endorsed by WHO.

EXPAND-TB (Expanding Access to New Diagnostics for TB) is a major global project that is supported by UNITAID, with total funding of US$ 88 million. The goal of EXPAND-TB is to improve capacity to diagnose MDR-TB in upgraded laboratory services. Launched in 2008 and expected to continue until 2013, it covers 27 countries (MAP) including 13 of the high MDR-TB burden countries and 10 of the 22 HBCs. Targets include the detection of 130 000 patients with MDR-TB and around 1 million cases of drug-susceptible TB. Transfer of modern technology, use of rapid tests and the integration of new tools within NTPs are emphasized.

EXPAND-TB is built on the foundation of a strong international partnership. UNITAID provides funding for essential instruments, reagents and supplies. The GLI develops policies and norms, conducts laboratory assessments and on-site monitoring, and develops indicators and tools. The Foundation for Innovative New Diagnostics (FIND) negotiates with industry on the price of products, ensures that customer support is available, shares knowledge gained in the product development process, and offers long-term and onsite mentoring of technology transfer. The Global Drug Facility (GDF) coordinates and manages procurement and delivery, works on the prequalification of diagnostics by WHO, and together with FIND engages with industry to negotiate affordable prices and decreases in prices over time.



Prolonged, sustained mentoring and technical support are provided by FIND and other GLI partners to develop in-country laboratory capacity through training and mentorship of local laboratory staff. Progress reflecting different models for laboratory strengthening is illustrated below using four country examples.

■ **Lesotho: an example of rapid technology transfer.** Between 2007 and 2008, the national reference laboratory was established, with appropriate biosafety containment. In 2009, microscopy services were reinforced, culture and DST services were implemented (including both solid and liquid methods), and molecular line-probe assays (LPAs) were introduced. This demonstrates the feasibility of transferring rapid technology in resource-limited settings. Capacity to test for HIV infection was added to the molecular diagnostics facility in 2009, allowing early diagnosis of HIV infection in infants. The equipment required for this was supplied by FIND; training and proficiency testing were provided by staff from the Centers for Disease Control in Atlanta, USA. Renovation of a regional culture laboratory began in 2010.

BOX 8 *Continued*

■ **Ethiopia: an example of laboratory integration.** Two central laboratories (including the national reference laboratory) and five regional laboratories have been strengthened and now have capacity to rapidly test for MDR-TB using molecular techniques (LPAs). With funding from PEPFAR (the US President's Emergency Plan for AIDS Relief), these laboratories are also conducting HIV testing using molecular methods, showing the feasibility of integrated laboratory services for TB and HIV. This model will be pursued for all EXPAND-TB countries with a high-burden of TB and HIV.

■ **India: an example of laboratory scale-up for diagnosis of MDR-TB.** A total of 43 laboratories are being strengthened. These include national reference laboratories, intermediate reference laboratories, public health laboratories and laboratories in medical colleges. Liquid culture and LPAs are being introduced and staff capacity strengthened (though a Global Fund grant for which FIND is a sub-recipient).

■ **Myanmar: an example of political commitment.** One central laboratory and one regional laboratory are being strengthened. New equipment has been installed, and the government has refurbished both laboratories and provided funding for training of laboratory technicians. This commitment from the government should help to ensure the sustainability of laboratory services.

BOX 9

Ensuring the rational use of anti-TB medicines

In 2010, 44 countries including 15 HBCs reported that first-line TB medicines were available in private pharmacies. In 22 countries including 12 HBCs, these medicines were available without a prescription. Some second-line drugs are even more freely available, such as fluoroquinolones. Serious efforts are required to limit the irrational use of TB medicines and thus prevent the development of drug resistance and amplification, especially since the misuse of these drugs by multiple care providers has been well documented.

National legislation to ensure that medicines are only available in public and non-public health facilities where rational and standardized treatment of TB is in place is one way to reduce the misuse of first and second-line drugs. The capacity of national drug regulatory authorities may have to be strengthened for this purpose.

A rapid assessment of regulatory approaches used to minimize the misuse of first-line TB medicines in Brazil, Ghana, India, the United Republic of Tanzania and Zambia in 2009 provided valuable insights into the different strategies that countries have used to date. In Brazil, first-line TB medicines have never been available in private pharmacies and, with uninterrupted availability in the public sector free-of-charge, a private market has not developed. In the absence of any formal legislation, Ghana and the United Republic of Tanzania have also been successful in restricting procurement and distribution of TB medicines so that they are only available to the NTP. To a great extent, this has also been achieved in Zambia. In these three countries, TB medicines are only distributed to private, NGO or other health facilities that are known to follow the national guidelines and comply with recording and reporting requirements. Managing the distribution of TB medicines in this way also helps to encourage collaboration between the NTP and other care providers.

The private sector in India is probably the biggest private source of TB medicines in the world. Management of TB patients in the private sector is known to be of uneven quality and it is often possible to buy TB medicines and other antibiotics in private pharmacies without a prescription. To address this situation within India's federal structure requires greater collaboration between agencies responsible for drug regulation at central and state levels.

Effective regulation of the sale and use of TB medicines, especially in countries where a domestic pharmaceutical industry is present, requires concerted effort and collaboration among Ministries of Health, drug regulatory authorities, the pharmaceutical industry, pharmacy associations, associations of health professionals and civil society.

BOX 10

Developing human resources: an integral component of the Stop TB Strategy

Effective TB control depends on hiring, training, deploying, motivating and managing sufficient numbers of health workers – and ensuring that they have the appropriate professional competencies – at all levels of the private and public health systems. This is a major challenge in many countries with a high burden of TB. In 2006, WHO estimated that 57 countries were facing a critical shortage of health workers.[1] Among these countries, 36 (63%) were in the African Region, including eight HBCs (the Democratic Republic of the Congo, Ethiopia, Kenya, Mozambique, Nigeria, Uganda, the United Republic of Tanzania and Zimbabwe).

The section on human resource development (HRD) in the 2010 global TB data collection form requested information about three main variables: (i) the percentage of established positions[2] that were vacant at the end of 2009 at peripheral-level health care units, for four key categories of health worker; (ii) the percentage of staff employed in peripheral-level health care units who were trained by the NTP in 2009, for the same four categories of staff; and (iii) the percentage of staff employed in peripheral-level health care units who had been trained by the NTP at any time, for the same four categories of health worker.

The completeness of reporting is summarized in the table (right).

REGION (NUMBER OF MEMBER COUNTRIES)	NUMBER OF COUNTRIES THAT REPORTED COMPLETE DATA ON HRD (% OF REGIONAL TOTAL)	NUMBER OF COUNTRIES THAT REPORTED SOME DATA ON HRD (% OF REGIONAL TOTAL)	NUMBER OF COUNTRIES THAT DID NOT REPORT ANY DATA ON HRD (% OF REGIONAL TOTAL)
African (46)	12 (26%)	13 (28%)	21 (46%)
Americas (36)	9 (25%)	2 (6%)	25 (69%)
Eastern Mediterranean (22)	13 (59%)	3 (14%)	6 (27%)
European (53)	0	8 (15%)	45 (85%)
South-East Asia (11)	4 (36%)	4 (36%)	3 (27%)
Western Pacific (36)	13 (36%)	3 (8%)	20 (56%)
Number of high-burden countries (out of 22)	7 (32%)	10 (45%)	5 (23%)
Total (204)	**51 (25%)**	**35 (16%)**	**120 (59%)**

Among the nine HBCs in the African Region, two reported complete data and two reported no data; for the five countries for which data were incomplete, the missing data related to the status of training. With eight of these HBCs among the 57 countries facing critical shortages of health staff, including three that are in the list of 27 high MDR-TB burden countries, lack of or insufficient data on HRD could be a major obstacle to scaling up interventions according to the targets set in strategic plans. Nine of the 22 HBCs as well as a high proportion of all countries did not report any data on "training coverage", even though this is a major programme activity and one that has increased considerably with the availability of funds from donors such as the Global Fund and USAID.

Since 2006, a box to collect data on staffing and training has been included in the recording and reporting forms recommended by WHO. The limited availability of data suggests that, in most countries, these data are not yet routinely collected or analysed by NTPs. Data on staffing at the peripheral level could be obtained from the Human Resources for Health (HRH) departments of the Ministries of Health (or similar structures), although observations during programme reviews and other country missions often suggest that collaboration between HRH departments and NTPs is weak.

The findings for the 51 countries that reported complete data are summarized below.

	NUMBER OF COUNTRIES								
	% OF POSTS VACANT, 2009			% OF STAFF TRAINED BY NTP, 2009			% OF STAFF TRAINED BY NTP AT ANY TIME		
STAFF CATEGORY	>50%	10–50%	<10%	<10%	10–50%	>50%	<10%	10–50%	>50%
Medical officer	5	19	27	14	13	24	8	8	35
Nurses (including registered nurses, registered midwives, enrolled nurses, enrolled midwives)	3	22	26	13	10	28	7	10	34
Health assistants/medical assistants/clinical officers	5	16	30	16	11	24	13	9	29
Laboratory technicians/microscopist	7	16	28	11	14	26	4	11	36

Complete and accurate data on HRD are an essential basis for ensuring that the people needed to implement all components of the Stop TB Strategy are available. This requires updating of routine TB recording and reporting systems to include data on staffing and training. Building on these data, greater collaboration among NTPs, Ministry of Health departments responsible for health workforce management and global initiatives such as the Global Heath Workforce Alliance are then needed to ensure that the necessary staff are recruited and retained.

[1] *The world health report 2006 – working together for health*. Geneva, World Health Organization, 2006.
[2] These positions can be multi-purpose or specific to TB control.

5. Financing for TB control

5.1 High-burden countries

The funding available for TB control in the 22 HBCs has increased year-on-year since 2002, with the exception of a small dip in 2009, and is expected to reach US$ 3.0 billion in 2011 (FIGURE 14, FIGURE 15, FIGURE 16). Most of this funding has been used to support DOTS implementation, although the share for MDR-TB (mostly accounted for by funding in the Russian Federation and South Africa) has increased since 2007 (FIGURE 14). The relatively small amount of funding reported for collaborative TB/HIV activities reflects the fact that funding for most of these interventions is channelled through national HIV programmes and nongovernmental organizations rather than via NTPs. National governments are the largest source of funding (FIGURE 15), accounting for 85% of total expected funding in 2011. Financing from the Global Fund has become increasingly important since 2004, and is expected to reach US$ 327 million in 2011 (a 10% increase compared with 2010). Other donor funding is expected to amount to approximately US$ 100 million in 2011. In absolute terms, 61% of the funding expected in 2011 is accounted for by just two countries: the Russian Federation and South Africa (FIGURE 16).

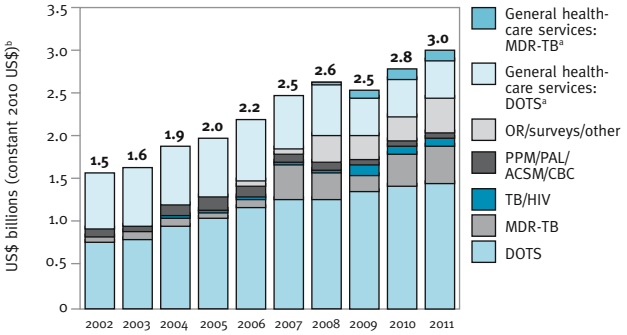
Despite increases in funding and nine completed rounds of proposals[1] to the Global Fund, NTPs continue to report funding gaps (FIGURE 17). Since 2007, these gaps have been in the range of US$ 0.3–0.5 billion per year. In 2011, funding gaps are anticipated for all components of the Stop TB Strategy, including for DOTS (the basic package that underpins the Stop TB Strategy). In some countries, there are still funding gaps for supplies of first-line anti-TB drugs.

Trends in funding for the 22 HBCs as a whole conceal important variations among countries (TABLE 8, FIGURE 18, FIGURE 19). Both NTP budgets and funding of NTPs have been increasing in most countries; the exceptions include Kenya, Indonesia and Mozambique, where funding has fallen since 2008 (FIGURE 18). Funding has been closest to keeping pace with increases in NTP budgets in Brazil, China, India, the Philippines and the Russian Federation. In contrast, funding gaps have persisted in most African countries as well as Cambodia, Myanmar and Pakistan. In 2011, the Russian Federation, Thailand, Brazil, South Africa, China, the Philippines and Viet Nam will rely primarily on domestic funding (including loans from development banks). In other HBCs, there is much greater reliance on donor funding, ranging from around

[1] The first round was completed in 2003. Round 9 was completed (including decisions on which proposals would be approved for funding) in 2009.

FIGURE 14

Funding available for TB control by line item, 22 high-burden countries, 2002–2011

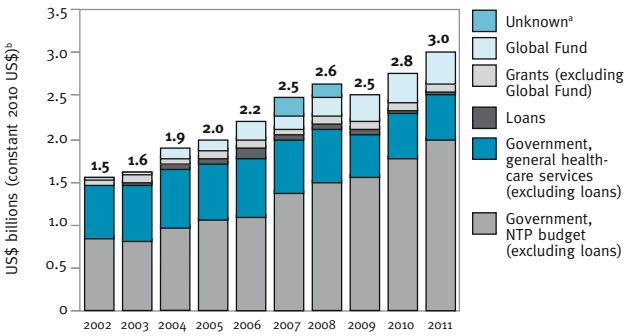


[a] These two categories show funding for outpatient visits and inpatient care provided in general (non TB-specific) clinics and hospitals. This funding is not provided through NTP budgets. The other categories shown in the figure are funded through and reported as part of NTP budgets.

[b] Constant 2010 US$ means that the amounts shown for each year reflect their value in 2010. In other words, changes between years reflect real changes in funding, after adjustment for changes in prices (inflation). See also METHODS.

FIGURE 15

Funding available for TB control by source of funding, 22 high-burden countries, 2002–2011

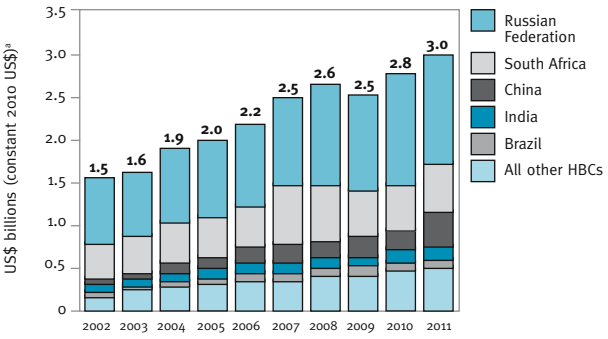


[a] Unknown source applies only to a portion of the budget for MDR-TB hospitals in South Africa.

[b] See footnote [b] of FIGURE 14 and METHODS.

FIGURE 16

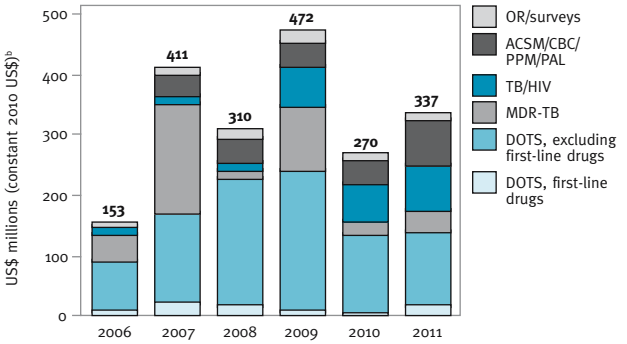
Funding available for TB control by country, 22 high-burden countries, 2002–2011



[a] See footnote [b] of FIGURE 14 and METHODS.

FIGURE 17

Funding gaps reported by NTPs, 22 high-burden countries,[a] 2006–2011



[a] Countries reporting no gap or a negative gap across all line items are excluded.
[b] See footnote [b] of FIGURE 14 and METHODS.

TABLE 8

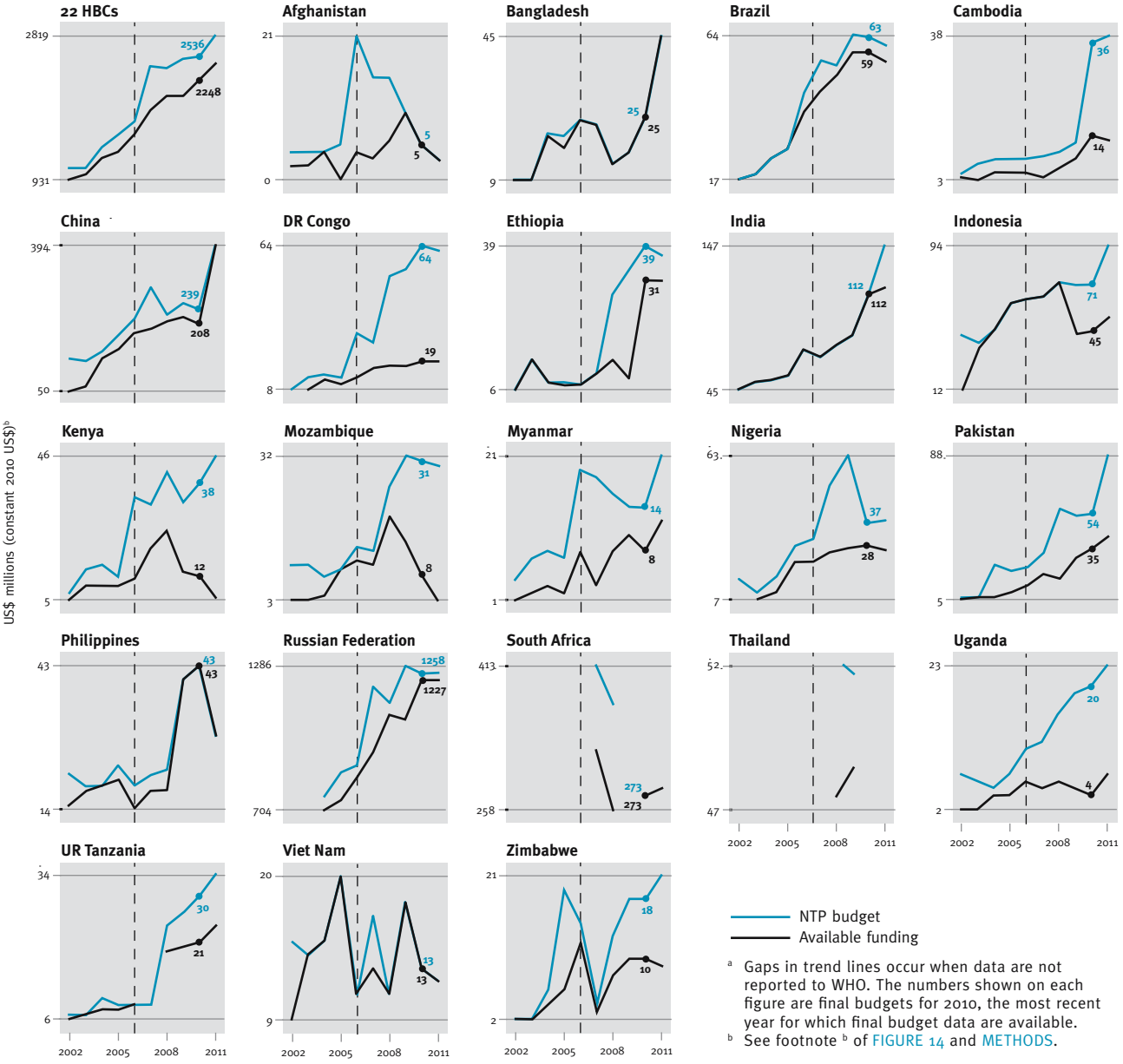
NTP budgets, available funding, cost of utilization of general health-care services and total TB control costs, 22 high-burden countries, 2011 (US$ millions)[a]

		AVAILABLE FUNDING						
	NTP BUDGET	GOVERNMENT (EXCLUDING LOANS)	LOANS	GRANTS (EXCLUDING GLOBAL FUND)	GLOBAL FUND	FUNDING GAP	COST OF UTILIZATION OF GENERAL HEALTH-CARE SERVICES	TOTAL TB CONTROL COSTS[c]
Afghanistan	2.9	0	0	0.8	2.0	0	4.0	6.9
Bangladesh	45	13	0	0	32	0	4.0	49
Brazil	61	49	0	2.7	4.0	5.4	41	102
Cambodia	38	1.0	0	7.6	4.6	25	3.5	42
China	394	306	0	0	88	0.1	0	394
DR Congo	62	0.3	0	8.8	9.4	43	0.6	63
Ethiopia	37	8.4	0	14	8.3	6.0	12	49
Indonesia	94	16	0	8.5	28	41	23	117
India	147	5.5	26	19	66	30	44	191
Kenya	46	3.7	1.9	0.1	0	40	5.9	51
Myanmar	21	0.6	0	1.8	10	8.3	1.4	22
Mozambique	30	0	0	0	3.2	26	8.2	38
Nigeria	38	6.3	0	5.5	14	12	14	52
Pakistan	89	14	0	4.4	23	47	7.7	96
Philippines[b]	–	–	–	–	–	–	27	–
Russian Federation	1 253	1 212	0	1.4	9.3	31	35	1 289
South Africa	281	281	0	0	0	0	282	563
Thailand	63	58	0	0	1.0	4.0	2.2	65
UR Tanzania	34	8.1	0	9.3	6.3	11	1.4	36
Uganda	23	0.1	1.5	0.5	5.2	15	0.5	23
Viet Nam	12	6.2	0	0.9	4.7	0	20	32
Zimbabwe	21	0	0	0.6	7.9	13	2.3	23
High-burden countries	**2 790**	**1 988**	**29**	**86**	**328**	**359**	**539**	**3 302**

[a] Amounts shown in constant 2010 US$, for consistency with other figures presented in this report.
[b] Data for the Philippines were under review at the time this report went to press.
[c] Total TB control costs are based on funding required as opposed to funding actually available. The difference between total TB control costs and the sum of available funding and the cost of utilization of general health-care services is the funding gap.

FIGURE 18

NTP budgets and available funding, 22 high-burden countries, 2002–2011.[a] The dashed vertical line indicates 2006, the year in which the Stop TB Strategy and the Global Plan to Stop TB, 2006–2015 were launched.

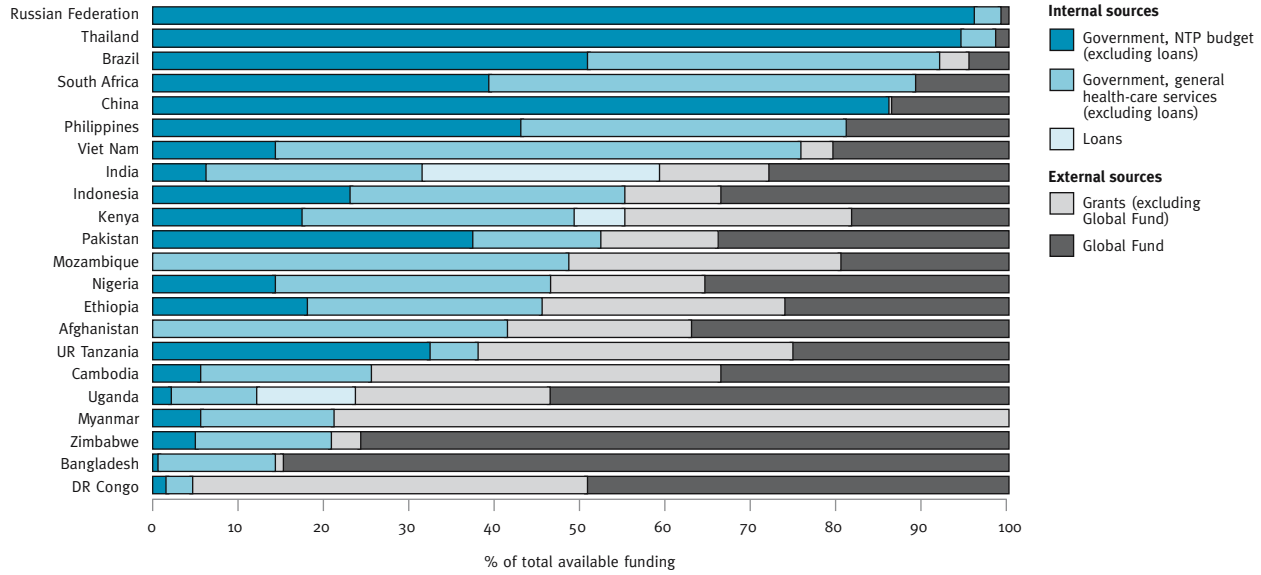


[a] Gaps in trend lines occur when data are not reported to WHO. The numbers shown on each figure are final budgets for 2010, the most recent year for which final budget data are available.

[b] See footnote [b] of FIGURE 14 and METHODS.

FIGURE 19

Sources of funding for TB control, 22 high-burden countries, 2010



40% of available funding in India to more than 90% of available funding in the Democratic Republic of the Congo (FIGURE 19).

There is also considerable variation in the estimated cost per patient treated according to the DOTS strategy (FIGURE 20). This ranges from under US$ 100 (in Bangladesh, India, Myanmar, Pakistan and Zimbabwe) to around US$ 750 in Thailand, US$ 1000–1500 in Brazil and South Africa and more than US$ 7 500 in the Russian Federation. In most HBCs, the cost per patient treated under DOTS is around US$ 150–400. As shown in FIGURE 20, variation in the cost per patient treated is clearly related to income levels (for example, Brazil and South Africa are upper-middle income countries, where prices for inputs such as NTP staff and hospital care are higher than in low-income countries). The major reason why the Russian Federation is an outlier is the model of care used: high costs are associated with a policy of lengthy hospitalization of TB patients within an extensive network of TB hospitals and sanatoria. A further explanation for variation in costs appears to be the scale at which treatment is provided. The countries with relatively low costs for their income level (for example, Bangladesh, China, India, Indonesia and the Philippines) are also the countries where the total numbers of patients treated are highest (as shown by the size of the circles in FIGURE 20). A similar pattern exists for the cost per patient successfully treated, which combines information about both costs and effectiveness (FIGURE 21).

5.2 High-burden countries and other countries

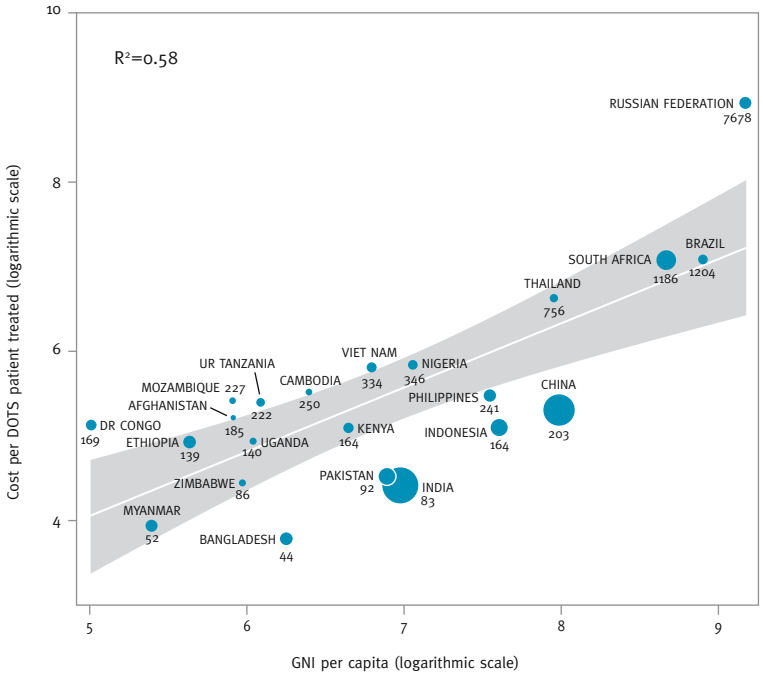
Besides the 22 HBCs, 81 other countries have reported financial data to WHO since 2006 that allow assessment of trends in funding for TB control. Combined, these 103 countries account for 96% of the world's notified cases of TB. Funding for TB control has grown from US$ 3.9 billion in 2006 to a projected US$ 4.7 billion in 2011 (FIGURE 22, FIGURE 23). As in HBCs, the largest share of funding is for DOTS implementation; an increasing amount is for MDR-TB. National governments account for 86% of the funding expected in 2011, followed by the Global Fund (US$ 513 million, or 11% of total funding) and then by grants from donors besides the Global Fund (US$ 101 million, or 2%). Loans from development banks account for the remaining 1% of total funding. The funding gaps reported by these 103 countries amount to US$ 0.6 billion in 2010 and US$ 0.3 billion in 2011 (FIGURE 22).

A comparison of the funding available in the countries that reported financial data with the funding requirements set out in the Global Plan is provided, by region and for the period 2011–2015, in FIGURE 24.[1] Overall, funding falls short of the requirements of the Global Plan. The gap is approximately US$ 1 billion in 2011. Given the scale-up of interventions set out in the plan, this could increase to US$ 3 billion by 2015 without intensified efforts to mobilize more resources.

[1] This analysis is for the 22 HBCs and a subset of 85 other countries that are among the 149 countries considered in the Global Plan. The total funding available in the group of 107 countries for which data were available was adjusted upwards according to the fraction of cases for which they accounted, to allow direct comparison with the group of 149 countries considered in the Global Plan. The Global Plan excludes high-income countries.

FIGURE 20

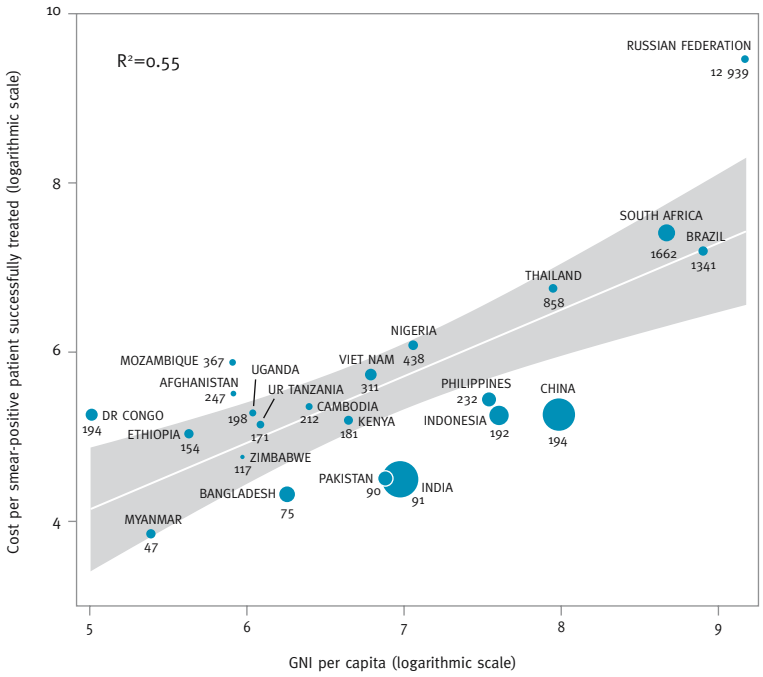
Cost per DOTS patient treated, income level and caseload, 22 high-burden countries, 2009. The cost per patient treated in 2009 US$[a] is shown below each circle. The size of the circle is proportional to the number of notified cases. The grey area depicts the 95% confidence interval of the prediction of the linear model, in which each country was given equal weighting.



[a] The cost per DOTS patient treated is based on a 3-year average of expenditures, 2007–2009, to minimize distortions associated with non-annual expenses on items such as buildings, equipment and buffer stocks of drugs.

FIGURE 21

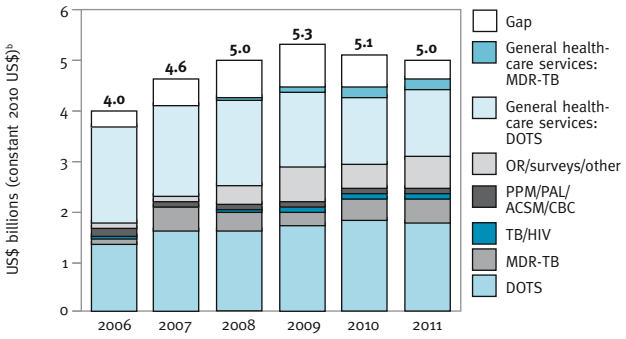
Cost per smear-positive patient successfully treated, income level and caseload, 22 high-burden countries, 2008. The cost per patient successfully treated in 2008 US$[a] is shown below each circle. The size of the circle is proportional to the number of smear-positive patients who were successfully treated. The grey area depicts the 95% confidence interval of the prediction of the linear model, in which each country was given equal weighting.



[a] The cost per smear-positive patient successfully treated is based on a 3-year average of expenditures, 2006–2008, to minimize distortions associated with non-annual expenses on items such as buildings, equipment and buffer stocks of drugs.

FIGURE 22

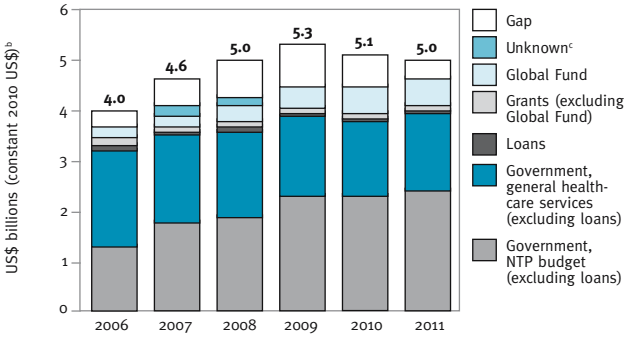
Funding available for TB control by line item and funding gap, 22 high-burden countries and 81 other countries,[a] 2006–2011



[a] These countries account for 96% of the total number of drug-susceptible TB cases notified globally in 2009.
[b] See footnote [b] of FIGURE 14 and METHODS.

FIGURE 23

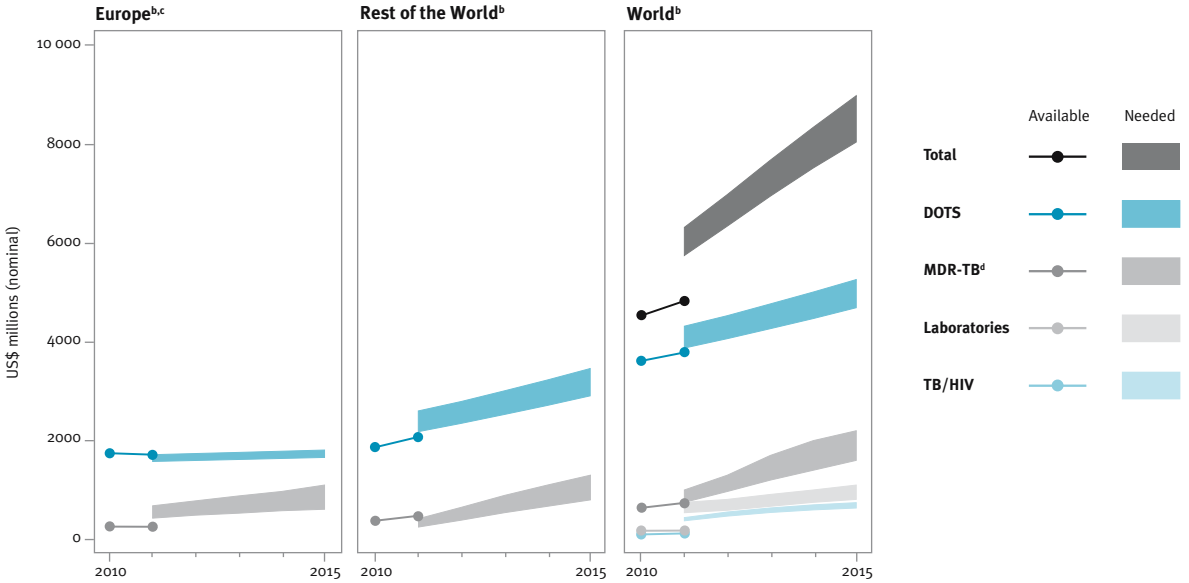
Funding available for TB control by source of funding and funding gap, 22 high-burden countries and 81 other countries,[a] 2006–2011



[a] These countries account for 96% of the total number of drug-susceptible TB cases notified globally in 2009.
[b] See footnote [b] of FIGURE 14 and METHODS.
[c] Unknown source applies only to a portion of the budget for MDR-TB hospitals in South Africa.

FIGURE 24

Funding available for TB control, 2010–2011 and funding needed according to the Global Plan, 2011–2015[a]



[a] Funding available in the 149 Global Plan countries was estimated using budget data reported by 107 countries that represent 98% of drug-susceptible TB cases and 97% of MDR-TB cases in 2009. Funding available in 2011 is based on preliminary budgets that may differ from final data that will be reported in 2011. For DOTS and MDR-TB, available funding includes the estimated cost of general health-care services for both inpatient and outpatient treatment under existing models of care. Funding needed is depicted as an area to reflect uncertainty about epidemiological and cost projections.
[b] The Global Plan excludes high-income countries; therefore, the groupings of Europe, Rest of the World and World all exclude high-income countries.
[c] For the purposes of the Global Plan, Europe includes: Armenia, Azerbaijan, Bulgaria, Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Lithuania, Latvia, Republic of Moldova, Romania, Russian Federation, Tajikistan, Turkmenistan, Ukraine and Uzbekistan.
[d] About 62% of the funding available for MDR-TB in the Rest of the World is accounted for by South Africa.

5.3 Improving the quality of planning and budgeting for TB control

The quality of financial data reported to WHO has steadily improved since data were first collected in 2002. At the same time, reported budgets and expenditures are not always consistent from one year to the next; assessments of the funding required – particularly for newer components of TB control (such as management of drug-resistant TB) – can appear too low (or, less often, too high); and persistent funding gaps indicate a need to strengthen resource mobilization efforts based on convincing plans and well-justified budgets. The WHO TB planning and budgeting tool was developed in 2006, to assist with the development of comprehensive plans and budgets for all relevant components of TB control. When completed, one advantage of the tool is that it automatically summarizes NTP budgets and sources of funding in the format requested on the annual WHO TB data collection form. Successes in using the tool to help with the development and budgeting of strategic plans in Bangladesh, Cambodia and Mongolia between mid-2009 and mid-2010 are highlighted in BOX 11.

BOX 11

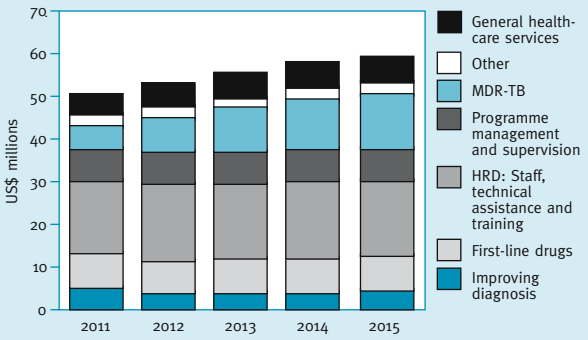
Strengthening planning and budgeting using the WHO TB Planning and Budgeting tool: experiences from Bangladesh, Cambodia and Mongolia

The WHO TB planning and budgeting tool was developed in 2006, to assist with the development of comprehensive plans and budgets for all relevant components of TB control.[1] When completed, one advantage is that it automatically summarizes NTP budgets and sources of funding in the format requested on the annual WHO TB data collection form.

By mid-2010, NTP staff from 28 of the 36 countries that are in the list of 22 HBCs and/or 27 high MDR-TB burden countries had been trained to use the tool and/or had already used it. Here, we highlight how the tool was used to help with the development and budgeting of strategic plans in Bangladesh, Cambodia and Mongolia between mid-2009 and mid-2010.

Bangladesh

Bangladesh is an HBC and also in the list of 27 high MDR-TB burden countries. TB control is a top priority in the national health agenda. The NTP collaborates with multiple partners to implement TB control. Two large NGOs – BRAC and the Damien Foundation – manage the implementation of TB control in designated parts of the country. Until 2010, planning and budgeting for TB control was carried out separately by each of the partners involved. This made it difficult for both the NTP and donors to have a comprehensive and accurate overview of the total funding needed for TB control each year. One consequence was that only partial financial data were reported to WHO each year, thus underestimating the total funding requirements and expenditures. In May 2010, the NTP hosted a workshop with all of its major implementation partners, with the aim of developing a comprehensive five-year plan for the years 2011–2015 that would reflect the financial needs of the TB programme as a whole. The WHO TB planning and budgeting tool was used to set out the plan targets, the major inputs and activities to be implemented by all partners and the funding requirements. The results at the end of the workshop are illustrated in the figure (see right).



The comprehensive five-year plan and budget are now used as a working document during coordination meetings of the NTP and its partners, and form the basis for submission of proposals to donors. Review and refinement of the budget (for example to identify areas where duplication may exist among activities or to include new activities) will need to be undertaken on a periodic basis.

Cambodia

In 2009, detailed plans for different components of the Stop TB Strategy were developed. Subsequently, the NTP asked Management Sciences for Health (MSH) and WHO to provide assistance with budgeting these plans, in coordination with staff from national and provincial levels. A one-week training course in the use of the WHO TB planning and budgeting tool (in Khmer and English) was organized in September 2009, which allowed participants to develop their skills in budgeting and prompted further review of the content of plans. After the workshop, the multi-year budget was updated and is being used as a basis for resource mobilization.

Mongolia

The NTP was keen to develop a long-term financing plan to strengthen national TB control efforts, particularly in the context of a high burden of MDR-TB and an insufficient number of hospital beds for patients with MDR-TB. In February 2010, NTP staff used the WHO TB planning and budgeting tool to produce a comprehensive plan and budget for the years 2010–2015, with facilitation provided by WHO staff from HQ and the Country Office. In line with the model of care described in the national strategic plan, a detailed plan and budget was developed to increase bed capacity for patients with MDR-TB. The strategy for doing this was to increase the use of outpatient treatment for patients with drug-susceptible TB, thus freeing up the necessary number of beds (after the establishment of appropriate infection control measures) for patients with MDR-TB. The NTP then went on to use the WHO TB planning and budgeting tool to cost alternative models of care. In doing so, they demonstrated the relative affordability of the national strategic plan, which helped to build political support for its implementation. The National Centre for Communicable Diseases is expected to proceed with the plan to increase outpatient treatment for drug-susceptible TB, as well as both in- and outpatient treatment for MDR-TB. In addition, the plan and budget can now be used for resource mobilization through a National Strategy Application to the Global Fund. A further advantage is that the Ministry of Health is now better equipped to negotiate with the Ministry of Finance during their programme-based budgeting process – not just for higher levels of funding, but also for more predictable streams of funding.

[1] http://www.who.int/tb/dots/planning_budgeting_tool/en/index.html

6. Progress towards global targets for reductions in disease burden

Progress made towards achieving the impact targets set for 2015 – to halt and reverse the incidence of TB by 2015 (MDG Target 6.c), and to halve prevalence and mortality rates compared with a baseline of 1990 (the targets set by the Stop TB Partnership) – is illustrated at the global level in FIGURE 25 and at the regional level in FIGURE 26, FIGURE 27 and FIGURE 28.[1] Progress in achieving reductions in incidence and mortality is shown for each of the 22 HBCs in FIGURE 29 and FIGURE 30.

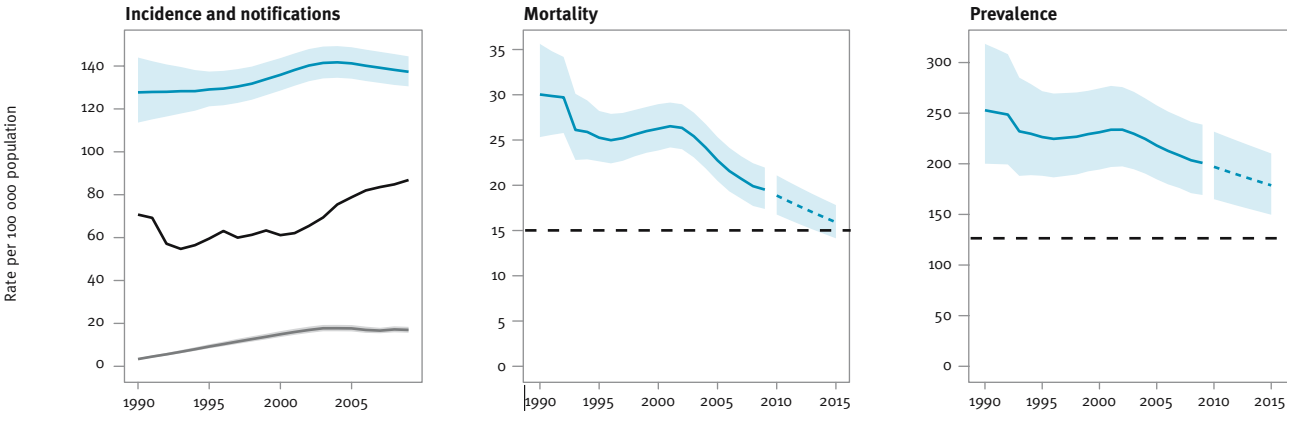
Globally, rates of incidence, prevalence and mortality are all declining (FIGURE 25). Incidence rates are falling slowly, at around 1% per year, following a peak at just over 140 cases per 100 000 population in 2004. If current trends are sustained, then MDG Target 6.c will be achieved. Mortality rates have fallen by one third since 1990, and prevalence rates are also in decline. Projections suggest that the target of halving mortality by 2015 compared with 1990 could be achieved at global level. The target of halving the prevalence rate appears out of reach. It should be noted, however, that there is more uncertainty about trends in prevalence, compared with trends in mortality (see also ANNEX 1).

Regionally, incidence rates are declining in five of WHO's six regions (FIGURE 26). The exception is the South-East Asia Region (where the incidence rate is stable), largely explained by apparent stability in the TB incidence rate in India. Further evaluation of trends in the disease burden in India is needed, and has been planned for early 2011. Among the five regions where incidence rates are falling, the rate of decline varies from less than 1% per year in the Eastern Mediterranean and European regions to around 2% per year in the African Region (since 2004) and 4% per year in the Region of the Americas. As also illustrated in FIGURE 26, notifications are closest to estimated incidence in the Region of the Americas and the European Region, indicating that the highest rates of case detection are achieved in these regions (see also SECTION 4). As incidence falls slowly, notifications are increasing in the African Region and (particularly since 2000) in the Eastern Mediterranean and South-East Asia regions, indicating improving rates of case detection. In the Western Pacific Region, notifications increased sharply between 2002 and 2006, but have since stabilized; here, patterns are strongly influenced by China, which accounts for almost 70% of incident cases in this region (TABLE 1).

The latest assessment for the 22 HBCs suggests that incidence rates are falling or stable in all countries except South Africa (FIGURE 29). Trends in incidence rates are assumed to be stable in Afghanistan, Bangladesh, India, Indonesia, Myanmar and Pakistan, in the absence of convincing evidence to the contrary (ANNEX 1). The stability in TB incidence rates in India (which accounts for 61% of cases in this region) as well as Bangladesh, Indonesia and Myanmar explains the flat trend in estimated incidence in the South-East Asia Region.

FIGURE 25

Global trends in case notification rates and estimated rates of incidence, mortality and prevalence. Left: Global trends in case notification rate (new and relapse cases, all forms) (black), estimated incidence rate including HIV-positive TB (blue) and estimated incidence rate of HIV-positive TB (grey). Centre and right: Trends in estimated TB mortality and prevalence rates 1990–2009 and forecast TB mortality and prevalence rates 2010–2015. The horizontal dashed lines represent the Stop TB Partnership targets of a 50% reduction in mortality and prevalence rates by 2015 compared with 1990. Shaded areas represent uncertainty bands. Mortality excludes TB deaths among HIV-positive people.



[1] See BOX 3 in SECTION 3 of this report for definitions of the global targets for TB control.

FIGURE 26

Estimated incidence and case notification rates by WHO region, 1990–2009. Regional trends in case notification rates (new and relapse cases, all forms) (black), estimated incidence rate including HIV-positive TB (blue) and estimated incidence rate of HIV-positive TB (grey). Shaded areas represent uncertainty bands.

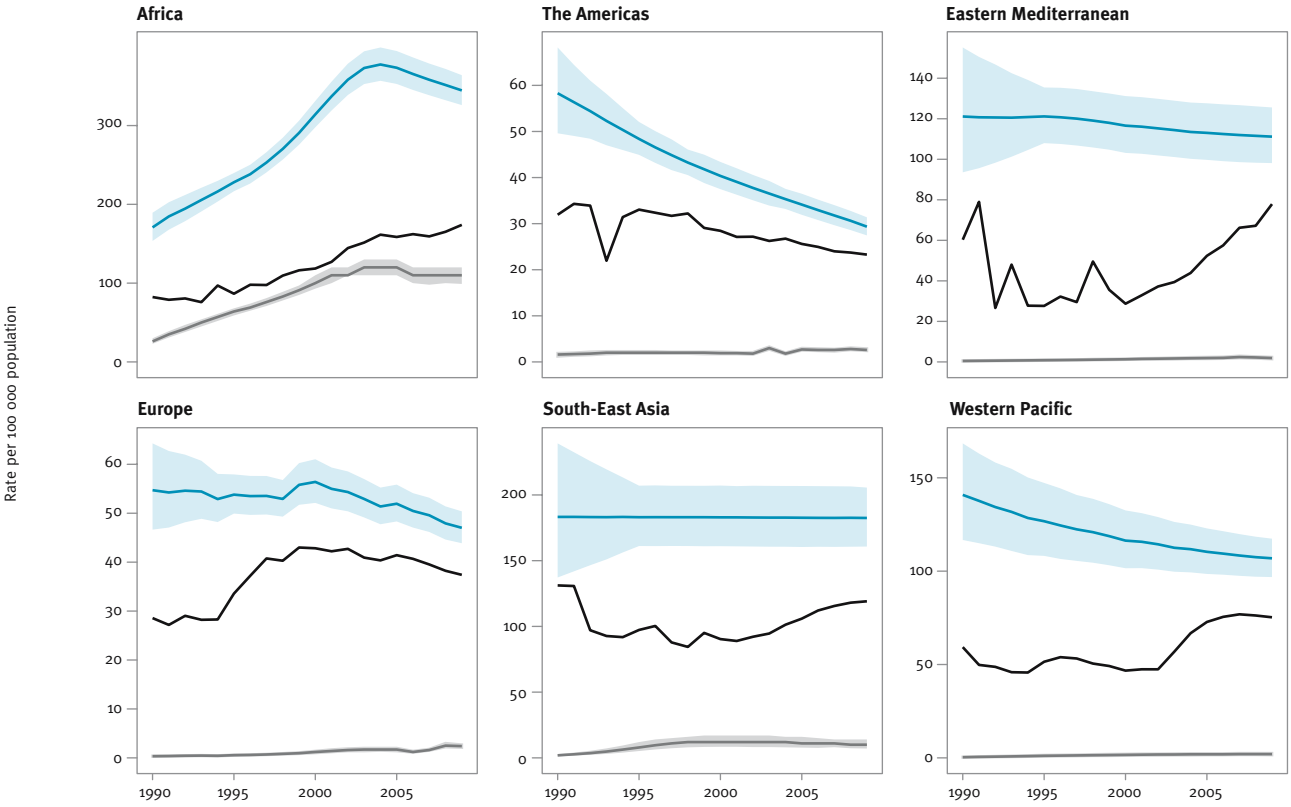


FIGURE 27

Trends in estimated TB prevalence rates 1990–2009 and forecast TB prevalence rates, 2010–2015, by WHO region. Shaded areas represent uncertainty bands. The horizontal dashed lines represent the Stop TB Partnership target of a 50% reduction in the prevalence rate by 2015 compared with 1990. The other dashed lines show projections up to 2015.

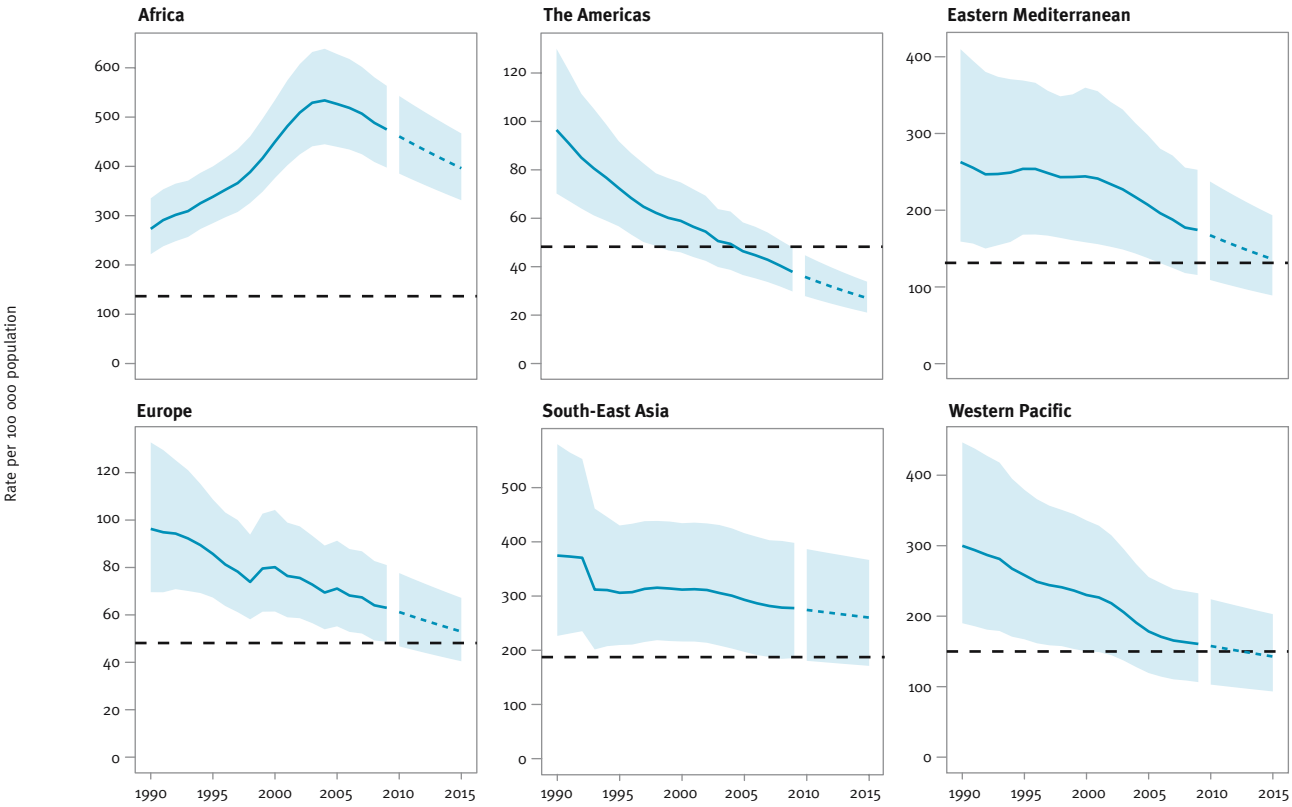
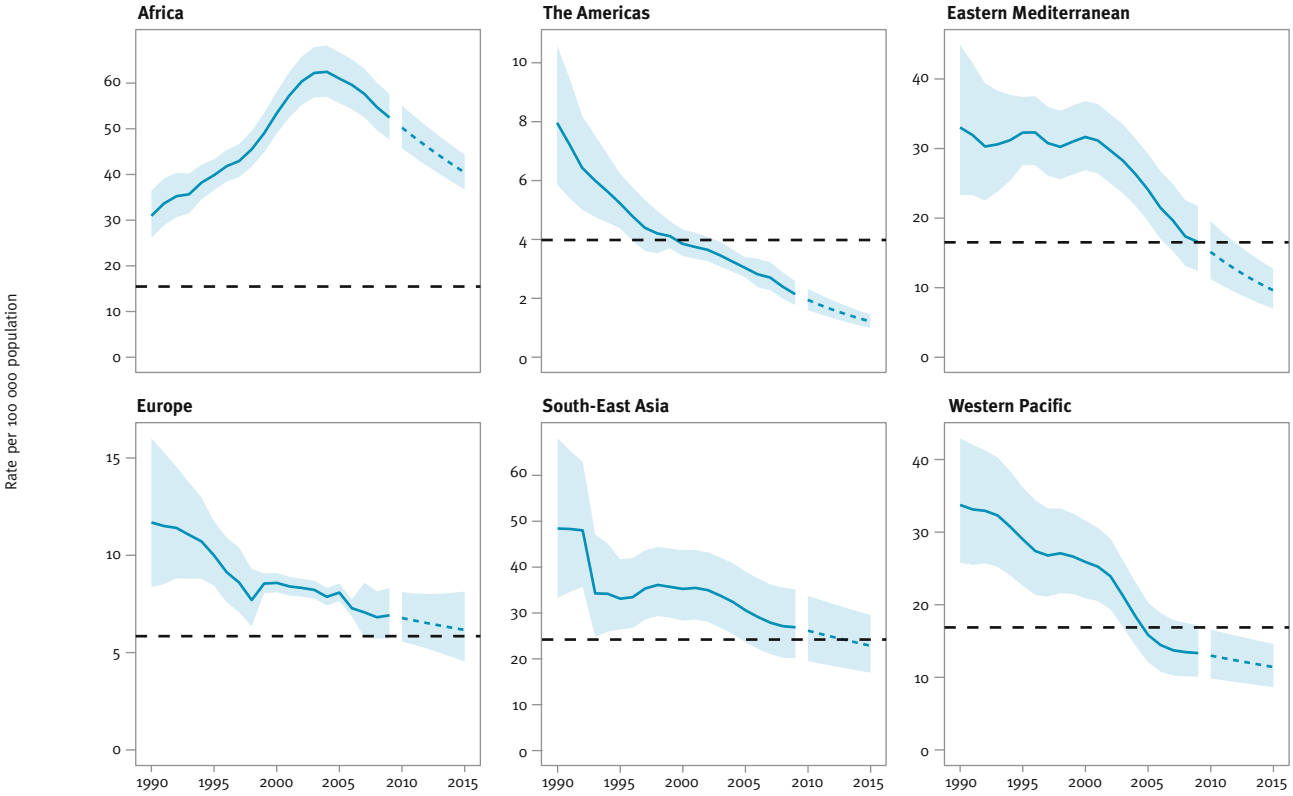


FIGURE 28

Trends in estimated TB mortality rates 1990–2009 and forecast TB mortality rates, 2010–2015, by WHO region.
Estimated TB mortality excludes TB deaths among HIV-positive people. Shaded areas represent uncertainty bands.[a] The horizontal dashed lines represent the Stop TB Partnership target of a 50% reduction in the mortality rate by 2015 compared with 1990. The other dashed lines show projections up to 2015.



[a] The width of uncertainty bands narrows as the proportion of regional mortality estimated using vital registration records increases.

In most of the HBCs, notifications have been getting closer to estimated incidence in recent years, notably in Afghanistan, Bangladesh, Cambodia, China, Indonesia, Pakistan, South Africa and the United Republic of Tanzania (FIGURE 29).

Prevalence rates are falling in all six WHO regions (FIGURE 27). The most impressive progress is in the Region of the Americas, where the Stop TB Partnership's target of halving the 1990 prevalence rate has been achieved. Projections suggest that the Western Pacific and Eastern Mediterranean regions are on track to achieve the target by 2015, and the European Region could get close. On current projections, the African and South-East Asian regions will not achieve the target.

Mortality rates (excluding TB deaths among HIV-positive people) are falling in all six WHO regions. The best progress towards the 2015 target of halving the 1990 mortality rate is in the Region of the Americas and the Western Pacific Region, both of which appear to have achieved the target already. The Eastern Mediterranean, European and South-East Asia regions are close to reaching the target, and could do so before 2015. In the African Region, achieving the target appears out-of-reach, following a major increase in TB incidence and mortality rates associated with the HIV epidemic throughout the 1990s and up to around 2004.

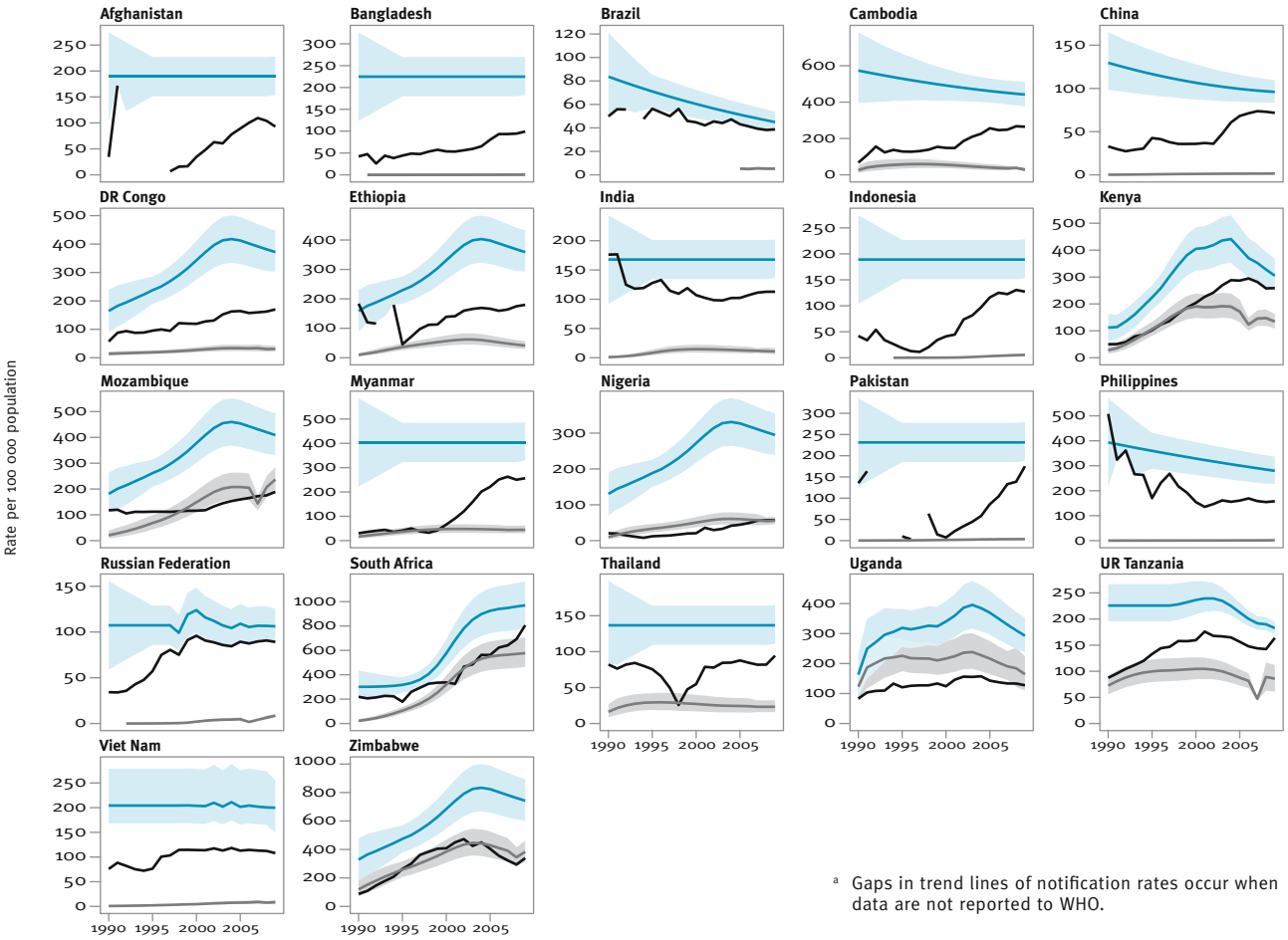
Among the 22 HBCs, mortality rates appear to be falling with the possible exception of Afghanistan and Uganda (FIGURE 30). Even allowing for uncertainty in these estimates, four countries reached the target of halving the 1990 mortality rate by 2009 (Brazil, Cambodia, China and the United Republic of Tanzania), and six additional countries (India, Indonesia, Kenya, Myanmar, Pakistan and the Russian Federation) have a good chance of doing so by 2015. In the other HBCs, current forecasts suggest that the target may not be achieved.

The reductions in mortality associated with progress to date in implementing the DOTS strategy (1995–2006) and its successor, the Stop TB Strategy (launched in 2006) have saved millions of lives since 1995, and continued implementation could save millions more in the years up to 2015 (FIGURE 31).[1] From 1995 to 2009, 49

[1] These results are based on the following manuscript: Glaziou P et al. Lives saved by tuberculosis control and prospects for achieving the 2015 global target for reductions in tuberculosis mortality (submitted for publication in May 2010).

FIGURE 29

Estimated incidence and case notification rates, 22 high-burden countries, 1990–2009. Trends in case notification rates[a] (new and relapse cases, all forms) (black), estimated incidence rates (blue) and estimated incidence rates of HIV-positive TB (grey). Shaded areas represent uncertainty bands.

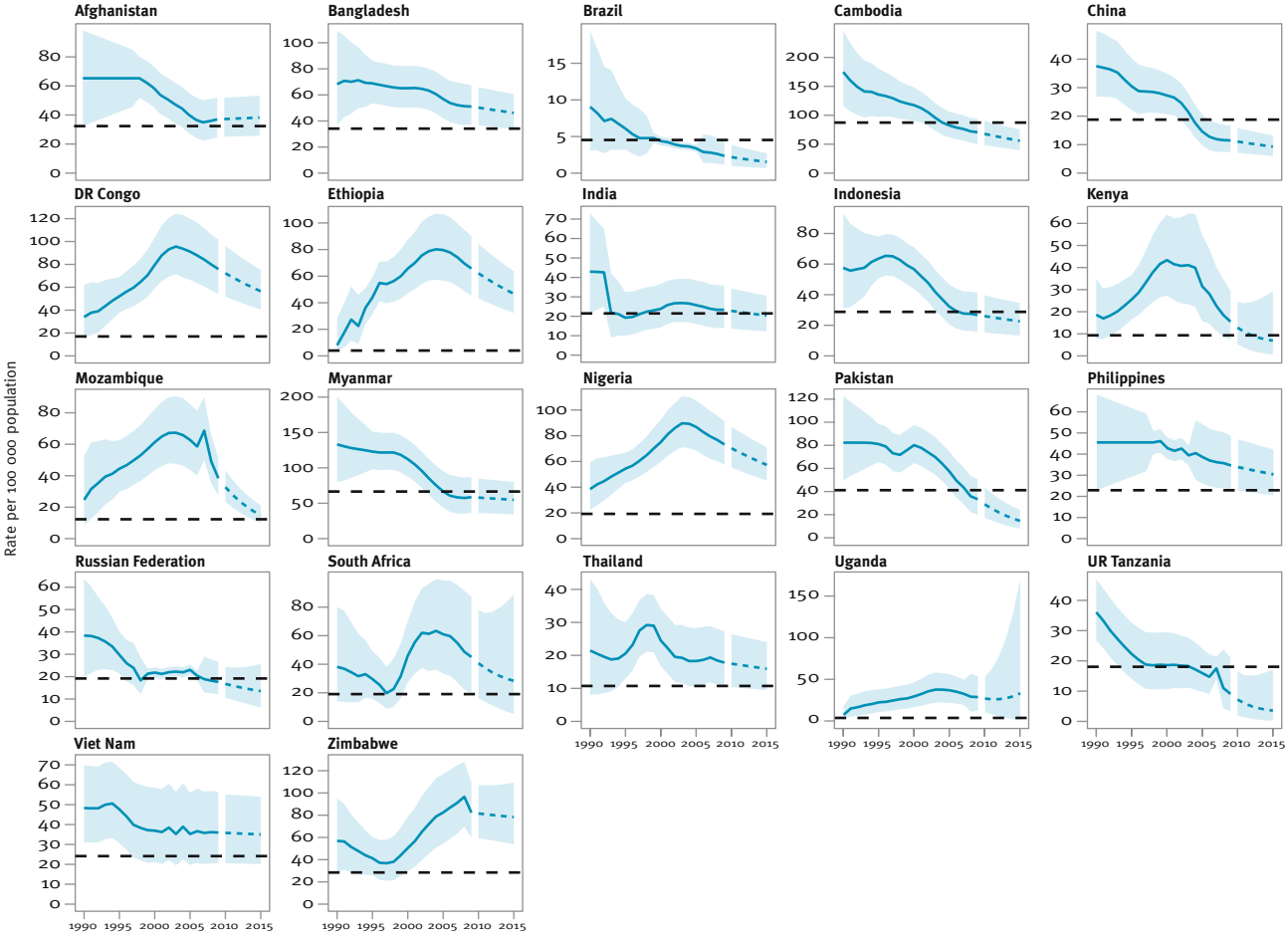


[a] Gaps in trend lines of notification rates occur when data are not reported to WHO.

million patients were treated, of whom 41 million were successfully treated in DOTS programmes, saving up to 6 million lives. This includes approximately 2 million lives saved among women and children. From 2010 to 2015, a further 5 million lives could be saved if current efforts and levels of achievement in TB control are sustained, including around 2 million women and children. With expansion of treatment for MDR-TB and interventions such as ART for HIV-positive TB patients in the period 2011–2015, as set out in the Global Plan, even more lives could be saved.

FIGURE 30

Trends in estimated TB mortality rates 1990–2009 and forecast TB mortality rates 2010–2015, 22 high-burden countries. Estimated TB mortality excludes TB deaths among HIV-positive people. Shaded areas represent uncertainty bands. The horizontal dashed lines represent the Stop TB Partnership target of a 50% reduction in the mortality rate by 2015 compared with 1990. The other dashed lines show projections up to 2015.



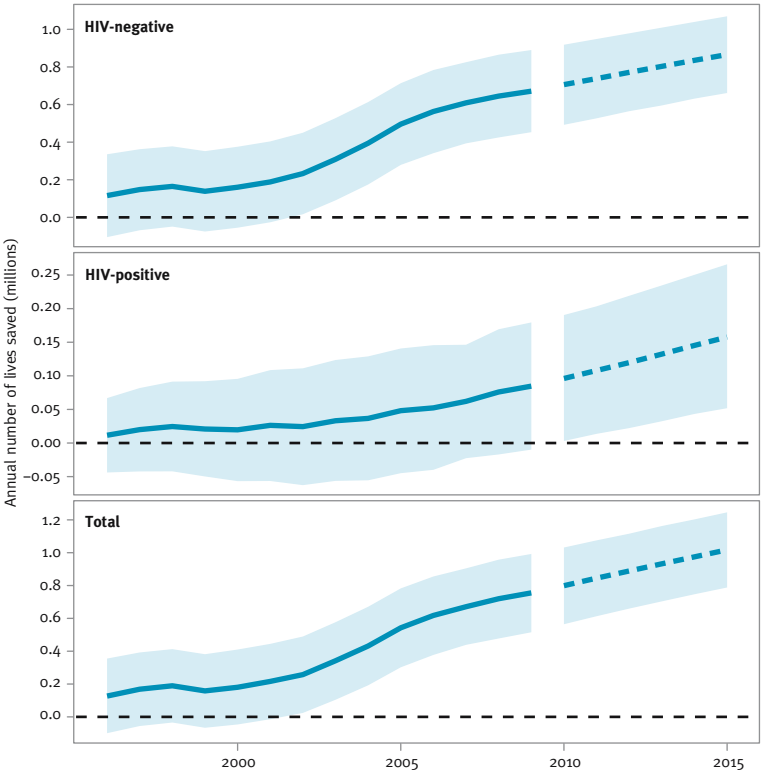


FIGURE 31

Estimated number of lives saved 1996–2009 and forecast number of lives saved, 2010–2015. Shaded areas represent uncertainty bands. Forecast expected values (dashed lines) were predicted by fitting log-linear models of time-series for the years 2006–2009.

7. Improving measurement of the global burden of TB

Estimates of TB incidence, prevalence and mortality and their trend (presented in TABLE 1 and in FIGURES 25–30) are based on the best available data and analytical methods. Methods were updated in 2009 following 18 months of work by an expert group convened under the umbrella of the WHO Global Task Force on TB Impact Measurement.[1] Improvements to methods (full details are provided in ANNEX 1) include systematic documentation of expert opinion and how this has been used in estimates of the burden of disease caused by TB, simplification of models,[2] updates to parameter values based on the results of systematic reviews, much greater use of mortality data from vital registration systems (89 countries for the analyses presented in this report, up from three in the years up to 2008) and systematic documentation of uncertainty.

Despite this progress, estimates of the disease burden need to be further improved in the period up to 2015 (and beyond) using better surveillance systems, more extensive and in-depth analysis of available surveillance and programmatic data, and additional survey data. For example, with the exception of Eritrea in 2005, the last nationwide and population-based surveys of the prevalence of TB disease in the African Region were undertaken between 1957 and 1961; only around 10% of TB-attributable deaths (in HIV-negative people) are recorded in vital registration systems and reported to WHO; and most notification systems are recording only around 50–70% of estimated cases.

Besides its work on reviewing and updating the methods that are used to produce estimates of the burden of disease caused by TB, the WHO Global Task Force on TB Impact Measurement is thus making concerted efforts to support countries to pursue two other major strategic tracks of work (full details are available in a recent WHO Policy Paper[3]). These are:

- Surveys of the prevalence of TB disease, with particular attention to 21 "global focus" countries (FIGURE 32). These surveys should be carried out according to WHO guidelines and related Task Force recommendations;
- Strengthening surveillance of cases and deaths through notification and vital registration systems. The ultimate goal is for TB incidence and mortality to be measured directly from these systems. The Task Force has defined a conceptual framework for this work (FIGURE 33) and related tools to help countries to implement it in practice.

As of mid-2010, all of the countries in the South-East Asia and Western Pacific regions where prevalence surveys are recommended (Bangladesh, Cambodia, China, Indonesia, Myanmar, the Philippines, Thailand and Viet Nam) were on track with survey implementation. Bangladesh (2008), the Philippines (2007) and Viet Nam (2007) recently completed surveys, and subsequent surveys are planned close to 2015. The most notable successes in 2009/2010 among Asian countries were the completion of nationwide surveys in Myanmar (in April 2010; see BOX 12) and China (in July 2010). The results of these surveys will be of major importance for gaining a better understanding of the burden of disease (both countries) and the impact of TB control in the past two decades (in China, following previous surveys in 1990 and 2000). Looking forwards, a survey will be implemented in Cambodia in 2011, following a previous survey in 2002. This will allow assessment of the impact of TB control since 2002 i.e. the years since DOTS was implemented. A survey is in the advanced stages of preparation in Thailand, and in Indonesia a follow-up to the 2004 survey is planned for 2013 or 2014.

In the Eastern Mediterranean Region, Pakistan secured full funding for a survey in 2008, but security concerns and other factors that affect field operations may preclude implementation.

The greatest challenge in terms of implementation of prevalence surveys is in the African Region. Nonetheless, considerable progress was made during 2009 and 2010. As of July 2010, five countries were in a strong position to start surveys in late 2010 or early 2011 (Ethiopia, Ghana, Nigeria, Rwanda and the United Republic of Tanzania). Preparations were relatively advanced in Kenya, Malawi, Uganda, Zambia and South Africa, although funding gaps remained a major bottleneck in Kenya (dependent on the approval of funding from a Round 9 grant from the Global Fund), Uganda (where reprogramming of Global Fund grants is needed) and Zambia (where full funding had been secured but the subsequent suspension of a Global Fund grant now impedes progress). Intensive efforts are needed to ensure that countries planning surveys in 2010 and 2011 are able to do so successfully.

In 2009 and 2010, there was substantial progress in

[1] For further details, see the Task Force web site at: http://www.who.int/tb/advisory_bodies/impact_measurement_taskforce/en/index.html. The review is also the basis for the TB component of the forthcoming update to the Global Burden of Disease, due for publication in 2010.

[2] For example, some parameter values are now estimated only at global level or for regions, rather than for each country individually.

[3] *TB impact measurement: policy and recommendations for how to assess the epidemiological burden of TB and the impact of TB control*. Geneva, World Health Organization, 2009 (Stop TB policy paper no. 2; WHO/HTM/TB/2009.416).

FIGURE 32

The 21 global focus countries where a national survey of the prevalence of TB disease is recommended in the period 2008–2015 (blue), and the 32 additional countries that meet criteria (grey) for implementing such surveys

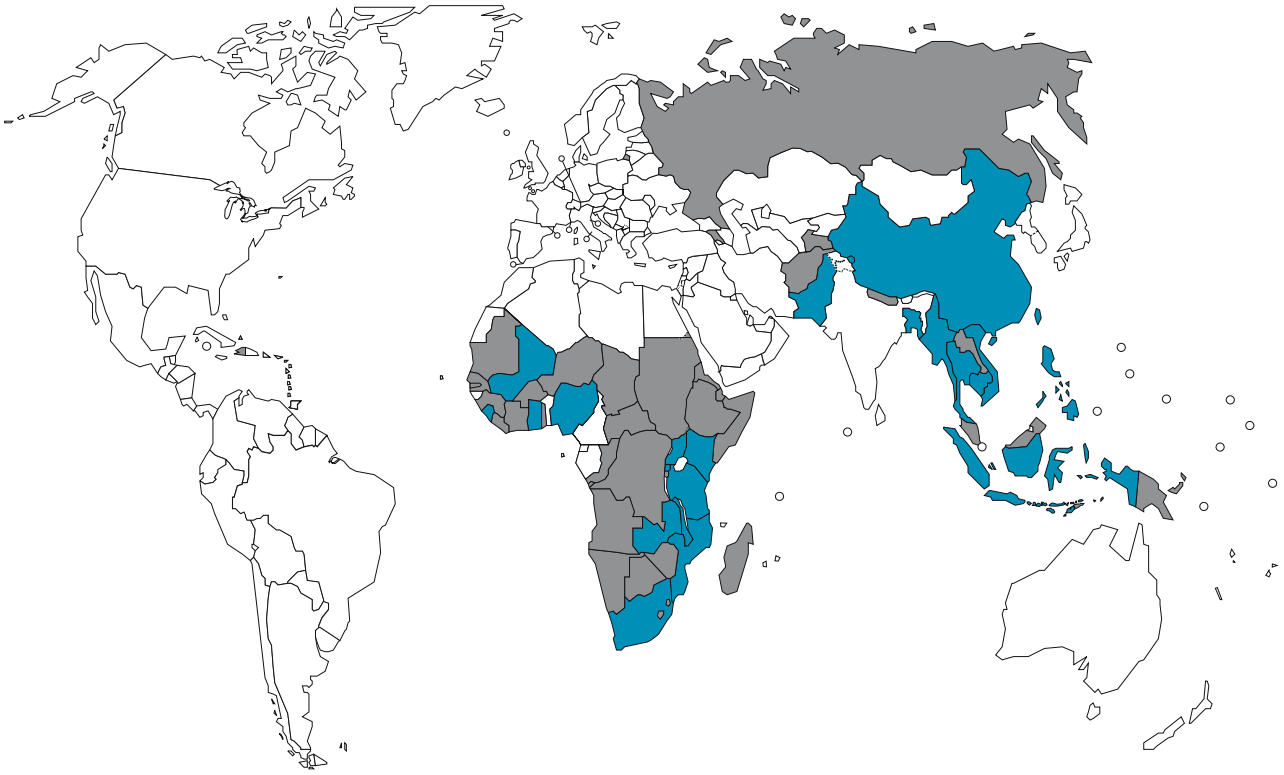
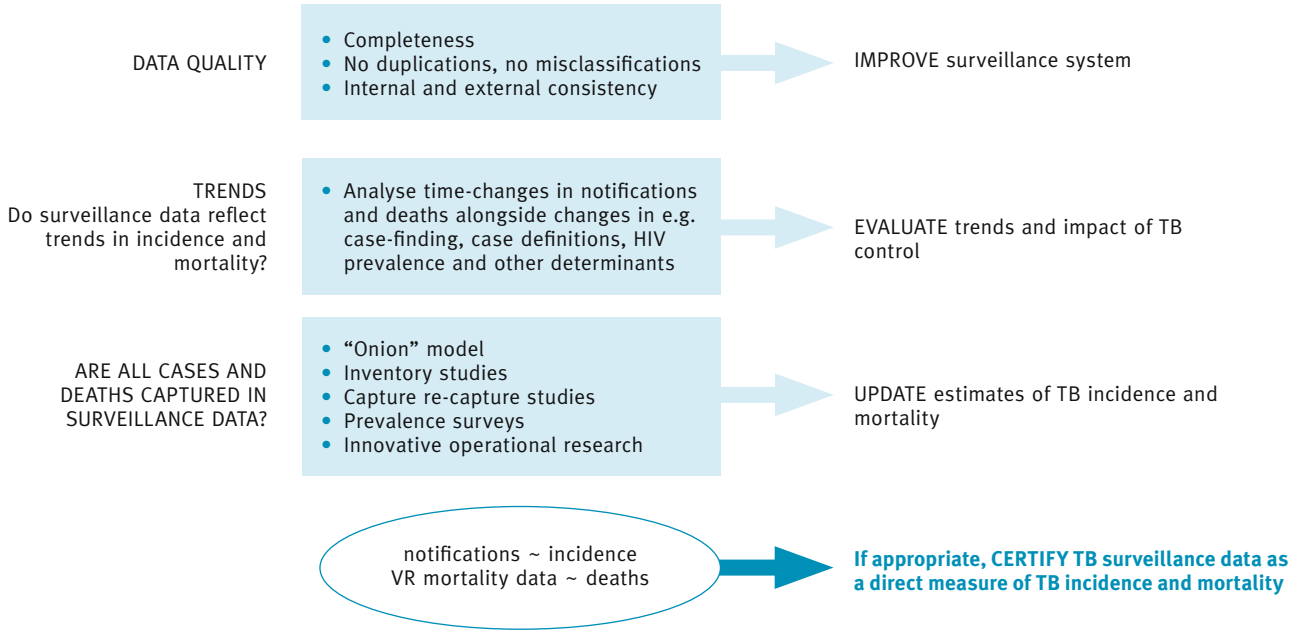


FIGURE 33

Framework for assessment of TB surveillance data (notification and vital registration data)



BOX 12

Implementing a national survey of the prevalence of TB disease: a success story from Myanmar

The DOTS strategy was introduced in Myanmar in the late 1990s. Case notifications increased rapidly and by 2004 were higher than the estimated number of incident cases published by WHO in 1999 (the estimate remained unchanged in subsequent years as a result of the lack of any new data to re-estimate the burden of TB). To better understand the burden of disease caused by TB, the NTP decided that a national survey of the prevalence of TB disease was needed.

Initially, a subnational survey was implemented in the capital division of Yangon. This showed that the prevalence of TB was three times the latest national estimate. It also showed that one third of the TB patients who were on treatment were being treated by general practitioners, and only 52% by facilities with NTP services. The patients who were receiving treatment from general practitioners were not recorded in routine surveillance data. Subsequently, the NTP and the Myanmar Medical Association worked together to strengthen partnerships between the public and private sectors, including through franchising schemes. Subsequently, private sector facilities began to notify cases to the NTP, and the NTP now supplies anti-TB medicines to private practitioners.

The NTP then mobilized the funding needed for a national survey from multiple donors. These included the Three Diseases Fund, the Government of Japan, the Bill and Melinda Gates Foundation and USAID. Several technical partners were involved, including WHO, Population Services International and the Research Institute for TB – RIT – in Japan. The purchase of capital equipment and the development of human resource capacity during the pilot survey in Yangon helped to leverage funding and interest, by convincing financial and technical partners that some of the critical resources and capacity were already in place.

The national survey was initiated in June 2009, and was completed in April 2010. As this report went to press, preliminary results were expected in late 2010.

analysing surveillance and programmatic data, with analyses used to develop recommendations for how surveillance systems need to be strengthened and to produce updated estimates of disease burden. Regional workshops to apply the Task Force framework (FIGURE 33) for systematic assessment of surveillance data were held in the Eastern Mediterranean, European, South-East Asia and Western Pacific regions and the Region of the Americas. Country missions in which the framework was applied were undertaken in the Philippines, the United Republic of Tanzania and Viet Nam. By July 2010, these workshops and country missions had covered a total of 70 countries (FIGURE 34). A workshop for 17 countries in the African Region is scheduled for December 2010.

An important conclusion from workshops and country missions was that there is an urgent need to strengthen vital registration systems, to allow better measurement of mortality (BOX 13). There is also an urgent need to introduce electronic recording and reporting systems, without which it is difficult or impossible to adequately assess many aspects of data quality. Examples of aspects of data quality that are difficult or impossible to assess without case-based and electronic reporting systems include the extent to which misclassifications and duplications exist. In addition, the availability of electronic data, stored in well-managed relational databases (not Excel spreadsheets), greatly facilitates data analysis. More widespread adoption of updated recommendations on recording and reporting is also required (for example, to ensure availability of data disaggregated by HIV status and source of referral).

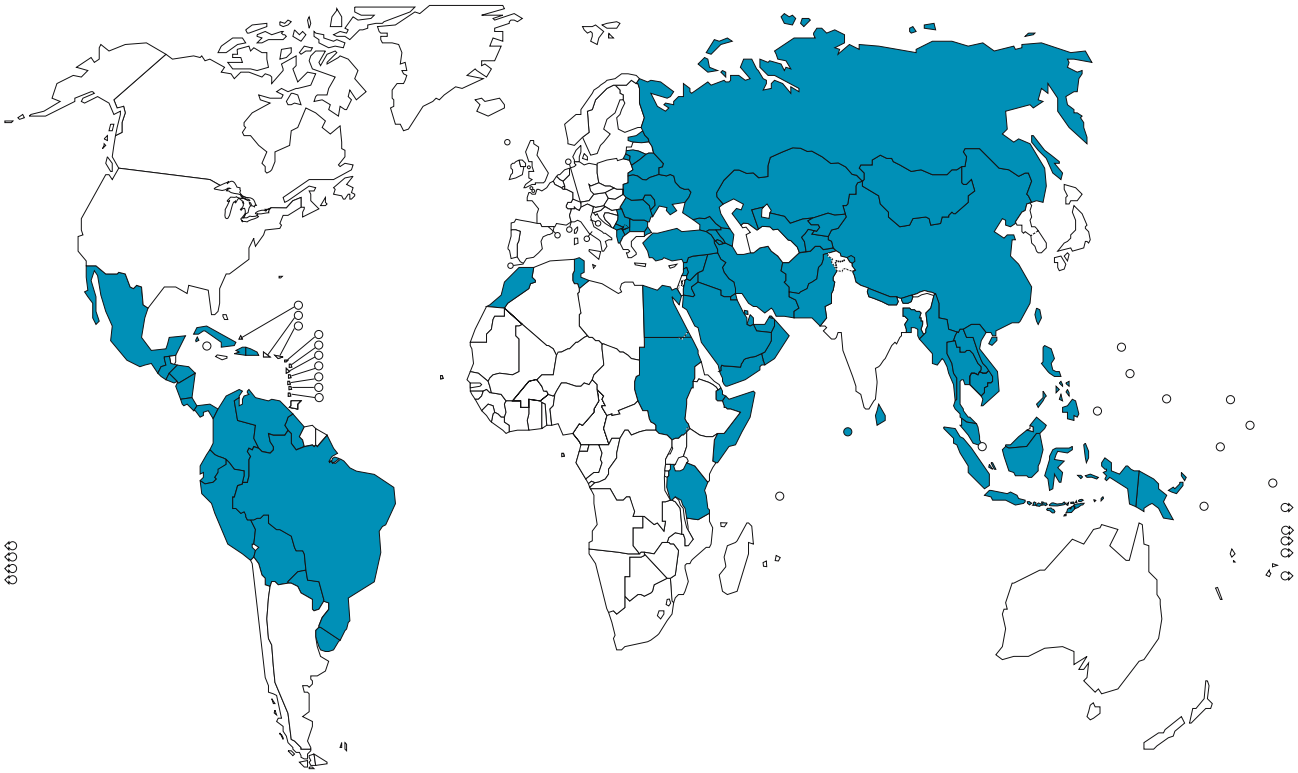
An example of experience with implementing a case-based and electronic recording and reporting system (from China) in provided in BOX 14.

Besides improving estimates of the disease burden caused by TB, better data from surveys and surveillance combined with better analysis of these data should be of great value in identifying where and why cases are not being detected. In turn, findings should help to identify which components of the Stop TB Strategy need to be introduced or scaled-up to improve TB control. Examples from Cambodia, Myanmar and Viet Nam are highlighted in the second edition of WHO's guidelines on surveys of the prevalence of TB disease.[1]

[1] The second edition of these guidelines (following publication of the first edition in 2007) has been produced as a major collaborative effort among technical and financial partners and lead survey investigators from Asian and African countries. The guidelines were in the late stages of preparation at the time this report went to press, with publication expected before the end of 2010.

FIGURE 34

Progress in applying the Task Force framework for assessment of TB surveillance data, as of mid-2010[a]



[a] All countries shown in blue participated in regional workshops held from April 2008 to June 2010, with the exception of the United Republic of Tanzania where a country mission was undertaken in October 2009. Further details of the work done in these workshops are provided in ANNEX 1.

BOX 13

Strengthening vital registration systems for accurate measurement and analysis of TB mortality

The incidence of TB cannot be measured accurately with currently available diagnostic tools, and the prevalence of TB disease will be measured through population-based surveys in no more than approximately 20 countries by 2015. TB mortality – the third of the major indicators for which global targets have been set within the MDGs and by the Stop TB Partnership – can be measured directly, provided that national vital registration systems are in place, with causes of death coded according to the International Classification of Diseases.

Accurate recording of mortality levels, trends and causes of death is an essential public good. Vital registration generates continuous data representative of entire populations, including cause-specific estimates of mortality, trends and regional differentials.

In 2009, 90 countries including four HBCs had well-functioning vital registration systems, according to the following definition: (i) coverage of at least 80% of the population and (ii) ill-defined causes of death for <20% of all registered deaths. Most of these 90 countries are in the European Region and the Region of the Americas (ANNEX 1).

Registration of civil events such as births and deaths is an essential first step for countries planning to establish vital registration systems. This should initially be done in sample areas and then rolled-out to the rest of the country. Sample vital registration and post-census mortality surveys coupled with verbal autopsy can be used as an interim solution for generating nationally representative data about mortality levels and causes of deaths.

To allow accurate measurement and analysis of mortality due to TB and other causes in all countries, the development and strengthening of standardized registration systems and/or validated interim measurement systems need to feature much higher on the global agenda. National governments and the global health community should intensify efforts to implement vital registration systems and/or to improve their completeness and quality in all countries.

BOX 14

Improving TB surveillance through an electronic and case-based recording and reporting system for TB: China's experience

The National Center for Tuberculosis Control and Prevention, which is part of the Chinese Center for Disease Control and Prevention, introduced a case-based and electronic recording and reporting system for TB in 2004. The system is linked to the system for surveillance of all infectious diseases, and captures data on TB patients as well as information on activities associated with NTP management (including drug management, training, supervision and financing). In line with new reporting requirements, data on HIV status and drug resistance are available for TB patients, and TB among migrants and in the prison sector specifically can be distinguished.

Strengths – first version

Strengths of the first version of the system introduced in 2004 included the availability of individual-level and real-time data for all TB patients; data were linked to the infectious diseases surveillance system and linkages could be made between the datasets; and tables to summarize major results could be automatically produced. The system helped to increase the referral and reporting of cases by hospitals (see also BOX 7).

Weaknesses – first version

The initial design of the system resulted in too much data being collected. In turn, the workload for staff was too high and the Internet server was overloaded. Managers thought that the automated outputs that could be produced were too limited and that the system was relatively inflexible. It was also noted that data on HIV, M/XDR-TB and TB among migrants needed to be captured.

Lessons learnt and development of second version

It took approximately two years to develop the first system and expand it nationwide. This time was needed for analysis of data requirements and data flow, the design and development of software, piloting, training of users and finally the introduction of the new system to all parts of the country. Slow internet speeds affected the functionality of the system in the periphery.

Taking account of the strengths, weaknesses, lessons learnt and new challenges in TB control, the system was further developed from the end of 2006. By March 2009, the second version had been implemented throughout the country. A comparison of the first and second versions is shown in the table.

	FIRST VERSION	SECOND VERSION
Structure	Software for one server only	Server plus client software
Data input	Online	Online for server, offline for client
Contents	Three "registration books" (registers for TB suspects, TB patients and laboratory tests) plus data about patients on treatment	Server collects core data, including data on HIV status, drug resistance, TB among migrants and TB in the prison sector; other data available at client level
Output	Basic analyses	Enhanced analyses

Data quality control

Various mechanisms are used to ensure the quality of data (including accuracy, completeness and timeliness). Only staff who have received the appropriate training can input data; the system has an in-built mechanism for data audit; manuals are available on standard operating procedures and assessing data quality; missing reports are investigated individually; constant supervision and feedback are provided; and emphasis is placed on building capacity to analyse data.

8. Conclusions

This section summarizes the main conclusions that can be drawn from the findings included in this report. It also draws together the main recommendations that appear in the report, in the form of a Box (BOX 15).

The global burden of TB is falling slowly. Incidence rates have been declining since 2004 at the global level, and if this trend is sustained, MDG Target 6.c will be achieved worldwide. Five of WHO's six regions are also on track to achieve this target (the exception is the South-East Asia Region, where the incidence rate is stable). Mortality rates at global level fell by around 35% between 1990 and 2009, and the target of a 50% reduction by 2015 could be achieved if the current rate of decline is sustained. At the regional level, the mortality target could be achieved in five of WHO's six regions; the exception is the African Region (although rates of mortality are falling in this region). Prevalence is falling globally and in all six WHO regions. However, the target of halving 1990 prevalence rates by 2015 may not be reached at global level. Three regions are on track to achieve this target: the Region of the Americas, the Eastern Mediterranean Region and the Western Pacific Region.

Reductions in the disease burden achieved to date follow 15 years of intensive efforts at country level to implement the DOTS strategy (1995–2005) and its successor, the Stop TB Strategy (launched in 2006). Between 1995 and 2009, a cumulative total of 41 million TB patients were successfully treated in DOTS programmes, and up to 6 million lives were saved. The treatment success rate achieved in DOTS cohorts worldwide has now exceeded the global target of 85% for two successive years.

Although increasing numbers of TB cases have access to high-quality treatment for TB as well as access to

BOX 15

Summary of main recommendations in the 2010 global TB control report

Estimates of disease burden

- Surveillance of cases and deaths needs to be strengthened, towards the ultimate goal of measuring TB cases and TB deaths directly from notification and vital registration data. Electronic systems for recording and reporting of data need to be introduced in many countries, and vital registration systems need to be developed or strengthened in more than 100 countries.
- Prevalence surveys need to be successfully implemented in countries where these have been planned for 2010/2011, particularly in African countries, and findings from surveys completed in 2010 need to be disseminated.
- Estimates of the burden of disease in women and children need to be improved via more analysis of notification and mortality data disaggregated by age and sex.
- An up-to-date assessment of trends in disease burden in India, using the latest surveillance, programmatic and survey data, needs to be undertaken.

Monitoring of progress

- The main indicators that should be used to monitor progress in TB control up to 2015, linked to the MDG and Stop TB Partnership targets, are trends in incidence, prevalence and mortality, the treatment success rate and the case detection rate for all forms of TB. Use of the case detection rate for smear-positive TB should be phased out.
- Recording and reporting of data needs to be improved for public-private mix (PPM), human resource development (HRD) and infection control. For PPM and HRD, data for the variables included in the recording and reporting forms recommended by WHO need to be collected. For infection control, data to monitor the ratio of the TB notification rate among health care workers to the notification rate in the general population (for which the target is approximately 1) are of most importance.

Implementation and financing of the Stop TB Strategy

- Rates of treatment success for TB patients with drug-susceptible TB need to be improved in the European Region.
- Diagnosis and treatment of MDR-TB need to be rapidly scaled up. This will require massive strengthening of laboratory capacity, using approaches such as those used in the EXPAND-TB project.
- Further expansion of HIV testing of TB patients and higher rates of enrolment of HIV-positive TB patients on ART are required.
- Screening for TB among people living with HIV, and provision of IPT to those without TB, need to be substantially increased from their currently low levels.
- Further efforts to engage all care providers in TB control are warranted in many countries. Data from 15 countries in this report show remarkable success when this is done.
- Efforts to mobilize funding from both domestic and external sources should be intensified so that funding gaps can be closed. The contribution of the Global Fund is crucial in many countries.

related interventions such as ART, much more remains to be done. More than one-third of incident TB cases are not reported as treated in DOTS programmes, around 90% of patients with MDR-TB are not being diagnosed and treated according to international guidelines, many HIV-positive TB cases do not know their HIV status and most of the HIV-positive TB patients who do know their HIV status are not yet being provided with ART. Funding gaps remain large at more than US$ 1 billion per year, despite increases in funding over the past decade and substantial financing from the Global Fund in many countries.

Looking forwards, the Stop TB Partnership launched an updated version of the Global Plan to Stop TB in October 2010, for the years 2011–2015. In the five years that remain until the target year of 2015, intensified efforts to plan, finance and implement the Stop TB Strategy, according to the updated targets included in the Global Plan, are needed. This could save a cumulative total of 5 million lives, including 2 million women and children.

ANNEX 1

Methods used to estimate the global burden of disease caused by TB

This annex explains the methods that were used to produce estimates of the global burden of disease caused by TB (measured in terms of incidence, prevalence and mortality). It has eight major sections:

- **General approach.** This section provides some background information about the methods used to produce estimates of disease burden.
- **Definitions.** This section defines TB incidence, prevalence and mortality and the case fatality rate. It also explains the regions for which estimates of disease burden are produced and sources of information on population estimates.
- **Estimates of TB incidence, 1990–2009.** This section explains the five main methods used to estimate TB incidence, and the countries for which they have been applied. It also discusses estimates of the incidence of sputum smear-positive cases of pulmonary TB, and explains why such estimates (and related estimates of the case detection rate for sputum smear-positive cases of pulmonary TB) are not included in this report.
- **Estimates of HIV prevalence among incident TB cases, 1990–2009.** This section explains the methods used to estimate the prevalence of HIV among incident cases of TB.
- **Estimates of TB prevalence, 1990–2009.** This section explains the two main methods used to estimate TB prevalence. These are national surveys of the prevalence of TB disease and indirect estimates based on combining estimates of incidence with estimates of the duration of TB disease.
- **Estimates of TB mortality, 1990–2009.** This section explains the two methods used to estimate TB mortality. These are direct measurements from vital registration (VR) data and indirect estimates based on combining estimates of TB incidence with estimates of the case fatality rate. The countries for which these methods have been used are explained. Methods for estimating mortality by age and sex are also described.
- **Projections of TB incidence, prevalence and mortality.** This section explains how projections up to 2015 were produced.
- **Uncertainty framework.** This section explains the general approach to including uncertainty in all estimates.

1. General approach

Estimates of the burden of disease caused by TB (measured in terms of incidence, prevalence and mortality) are produced annually by WHO using information gathered through surveillance systems (case notifications and death registrations), special studies (including surveys of the prevalence of disease and in-depth analyses of surveillance data), expert opinion and consultations with countries. Two recent publications provide up-to-date guidance about how TB incidence, prevalence and mortality should be measured,[1,2] based on the work of the WHO Global Task Force on TB Impact Measurement.[3] The methods used to estimate the burden of disease were updated in 2009 following 18 months of work by an expert group convened under the umbrella of the Task Force. Improvements to methods include systematic documentation of expert opinion and how this has been used to produce estimates of disease burden, simplification of models,[4] updates to parameter values based on the results of systematic reviews, much greater use of mortality data from VR systems (89 countries instead of the three from which estimates were derived up to 2008) and systematic documentation of uncertainty (hence the uncertainty intervals shown on all of the estimates of disease burden in this report).

2. Definitions

2.1 Incidence, prevalence, mortality and the case fatality rate

Incidence is defined as the number of new and relapse cases of TB (all forms) occurring in a given year. Relapse cases are defined as people who have been previously treated for TB and for whom there was bacteriological confirmation of cure and/or documentation that treatment was completed. Relapse cases may be true relapses or a subsequent episode of TB caused by reinfection.

Prevalence is defined as the number of cases of TB disease (all forms) at a given point in time (the middle of the year).

Mortality is defined as the number of deaths caused by TB, excluding deaths occurring in HIV-positive TB cases, according to the definitions used in the 10th revision of the International Classification of Diseases (ICD-10). Estimates of deaths caused by TB in HIV-positive cases are presented separately.

The **case fatality rate** is defined as the risk of death from TB among people with active TB disease.

2.2 Regions

Regional analyses are generally undertaken for the six WHO regions (that is, the African Region, the Region of the Americas, the Eastern Mediterranean Region, the European Region, the South-East Asia Region and

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1 Dye C et al. Measuring tuberculosis burden, trends and the impact of control programmes. *Lancet Infectious Diseases* (published online 16 January 2008; http://infection.thelancet.com).

2 TB impact ,measurement: policy and recommendations for how to assess the epidemiological burden of TB and the impact of TB control. Geneva, World Health Organization, 2009 (Stop TB policy paper no. 2; WHO/HTM/TB/2009.416). The policy paper is available on the Task Force's website http://www.who.int/tb/advisory_bodies/impact_measurement_taskforce/en/index.html.

3 For further details, see the Task Force web site at: http://www.who.int/tb/advisory_bodies/impact_measurement_taskforce/en/index.html. The review is also the basis for the TB component of the update to the Global Burden of Disease, due for publication in 2010.

4 For example, some parameter values are now estimated only at global level or for regions, rather than for each country individually.

the Western Pacific Region). For some analyses, Eastern Europe (countries of the former Soviet states plus Bulgaria and Romania) as well as the group of high-income countries[1] are distinguished.

2.3 Population estimates

Where population sizes are needed to calculate TB indicators, the 2008 revision of estimates provided by the United Nations Population Division (UNPD) was used.[2] The UNPD estimates sometimes differ from those made by countries.

3. Estimates of TB incidence, 1990–2009

No country has ever undertaken a nationwide survey of TB incidence because of the large sample sizes required and associated major logistic and financial challenges. As a result, there are no direct measurements of the incidence of TB. Theoretically, data from TB surveillance systems that are linked to health systems of high coverage and performance may capture all (or almost all) incident cases of TB. However, as yet no standard and widely-endorsed criteria and benchmarks for classifying TB surveillance systems are available. The WHO Global Task Force on TB Impact Measurement is working on the development of such standards, and initial ideas are available in a background paper.

In the absence of direct measurements, estimates of TB incidence rely on one or more of the five methods described in SECTIONS 3.1–3.5.

It should be noted that, with very few exceptions, incidence estimates are no longer derived from surveys of the prevalence of tuberculous infection as measured in tuberculin surveys. The WHO Global Task Force on TB Impact Measurement has agreed that methods for deriving incidence from the prevalence of infection are unreliable. The Task Force has also stated that it is doubtful whether repeat tuberculin surveys provide a reliable estimate of the trend in TB incidence.[4]

3.1 Estimating TB incidence from estimates of the proportion of cases detected

Notification data for new and relapse cases have been analysed in combination with evidence about the coverage of the TB surveillance system[5] and expert opinion in five regional workshops and three country missions held 2008–2010, according to a framework developed by the WHO Global Task Force on TB Impact Measurement (see SECTION 7 of the main part of this report). By mid-2010, these workshops and country missions had covered 71 countries in the Region of the Americas, the Eastern Mediterranean Region, the European Region, the South-East Asia Region and the Western Pacific Region. The African region was the only region where such workshops had not been held by mid-2010; at the time this report went to press, the first workshop in this region, for 17 of the 46 countries in the region, was scheduled for December 2010.

For countries participating in these regional workshops, incidence was estimated according to the following equation:

$$\text{incidence} = \frac{\text{case notifications}}{\text{proportion of cases detected}}$$

The proportion of all TB cases[6] detected (the case detection rate, or CDR) was estimated, with plausible ranges, for three years (1997, 2003 and 2008 or 2009), following in-depth analysis of national and sub-national data. Expert opinion was elicited after in-depth analysis of notification data (including data from sub-national administrative levels) and programmatic data reflecting efforts in TB control (for example, data on infrastructure, staffing, the performance of services and funding). In addition, data on access to health care from Demographic and Health Surveys and the overall performance of health systems (using indicators such as the infant mortality rate) were used to substantiate opinion on the proportion of cases with no or very limited access to health care (TABLE A1).

TABLE A1

Sources of information and data on TB incidence used in regional workshops and country missions

POSSIBLE CATEGORIES OF INCIDENT CASES	SOURCES OF DATA	
Do not have physical or financial access to health care	Demographic and health surveys, KABP[a] surveys	Capture–recapture modelling
Seek care, but TB not diagnosed	Survey	
TB diagnosed, but not reported	"Inventory" survey	
Reported cases	TB surveillance	

[a] KABP = knowledge, attitudes, behaviour and practices.

[1] As defined by the World Bank. High-income countries are those with a per capita gross national income (GNI) of US$ 12 196 or more in 2009.

[2] http://esa.un.org/unpp/; accessed on 7 June 2010.

[3] See the second background paper prepared for the fourth meeting of the Global Task Force on TB Impact Measurement, held 17–18 March 2010. The paper is available on the Task Force's web site http://www.who.int/tb/advisory_bodies/impact_measurement_taskforce/en/index.html.

[4] TB Impact Measurement: Policy and recommendations for how to assess the epidemiological burden of TB and the impact of TB control. Geneva, World Health Organization, 2009 (Stop TB policy paper; no. 2 (WHO/HTM/TB/2009.416). The recommendation on tuberculin surveys is provided on page 12. The policy paper is available on the Task Force's website http://www.who.int/tb/advisory_bodies/impact_measurement_taskforce/en/index.html.

[5] For example, measurements from "inventory" studies or estimation from capture-recapture modelling in which at least three sources of information were used – thus allowing adjustment for between-source dependencies. A useful reference on capture-recapture methods is: Chao A et al. The applications of capture-recapture models to epidemiological data. *Statistics in Medicine*, 2001, 20(20):3123–3157.

[6] Defined as cases of all forms of TB, including sputum smear-positive pulmonary cases, sputum smear-negative pulmonary cases, and extrapulmonary cases.

TABLE A2

Parameter estimates used to produce estimates of TB incidence, prevalence and mortality

MODEL PARAMETER	DISTRIBUTION	DISTRIBUTION PARAMETERS[b]
Incidence, high-income countries	Beta[a]	$\alpha = \bar{I} \cdot \left[\frac{\bar{I}(1-\bar{I})}{V} - 1\right]$ $\beta = (1-\bar{I}) \cdot \left[\frac{\bar{I}(1-\bar{I})}{V} - 1\right]$ where $\bar{I}$ was set at 1.12 times the notification rate, noted N, and V is defined by:[c] $V = \left[\frac{0.3}{4} N\right]^2$
HIV prevalence among incident TB	Beta[a]	$\alpha = \bar{x} \cdot \left[\frac{\bar{x}(1-\bar{x})}{V} - 1\right]$ $\beta = (1-\bar{x}) \cdot \left[\frac{\bar{x}(1-\bar{x})}{V} - 1\right]$ Where $\bar{x}$ is the expected value and V is given by: $V = \left[\frac{(u-l)}{4}\right]^2$
Duration of disease, non-notified HIV-negative cases of TB	Uniform	$l = 1, u = 4$ (years)
Duration of disease, non-notified HIV-positive cases of TB	Uniform	$l = 0.01, u = 0.2$ (years)
Duration of disease, notified HIV-negative cases of TB	Uniform	$l = 0.2, u = 2$ (years)
Duration of disease, notified HIV-positive cases of TB	Uniform	$l = 0.01, u = 1$ (years)

[a] The probability density function of the Beta distribution is:

$$f(x; \alpha, \beta) = \frac{x^{\alpha-1}(1-x)^{\beta-1}}{\int_0^1 u^{\alpha-1}(1-u)^{\beta-1}\,du}$$

[b] u and l denote upper and lower bounds

[c] See section 3.2

Data were assessed using a three-step process. This started with a systematic assessment of data quality, including an assessment of the over-dispersion of count data over time and across regions/districts (or similar geographical areas). This was followed by exploration of potential factors driving time-changes in case notifications (such as improvements in diagnostic capacity and the HIV epidemic), and then by assessment of the likely number of TB cases that are not notified. To facilitate the documentation of expert opinion, an "onion" framework[1] was used. In this framework, different "layers" of the onion represent distinct populations of TB cases that are not captured by national TB information systems (for example, cases with no access to health care and cases with access to private health-care services but not reported to NTPs – see TABLE A1).

These methods are documented in a workbook available on the web site of the WHO Global Task Force on TB Impact Measurement.[2]

Distributions of CDRs for the three years for which they were estimated were assumed to follow a Beta distribution (TABLE A2). Reasons for using Beta distributions include the following:

- They are continuous and defined on the interval (0, 1). Since the variance of CDR distributions tend to be large as a result of high uncertainty, random draws of numbers from a normal distribution would yield numbers outside the interval (0, 1). The use of truncated normal distributions may result in excess density towards one of the bounds.
- They are not necessarily symmetrical.
- They are defined with two parameters that can be estimated from available data using the method of moments.

The two shape parameters necessary to define the Beta distribution were computed using the method of moments, as follows:

[1] *TB impact measurement: policy and recommendations for how to assess the epidemiological burden of TB and the impact of TB control*. Geneva, World Health Organization, 2009 (Stop TB policy paper no 2; WHO/HTM/TB/2009.416. The onion framework is described on pages 19–24). The policy paper is available on the Task Force's website http://www.who.int/tb/advisory_bodies/impact_measurement_taskforce/en/index.html.

[2] http://www.who.int/tb/advisory_bodies/impact_measurement_taskforce/en/index.html.

First, the variance for the distribution was taken as:

$$V = ((u - l)/4)^2$$

where l and u are the lower and upper bounds of the plausible range for the CDR.

Shape 1 (noted α) and shape 2 (noted β) follow from:

$$s = \frac{E(1 - E)}{V} - 1$$

$$\alpha = sE$$

$$\beta = s(1 - E)$$

where E is the expected value of the distribution.

Time series for the period 1990–2009 were built according to the characteristics of the three CDRs that were estimated. A cubic spline extrapolation of V and E, with knots set at the three reference years, was used. Incidence trajectories were derived from the series of notified TB cases using Monte Carlo simulations from which expected values, 2.5th and 97.5th centiles were extracted. All computations were conducted in the R statistical environment.[1]

If there were insufficient data to determine the factors leading to time-changes in case notifications, incidence was assumed to follow a horizontal trend going through the most recent estimate of incidence.

3.2 Estimating TB incidence from data on case notifications and expert opinion for high-income countries

For high-income countries, the level of TB incidence was assumed to be distributed between the notification rate for new and relapse cases combined (lower uncertainty bound, noted l) and 1.3 times the notification rate (upper uncertainty bound, noted u), as informed by expert opinion. The distribution of incidence was assumed to follow a Beta distribution with shape parameters computed using the method of moments, as described above.

In the absence of country-specific data on the quality and coverage of TB surveillance systems, it was assumed that TB surveillance systems from countries in the high-income group performed similarly well, although the model does allow for stochastic fluctuations.

3.3 Estimating TB incidence from empirical measurements of disease prevalence

Incidence can be estimated using measurements from national surveys of the prevalence of TB disease combined with estimates of the duration of disease. Incidence is estimated as the prevalence of TB divided by the average duration of disease.

The duration of disease cannot be directly measured. For example, measurements of the duration of symptoms in prevalent TB cases that are detected during a prevalence survey are systematically biased towards lower values, since active case-finding truncates the natural history of undiagnosed disease. Measurements of the duration of disease in notified cases ignore the duration of disease among non-notified and untreated cases.

Literature reviews commissioned by the WHO Global Task Force on TB Impact Measurement have provided estimates of the duration of disease in untreated TB cases from the pre-chemotherapy era (before the 1950s). The best estimate of the mean duration of disease (for smear-positive cases and smear-negative cases combined) in HIV-negative individuals is about three years. There are few data on the duration of disease in HIV-positive individuals.

When measurements from two prevalence surveys were available, trends in TB incidence were derived by fitting a log-linear model to indirect estimates of TB incidence. When three or more prevalence measurements were available, the prevalence trajectory was built using cubic spline interpolation. If only one prevalence survey measurement was available, time-trends were assessed using in-depth analysis of surveillance data, as described above.

In this report, the prevalence to incidence method was used for only one country (Viet Nam), following a meeting in early 2009 in which consensus was reached among national experts and experts from WHO and the KNCV Tuberculosis Foundation.

3.4 Estimating TB incidence from measurements of mortality and estimates of the case-fatality rate

In three countries (Brazil, Mexico and South Africa), incidence was estimated from 1990 up to 2008 from TB mortality data, using the following equation:

$$\text{incidence} = \frac{\text{deaths}}{\text{proportion of incident cases that die}}$$

Previously published time-series of incidence for those three countries were then extended to 2009, using methods described in SECTION 3.5.

3.5 Estimating TB incidence from previously published time-series of incidence

In all remaining countries, previously published time-series of TB incidence were extended by fitting a log-linear model to the estimates for 2006–2008, to predict a value for 2009.

3.6 Estimating the incidence of sputum smear-positive TB and the case detection rate for sputum smear-positive TB

All the annual reports on global TB control published by WHO from 1997 to 2009 included estimates of the incidence of sputum smear-positive TB and the related CDR for such cases. The CDR for sputum smear-positive pulmonary TB is the number of new and relapse cases of sputum smear-positive pulmonary TB notified to NTPs divided by

[1] R Development Core Team. *R: a language and environment for statistical computing*. Vienna, R Foundation for Statistical Computing, , 2009 (ISBN 3-900051-07-0; http://www.R-project.org).

the estimated number of incident cases that occurred in the same year.

Estimates of the incidence of sputum smear-positive pulmonary TB and the related CDR for these cases are not published in this report. There are several reasons for this, which are summarized in the main part of the report (BOX 6). Among the reasons noted in this box are the findings and associated recommendations from the 18-month expert review of methods used to estimate disease burden described in SECTION 1 above, and associated updates to methods used to estimate disease burden that have been applied in a series of regional workshops and country missions (SECTION 3.1). A fuller explanation is provided here.

In regional workshops and country missions, the starting point for estimates of the incidence of TB was an estimate of the CDR for all forms of TB. This was because, for many countries, estimates of the incidence of all forms of TB are used to produce indirect estimates of TB mortality and TB prevalence (these do not require estimates of the CDR for smear-positive TB).

The incidence of sputum smear-positive pulmonary TB can theoretically be estimated by multiplying the incidence of all forms of TB by the estimated proportion of all incident cases of TB that have sputum smear-positive pulmonary TB. The CDR for sputum smear-positive pulmonary TB would then be estimated by dividing reported notifications of sputum smear-positive cases of pulmonary TB by the estimated incidence of sputum smear-positive pulmonary TB. This approach was used in global reports published up to December 2009. Subsequently, the findings of one of the systematic reviews conducted by the expert group have cast doubts on this approach. A systematic review of the evidence about the proportion of TB cases that have sputum smear-positive pulmonary TB found considerable uncertainty around the best estimate of this proportion.[1]

It may appear that an alternative method is to assume that, for any given country, the proportion of all incident cases with sputum smear-positive pulmonary TB is equal to the proportion of all notified cases that had smear-positive pulmonary TB in the region of reference (this could be an epidemiologically-defined region or a WHO region, for example). However, use of this method will mean that, for many countries, changes in the estimated CDR for sputum smear-positive pulmonary TB will occur from one year to the next simply because of a change in the share of regional notifications that are smear-positive, without any real change in the level of case detection in the country itself (since a change in the regional proportion will cause the estimated incidence of smear-positive TB in a given country, the denominator of the CDR, to go up and down even when the country's notifications are stable). This is wrong and likely to cause confusion.

Another alternative is to assume that, in any given country, the proportion of sputum smear-positive cases of pulmonary TB among all notified cases reflects the true proportion of sputum smear-positive TB among incident cases of TB in the country. In this case, the estimated CDR for all forms of TB and the estimated CDR for sputum smear-positive cases are the same.

If needed for reporting purposes, it is suggested that the CDR for smear-positive TB is assumed to be similar to the CDR for all forms of TB.

4. Estimates of HIV prevalence among incident TB cases, 1990–2009

The prevalence of HIV among incident cases of TB was directly estimated from country-specific and empirical data wherever possible. For the estimates published in this report, suitable data (as defined in TABLE A3) were available for a total of 440 country-year data points, up from 288 country-year data points in the previous year (for details of the source of data used for each country, please see the APPENDIX).

For the 3785 country-year data points for which surveillance data were either not available or for which the percentage of TB patients tested for HIV was below 50%,

TABLE A3

Source of data on HIV prevalence among incident TB cases

DIRECT MEASUREMENT OF THE PREVALENCE OF HIV IN TB PATIENTS	NUMBER OF COUNTRY-YEARS
National surveys	96
HIV sentinel surveillance	28
Provider-initiated testing and counselling with a least 50% coverage of testing	316
Total	**440**

the prevalence of HIV was estimated indirectly according to the following equation:

$$t = \frac{h\rho}{1 + h(\rho - 1)}$$

In this equation, t is HIV prevalence among incident TB cases, h is HIV prevalence among the general population (from the latest time-series provided by UNAIDS) and ρ is the incidence rate ratio (IRR) (defined as the incidence rate of TB in HIV-positive people divided by the incidence rate of TB in HIV-negative people).[2] To estimate ρ from empirical data (that is, from countries that have an empirical estimate of both t and h), the equation was rearranged as follows:

$$\rho = \frac{t(1 - h)}{h(1 - t)}$$

We then let logit(t) be log(t/(1-t)) and logit(h) be log(h/(1-h)). Using data from countries where HIV prevalence

[1] Research Institute of Tuberculosis, Tokyo 2010 (data not shown).

[2] Data on HIV prevalence in the general population are unpublished data provided to WHO by UNAIDS.

has been estimated by UNAIDS as an independent variable, a linear model of logit-transformed t was fitted using logit-transformed h according to the following equation, written in matrix notation:

$$\hat{T} = X\beta$$

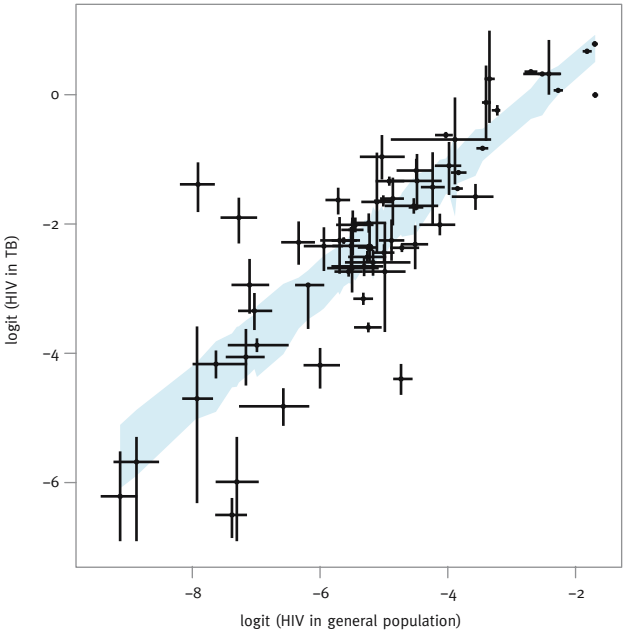
where $\hat{T}$ is a vector of predicted logit(t), X is an n x 2 matrix in which the first column holds 1s, and the second column holds logit(h). The vector β holds estimated model parameters.

Models were run using Monte Carlo simulations in which h was drawn randomly from a Beta distribution with shape parameters computed as described in SECTION 3.1, (low and high uncertainty bounds are provided by UNAIDS – also see TABLE A2). The model was run 50 000 times using country-specific distributions for H and T (noted in capital letters to denote vectors or matrices) based on their uncertainty intervals (FIGURE A1). The uncertainty bounds for β were chosen as the 2.5th and 97.5th centiles.

The source of data used for each country is listed in the APPENDIX.

FIGURE A1

Relationship between the prevalence of HIV in TB patients and the prevalence of HIV in the general population



HIV prevalence in newly notified TB cases against HIV prevalence in the general population, after logit transformation. A total of 50 000 linear regression models were fitted to randomly selected numbers drawn from logit-transformed distributions of both variables. Uncertainty bands for predicted values, with bounds defined as the 2.5th and 97.5th centiles, are shown in blue.

5. Estimates of TB prevalence, 1990–2009

The best way to measure the prevalence of TB is through national population-based surveys of TB disease.[1,2] Data from such surveys are available for an increasing number of countries. It should be noted, however, that measurements of prevalence are typically confined to the adult population. Furthermore, prevalence surveys exclude extrapulmonary cases and do not allow the diagnosis of cases of culture-negative pulmonary TB.

When there is no direct measurement from a national survey of the prevalence of TB disease, prevalence is the most uncertain of the three TB indicators used to measure disease burden. This is because prevalence is the product of two uncertain quantities: (i) incidence and (ii) disease duration. The duration of disease is very difficult to quantify because measurements from surveys of the prevalence of TB disease are not reliable (surveys truncate the natural history of disease). Duration can be assessed in self-presenting patients, but there is no practical way to measure the duration of disease in patients who are not notified to NTPs.

Indirect estimates of prevalence were calculated according to the following equation:

$$P = \sum I_{i,j} d_{i,j}, i \in \{1,2\}, j \in \{1,2\}$$

where the index variable i denotes HIV+ and HIV–, the index variable j denotes notified and non-notified cases, d denotes the duration of disease and I is total incidence. In the absence of measurements, we did not allow duration in notified cases to vary among countries. Given their underlying uncertainty, prevalence estimates should be used with great caution in the absence of direct measurements from a prevalence survey. Assumptions of the duration of disease are shown in the last four rows of TABLE A2.

6. Estimates of TB mortality, 1990-2009

The best sources of data about deaths from TB (excluding those among HIV-positive people) are VR systems in which causes of death are coded according to ICD-10 (although the older ICD-9 and ICD-8 classification are still in use in several countries). Deaths from TB in HIV-positive people are coded under HIV-associated codes.

Estimates of TB mortality were produced directly from VR data, or indirectly from estimates of TB incidence and case-fatality rates (CFRs). The source of data used in each country is listed in the APPENDIX.

6.1 Estimating TB mortality from direct measurements of vital registration data

Data from VR systems are reported to WHO by Member States and territories every year. In countries with

[1] Glaziou P et al. Tuberculosis prevalence surveys: rationale and cost. *International Journal of Tuberculosis and Lung Disease*, 2008, 12(9):1003–1008.

[2] Assessing tuberculosis prevalence through population-based surveys. Manila, World Health Organization, 2007.

functioning VR systems in which causes of death are coded according to the two latest revisions of the International Classification of Diseases (underlying cause of death: ICD-10 A15-A19, equivalent to ICD-9: 010-018), VR data are the best source of information about deaths from TB among people not infected with HIV. When people with AIDS die from TB, HIV is registered as the underlying cause of death and TB is recorded as a contributory cause. Since one third of countries with VR systems report to WHO only the underlying causes of death and not contributory causes, VR data usually cannot be used to estimate the number of TB deaths in HIV-positive people.

In 2009, 90 countries had well-functioning VR systems according to the following definition: (i) coverage of at least 70% of the population, and (ii) ill-defined causes of death (ICD-9 code B46, ICD-10 codes R00-R99) of <20% of all registered deaths.[1] These countries included four of the 22 HBCs (Brazil, the Philippines, the Russian Federation and South Africa). However, we could not use the VR data on TB deaths from South Africa because large numbers of HIV deaths were miscoded as TB deaths.

Among the remaining 89 countries, there was an average of 6.2 years (interquartile range, 4–8) of VR data on TB mortality between 1991 and 2009 that met the above criteria, equivalent to 602 country-years. We assumed that the proportion of TB deaths among deaths not recorded by the VR system was the same as the proportion of TB deaths in VR-recorded deaths. For VR-recorded deaths with ill-defined causes, we assumed that the proportion of deaths attributable to TB was half of the observed proportion in recorded deaths, since ill-defined causes are typically observed in higher proportions in rural areas with a low population density where the risk of TB is lower. We assumed errors in measurement (due to misclassifications) and assumptions (redistributions) to be log-normally distributed with a standard deviation on a log scale given by $\sigma = 0.05\mu / (\nu - s/2)$, where μ is the VR recorded TB mortality rate, v the coverage of the VR system and s the rate of ill-defined causes. Incomplete coverage and ill-defined causes introduce uncertainty in measurements μ. The standard deviation of μ was based on the assumption that uncertainty intervals of μ spanned at least ±10% of the measurement μ, increasing with decreasing VR coverage and with increasing rates of ill-defined causes of death.

6.2 Estimating TB mortality from indirect estimates of case-fatality rates and TB incidence

For the years in which VR data of sufficient quality and coverage were not available for the 89 countries defined above plus the 124 countries without any VR data, mortality was estimated as the product of TB incidence and the CFR. CFRs were estimated separately for TB cases notified to NTPs and non-notified cases and, within these two groups, separate estimates were made for HIV-positive TB cases and HIV-negative TB cases (TABLE A4).

For consistency with VR-based mortality estimates, CFRs were estimated such that they gave the best fit to the VR-recorded TB death rates (within their uncertainty ranges) across the 602 country-years of data from the 89 countries with functioning VR systems, in conjunction with WHO estimates of distributions of TB incidence in those countries. This statistical fitting used Bayesian linear models and was done separately for three groups of countries (high-income, eastern Europe, and all other countries), to account for differences in the ratio of reported TB mortality to TB notification rates among these three groups (data not shown).

The models used normal errors and Gibbs sampling:

$$y = (I - N)\beta_1 + N\beta_2 + \varepsilon,\ \varepsilon \sim N(0,\sigma^2)$$

where y is TB mortality from VR, I denotes TB incidence excluding people living with HIV, N denotes TB notifications excluding people living with HIV, and parameters β_1 and β_2 denote the CFR in non-notified and notified cases respectively. Semi-conjugate priors were set with an uninformative inverse Gamma prior on the conditional error variance:

$$b \sim N(b_i, B_i^{-2}), \sigma^2 \sim IG(5.10^{-4}, 5.10^{-4})$$

Priors b and their precision B were defined based on literature reviews and the country-year CFR parameters used by WHO for the years 1999–2008 (TABLE A4). Convergence of Markov Chains was assessed graphically and using two convergence diagnostic tests. Within each case category 1990–2009, mortality estimates were computed by taking the product of posterior distributions of the CFR, assumed to be time-independent (TABLE A4), and country-year specific distributions of estimated incidence.

Among the 89 countries, the combination of using VR data for some years and indirect estimates (based on incidence and CFRs) for others sometimes led to implausible differences between adjacent time-points. Where this occurred, we assumed that VR measurements were more reliable than the indirect estimates. We re-scaled the indirectly estimated TB mortality values to ensure, on average, smooth mortality trend lines. Rescaling factors were defined for each country as the ratio of the mean of available VR-recorded TB mortality rates over the mean of indirectly estimated mortality, among cases excluding those infected with HIV, for the years covered by VR measurements.

6.3 Estimating TB mortality from disaggregated estimates of TB deaths by age and sex

For countries with VR data, it was possible to disaggregate estimated TB deaths by age (with age groups defined as 0–4 years, 5–14 years, 15–24 years, 25–34 years,

[1] Mathers CD et al. Counting the dead and what they died from: an assessment of the global status of cause of death data. *Bulletin of the World Health Organization*, 2005, 83:171–177.

TABLE A4

Estimates of TB case-fatality rates by case type and country

CASE TYPE AND COUNTRY GROUP	HIV-NEGATIVE		HIV-POSITIVE
	NORMAL PRIOR DISTRIBUTIONS[a] MEAN (STANDARD ERROR)	POSTERIOR DISTRIBUTIONS MEAN (STANDARD ERROR)	TRIANGULAR DISTRIBUTIONS[a] MODE (BOUNDS)
Non-notified: high-income countries	0.1 (0.004)	0.12 (0.004)	0.2 (0.05–0.3)
Non-notified: Eastern Europe	0.35 (0.007)	0.36 (0.007)	0.4 (0.2–0.8)
Non-notified: other countries	0.42 (0.008)	0.37 (0.01)	0.4 (0.2–0.8)
Notified: high income countries	0.05 (0.0013)	0.045 (0.001)	0.1 (0.05–0.15)
Notified: Eastern Europe	0.08 (0.004)	0.1 (0.005)	0.2 (0.1–0.4)
Notified: other countries	0.1 (0.006)	0.04 (0.007)	0.2 (0.1–0.4)

[a] Priors and assumed distributions in HIV-positive cases were derived from (i) pooled estimates from random-effects modelling of literature review results and (ii) pooled estimates from the WHO global TB database of assumed country-specific CFRs (2008).

35–44 years, 45–54 years, 55–64 years, ≥65 years) and sex, in line with the way in which deaths are reported. In countries with no functional VR system, the total number of estimated TB deaths was redistributed into the different age and sex strata according to the disaggregation of the combined population of countries with VR data (with standardization against the individual country's age and sex distribution). TB deaths in HIV-positive people were not disaggregated by age and sex due to limited data from countries with functional VR systems.

7. Projections of incidence, prevalence and mortality up to 2015

Projections of TB incidence, prevalence and mortality rates up to 2015 enable assessment of whether global targets set for 2015 are likely to be achieved at global, regional and country levels. Projections for the years 2010–2015 were made using log-linear regression models fitted to rates from 2006–2009, with the assumption that recent trends would continue.

8. Estimation of uncertainty

There are many potential sources of uncertainty associated with estimates of TB incidence, prevalence and mortality, as well as estimates of the burden of HIV-associated TB and MDR-TB. These include uncertainties in input data, in parameter values, in extrapolations used to impute missing data, and in the model used.

We used fixed population values from the UNPD. We did not account for any uncertainty in these values.

Notification data are of uneven quality. Cases may be underreported (missing quarterly reports from remote administrative areas are not uncommon), misclassified (in particular, misclassification of relapse cases in the category of new cases is common), or over-reported as a result of duplicated entries in TB information systems. The latter two issues can only be addressed efficiently in countries with case-based nationwide TB databases that include patient identifiers. Sudden changes in notifications over time are often the result of errors or inconsistencies in reporting, but may sometimes reflect abrupt changes in TB epidemiology (for example, resulting from a rapid influx of migrants from countries with a high-burden of TB, or from rapid improvement in case-finding efforts).

Missing national aggregates of new and relapse cases were imputed by cubic spline interpolation. However, notification trajectories were not automatically smoothed over time to avoid introducing systematic errors in countries where time-changes are reflecting true changes in the epidemiology of TB. Attempts to obtain corrections for historical data are made every year, but only rarely do countries provide appropriate data corrections. It is therefore generally unclear when bumps in notifications are most likely reflecting reporting errors. Future regional workshops will include a systematic effort to correct for such data deficiencies using expert opinion, for those cases where corrections appear necessary.

Mortality estimates incorporated the following sources of uncertainty: sampling uncertainty in the underlying measurements of TB mortality rates from data sources, uncertainty in estimates of incidence rates and rates of HIV prevalence among both incident and notified TB cases, and parameter uncertainty in the Bayesian model. Time-series of TB mortality were generated for each country through Monte Carlo simulations.

Unless otherwise specified, uncertainty bounds and ranges were defined as the 2.5th and 97.5th centiles of outcome distributions. Throughout this report, ranges with upper and lower bounds defined by these centiles are provided for all estimates established with the use of simulations. When uncertainty was established with the use of observed or other empirical data, 95% confidence intervals are reported.

The model used the following sequence: (1) incidence estimation, (2) estimation of HIV-positive TB incidence, (3) estimation of mortality, (4) estimation of prevalence. By design, some steps were independent from each other (for example, step 4 may be done before or after step 3).

The general approach to uncertainty analyses was to draw values from specified distributions for every

parameter (except for notifications and population values) in Monte Carlo simulations, with the number of simulation runs set so that they were sufficient to ensure stability in the outcome distributions. The same random generator seed was used for every country, and errors were assumed to be time-dependent within countries (thus generating autocorrelation in time-series). Regional parameters were used in some instances (for example, for CFRs). Summaries of quantities of interest were obtained by extracting the 2.5th, 50th and 97.5th centiles of posterior distributions. The country-specific estimates produced using the just-described simulations were then used as the building blocks for further simulations, from which aggregated summaries at global and regional levels for incidence, prevalence and mortality were drawn. Two sets of simulations were run, the first to produce aggregates at regional level and the second to produce aggregates at global level. These summary estimates are the result of simulations based on non-symmetric distributions. As a result, best estimates for regions do not necessarily sum to the best estimate for the world.

APPENDIX

Source of estimates for TB mortality and HIV prevalence among TB cases

WHO REGION AND COUNTRY	SOURCE OF ESTIMATES MORTALITY	TB/HIV
AFRICAN REGION		
Algeria	Indirect	Indirect
Angola	Indirect	Sentinel
Benin	Indirect	Routine
Botswana	Indirect	Routine
Burkina Faso	Indirect	Routine
Burundi	Indirect	Indirect
Cameroon	Indirect	Routine
Cape Verde	Indirect	Routine
Central African Republic	Indirect	Indirect
Chad	Indirect	Indirect
Comoros	Indirect	Routine
Congo	Indirect	Indirect
Côte d'Ivoire	Indirect	Routine
DR Congo	Indirect	Indirect
Equatorial Guinea	Indirect	Routine
Eritrea	Indirect	Indirect
Ethiopia	Indirect	Indirect
Gabon	Indirect	Indirect
Gambia	Indirect	Routine
Ghana	Indirect	Routine
Guinea	Indirect	Survey
Guinea-Bissau	Indirect	Indirect
Kenya	Indirect	Survey
Lesotho	Indirect	Routine
Liberia	Indirect	Routine
Madagascar	Indirect	Indirect
Malawi	Indirect	Routine
Mali	Indirect	Survey
Mauritania	Indirect	Indirect
Mauritius	VR	Routine
Mozambique	Indirect	Routine
Namibia	Indirect	Survey
Niger	Indirect	Survey
Nigeria	Indirect	Routine
Rwanda	Indirect	Routine
Sao Tome & Principe	Indirect	Routine
Senegal	Indirect	Routine
Seychelles	VR	Survey
Sierra Leone	Indirect	Routine
South Africa	VR	Indirect
Swaziland	Indirect	Routine
Togo	Indirect	Survey
Uganda	Indirect	Survey
UR Tanzania	Indirect	Survey
Zambia	Indirect	Indirect
Zimbabwe	Indirect	Routine
REGION OF THE AMERICAS		
Anguilla	Indirect	Indirect
Antigua & Barbuda	VR	Survey
Argentina	VR	Indirect
Bahamas	VR	Routine
Barbados	VR	Survey
Belize	VR	Routine
Bermuda	Indirect	Indirect
Bolivia	Indirect	Indirect
Brazil	VR	Routine
British Virgin Islands	Indirect	Indirect
Canada	VR	Indirect
Cayman Islands	Indirect	Indirect
Chile	VR	Indirect
Colombia	VR	Sentinel
Costa Rica	VR	Routine
Cuba	VR	Survey
Dominica	VR	Routine
Dominican Republic	Indirect	Survey
Ecuador	VR	Survey
El Salvador	VR	Routine
Grenada	VR	Routine
Guatemala	VR	Routine
Guyana	VR	Routine
Haiti	Indirect	Indirect
Honduras	Indirect	Routine
Jamaica	Indirect	Routine
Mexico	VR	Survey
Montserrat	Indirect	Indirect
Netherlands Antilles	Indirect	Indirect
Nicaragua	Indirect	Indirect
Panama	VR	Routine
Paraguay	VR	Indirect
Peru	Indirect	Survey
Puerto Rico	Indirect	Routine
Saint Kitts & Nevis	VR	Routine
Saint Lucia	VR	Routine
St Vincent & Grenadines	VR	Routine
Suriname	VR	Routine
Trinidad & Tobago	VR	Survey
Turks & Caicos Islands	Indirect	Indirect
Uruguay	VR	Survey
US Virgin Islands	Indirect	Indirect
USA	VR	Routine
Venezuela	VR	Routine
EASTERN MEDITERRANEAN REGION		
Afghanistan	Indirect	Indirect
Bahrain	VR	Routine
Djibouti	Indirect	Sentinel
Egypt	VR	Survey
Iran (Islamic Republic of)	Indirect	Indirect
Iraq	Indirect	Routine
Jordan	Indirect	Survey
Kuwait	VR	Survey
Lebanon	Indirect	Routine
Libyan Arab Jamahiriya	Indirect	Indirect
Morocco	Indirect	Survey
Oman	Indirect	Survey
Pakistan	Indirect	Indirect
Qatar	VR	Survey
Saudi Arabia	Indirect	Indirect
Somalia	Indirect	Indirect
Sudan	Indirect	Routine
Syrian Arab Republic	Indirect	Indirect
Tunisia	Indirect	Indirect
United Arab Emirates	Indirect	Indirect
West Bank and Gaza Strip	Indirect	Routine
Yemen	Indirect	Indirect
EUROPEAN REGION		
Albania	VR	Indirect
Andorra	Indirect	Indirect
Armenia	Indirect	Indirect
Austria	VR	Indirect
Azerbaijan	VR	Indirect
Belarus	VR	Indirect
Belgium	VR	Indirect
Bosnia & Herzegovina	VR	Indirect
Bulgaria	VR	Indirect
Croatia	VR	Indirect
Cyprus	VR	Indirect
Czech Republic	VR	Indirect
Denmark	VR	Indirect
Estonia	VR	Survey
Finland	VR	Indirect
France	VR	Indirect
Georgia	VR	Indirect
Germany	VR	Indirect
Greece	VR	Indirect
Hungary	VR	Indirect
Iceland	VR	Indirect
Ireland	VR	Indirect
Israel	VR	Indirect
Italy	VR	Indirect
Kazakhstan	VR	Indirect
Kyrgyzstan	VR	Routine
Latvia	VR	Survey
Lithuania	VR	Survey
Luxembourg	VR	Indirect
Malta	VR	Survey
Monaco	Indirect	Indirect
Montenegro	Indirect	Routine
Netherlands	VR	Indirect
Norway	VR	Indirect
Poland	VR	Indirect
Portugal	VR	Indirect
Republic of Moldova	VR	Indirect
Romania	VR	Indirect
Russian Federation	VR	Survey
San Marino	VR	Indirect
Serbia	VR	Indirect
Slovakia	VR	Indirect
Slovenia	VR	Indirect
Spain	VR	Indirect
Sweden	VR	Indirect
Switzerland	VR	Indirect
Tajikistan	Indirect	Routine
TFYR Macedonia	VR	Indirect
Turkey	Indirect	Indirect
Turkmenistan	VR	Indirect
Ukraine	VR	Indirect
United Kingdom	VR	Indirect
Uzbekistan	VR	Routine
SOUTH-EAST ASIA REGION		
Bangladesh	Indirect	Indirect
Bhutan	Indirect	Indirect
DPR Korea	Indirect	Indirect
India	Indirect	Indirect
Indonesia	Indirect	Indirect
Maldives	Indirect	Indirect
Myanmar	Indirect	Sentinel
Nepal	Indirect	Indirect
Sri Lanka	Indirect	Indirect
Thailand	Indirect	Survey
Timor-Leste	Indirect	Indirect
WESTERN PACIFIC REGION		
American Samoa	Indirect	Routine
Australia	VR	Indirect
Brunei Darussalam	VR	Indirect
Cambodia	Indirect	Survey
China	Indirect	Indirect
China, Hong Kong SAR	Indirect	Routine
China, Macao SAR	Indirect	Routine
Cook Islands	Indirect	Indirect
Fiji	Indirect	Survey
French Polynesia	Indirect	Indirect
Guam	Indirect	Routine
Japan	VR	Indirect
Kiribati	Indirect	Survey
Lao PDR	Indirect	Indirect
Malaysia	Indirect	Routine
Marshall Islands	Indirect	Routine
Micronesia	Indirect	Indirect
Mongolia	VR	Routine
Nauru	Indirect	Indirect
New Caledonia	Indirect	Indirect
New Zealand	VR	Indirect
Niue	Indirect	Indirect
Northern Mariana Islands	Indirect	Survey
Palau	Indirect	Routine
Papua New Guinea	Indirect	Indirect
Philippines	VR	Indirect
Republic of Korea	VR	Indirect
Samoa	Indirect	Indirect
Singapore	VR	Routine
Solomon Islands	Indirect	Indirect
Tokelau	Indirect	Indirect
Tonga	Indirect	Survey
Tuvalu	Indirect	Indirect
Vanuatu	Indirect	Indirect
Viet Nam	Indirect	Indirect
Wallis and Futuna Islands	Indirect	Routine

ANNEX 2

Global, regional and country-specific data for key indicators

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Estimates of mortality, prevalence and incidence

Estimated values are shown as best estimates followed by lower and upper bounds. The lower and upper bounds are defined as the 2.5th and 97.5th centiles of outcome distributions produced in simulations. See ANNEX 1 for further details.

Estimated numbers are shown rounded to two significant figures. Estimated rates are shown rounded to three significant figures unless the value is under 100, in which case rates are shown rounded to two significant figures.

Estimates for all years are recalculated as new information becomes available and techniques are refined, so they may differ from those published in previous reports in this series. Estimates published in previous global TB control reports should no longer be used.

Graphs

Graphs where displayed show data from all years within the range stated.

Data source

Data shown in this annex are taken from the WHO global TB database on 31 August 2010. Data shown in the main part of the report were taken from the database on 17 June 2010. As a result, data in this annex may differ slightly from those in the main part of the report.

Data can be downloaded from www.who.int/tb/data.

TABLE A2.1 **Estimates of the burden of disease caused by TB, 1990–2009**

			MORTALITY (EXCLUDING HIV)		PREVALENCE (INCLUDING HIV)		INCIDENCE (INCLUDING HIV)	
	YEAR	POPULATION (MILLIONS)	NUMBER (THOUSANDS)	RATE[a]	NUMBER (THOUSANDS)	RATE	NUMBER (THOUSANDS)	RATE
Global	1990	5 288	1 600 (1 300–1 900)	30 (25–36)	13 000 (11 000–17 000)	253 (200–318)	6 800 (6 000–7 600)	128 (114–144)
	1995	5 711	1 400 (1 300–1 600)	25 (23–28)	13 000 (11 000–16 000)	226 (188–272)	7 400 (6 900–7 800)	129 (121–137)
	2000	6 113	1 600 (1 500–1 800)	26 (24–29)	14 000 (12 000–17 000)	231 (194–274)	8 300 (7 900–8 800)	136 (129–144)
	2005	6 509	1 500 (1 300–1 600)	23 (20–25)	14 000 (12 000–17 000)	218 (185–258)	9 200 (8 700–9 700)	141 (134–149)
	2006	6 589	1 400 (1 300–1 600)	22 (19–24)	14 000 (12 000–17 000)	213 (180–252)	9 200 (8 800–9 700)	140 (133–148)
	2007	6 668	1 400 (1 200–1 500)	21 (19–23)	14 000 (12 000–16 000)	208 (176–247)	9 300 (8 800–9 800)	139 (132–147)
	2008	6 747	1 300 (1 200–1 500)	20 (18–22)	14 000 (12 000–16 000)	203 (171–241)	9 300 (8 900–9 800)	138 (131–146)
	2009	6 826	1 300 (1 200–1 500)	20 (17–22)	14 000 (12 000–16 000)	201 (169–239)	9 400 (8 900–9 900)	137 (131–145)
Africa	1990	508	160 (130–190)	31 (26–37)	1 400 (1 100–1 700)	273 (221–335)	870 (780–960)	171 (154–189)
	1995	583	230 (210–250)	40 (37–43)	2 000 (1 700–2 300)	338 (285–401)	1 300 (1 300–1 400)	228 (217–240)
	2000	661	350 (320–380)	53 (49–58)	3 000 (2 500–3 500)	450 (376–536)	2 100 (2 000–2 200)	314 (298–331)
	2005	748	460 (420–500)	61 (56–67)	3 900 (3 300–4 700)	527 (439–629)	2 800 (2 600–3 000)	373 (353–395)
	2006	767	460 (420–500)	60 (54–65)	4 000 (3 300–4 700)	519 (434–617)	2 800 (2 600–3 000)	365 (345–386)
	2007	786	450 (410–500)	58 (52–63)	4 000 (3 300–4 700)	507 (425–602)	2 800 (2 700–3 000)	358 (338–379)
	2008	805	440 (400–480)	55 (50–60)	3 900 (3 300–4 700)	489 (408–582)	2 800 (2 700–3 000)	351 (332–372)
	2009	824	430 (390–470)	52 (48–58)	3 900 (3 300–4 600)	475 (398–563)	2 800 (2 700–3 000)	345 (326–364)
The Americas	1990	724	58 (43–77)	8.0 (5.9–11)	700 (510–950)	97 (70–131)	420 (360–490)	58 (50–68)
	1995	781	41 (34–49)	5.2 (4.4–6.3)	570 (440–720)	72 (56–92)	380 (350–410)	48 (45–52)
	2000	839	32 (29–37)	3.9 (3.4–4.4)	490 (380–630)	59 (46–75)	340 (310–360)	40 (37–43)
	2005	890	27 (24–30)	3.0 (2.7–3.4)	410 (330–520)	46 (37–58)	300 (280–320)	34 (32–36)
	2006	900	25 (21–30)	2.8 (2.4–3.4)	400 (320–510)	45 (35–56)	300 (280–320)	33 (31–35)
	2007	910	25 (21–29)	2.7 (2.3–3.2)	390 (310–490)	43 (34–54)	290 (270–310)	32 (30–34)
	2008	920	22 (18–27)	2.4 (2–2.9)	370 (290–470)	40 (32–51)	280 (260–300)	31 (29–33)
	2009	930	20 (16–24)	2.1 (1.8–2.6)	350 (280–450)	38 (30–48)	270 (260–290)	29 (27–31)
Eastern Mediterranean	1990	389	130 (91–170)	33 (23–45)	1 000 (620–1 600)	263 (159–410)	470 (360–600)	121 (94–155)
	1995	440	140 (120–160)	32 (28–37)	1 100 (740–1 600)	254 (168–369)	530 (480–600)	121 (108–135)
	2000	493	160 (130–180)	32 (27–37)	1 200 (780–1 800)	244 (158–360)	580 (510–650)	117 (103–131)
	2005	549	130 (110–160)	24 (20–29)	1 100 (760–1 600)	207 (138–298)	620 (550–700)	113 (100–128)
	2006	560	120 (95–150)	22 (17–27)	1 100 (730–1 600)	196 (131–280)	630 (560–710)	112 (99–127)
	2007	572	110 (87–140)	20 (15–25)	1 100 (710–1 600)	188 (125–271)	640 (560–730)	112 (99–127)
	2008	584	100 (77–130)	17 (13–23)	1 000 (690–1 500)	177 (118–256)	650 (570–740)	112 (98–126)
	2009	597	99 (74–130)	17 (12–22)	1 000 (690–1 500)	174 (116–253)	660 (590–750)	111 (98–126)
Europe	1990	849	99 (71–140)	12 (8.4–16)	820 (590–1 100)	96 (70–133)	460 (400–550)	55 (47–64)
	1995	864	86 (73–100)	10 (8.5–12)	740 (590–940)	86 (68–109)	460 (430–500)	54 (50–58)
	2000	871	75 (71–79)	8.6 (8.1–9.1)	700 (530–910)	80 (61–104)	490 (450–530)	56 (52–61)
	2005	882	71 (67–75)	8.1 (7.6–8.6)	630 (480–800)	71 (55–91)	460 (430–490)	52 (48–56)
	2006	884	64 (61–68)	7.3 (6.9–7.7)	600 (470–780)	68 (53–88)	450 (420–480)	50 (47–54)
	2007	887	63 (51–76)	7.1 (5.8–8.6)	600 (460–770)	67 (52–87)	440 (410–470)	50 (46–53)
	2008	889	61 (51–72)	6.8 (5.7–8.1)	570 (440–740)	64 (49–83)	430 (400–460)	48 (45–51)
	2009	892	62 (51–74)	6.9 (5.7–8.3)	560 (440–720)	63 (49–81)	420 (390–450)	47 (44–50)
South-East Asia	1990	1 311	630 (440–890)	48 (33–68)	4 900 (3 000–7 600)	375 (227–580)	2 400 (1 800–3 100)	183 (137–239)
	1995	1 440	480 (380–600)	33 (26–42)	4 400 (3 000–6 200)	306 (210–430)	2 600 (2 300–3 000)	183 (161–207)
	2000	1 565	550 (440–680)	35 (28–44)	4 900 (3 400–6 800)	312 (216–434)	2 900 (2 500–3 200)	183 (161–207)
	2005	1 689	520 (400–660)	31 (24–39)	5 000 (3 300–7 000)	293 (197–416)	3 100 (2 700–3 500)	183 (160–207)
	2006	1 713	500 (380–640)	29 (22–38)	4 900 (3 300–7 000)	287 (191–409)	3 100 (2 800–3 500)	183 (161–207)
	2007	1 737	480 (370–630)	28 (21–36)	4 900 (3 300–7 000)	282 (188–403)	3 200 (2 800–3 600)	183 (161–207)
	2008	1 760	480 (360–630)	27 (20–36)	4 900 (3 200–7 100)	279 (184–402)	3 200 (2 800–3 600)	183 (161–206)
	2009	1 784	480 (360–630)	27 (20–35)	5 000 (3 300–7 100)	278 (186–398)	3 300 (2 900–3 700)	182 (161–206)
Western Pacific	1990	1 507	510 (390–650)	34 (26–43)	4 500 (2 800–6 800)	300 (189–450)	2 100 (1 800–2 500)	141 (117–168)
	1995	1 602	460 (360–580)	29 (23–36)	4 100 (2 700–6 100)	258 (168–379)	2 000 (1 700–2 400)	127 (108–147)
	2000	1 683	440 (350–530)	26 (21–32)	3 900 (2 500–5 700)	231 (150–336)	2 000 (1 700–2 200)	116 (102–133)
	2005	1 750	280 (210–360)	16 (12–20)	3 100 (2 100–4 500)	178 (119–257)	1 900 (1 700–2 200)	110 (99–123)
	2006	1 763	250 (190–330)	14 (11–19)	3 000 (2 000–4 300)	171 (113–247)	1 900 (1 700–2 100)	109 (98–121)
	2007	1 776	240 (180–320)	14 (10–18)	2 900 (2 000–4 200)	166 (111–239)	1 900 (1 700–2 100)	108 (98–120)
	2008	1 788	240 (180–310)	13 (10–17)	2 900 (1 900–4 200)	163 (108–236)	1 900 (1 700–2 100)	107 (97–118)
	2009	1 801	240 (180–310)	13 (10–17)	2 900 (1 900–4 200)	160 (107–231)	1 900 (1 700–2 100)	107 (97–117)

[a] Rates are per 100 000 population.

TABLE A2.2 **Incidence, notification and case detection rates, all forms, 1990–2009**

			INCIDENCE (INCLUDING HIV)		INCIDENCE HIV-POSITIVE		NOTIFIED NEW AND RELAPSE[a]		CASE DETECTION RATE[a]
	YEAR	POPULATION (MILLIONS)	NUMBER (THOUSANDS)	RATE[b]	NUMBER (THOUSANDS)	RATE[b]	NUMBER	RATE[b]	PERCENT
Global	1990	5 288	6 800 (6 000–7 600)	128 (114–144)	180 (160–200)	3.4 (3–3.8)	3 740 196	71	55 (49–62)
	1995	5 711	7 400 (6 900–7 800)	129 (121–137)	530 (480–580)	9.2 (8.4–10)	3 400 311	60	46 (43–49)
	2000	6 113	8 300 (7 900–8 800)	136 (129–144)	910 (840–1 000)	15 (14–16)	3 737 841	61	45 (43–48)
	2005	6 509	9 200 (8 700–9 700)	141 (134–149)	1 200 (1 100–1 300)	18 (16–19)	5 130 550	79	56 (53–59)
	2006	6 589	9 200 (8 800–9 700)	140 (133–148)	1 100 (1 000–1 200)	17 (16–18)	5 402 497	82	59 (56–62)
	2007	6 668	9 300 (8 800–9 800)	139 (132–147)	1 100 (1 000–1 200)	17 (15–18)	5 572 034	84	60 (57–63)
	2008	6 747	9 300 (8 900–9 800)	138 (131–146)	1 200 (1 100–1 300)	17 (16–19)	5 721 344	85	61 (58–65)
	2009	6 826	9 400 (8 900–9 900)	137 (131–145)	1 200 (1 100–1 300)	17 (16–18)	*5 889 265*	*86*	*63 (60–66)*
Africa	1990	508	870 (780–960)	171 (154–189)	130 (120–150)	26 (23–30)	418 530	82	48 (43–54)
	1995	583	1 300 (1 300–1 400)	228 (217–240)	370 (340–400)	64 (59–68)	504 309	87	38 (36–40)
	2000	661	2 100 (2 000–2 200)	314 (298–331)	660 (620–730)	100 (93–110)	783 930	119	38 (36–40)
	2005	748	2 800 (2 600–3 000)	373 (353–395)	900 (820–970)	120 (110–130)	1 186 800	159	42 (40–45)
	2006	767	2 800 (2 600–3 000)	365 (345–386)	840 (770–920)	110 (100–120)	1 243 560	162	44 (42–47)
	2007	786	2 800 (2 700–3 000)	358 (338–379)	860 (770–940)	110 (98–120)	1 251 735	159	44 (42–47)
	2008	805	2 800 (2 700–3 000)	351 (332–372)	890 (800–970)	110 (100–120)	1 329 581	165	47 (44–50)
	2009	824	2 800 (2 700–3 000)	345 (326–364)	910 (820–990)	110 (99–120)	1 397 369	170	49 (47–52)
The Americas	1990	724	420 (360–490)	58 (50–68)	12 (8.7–14)	1.6 (1.2–1.9)	231 179	32	55 (47–64)
	1995	781	380 (350–410)	48 (45–52)	16 (14–18)	2.0 (1.8–2.3)	258 176	33	68 (63–74)
	2000	839	340 (310–360)	40 (37–43)	16 (14–18)	1.9 (1.7–2.2)	238 569	28	70 (66–76)
	2005	890	300 (280–320)	34 (32–36)	24 (22–27)	2.7 (2.5–3)	227 969	26	75 (70–80)
	2006	900	300 (280–320)	33 (31–35)	23 (22–26)	2.6 (2.4–2.9)	224 672	25	76 (71–81)
	2007	910	290 (270–310)	32 (30–34)	24 (21–25)	2.6 (2.3–2.8)	218 423	24	76 (71–81)
	2008	920	280 (260–300)	31 (29–33)	26 (24–29)	2.8 (2.6–3.1)	218 249	24	77 (72–83)
	2009	930	270 (260–290)	29 (27–31)	24 (22–27)	2.6 (2.4–2.9)	*216 398*	*23*	*79 (74–85)*
Eastern Mediterranean	1990	389	470 (360–600)	121 (94–155)	1.8 (1.2–2.6)	0.5 (0.3–0.68)	234 620	60	50 (39–64)
	1995	440	530 (480–600)	121 (108–135)	3.7 (2.8–4.8)	0.8 (0.64–1.1)	121 745	28	23 (20–26)
	2000	493	580 (510–650)	117 (103–131)	6.4 (5.4–7.9)	1.3 (1.1–1.6)	141 748	29	25 (22–28)
	2005	549	620 (550–700)	113 (100–128)	10 (8.2–13)	1.9 (1.5–2.4)	287 352	52	46 (41–53)
	2006	560	630 (560–710)	112 (99–127)	11 (9–14)	2.0 (1.6–2.5)	322 306	58	51 (45–58)
	2007	572	640 (560–730)	112 (99–127)	14 (11–17)	2.4 (1.9–3)	378 895	66	59 (52–67)
	2008	584	650 (570–740)	112 (98–126)	13 (9.9–16)	2.2 (1.7–2.7)	392 633	67	60 (53–68)
	2009	597	660 (590–750)	111 (98–126)	11 (8.4–14)	1.9 (1.4–2.4)	464 521	78	70 (62–79)
Europe	1990	849	460 (400–550)	55 (47–64)	2.9 (2.4–3.5)	0.3 (0.28–0.41)	242 429	29	52 (44–61)
	1995	864	460 (430–500)	54 (50–58)	4.8 (4.1–5.4)	0.6 (0.48–0.63)	290 031	34	62 (58–67)
	2000	871	490 (450–530)	56 (52–61)	10 (8.7–12)	1.2 (1–1.4)	373 081	43	76 (70–82)
	2005	882	460 (430–490)	52 (48–56)	15 (12–18)	1.7 (1.4–2)	365 119	41	80 (74–86)
	2006	884	450 (420–480)	50 (47–54)	11 (9.7–12)	1.2 (1.1–1.4)	359 803	41	81 (75–86)
	2007	887	440 (410–470)	50 (46–53)	14 (13–16)	1.6 (1.5–1.8)	350 504	40	80 (74–86)
	2008	889	430 (400–460)	48 (45–51)	22 (20–27)	2.5 (2.2–3)	339 164	38	80 (74–85)
	2009	892	420 (390–450)	47 (44–50)	21 (19–24)	2.4 (2.1–2.7)	*331 436*	*37*	*79 (74–85)*
South-East Asia	1990	1 311	2 400 (1 800–3 100)	183 (137–239)	25 (16–38)	1.9 (1.2–2.9)	1 719 365	131	72 (55–96)
	1995	1 440	2 600 (2 300–3 000)	183 (161–207)	110 (75–170)	7.9 (5.2–12)	1 401 096	97	53 (47–60)
	2000	1 565	2 900 (2 500–3 200)	183 (161–207)	190 (130–270)	12 (8.4–17)	1 414 228	90	49 (44–56)
	2005	1 689	3 100 (2 700–3 500)	183 (160–207)	190 (130–270)	11 (7.8–16)	1 789 186	106	58 (51–66)
	2006	1 713	3 100 (2 800–3 500)	183 (161–207)	190 (130–260)	11 (7.6–15)	1 920 644	112	61 (54–70)
	2007	1 737	3 200 (2 800–3 600)	183 (161–207)	190 (140–240)	11 (8.1–14)	2 007 193	116	63 (56–72)
	2008	1 760	3 200 (2 800–3 600)	183 (161–206)	180 (130–250)	10 (7.3–14)	2 078 238	118	65 (57–73)
	2009	1 784	3 300 (2 900–3 700)	182 (161–206)	180 (130–250)	10 (7.1–14)	2 124 370	119	65 (58–74)
Western Pacific	1990	1 507	2 100 (1 800–2 500)	141 (117–168)	5.3 (3.2–8)	0.35 (0.21–0.53)	894 073	59	42 (35–51)
	1995	1 602	2 000 (1 700–2 400)	127 (108–147)	18 (12–24)	1.1 (0.75–1.5)	824 954	51	41 (35–48)
	2000	1 683	2 000 (1 700–2 200)	116 (102–133)	27 (20–35)	1.6 (1.2–2.1)	786 285	47	40 (35–46)
	2005	1 750	1 900 (1 700–2 200)	110 (99–123)	33 (26–42)	1.9 (1.5–2.4)	1 274 124	73	66 (59–74)
	2006	1 763	1 900 (1 700–2 100)	109 (98–121)	33 (26–42)	1.9 (1.5–2.4)	1 331 512	76	69 (62–77)
	2007	1 776	1 900 (1 700–2 100)	108 (98–120)	36 (28–44)	2.0 (1.6–2.5)	1 365 284	77	71 (64–79)
	2008	1 788	1 900 (1 700–2 100)	107 (97–118)	36 (29–45)	2.0 (1.6–2.5)	1 363 479	76	71 (64–79)
	2009	1 801	1 900 (1 700–2 100)	107 (97–117)	36 (27–45)	2.0 (1.5–2.5)	*1 355 171*	*75*	*70 (64–78)*

[a] Where notification data from a country had not been received by 31 August, the notification rate was assumed to be the same as for 2008 (in *italics*).

[b] Rates are per 100 000 population.

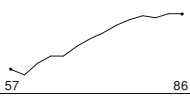
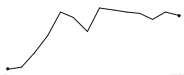
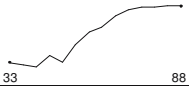
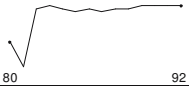
TABLE A2.3 **Case notifications, 1990–2009**

	NEW AND RELAPSE NOTIFICATION RATE[a] 1990–2009	YEAR	NEW AND RELAPSE[a]	NEW CASES				RELAPSE	RE-TREAT EXCL. RELAPSE	TOTAL RETREAT	HISTORY UNKNOWN	% SMEAR-POS AMONG NEW PULM
				SMEAR-POSITIVE	SMEAR-NEGATIVE/ UNKNOWN	EXTRA-PULMONARY	OTHER					
Global		1990	3 740 196	28 636	22 083	4 055	0	562	0	562	29	56
		1995	3 400 311	1 175 286	1 811 842	262 727	5	59 240	0	59 240	44	39
		2000	3 737 841	1 535 209	1 613 006	397 754	37	115 070	236 637	351 707	56	49
		2005	5 130 550	2 413 758	1 722 467	686 607	8 174	259 936	405 863	665 799	18 611	58
		2006	5 402 497	2 537 902	1 839 580	725 138	5 015	290 576	409 364	699 940	15 325	58
		2007	5 572 034	2 580 698	1 937 465	770 811	2 980	280 080	484 226	764 306	8 659	57
		2008	5 721 344	2 656 147	1 980 389	785 495	18 429	280 884	494 519	775 403	16 849	57
	71 86	2009	*5 889 265*	2 648 829	2 031 845	828 124	17 337	283 647	353 429	637 076	30 342	57
Africa		1990	418 530	22 654	5827	1 885	0	382	0	382	0	80
		1995	504 309	212 910	191477	72 689	0	15 133	0	15 133	0	53
		2000	783 930	362 527	220072	139 370	0	18 905	68527	87 432	0	62
		2005	1 186 800	550 001	364789	208 979	2 940	60 091	65883	125 974	2 649	60
		2006	1 243 560	561 064	383306	221 844	1 860	75 486	75589	151 075	1 479	59
		2007	1 251 735	561 149	408964	223 322	1 184	57 116	74165	131 281	792	58
		2008	1 329 581	595 184	446859	232 864	1 484	53 190	82374	135 564	4 607	57
	82 170	2009	1 397 369	607 347	472740	252 125	10 345	54 812	61595	116 407	305	56
The Americas		1990	231 179	1 542	516	723	0	180	0	180	29	75
		1995	258 176	138 928	72304	32 990	5	1 723	0	1 723	44	66
		2000	238 569	131 286	60389	32 037	37	10 834	14344	25 178	56	68
		2005	227 969	124 809	56048	33 278	3 684	10 150	12479	22 629	2 106	69
		2006	224 672	125 175	54706	32 413	1 921	10 457	10896	21 353	565	70
		2007	218 423	119 836	55040	32 564	990	9 993	11043	21 036	704	69
		2008	218 249	119 862	51818	33 218	3 343	10 008	13193	23 201	232	70
	32 23	2009	*216 398*	110 598	44957	31 384	4 363	10 263	10966	21 229	3 885	71
Eastern Mediterranean		1990	234 620	1 587	12394	754	0	0	0	0	0	11
		1995	121 745	46 851	51823	33 382	0	2 407	0	2 407	0	47
		2000	141 748	60 959	34289	40 754	0	5 568	0	5 568	0	64
		2005	287 352	113 864	102366	64 615	12	6 495	5338	11 833	20	53
		2006	322 306	131 882	115038	66 545	0	8 841	3474	12 315	17	53
		2007	378 895	155 572	136865	76 898	0	9 560	4338	13 898	131	53
		2008	392 633	166 558	137780	77 247	0	11 048	5393	16 441	18	55
	60 78	2009	464 521	177 213	187049	87 726	809	11 724	6240	17 964	737	49
Europe		1990	242 429	0	0	0	0	0	0	0	0	–
		1995	290 031	104 444	146592	29 866	0	7 927	0	7 927	0	42
		2000	373 081	94 275	208051	35 043	0	21 611	19248	40 859	0	31
		2005	365 119	96 101	157334	49 831	0	22 245	64903	87 148	3 530	38
		2006	359 803	109 901	170786	56 363	0	22 753	56193	78 946	3 308	39
		2007	350 504	105 288	165777	53 623	0	25 816	122800	148 616	2 374	39
		2008	339 164	105 238	159280	42 915	8 858	22 873	112513	135 386	8 021	40
	29 37	2009	*331 436*	78 538	131200	36 678	0	20 375	38235	58 610	18 582	37
South-East Asia		1990	1 719 365	2 769	3241	656	0	0	0	0	0	46
		1995	1 401 096	357 882	939945	76 865	0	5 546	0	5 546	0	28
		2000	1 414 228	510 053	741471	120 708	0	27 095	80444	107 539	0	41
		2005	1 789 186	857 371	594185	242 332	1 439	93 859	158215	252 074	202	59
		2006	1 920 644	938 637	609705	261 839	1 188	109 275	182640	291 915	1 389	61
		2007	2 007 193	972 441	622795	295 866	798	115 293	194736	310 029	220	61
		2008	2 078 238	1 007 382	635427	310 700	1 866	122 863	209433	332 296	132	61
	131 119	2009	2 124 370	1 028 656	636755	329 338	1 796	127 825	203598	331 423	261	62
Western Pacific		1990	894 073	84	105	37	0	0	0	0	0	44
		1995	824 954	314 271	409701	16 935	0	26 504	0	26 504	0	43
		2000	786 285	376 109	348734	29 842	0	31 057	54074	85 131	0	52
		2005	1 274 124	671 612	447745	87 572	99	67 096	99045	166 141	10 104	60
		2006	1 331 512	671 243	506039	86 134	46	63 764	80572	144 336	8 567	57
		2007	1 365 284	666 412	548024	88 538	8	62 302	77144	139 446	4 438	55
		2008	1 363 479	661 923	549225	88 551	2 878	60 902	71613	132 515	3 839	55
	59 75	2009	*1 355 171*	646 477	559144	90 873	24	58 648	32795	91 443	6 572	54

[a] Rates are per 100 000 population. Where notification data from a country had not been received by 31 August, the notification rate was assumed to be the same as for 2008 (in italics).

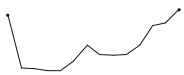
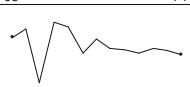
Data can be downloaded from www.who.int/tb/data

TABLE A2.4 **Treatment outcomes, new smear-positive cases, 1995–2008**

	TREATMENT SUCCESS (%)[a] 1995–2008	YEAR	NUMBER NOTIFIED	SIZE OF COHORT	COHORT AS % NOTIFIED	% OF COHORT					
						CURED	COMPLETED	DIED	FAILED	DEFAULTED	NOT EVALUATED
Global		1995	1 175 286	1 000 525	85	40	17	3	1	5	34
		2000	1 535 209	1 450 685	94	60	9	4	1	7	19
		2005	2 413 758	2 396 101	99	77	7	4	2	5	4
		2006	2 537 902	2 525 665	100	78	7	4	2	5	5
		2007	2 580 698	2 589 414	100	79	7	4	2	5	4
	57 86	2008	2 656 147	2 603 605	98	80	7	4	2	5	4
Africa		1995	212 910	177 513	83	46	14	6	2	12	20
		2000	362 527	362 527	100	59	12	7	1	11	10
		2005	550 001	563 750	102	62	13	7	1	9	7
		2006	561 064	562 920	100	65	10	6	1	8	9
		2007	561 149	576 751	103	68	11	6	1	7	6
	60 80	2008	595 184	576 473	97	70	10	6	2	7	6
The Americas		1995	138 928	128 529	93	37	14	3	1	6	39
		2000	131 286	110 629	84	60	17	5	1	8	11
		2005	124 809	118 781	95	55	23	5	1	7	10
		2006	125 175	132 078	106	52	23	4	1	7	13
		2007	119 836	114 472	96	57	22	5	1	8	8
	50 77	2008	119 862	108 965	91	56	21	5	1	7	10
Eastern Mediterranean		1995	46 851	46 318	99	60	19	2	3	13	4
		2000	60 959	63 749	105	69	12	4	2	8	6
		2005	113 864	113 742	100	72	11	3	1	8	5
		2006	131 882	132 058	100	75	11	3	1	6	4
		2007	155 572	155 658	100	75	12	3	1	5	4
	79 88	2008	166 558	166 719	100	74	13	2	1	5	4
Europe		1995	104 444	33 823	32	58	10	6	6	4	16
		2000	94 275	41 464	44	47	28	5	6	6	7
		2005	96 101	81 183	84	59	13	8	7	7	5
		2006	109 901	97 623	89	59	10	8	9	7	6
		2007	105 288	108 146	103	59	12	8	9	7	5
	67 67	2008	105 238	83 549	79	59	8	9	12	7	5
South-East Asia		1995	357 882	318 410	89	9	23	1	0	2	64
		2000	510 053	512 286	100	44	6	2	1	7	40
		2005	857 371	855 962	100	83	4	4	2	6	1
		2006	938 637	937 764	100	84	4	4	2	5	1
		2007	972 441	973 507	100	84	4	4	2	5	1
	33 88	2008	1 007 382	1 011 353	100	84	4	4	2	5	1
Western Pacific		1995	314 271	295 932	94	67	13	2	1	4	13
		2000	376 109	360 030	96	85	5	2	1	2	4
		2005	671 612	662 683	99	89	3	2	1	1	3
		2006	671 243	663 222	99	89	3	2	1	1	4
		2007	666 412	660 880	99	89	3	2	1	1	4
	80 92	2008	661 923	656 546	99	89	3	2	1	1	4

[a] TREATMENT SUCCESS = percent cured + percent completed then rounded to the nearest digit.

TABLE A2.5 **Treatment outcomes, retreatment cases, 1995–2008**

	TREATMENT SUCCESS (%)[a] 1995–2008	YEAR	NUMBER NOTIFIED	SIZE OF COHORT	COHORT AS % NOTIFIED	% OF COHORT					
						CURED	COMPLETED	DIED	FAILED	DEFAULTED	NOT EVALUATED
Global		1995	59 240	71 395	121	82	4	3	3	3	4
		2000	351 707	188 219	54	60	10	6	4	11	10
		2005	665 799	546 168	82	51	19	7	4	12	6
		2006	699 940	600 988	86	49	20	7	6	11	6
		2007	764 306	532 951	70	58	10	7	6	11	8
	86 72	2008	775 403	569 496	73	49	23	7	5	10	5
Africa		1995	15 133	5 756	38	57	12	9	3	12	6
		2000	87 432	43 865	50	47	11	9	3	16	14
		2005	125 974	114 838	91	35	27	11	3	13	12
		2006	151 075	98 862	65	49	17	7	5	11	11
		2007	131 281	112 807	86	52	15	7	4	10	11
	69 70	2008	135 564	87 999	65	47	24	7	4	8	10
The Americas		1995	1 723	1 104	64	61	11	6	4	11	8
		2000	25 178	15 302	61	47	8	5	3	12	25
		2005	22 629	18 596	82	38	16	6	3	15	21
		2006	21 353	17 446	82	29	25	6	2	16	22
		2007	21 036	18 975	90	35	23	7	3	18	15
	72 52	2008	23 201	15 482	67	29	23	8	2	20	17
Eastern Mediterranean		1995	2 407	1 860	77	61	14	3	4	12	5
		2000	5 568	4 217	76	51	11	6	7	15	11
		2005	11 833	12 860	109	60	15	5	4	10	6
		2006	12 315	14 039	114	58	18	4	3	11	6
		2007	13 898	14 372	103	60	17	4	3	10	5
	75 75	2008	16 441	14 990	91	57	19	4	3	11	6
Europe		1995	7 927	480	6	20	20	11	8	32	8
		2000	40 859	10 731	26	39	19	9	14	11	8
		2005	87 148	39 490	45	32	18	11	13	14	10
		2006	78 946	83 463	106	22	26	12	15	11	13
		2007	148 616	69 305	47	28	24	11	19	12	7
	40 47	2008	135 386	52 267	39	29	18	11	21	12	8
South-East Asia		1995	5 546	3 271	59	62	6	4	5	15	8
		2000	107 539	59 337	55	57	14	6	5	15	3
		2005	252 074	254 378	101	49	22	7	5	15	2
		2006	291 915	290 910	100	47	25	7	4	14	2
		2007	310 029	227 767	73	63	3	7	5	13	8
	68 74	2008	332 296	323 436	97	47	28	7	4	12	2
Western Pacific		1995	26 504	58 924	222	88	2	3	3	1	3
		2000	85 131	54 767	64	83	3	2	2	1	9
		2005	166 141	106 006	64	81	6	3	3	2	6
		2006	144 336	96 268	67	80	6	3	3	2	6
		2007	139 446	89 725	64	79	7	3	3	2	6
	90 86	2008	132 515	75 322	57	80	6	3	2	2	7

[a] TREATMENT SUCCESS = percent cured + percent completed then rounded to the nearest digit.

TABLE A.6 **HIV testing and provision of CPT, ART and IPT, 2005–2009**

	% OF TB PATIENTS WITH KNOWN HIV STATUS 2005–2009	YEAR	% OF TB PATIENTS WITH KNOWN HIV STATUS	NUMBER OF TB PATIENTS WITH KNOWN HIV STATUS	PATIENTS NOTIFIED (NEW AND RETREAT)[a]	NUMBER OF HIV-POSITIVE TB PATIENTS	% OF TESTED TB PATIENTS HIV-POSITIVE	% OF HIV-POSITIVE TB PATIENTS ON CPT	% OF HIV-POSITIVE TB PATIENTS ON ART	NUMBER OF HIV-POSITIVE PEOPLE PROVIDED IPT
Global		2005	8.5	470 095	5 555 024	103 738	22	77	35	25 911
		2006	12	692 408	5 827 186	192 067	27	77	45	27 056
		2007	20	1 218 927	6 064 919	320 179	26	66	30	29 195
	8 27	2008	23	1 416 180	6 232 712	369 334	26	71	32	50 883
		2009	27	1 689 849	6 193 584	444 984	26	75	37	85 426
Africa		2005	11	141 006	1 255 332	73 385	52	78	29	22 211
		2006	22	285 826	1 320 628	147 406	52	82	44	23 100
		2007	38	510 014	1 326 692	260 319	51	72	30	15 357
	11 55	2008	47	661 204	1 416 562	309 836	47	73	30	25 553
		2009	55	796275	1 459 269	364 449	46	76	36	60 509
The Americas		2005	35	84 022	242 554	14 229	17	22	80	3 700
		2006	40	94 567	236 133	13 884	14	13	92	1 784
		2007	43	99 517	230 170	16 314	16	25	63	5 878
	35 41	2008	44	101 630	231 674	16 832	17	33	67	11 728
		2009	41	87967	216 416	14 762	17	61	73	4 568
Eastern Mediterranean		2005	<1	2 582	292 710	330	15	18	16	0
		2006	1.1	3 657	325 797	275	7.5	20	13	79
		2007	1.2	4 424	383 364	522	11	40	55	141
		2008	6.1	24 280	398 044	1 158	4.6	42	43	702
	<1 9	2009	8.7	40819	471 498	1 478	3.6	43	42	464
Europe		2005	41	178 033	433 552	6 548	2.7	25	15	0
		2006	46	191 698	419 304	5 339	1.8	50	45	1 347
		2007	72	341 822	475 678	9 724	2.8	65	28	7 453
		2008	85	392 077	459 698	12 358	3.2	58	31	12 003
	41 86	2009	86	279354	323 608	9 275	3.2	18	21	17 772
South-East Asia		2005	1.6	31 847	1 947 603	7 025	22	50	31	0
		2006	4.2	89 418	2 104 673	21 630	19	41	20	444
		2007	6.3	139 318	2 202 149	22 593	13	30	15	1
		2008	3.7	84 045	2 287 803	18 599	22	59	37	208
	2 14	2009	14	317615	2 328 229	40 790	13	75	52	467
Western Pacific		2005	2.4	32 605	1 383 273	2 221	6.8	32	51	0
		2006	1.9	27 242	1 420 651	3 533	13.0	58	29	302
		2007	8.6	123 832	1 446 866	10 707	8.6	22	14	365
		2008	11	152 944	1 438 931	10 551	6.9	55	28	689
	2 12	2009	12	167819	1 394 564	14 230	8.5	64	16	1 646

[a] Data presented as of 31 August 2010. Notification data for European Union countries were not available.

TABLE A2.7 **Testing for MDR-TB and number of confirmed cases of MDR-TB, 2005–2009**

			NEW CASES				PREVIOUSLY TREATED CASES			
	YEAR	TOTAL CONFIRMED CASES OF MDR-TB[a]	NOTIFIED	NUMBER OF NOTIFIED TESTED FOR MDR-TB	% OF NOTIFIED TESTED FOR MDR-TB	NUMBER OF CONFIRMED CASES OF MDR-TB	NOTIFIED	NUMBER OF NOTIFIED TESTED FOR MDR-TB	% OF NOTIFIED TESTED FOR MDR-TB	NUMBER OF CONFIRMED CASES OF MDR-TB
Global	2005	18 424	4 831 006	71 629	1	1 990	665 799	23 553	4	7 018
	2006	22 626	5 107 635	91 270	2	6 875	699 940	27 232	4	8 976
	2007	29 708	5 291 954	104 280	2	8 137	764 306	37 261	5	12 252
	2008	29 423	5 440 460	99 613	2	8 882	775 403	41 793	5	11 889
	2009	39 060	5 526 166	71 788	1	10 361	637 076	29 833	5	12 795
Africa	2005	2 457	1 126 709	1 826	0	277	125 974	3 922	3	2 073
	2006	7 062	1 168 074	815	0	74	151 075	2 498	2	202
	2007	8 772	1 194 619	523	0	47	131 281	7 043	5	709
	2008	7 736	1 276 391	2 566	0	177	135 564	9 614	7	957
	2009	8 798	1 342 557	1 678	0	182	116 407	4 124	4	1 165
The Americas	2005	4 387	217 819	14 884	7	336	22 629	10 585	47	3 059
	2006	1 635	214 215	13 271	6	957	21 353	2 001	9	689
	2007	2 522	208 430	13 060	6	532	21 036	4 181	20	1 839
	2008	2 209	208 241	12 571	6	352	23 201	4 307	19	1 515
	2009	2 884	191 302	11 513	6	993	21 229	3 056	14	1 134
Eastern Mediterranean	2005	345	280 857	1 317	0	35	11 833	83	1	41
	2006	244	313 465	1 905	1	53	12 315	366	3	164
	2007	486	369 335	2 216	1	87	13 898	938	7	377
	2008	547	381 585	2 089	1	92	16 441	1 547	9	334
	2009	496	452 797	1 760	0	80	17 964	1 274	7	395
Europe	2005	10 828	303 266	32 136	11	1 299	87 148	6 682	8	1 681
	2006	12 282	337 050	68 324	20	5 709	78 946	19 881	25	6 711
	2007	16 062	324 688	76 601	24	7 351	148 616	22 228	15	8 572
	2008	15 869	316 291	75 751	24	8 182	135 386	20 691	15	7 167
	2009	22 322	246 416	53 159	22	8 020	58 610	15 628	27	7 008
South-East Asia	2005	68	1 695 327	661	0	9	252 074	420	0	25
	2006	775	1 811 369	614	0	4	291 915	1 184	0	702
	2007	918	1 891 900	1 649	0	31	310 029	1 275	0	287
	2008	1 864	1 955 375	902	0	22	332 296	3 333	1	1 022
	2009	2 560	1 996 545	950	0	10	331 423	5 069	2	2 538
Western Pacific	2005	339	1 207 028	20 805	2	34	166 141	1 861	1	139
	2006	628	1 263 462	6 341	1	78	144 336	1 302	1	508
	2007	948	1 302 982	10 231	1	89	139 446	1 596	1	468
	2008	1 198	1 302 577	5 734	0	57	132 515	2 301	2	894
	2009	2 000	1 296 549	2 728	0	1 076	91 443	682	1	555

[a] TOTAL CONFIRMED CASES OF MDR-TB includes cases with unknown previous treatment history (i.e. not included under NEW CASES or PREVIOUSLY TREATED CASES).

Data can be downloaded from www.who.int/tb/data

TABLE A2.8 **New smear-positive case notification by age and sex, 1995–2009**

		MALE								FEMALE								
	YEAR	0–14	15–24	25–34	35–44	45–54	55–64	65+	UN-KNOWN	0–14	15–24	25–34	35–44	45–54	55–64	65+	UN-KNOWN	MALE/FEMALE RATIO
Global	1995	7 491	48 816	76 799	65 677	49 513	41 756	34 776	0	7 730	41 378	50 102	32 741	22 688	17 816	16 686	0	1.7
	2000	12 387	115 246	172 895	156 265	121 278	82 838	75 151	0	14 748	94 643	110 305	74 707	49 823	33 699	33 823	0	1.8
	2005	18 413	242 359	329 714	312 522	261 230	184 836	166 846	42	26 179	199 697	220 525	153 504	106 028	72 019	65 707	15	1.8
	2009	19 501	256 007	334 995	327 649	282 775	210 491	173 152	25	28 134	211 999	217 154	160 324	111 994	80 068	70 910	10	1.8
Africa	1995	2 910	16 754	28 172	20 240	12 017	7 008	4 104	0	3 167	15 873	19 005	11 339	6 643	3 655	1 734	0	1.5
	2000	3 625	29 522	47 654	34 435	17 923	8 970	5 751	0	4 315	29 530	35 386	20 037	9 402	4 581	2 578	0	1.4
	2005	7 635	54 066	94 388	71 072	40 974	18 931	12 143	0	10 023	57 115	75 056	43 213	22 855	11 047	7 163	0	1.3
	2009	8 363	56 550	101 957	82 660	49 205	24 021	14 313	0	10 727	68 612	77 695	51 285	26 830	13 675	8 586	0	1.3
The Americas	1995	437	2 888	3 443	3 156	2 447	1 866	2 251	0	431	2 293	2 434	1 654	1 109	912	1 311	0	1.6
	2000	3 464	18 564	21 865	19 784	15 138	9 897	9 717	0	3 535	15 305	14 960	10 323	7 294	5 037	5 894	0	1.6
	2005	1 520	16 410	16 671	14 369	12 339	7 801	7 951	0	1 718	12 405	11 563	7 891	5 933	3 788	4 751	0	1.6
	2009	1 005	10 620	12 789	10 625	10 340	6 893	6 844	23	1 127	7 254	7 508	5 195	4 526	3 097	3 869	10	1.8
Eastern Mediterranean	1995	2 010	6 796	8 673	5 475	3 731	3 732	2 604	0	1 881	5 035	5 797	3 679	3 047	2 742	1 902	0	1.4
	2000	1 339	8 135	9 002	6 525	4 409	2 990	3 036	0	1 711	6 710	5 780	3 922	2 851	2 039	1 893	0	1.4
	2005	1 546	13 558	14 609	10 798	8 729	6 581	5 595	0	2 766	13 529	12 098	8 386	6 245	4 383	3 399	0	1.2
	2009	1 932	19 104	19 698	15 108	13 739	10 741	9 504	1	3 811	20 865	17 264	12 847	9 673	7 409	6 109	0	1.2
Europe	1995	553	3 588	7 046	10 157	7 625	5 716	4 842	0	548	2 906	3 636	2 594	1 549	1 560	3 289	0	2.5
	2000	201	4 632	8 325	9 856	8 066	4 309	3 316	0	289	3 508	4 405	2 947	1 798	1 247	2 484	0	2.3
	2005	297	6 173	9 145	9 146	8 702	4 443	4 077	42	423	4 664	5 096	3 162	2 241	1 333	3 166	15	2.1
	2009	114	7 109	13 255	12 112	12 286	5 990	3 154	0	204	4 547	6 075	3 884	2 978	1 789	2 793	0	2.4
South-East Asia	1995	165	3 179	6 467	6 508	5 241	4 682	3 523	0	250	2 187	2 834	2 404	2 003	1 866	1 480	0	2.3
	2000	2 453	30 093	45 720	47 107	38 058	25 080	16 208	0	3 222	21 518	25 653	19 241	13 019	8 142	5 468	0	2.1
	2005	5 064	94 638	120 560	122 256	107 228	74 084	45 533	0	8 591	71 923	76 779	54 000	37 709	24 289	12 975	0	2.0
	2009	6 523	103 431	123 094	128 467	116 158	86 821	53 381	0	10 585	72 775	75 496	55 572	41 529	28 954	16 502	0	2.0
Western Pacific	1995	1 416	15 611	22 998	20 141	18 452	18 752	17 452	0	1 453	13 084	16 396	11 071	8 337	7 081	6 970	0	1.8
	2000	1 305	24 300	40 329	38 558	37 684	31 592	37 123	0	1 676	18 072	24 121	18 237	15 459	12 653	15 506	0	2.0
	2005	2 351	57 514	74 341	84 881	83 258	72 996	91 547	0	2 658	40 061	39 933	36 852	31 045	27 179	34 253	0	2.2
	2009	1 564	59 193	64 202	78 677	81 047	76 025	85 956	1	1 680	37 946	33 116	31 541	26 458	25 144	33 051	0	2.4

[a] Data presented as of 31 August 2010. Notification data for countries that are members of the European Union were not available.

African Region

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Table A2.2 Incidence, notification and case detection rates, all forms, 1990–2009 **73**

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Estimates of mortality, prevalence and incidence

Estimated values are shown as best estimates followed by lower and upper bounds. The lower and upper bounds are defined as the 2.5th and 97.5th centiles of outcome distributions produced in simulations. See ANNEX 1 for further details.

Estimated numbers are shown rounded to two significant figures. Estimated rates are shown rounded to three significant figures unless the value is under 100, in which case rates are shown rounded to two significant figures.

Estimates for all years are recalculated as new information becomes available and techniques are refined, so they may differ from those published in previous reports in this series. Estimates published in previous global TB control reports should no longer be used.

Graphs

Graphs where displayed show data from all years within the range stated.

Data source

Data shown in this annex are taken from the WHO global TB database on 31 August 2010. Data shown in the main part of the report were taken from the database on 17 June 2010. As a result, data in this annex may differ slightly from those in the main part of the report.

Data can be downloaded from www.who.int/tb/data.

TABLE A2.1 **Estimates of the burden of disease caused by TB, 1990–2009**

			MORTALITY (EXCLUDING HIV)		PREVALENCE (INCLUDING HIV)		INCIDENCE (INCLUDING HIV)	
	YEAR	POPULATION (MILLIONS)	NUMBER (THOUSANDS)	RATE[a]	NUMBER (THOUSANDS)	RATE	NUMBER (THOUSANDS)	RATE
Algeria	1990	25	0.45 (0.3–0.61)	1.8 (1.2–2.4)	12 (2.8–22)	49 (11–88)	9.5 (5.2–14)	38 (21–54)
	1995	28	0.56 (0.37–0.75)	2 (1.3–2.7)	15 (3.4–27)	54 (12–97)	12 (9.6–14)	42 (34–51)
	2000	31	0.71 (0.47–0.96)	2.3 (1.5–3.1)	20 (4.4–35)	64 (14–114)	15 (12–17)	48 (38–57)
	2005	33	0.83 (0.55–1.1)	2.5 (1.7–3.4)	23 (5.1–41)	69 (16–123)	18 (14–21)	54 (43–65)
	2006	33	0.85 (0.56–1.1)	2.5 (1.7–3.4)	23 (5.2–42)	70 (16–125)	18 (15–22)	55 (44–66)
	2007	34	0.84 (0.55–1.1)	2.5 (1.6–3.3)	23 (5.2–41)	68 (15–121)	19 (15–23)	57 (45–68)
	2008	34	0.85 (0.56–1.1)	2.5 (1.6–3.3)	23 (5.2–41)	68 (15–120)	20 (16–24)	58 (46–70)
	2009	35	0.85 (0.56–1.1)	2.4 (1.6–3.3)	23 (5.2–42)	67 (15–119)	21 (17–25)	59 (48–72)
Angola	1990	11	4.5 (1.9–8.5)	42 (17–80)	39 (15–77)	364 (139–722)	22 (12–32)	205 (113–298)
	1995	13	7 (5.2–9)	55 (41–71)	54 (25–89)	434 (202–712)	28 (23–34)	226 (181–272)
	2000	14	6.9 (4.8–9.4)	48 (34–66)	61 (28–99)	424 (197–691)	36 (29–43)	250 (200–300)
	2005	17	3.2 (1.5–6.2)	19 (9.3–37)	54 (17–94)	325 (103–566)	46 (37–55)	276 (224–331)
	2006	17	3.3 (1.6–6.6)	19 (9.3–38)	57 (18–99)	331 (104–578)	48 (38–58)	281 (225–337)
	2007	18	3.3 (1.6–6.5)	19 (9.3–37)	59 (18–100)	334 (104–579)	50 (41–60)	287 (235–344)
	2008	18	5 (2.6–8.6)	28 (15–48)	68 (26–120)	376 (142–639)	53 (45–63)	292 (247–351)
	2009	18	5.5 (3–9.2)	30 (16–50)	72 (28–120)	388 (151–660)	55 (46–65)	298 (249–352)
Benin	1990	5	0.65 (0.22–1.4)	14 (4.7–28)	6.1 (2.1–13)	128 (44–264)	3.7 (2.1–5.3)	77 (43–111)
	1995	6	0.83 (0.56–1.2)	15 (9.8–20)	7.4 (3.4–12)	129 (60–215)	4.6 (3.7–5.5)	80 (64–97)
	2000	7	0.99 (0.68–1.4)	15 (10–21)	8.8 (4.1–14)	132 (62–215)	5.6 (4.5–6.8)	85 (68–102)
	2005	8	1.2 (0.85–1.7)	16 (11–22)	11 (5.1–18)	139 (65–229)	7 (5.6–8.4)	89 (71–107)
	2006	8	1.3 (0.88–1.8)	16 (11–22)	11 (5.4–19)	141 (66–231)	7.3 (5.8–8.8)	90 (72–108)
	2007	8	1.3 (0.9–1.8)	16 (11–22)	12 (5.6–20)	141 (66–233)	7.6 (6.1–9.2)	91 (73–109)
	2008	9	1.4 (0.98–1.9)	16 (11–22)	12 (5.8–20)	143 (67–233)	7.9 (6.4–9.5)	92 (73–110)
	2009	9	1.5 (1–2)	17 (12–22)	13 (6.2–21)	146 (69–238)	8.3 (6.7–10)	93 (75–112)
Botswana	1990	1	0.42 (0.15–0.91)	31 (11–68)	5.2 (1.9–9.9)	384 (138–731)	4.2 (2.9–6)	307 (217–446)
	1995	2	0.37 (0.17–0.71)	24 (11–46)	6.4 (2.6–11)	414 (168–686)	6.9 (5.7–8.3)	444 (366–532)
	2000	2	0.5 (0.24–0.95)	29 (14–55)	9.5 (3.9–16)	550 (224–905)	11 (9.3–13)	640 (539–768)
	2005	2	1 (0.56–1.6)	54 (31–87)	13 (6.1–21)	710 (331–1153)	14 (11–17)	770 (616–924)
	2006	2	1.3 (0.82–2)	71 (44–105)	15 (7.2–24)	805 (387–1296)	14 (11–17)	751 (601–901)
	2007	2	1.2 (0.79–1.8)	66 (42–95)	14 (6.8–22)	735 (360–1175)	14 (11–17)	731 (585–878)
	2008	2	0.78 (0.17–2)	41 (8.9–105)	10 (3.6–21)	531 (188–1103)	14 (11–16)	712 (570–855)
	2009	2	1.1 (0.71–1.6)	57 (36–84)	13 (6.4–21)	675 (329–1078)	14 (11–16)	694 (564–835)
Burkina Faso	1990	9	1.5 (0.8–2.4)	17 (9.1–27)	11 (4.5–22)	126 (51–245)	8.4 (4.6–12)	95 (52–138)
	1995	10	2.7 (2–3.5)	27 (19–35)	19 (8.5–33)	191 (84–327)	14 (11–17)	137 (110–165)
	2000	12	5.2 (4–6.5)	44 (34–56)	36 (16–62)	312 (138–527)	23 (18–28)	198 (158–238)
	2005	14	8.1 (6.4–10)	59 (46–74)	58 (26–96)	419 (186–700)	33 (26–39)	238 (191–286)
	2006	14	8.9 (7.1–11)	63 (50–77)	63 (28–100)	444 (198–733)	33 (26–40)	232 (186–279)
	2007	15	7.7 (5.8–9.8)	52 (40–66)	55 (24–92)	372 (165–625)	33 (27–40)	226 (181–271)
	2008	15	8.5 (6.8–11)	56 (44–69)	61 (27–100)	400 (180–659)	34 (27–40)	220 (176–264)
	2009	16	8.7 (7–11)	55 (44–68)	62 (28–100)	396 (178–651)	34 (27–41)	215 (174–258)
Burundi	1990	6	1.3 (0.5–2.6)	23 (8.8–46)	12 (4.8–25)	218 (84–431)	8.8 (4.8–13)	154 (85–224)
	1995	6	2.7 (2–3.5)	44 (33–56)	21 (9.8–34)	337 (159–555)	14 (11–16)	223 (178–267)
	2000	6	3.9 (2.9–5.1)	61 (45–79)	31 (15–51)	482 (229–788)	21 (17–25)	321 (257–386)
	2005	7	6.1 (4.6–7.8)	83 (63–106)	46 (22–76)	626 (292–1026)	29 (23–34)	387 (309–464)
	2006	8	6.3 (4.8–8)	83 (63–105)	47 (22–77)	621 (289–1018)	29 (23–34)	377 (301–452)
	2007	8	6.4 (4.9–8.1)	81 (62–103)	48 (22–78)	609 (285–1001)	29 (23–35)	367 (294–440)
	2008	8	6.4 (4.8–8.1)	79 (60–100)	48 (22–79)	596 (278–977)	29 (23–35)	357 (286–429)
	2009	8	6.4 (4.8–8.1)	77 (58–97)	48 (23–79)	581 (273–951)	29 (24–35)	348 (283–420)
Cameroon	1990	12	1.5 (0.52–3.3)	12 (4.2–27)	15 (5.2–31)	125 (42–254)	9.9 (5.9–14)	81 (48–117)
	1995	14	3.5 (2.6–4.5)	25 (19–32)	27 (13–44)	192 (91–315)	16 (13–20)	116 (93–140)
	2000	16	5.1 (3.8–6.7)	32 (24–42)	41 (19–67)	257 (121–421)	27 (21–32)	168 (134–201)
	2005	18	4.5 (2.8–6.7)	25 (16–38)	46 (21–76)	258 (120–424)	36 (29–43)	202 (162–242)
	2006	18	4 (2.3–6.2)	22 (13–34)	44 (20–72)	240 (110–397)	36 (29–43)	197 (157–236)
	2007	19	3.7 (2.1–6)	20 (11–32)	43 (19–71)	229 (103–382)	36 (29–43)	192 (153–230)
	2008	19	3.6 (2.1–5.6)	19 (11–29)	42 (19–70)	223 (101–367)	36 (29–43)	187 (149–224)
	2009	20	3.4 (2–5.3)	17 (10–27)	41 (19–68)	211 (95–346)	36 (29–43)	182 (148–219)
Cape Verde	1990	<1	0.1 (0.035–0.22)	28 (9.9–61)	1 (0.34–2.1)	285 (96–586)	0.62 (0.34–0.9)	175 (96–254)
	1995	<1	0.14 (0.095–0.19)	35 (24–48)	1.2 (0.55–2)	304 (137–506)	0.67 (0.53–0.8)	168 (134–201)
	2000	<1	0.16 (0.12–0.22)	37 (27–50)	1.4 (0.62–2.2)	308 (142–511)	0.7 (0.56–0.84)	160 (128–192)
	2005	<1	0.17 (0.12–0.22)	35 (26–47)	1.4 (0.63–2.3)	287 (133–472)	0.73 (0.59–0.88)	153 (123–184)
	2006	<1	0.18 (0.13–0.24)	37 (27–49)	1.5 (0.67–2.4)	301 (139–496)	0.74 (0.59–0.88)	152 (122–182)
	2007	<1	0.18 (0.13–0.24)	36 (26–48)	1.4 (0.66–2.4)	295 (135–485)	0.74 (0.59–0.89)	151 (120–181)
	2008	<1	0.17 (0.12–0.23)	34 (25–46)	1.4 (0.65–2.3)	285 (131–469)	0.74 (0.6–0.89)	149 (119–179)
	2009	<1	0.14 (0.097–0.19)	27 (19–37)	1.2 (0.56–1.9)	235 (111–384)	0.75 (0.61–0.9)	148 (120–178)
Central African Republic	1990	3	0.72 (0.28–1.4)	25 (9.6–48)	6.4 (2.5–13)	220 (84–443)	4.2 (2.3–6.2)	145 (80–210)
	1995	3	0.88 (0.56–1.3)	26 (17–38)	8.3 (3.9–14)	248 (118–411)	7 (5.6–8.4)	209 (167–251)
	2000	4	1.8 (1.3–2.3)	47 (33–63)	14 (6.9–24)	383 (185–630)	11 (9.1–14)	302 (242–363)
	2005	4	2.6 (1.9–3.4)	63 (47–83)	21 (9.8–34)	503 (239–828)	15 (12–18)	363 (291–436)
	2006	4	2.4 (1.7–3.2)	58 (42–77)	20 (9.7–33)	481 (233–786)	15 (12–18)	354 (283–425)
	2007	4	2.2 (1.5–3)	51 (35–70)	19 (9.4–32)	456 (220–745)	15 (12–18)	345 (276–414)
	2008	4	2 (1.3–2.9)	46 (30–66)	19 (9.1–31)	435 (209–713)	15 (12–18)	336 (269–403)
	2009	4	1.9 (1.3–2.8)	44 (28–63)	19 (8.9–31)	424 (201–695)	14 (12–17)	328 (266–395)
Chad	1990	6	1.8 (0.86–3)	29 (14–50)	14 (5.6–28)	231 (92–451)	7.7 (4.2–11)	125 (69–182)
	1995	7	3.3 (2.5–4.2)	46 (35–58)	24 (11–40)	340 (157–562)	13 (10–15)	181 (145–217)
	2000	8	5.1 (3.8–6.5)	60 (45–77)	38 (18–63)	456 (210–754)	22 (18–26)	262 (209–314)
	2005	10	7.5 (5.8–9.4)	75 (58–94)	55 (25–91)	550 (254–908)	32 (25–38)	315 (252–378)
	2006	10	7.5 (5.7–9.4)	72 (56–91)	55 (25–91)	533 (244–880)	32 (25–38)	307 (245–368)
	2007	11	7.4 (5.7–9.4)	70 (54–88)	55 (26–91)	520 (241–854)	32 (25–38)	299 (239–358)
	2008	11	7.3 (5.5–9.2)	66 (51–85)	54 (25–90)	497 (231–820)	32 (25–38)	291 (233–349)
	2009	11	7.1 (5.3–9.1)	63 (47–81)	54 (25–89)	480 (223–795)	32 (26–38)	283 (230–342)
Comoros	1990	<1	0.096 (0.047–0.16)	22 (11–37)	0.75 (0.3–1.5)	172 (68–335)	0.37 (0.21–0.54)	85 (47–124)
	1995	<1	0.085 (0.062–0.11)	17 (13–22)	0.68 (0.31–1.1)	137 (64–225)	0.34 (0.27–0.41)	69 (55–83)
	2000	<1	0.069 (0.049–0.092)	12 (8.9–17)	0.58 (0.27–0.95)	105 (48–172)	0.31 (0.25–0.37)	56 (45–68)
	2005	<1	0.069 (0.05–0.09)	11 (8.2–15)	0.55 (0.26–0.9)	89 (42–146)	0.28 (0.23–0.34)	46 (37–55)
	2006	<1	0.064 (0.046–0.084)	10 (7.3–13)	0.52 (0.24–0.85)	83 (38–135)	0.28 (0.22–0.33)	44 (35–53)
	2007	<1	0.059 (0.041–0.079)	9.1 (6.4–12)	0.5 (0.23–0.82)	77 (35–127)	0.27 (0.22–0.33)	42 (34–50)
	2008	<1	0.056 (0.039–0.076)	8.5 (5.9–12)	0.48 (0.22–0.79)	73 (34–120)	0.27 (0.21–0.32)	40 (32–48)
	2009	<1	0.053 (0.037–0.072)	7.8 (5.4–11)	0.46 (0.21–0.76)	68 (31–113)	0.26 (0.21–0.31)	39 (31–47)
Congo	1990	2	0.96 (0.55–1.5)	39 (22–61)	6.9 (2.8–13)	282 (113–539)	4.1 (2.3–6)	169 (93–246)
	1995	3	0.95 (0.61–1.4)	34 (22–49)	9.1 (4.3–15)	328 (154–541)	6.8 (5.4–8.2)	245 (196–293)
	2000	3	0.99 (0.55–1.6)	33 (18–53)	13 (5.4–21)	416 (179–693)	11 (9.2–13)	353 (304–424)
	2005	3	1.7 (1–2.6)	50 (29–77)	19 (8.4–31)	543 (245–905)	15 (12–17)	425 (340–509)
	2006	3	1.8 (1–2.7)	50 (30–76)	19 (8.5–31)	535 (244–885)	14 (12–17)	414 (331–497)
	2007	4	1.8 (1.1–2.7)	51 (31–76)	19 (8.6–31)	528 (242–875)	14 (11–17)	403 (322–484)
	2008	4	1.7 (0.98–2.6)	46 (27–71)	18 (8.2–30)	503 (226–839)	14 (11–17)	393 (314–471)
	2009	4	1.6 (0.93–2.5)	43 (25–68)	18 (8–30)	483 (216–802)	14 (11–17)	382 (311–461)
Côte d'Ivoire	1990	13	4.9 (2.3–8.6)	39 (18–68)	39 (15–78)	312 (123–617)	22 (12–32)	177 (97–256)
	1995	15	6.9 (5–9.2)	46 (33–62)	56 (27–93)	375 (179–619)	38 (31–46)	255 (204–306)
	2000	17	13 (9.8–16)	75 (57–95)	98 (46–160)	570 (266–935)	64 (51–76)	368 (295–442)
	2005	19	18 (14–23)	95 (72–122)	140 (65–230)	723 (337–1190)	85 (68–100)	443 (354–531)
	2006	20	18 (14–23)	93 (71–119)	140 (66–230)	711 (333–1164)	85 (68–100)	432 (345–518)
	2007	20	18 (14–23)	90 (68–116)	140 (66–230)	694 (328–1132)	85 (68–100)	420 (336–505)
	2008	21	19 (14–24)	90 (69–114)	140 (67–230)	693 (325–1129)	84 (67–100)	410 (328–492)
	2009	21	18 (14–23)	85 (65–108)	140 (66–230)	661 (314–1074)	84 (68–100)	399 (325–480)

[a] Rates are per 100 000 population.

Data can be downloaded from www.who.int/tb/data

TABLE A2.1 **Estimates of the burden of disease caused by TB, 1990–2009**

			MORTALITY (EXCLUDING HIV)		PREVALENCE (INCLUDING HIV)		INCIDENCE (INCLUDING HIV)	
	YEAR	POPULATION (MILLIONS)	NUMBER (THOUSANDS)	RATE[a]	NUMBER (THOUSANDS)	RATE	NUMBER (THOUSANDS)	RATE
Democratic Republic of the Congo	1990	37	13 (5.5–23)	34 (15–62)	110 (42–210)	287 (113–563)	61 (34–88)	165 (91–239)
	1995	45	23 (17–31)	52 (38–68)	190 (90–320)	428 (200–702)	110 (85–130)	238 (190–285)
	2000	51	40 (30–53)	80 (59–104)	320 (150–530)	636 (297–1043)	170 (140–210)	343 (274–412)
	2005	59	54 (39–71)	91 (66–120)	440 (210–720)	746 (349–1222)	240 (190–290)	413 (330–495)
	2006	61	53 (39–71)	88 (64–116)	440 (200–720)	722 (337–1185)	240 (200–290)	402 (322–483)
	2007	63	53 (38–70)	84 (61–112)	430 (200–710)	694 (326–1137)	240 (200–290)	392 (313–470)
	2008	64	51 (37–69)	80 (57–107)	430 (200–710)	674 (313–1100)	250 (200–290)	382 (305–458)
	2009	66	50 (36–67)	76 (54–102)	430 (200–700)	645 (300–1056)	250 (200–300)	372 (303–448)
Equatorial Guinea	1990	<1	0.017 (0.013–0.025)	4.5 (3.5–6.5)	0.4 (0.12–0.72)	107 (32–189)	0.33 (0.26–0.39)	86 (69–103)
	1995	<1	0.017 (0.015–0.022)	3.8 (3.2–5)	0.42 (0.12–0.72)	92 (27–158)	0.35 (0.31–0.4)	78 (68–88)
	2000	<1	0.02 (0.019–0.021)	3.8 (3.6–4)	0.49 (0.11–0.87)	93 (21–165)	<0.01 (<0.01–<0.01)	<1 (<1–<1)
	2005	<1	0.024 (0.023–0.025)	3.9 (3.7–4.1)	0.58 (0.13–1)	96 (21–171)	<0.01 (<0.01–<0.01)	<1 (<1–<1)
	2006	<1	0.026 (0.024–0.027)	4.1 (3.9–4.3)	0.63 (0.14–1.1)	101 (22–179)	<0.01 (<0.01–<0.01)	<1 (<1–<1)
	2007	<1	0.027 (0.026–0.029)	4.3 (4.1–4.5)	0.67 (0.15–1.2)	104 (23–185)	<0.01 (<0.01–<0.01)	<1 (<1–<1)
	2008	<1	0.044 (0.034–0.058)	6.6 (5.2–8.8)	1 (0.37–1.8)	157 (56–266)	0.83 (0.72–0.93)	125 (109–142)
	2009	<1	0.034 (0.028–0.045)	5 (4.1–6.7)	0.87 (0.3–1.5)	128 (44–216)	0.79 (0.71–0.92)	117 (105–136)
Eritrea	1990	3	0.14 (0.091–0.19)	4.4 (2.9–5.9)	3.9 (0.96–7)	125 (30–221)	2.3 (1.2–3.3)	72 (40–104)
	1995	3	0.46 (0.3–0.63)	15 (9.5–20)	13 (2.9–23)	402 (90–720)	2.5 (2–3)	78 (63–94)
	2000	4	0.16 (0.11–0.22)	4.5 (2.9–6.1)	4.5 (1–8.1)	123 (27–221)	3.1 (2.5–3.7)	85 (68–102)
	2005	4	0.27 (0.13–0.52)	6 (2.9–12)	4.6 (1.6–7.9)	102 (36–177)	4.1 (3.5–5)	92 (79–111)
	2006	5	0.39 (0.18–0.73)	8.5 (4–16)	5.3 (2–9.2)	114 (44–199)	4.3 (3.5–5.2)	94 (75–113)
	2007	5	0.62 (0.35–0.99)	13 (7.3–21)	6.8 (2.8–12)	143 (58–243)	4.6 (3.6–5.5)	95 (76–115)
	2008	5	0.48 (0.24–0.84)	9.8 (4.8–17)	5.6 (2.4–9.6)	113 (49–195)	4.8 (3.8–5.7)	97 (78–116)
	2009	5	0.72 (0.45–1.1)	14 (8.8–21)	7.2 (3.3–12)	142 (64–237)	5 (4.1–6)	99 (80–119)
Ethiopia	1990	48	3.9 (1.9–14)	8.2 (3.9–29)	86 (20–170)	178 (42–349)	77 (42–110)	159 (87–230)
	1995	57	25 (18–34)	44 (31–59)	210 (100–350)	375 (177–613)	130 (100–160)	229 (184–275)
	2000	66	43 (31–57)	66 (48–87)	360 (170–590)	546 (257–895)	220 (170–260)	331 (265–397)
	2005	75	60 (42–79)	80 (57–106)	500 (240–810)	668 (316–1090)	300 (240–360)	398 (319–478)
	2006	77	60 (43–80)	78 (56–104)	500 (230–820)	654 (306–1071)	300 (240–360)	388 (311–466)
	2007	79	59 (41–79)	74 (53–100)	500 (230–810)	634 (294–1035)	300 (240–360)	378 (303–454)
	2008	81	56 (39–77)	70 (49–95)	490 (230–800)	607 (285–993)	300 (240–360)	368 (295–442)
	2009	83	54 (38–75)	66 (45–90)	480 (230–800)	585 (274–963)	300 (240–360)	359 (292–432)
Gabon	1990	<1	0.21 (0.077–0.43)	23 (8.3–47)	2.1 (0.78–4.2)	231 (85–459)	1.4 (0.92–2.1)	153 (99–222)
	1995	1	0.2 (0.12–0.31)	19 (11–29)	2.1 (0.96–3.6)	197 (89–330)	1.6 (1.3–2)	151 (121–182)
	2000	1	0.32 (0.17–0.52)	26 (14–42)	3.6 (1.6–6.1)	293 (132–492)	3.1 (2.5–3.8)	254 (204–305)
	2005	1	0.47 (0.27–0.75)	34 (19–55)	5.1 (2.4–8.5)	372 (173–621)	4.4 (3.6–5.3)	325 (260–390)
	2006	1	0.54 (0.31–0.85)	39 (22–61)	5.9 (2.7–9.8)	420 (194–702)	5.1 (4.1–6.1)	366 (292–439)
	2007	1	0.6 (0.3–1)	42 (21–72)	6.8 (3–12)	476 (209–818)	5.8 (4.6–6.9)	406 (325–488)
	2008	1	0.68 (0.33–1.2)	47 (23–81)	7.3 (3.2–13)	501 (224–884)	6.5 (5.2–7.9)	452 (362–542)
	2009	1	0.92 (0.58–1.3)	62 (39–91)	8.9 (4.3–15)	603 (288–996)	7.4 (6–8.9)	501 (408–604)
Gambia	1990	<1	0.61 (0.37–0.92)	68 (42–102)	4.2 (1.5–7.9)	464 (171–884)	1.7 (0.91–2.4)	185 (102–269)
	1995	1	0.5 (0.36–0.67)	47 (33–62)	4.2 (1.9–6.8)	384 (177–631)	2.2 (1.8–2.7)	204 (163–245)
	2000	1	0.53 (0.35–0.75)	41 (27–58)	4.9 (2.2–8)	374 (169–618)	2.9 (2.3–3.5)	225 (180–270)
	2005	2	0.67 (0.45–0.95)	44 (30–62)	6.1 (2.8–10)	401 (183–665)	3.8 (3–4.6)	248 (199–298)
	2006	2	0.75 (0.51–1)	48 (33–66)	6.6 (3–11)	420 (194–691)	4 (3.2–4.8)	253 (203–304)
	2007	2	0.79 (0.55–1.1)	49 (34–67)	6.9 (3.2–11)	427 (199–701)	4.2 (3.3–5)	258 (207–310)
	2008	2	0.82 (0.56–1.1)	49 (34–68)	7.1 (3.3–12)	429 (199–706)	4.4 (3.5–5.2)	263 (211–316)
	2009	2	0.83 (0.59–1.1)	49 (34–66)	7.3 (3.5–12)	429 (202–698)	4.6 (3.7–5.5)	268 (218–323)
Ghana	1990	15	9.8 (5.4–15)	66 (36–104)	72 (29–140)	480 (192–919)	33 (18–48)	223 (123–323)
	1995	17	8.6 (6.4–11)	50 (37–65)	68 (32–110)	394 (183–647)	37 (30–45)	217 (173–260)
	2000	20	9.7 (7.3–12)	50 (38–63)	74 (35–120)	379 (177–622)	41 (33–49)	211 (169–253)
	2005	22	11 (8.1–14)	49 (37–62)	81 (38–130)	372 (174–608)	45 (36–54)	205 (164–246)
	2006	22	11 (8.2–14)	48 (37–62)	83 (39–140)	370 (172–605)	46 (37–55)	204 (163–245)
	2007	23	11 (8.2–14)	47 (36–61)	83 (39–140)	365 (171–600)	46 (37–56)	203 (162–243)
	2008	23	11 (8.2–14)	47 (35–60)	85 (40–140)	364 (171–597)	47 (38–57)	202 (161–242)
	2009	24	11 (8.3–14)	46 (35–59)	85 (40–140)	358 (169–584)	48 (39–58)	201 (163–242)
Guinea	1990	6	1.8 (0.85–3.2)	30 (14–52)	14 (5.3–28)	226 (87–454)	7.3 (4–11)	119 (66–173)
	1995	7	2.5 (1.7–3.5)	33 (22–47)	20 (9–34)	264 (120–454)	12 (9.2–14)	154 (124–185)
	2000	8	3.6 (2.6–4.7)	43 (31–57)	28 (13–47)	337 (158–557)	17 (13–20)	200 (160–240)
	2005	9	5.2 (3.9–6.8)	56 (42–73)	41 (19–67)	446 (210–727)	24 (19–29)	259 (207–311)
	2006	9	5.6 (4.1–7.2)	59 (44–77)	44 (21–72)	468 (220–768)	26 (21–31)	273 (218–327)
	2007	10	5.9 (4.4–7.7)	61 (45–80)	47 (22–77)	491 (229–804)	28 (22–33)	287 (230–345)
	2008	10	6.6 (4.9–8.5)	67 (50–87)	52 (24–85)	527 (247–865)	30 (24–36)	302 (242–363)
	2009	10	7.3 (5.5–9.3)	72 (55–93)	56 (27–93)	561 (264–919)	32 (26–39)	318 (259–383)
Guinea-Bissau	1990	1	0.2 (0.074–0.43)	19 (7.2–42)	2.3 (0.77–4.5)	227 (75–440)	1.6 (1.2–2.3)	158 (114–229)
	1995	1	0.19 (0.09–0.36)	16 (7.7–30)	2.6 (0.92–4.6)	223 (79–392)	2 (1.6–2.4)	174 (139–209)
	2000	1	0.44 (0.3–0.61)	34 (23–47)	4 (1.8–6.5)	304 (142–499)	2.5 (2–3)	192 (153–230)
	2005	1	0.43 (0.26–0.63)	29 (18–43)	4.4 (2–7.3)	298 (134–495)	3.1 (2.5–3.7)	211 (169–254)
	2006	2	0.45 (0.28–0.67)	30 (19–45)	4.6 (2.1–7.6)	304 (139–503)	3.2 (2.6–3.9)	216 (172–259)
	2007	2	0.41 (0.24–0.65)	27 (15–42)	4.5 (2–7.6)	295 (129–494)	3.4 (2.7–4.1)	220 (176–264)
	2008	2	0.45 (0.27–0.7)	29 (17–44)	4.8 (2.1–8)	306 (136–510)	3.5 (2.8–4.2)	224 (179–269)
	2009	2	0.49 (0.29–0.73)	30 (18–45)	5.1 (2.3–8.5)	316 (143–525)	3.7 (3–4.4)	228 (186–275)
Kenya	1990	23	4.4 (1.8–8.1)	19 (7.7–35)	38 (15–75)	163 (65–320)	26 (14–38)	112 (62–162)
	1995	27	7 (4.6–10)	25 (17–37)	66 (32–110)	242 (118–398)	62 (49–74)	224 (179–269)
	2000	31	14 (8.5–20)	43 (27–63)	140 (66–220)	432 (210–706)	130 (100–150)	405 (324–486)
	2005	36	11 (5.6–20)	32 (16–55)	150 (65–250)	414 (182–693)	150 (120–170)	406 (325–488)
	2006	37	10 (5.3–18)	28 (14–48)	150 (62–240)	397 (170–663)	140 (110–160)	371 (296–445)
	2007	38	8.5 (4.2–15)	23 (11–40)	130 (56–220)	347 (147–574)	130 (110–160)	353 (282–423)
	2008	39	7.1 (3.3–13)	18 (8.6–35)	120 (49–200)	306 (126–508)	130 (100–150)	328 (262–393)
	2009	40	6.2 (3–12)	15 (7.4–29)	110 (45–190)	283 (114–467)	120 (99–150)	305 (248–368)
Lesotho	1990	2	0.17 (0.08–0.44)	11 (5–28)	3.4 (0.9–6.3)	211 (56–391)	2.9 (2.5–4.3)	184 (158–267)
	1995	2	0.22 (0.11–0.44)	13 (6.3–25)	4.9 (1.9–8.2)	286 (107–475)	5.6 (5.2–6.7)	323 (300–388)
	2000	2	0.33 (0.16–0.67)	18 (8.4–35)	8.1 (3.1–13)	429 (164–706)	10 (9.7–13)	553 (516–664)
	2005	2	0.37 (0.17–0.79)	19 (8.6–40)	9.8 (3.6–16)	490 (179–814)	13 (11–15)	639 (541–767)
	2006	2	0.77 (0.47–1.2)	38 (23–58)	11 (5.1–17)	523 (251–824)	13 (12–15)	638 (600–765)
	2007	2	0.73 (0.37–1.3)	36 (18–62)	10 (4.8–17)	517 (235–845)	13 (10–16)	637 (509–764)
	2008	2	0.82 (0.57–1.1)	40 (28–55)	11 (5.5–17)	549 (267–847)	13 (12–16)	635 (586–763)
	2009	2	0.28 (0.15–0.51)	14 (7.4–24)	9.4 (3.3–16)	454 (159–751)	13 (11–15)	634 (549–725)
Liberia	1990	2	0.2 (0.11–0.53)	9.3 (5.2–25)	4.9 (1.1–8.4)	225 (49–389)	4.3 (2.4–6.2)	199 (109–288)
	1995	2	1.1 (0.84–1.4)	58 (43–74)	8.7 (4–14)	446 (207–730)	4.3 (3.4–5.1)	219 (175–263)
	2000	3	1.9 (1.5–2.4)	68 (52–86)	14 (6.6–24)	509 (235–839)	6.8 (5.5–8.2)	242 (193–290)
	2005	3	1.9 (1.3–2.6)	57 (40–78)	16 (7.5–27)	490 (225–806)	8.9 (7.1–11)	266 (213–320)
	2006	3	2.1 (1.5–2.8)	59 (42–79)	17 (8–28)	501 (232–821)	9.4 (7.5–11)	272 (217–326)
	2007	4	2.1 (1.5–2.9)	58 (41–79)	18 (8.4–30)	501 (231–823)	10 (8–12)	277 (222–333)
	2008	4	2.2 (1.5–3)	58 (40–79)	19 (8.7–32)	505 (230–833)	11 (8.6–13)	283 (226–339)
	2009	4	2.4 (1.7–3.2)	59 (42–81)	21 (9.4–34)	518 (238–851)	11 (9.3–14)	288 (234–347)
Madagascar	1990	11	5.3 (2.7–8.6)	47 (24–77)	40 (16–78)	359 (144–695)	20 (11–29)	177 (98–257)
	1995	13	4.5 (3–6.2)	34 (23–47)	42 (19–70)	324 (145–531)	26 (22–31)	196 (165–236)
	2000	15	6.5 (4.4–9)	42 (29–59)	58 (26–95)	378 (171–623)	33 (27–40)	217 (174–261)
	2005	18	8.7 (6.1–12)	50 (35–68)	76 (35–120)	430 (197–708)	42 (34–51)	241 (193–289)
	2006	18	9.3 (6.6–13)	51 (36–69)	80 (37–130)	442 (203–728)	44 (36–53)	246 (197–295)
	2007	19	9.8 (6.9–13)	53 (37–71)	84 (39–140)	452 (208–743)	47 (37–56)	251 (201–301)
	2008	19	10 (7.4–14)	55 (39–74)	89 (41–150)	465 (214–765)	49 (39–59)	256 (205–307)
	2009	20	11 (8–15)	57 (41–76)	94 (43–150)	480 (221–787)	51 (42–62)	261 (212–315)

[a] Rates are per 100 000 population.

TABLE A2.1 **Estimates of the burden of disease caused by TB, 1990–2009**

			MORTALITY (EXCLUDING HIV)		PREVALENCE (INCLUDING HIV)		INCIDENCE (INCLUDING HIV)	
	YEAR	POPULATION (MILLIONS)	NUMBER (THOUSANDS)	RATE[a]	NUMBER (THOUSANDS)	RATE	NUMBER (THOUSANDS)	RATE
Malawi	1990	9	2.7 (0.83–5.9)	28 (8.7–62)	27 (10–57)	290 (109–600)	24 (13–35)	258 (142–374)
	1995	10	3.2 (1.8–5)	31 (18–49)	34 (17–57)	336 (163–561)	40 (32–47)	390 (312–468)
	2000	12	3.9 (2.2–6.1)	33 (19–51)	42 (20–69)	354 (171–586)	50 (40–60)	425 (340–510)
	2005	14	4.5 (2.7–6.9)	33 (20–51)	47 (23–78)	344 (166–569)	53 (43–64)	391 (313–469)
	2006	14	5.7 (3.9–7.7)	40 (28–55)	55 (27–88)	391 (195–623)	52 (41–62)	368 (295–442)
	2007	14	3.8 (2.6–5.2)	26 (18–36)	41 (21–64)	284 (143–444)	50 (40–60)	346 (277–415)
	2008	15	3.7 (1.1–8.2)	25 (7.3–55)	40 (15–81)	268 (103–545)	48 (39–58)	324 (260–389)
	2009	15	3.9 (2.7–5.3)	25 (17–35)	41 (21–65)	269 (135–423)	46 (38–56)	304 (248–367)
Mali	1990	9	7.5 (4.4–11)	87 (50–133)	53 (20–100)	610 (235–1172)	24 (13–34)	275 (151–399)
	1995	10	7.2 (5.4–9.2)	75 (57–96)	51 (22–86)	534 (235–901)	27 (22–33)	287 (230–345)
	2000	11	8.1 (6.3–10)	77 (60–96)	58 (26–96)	551 (248–914)	32 (25–38)	300 (240–360)
	2005	12	10 (7.9–12)	85 (67–105)	71 (32–120)	602 (270–996)	37 (30–45)	313 (251–376)
	2006	12	10 (8.2–13)	86 (68–106)	74 (33–120)	611 (274–1014)	38 (31–46)	316 (253–379)
	2007	12	11 (8.5–13)	87 (68–108)	77 (35–130)	623 (279–1029)	40 (32–47)	319 (255–383)
	2008	13	11 (8.4–14)	87 (66–111)	79 (35–130)	625 (279–1045)	41 (33–49)	322 (257–386)
	2009	13	11 (8.6–15)	88 (66–112)	81 (36–140)	626 (280–1046)	42 (34–51)	324 (264–391)
Mauritania	1990	2	0.3 (0.12–0.99)	15 (6.2–50)	5.4 (1.3–11)	273 (64–562)	4.5 (2.5–6.6)	228 (125–330)
	1995	2	0.83 (0.49–1.3)	36 (22–56)	8.7 (3.7–15)	385 (161–650)	5.7 (4.6–6.8)	251 (201–301)
	2000	3	1.5 (1.1–2.1)	59 (41–79)	13 (6–21)	497 (229–815)	7.2 (5.8–8.7)	277 (222–332)
	2005	3	2.4 (1.8–3)	79 (60–102)	18 (8.5–30)	608 (283–997)	9.1 (7.3–11)	305 (244–367)
	2006	3	2.5 (1.9–3.2)	83 (63–105)	19 (8.9–31)	628 (292–1028)	9.5 (7.6–11)	312 (249–374)
	2007	3	2.6 (2–3.4)	84 (64–107)	20 (9.4–33)	640 (298–1046)	10 (8–12)	318 (254–381)
	2008	3	2.8 (2.1–3.5)	87 (66–110)	21 (9.8–35)	656 (305–1076)	10 (8.3–12)	324 (259–389)
	2009	3	3 (2.3–3.7)	90 (70–114)	22 (10–36)	676 (312–1107)	11 (8.8–13)	330 (268–398)
Mauritius	1990	1	0.013 (<0.01–0.024)	1.3 (<1–2.3)	0.55 (0.21–1.1)	52 (20–103)	0.29 (0.16–0.42)	28 (15–40)
	1995	1	0.013 (<0.01–0.017)	1.1 (<1–1.5)	0.55 (0.25–0.9)	48 (22–80)	0.29 (0.23–0.35)	26 (21–31)
	2000	1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0.52 (0.24–0.85)	43 (20–71)	0.29 (0.23–0.35)	24 (20–29)
	2005	1	0.015 (0.013–0.017)	1.2 (1.1–1.3)	0.54 (0.25–0.89)	43 (20–71)	0.29 (0.23–0.34)	23 (18–28)
	2006	1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0.53 (0.25–0.88)	42 (20–70)	0.29 (0.23–0.34)	23 (18–27)
	2007	1	0.015 (0.013–0.016)	1.2 (1–1.3)	0.53 (0.25–0.87)	41 (19–68)	0.28 (0.23–0.34)	22 (18–27)
	2008	1	0.016 (0.014–0.018)	1.3 (1.1–1.4)	0.51 (0.24–0.83)	40 (18–65)	0.28 (0.23–0.34)	22 (18–27)
	2009	1	0.013 (<0.01–0.017)	<1 (<1–1.3)	0.52 (0.24–0.85)	40 (19–66)	0.28 (0.23–0.34)	22 (18–26)
Mozambique	1990	14	3.4 (1.2–7.2)	25 (8.6–54)	35 (12–71)	261 (92–522)	25 (16–36)	181 (117–263)
	1995	16	7.1 (4.7–10)	44 (30–63)	61 (29–100)	383 (181–639)	42 (33–50)	262 (209–314)
	2000	18	11 (7.9–15)	61 (43–83)	90 (43–150)	495 (237–820)	69 (55–83)	378 (302–453)
	2005	21	13 (9–18)	63 (43–86)	110 (53–180)	531 (255–870)	95 (76–110)	454 (363–545)
	2006	21	12 (8.5–17)	59 (40–81)	110 (52–180)	509 (245–836)	95 (76–110)	443 (354–531)
	2007	22	15 (11–20)	69 (50–90)	130 (63–210)	587 (286–946)	94 (75–110)	431 (345–518)
	2008	22	11 (7.9–15)	49 (35–65)	100 (50–160)	451 (225–717)	94 (75–110)	420 (336–504)
	2009	23	8.8 (6.3–12)	38 (27–51)	86 (44–140)	376 (190–592)	94 (76–110)	409 (332–492)
Namibia	1990	1	0.75 (0.29–1.5)	53 (20–105)	7.1 (2.7–14)	503 (189–1009)	4.6 (2.7–6.6)	322 (189–467)
	1995	2	0.67 (0.33–1.2)	41 (21–71)	8.5 (3.6–14)	523 (224–883)	7.5 (6–9)	465 (372–558)
	2000	2	0.41 (0.2–0.88)	23 (11–48)	10 (3.7–17)	566 (202–949)	12 (11–15)	671 (592–806)
	2005	2	0.53 (0.26–1.1)	27 (13–56)	13 (4.9–22)	671 (243–1120)	16 (15–19)	808 (743–969)
	2006	2	0.51 (0.25–1.1)	25 (12–53)	13 (4.7–22)	652 (227–1094)	16 (15–19)	787 (716–945)
	2007	2	0.8 (0.44–1.4)	38 (21–65)	16 (6–26)	758 (288–1245)	16 (15–19)	767 (728–920)
	2008	2	0.58 (0.17–1.8)	27 (7.8–85)	13 (4.1–24)	591 (195–1128)	16 (13–19)	747 (626–896)
	2009	2	0.68 (0.25–1.5)	31 (12–71)	13 (4.9–22)	589 (226–1021)	16 (13–19)	728 (600–872)
Niger	1990	8	3.3 (1.9–5.1)	41 (23–64)	23 (8.8–45)	292 (111–563)	9.9 (5.4–14)	125 (69–181)
	1995	9	3.6 (2.8–4.5)	38 (30–48)	26 (12–43)	282 (130–464)	13 (10–15)	138 (110–165)
	2000	11	4.1 (3.1–5.3)	37 (28–48)	31 (15–51)	285 (133–466)	17 (13–20)	152 (122–182)
	2005	13	4.9 (3.7–6.4)	38 (28–49)	39 (19–64)	301 (142–492)	22 (18–26)	168 (134–201)
	2006	14	5.1 (3.8–6.7)	38 (28–50)	41 (19–68)	305 (142–500)	23 (19–28)	171 (137–205)
	2007	14	5.5 (4–7.2)	39 (28–51)	44 (21–72)	311 (145–512)	25 (20–30)	174 (139–209)
	2008	15	5.8 (4.3–7.6)	40 (29–52)	47 (22–77)	319 (150–522)	26 (21–31)	178 (142–213)
	2009	15	6.3 (4.7–8.1)	41 (31–53)	50 (24–81)	327 (154–533)	28 (23–33)	181 (148–218)
Nigeria	1990	97	38 (21–58)	39 (22–60)	270 (110–520)	277 (109–531)	130 (70–180)	131 (72–189)
	1995	110	60 (48–74)	55 (44–67)	420 (180–690)	378 (163–627)	210 (170–250)	188 (151–226)
	2000	125	94 (75–120)	75 (60–92)	660 (290–1100)	527 (233–873)	340 (270–410)	272 (218–326)
	2005	141	120 (96–150)	87 (68–108)	880 (390–1400)	621 (279–1026)	460 (370–550)	327 (262–393)
	2006	144	120 (94–150)	83 (65–103)	870 (390–1400)	600 (272–989)	460 (370–550)	319 (255–383)
	2007	148	120 (91–150)	79 (62–99)	860 (390–1400)	579 (264–949)	460 (370–550)	311 (249–373)
	2008	151	120 (91–140)	77 (60–95)	850 (390–1400)	562 (257–922)	460 (370–550)	303 (242–363)
	2009	155	110 (89–140)	73 (57–91)	830 (380–1400)	537 (247–876)	460 (370–550)	295 (240–356)
Rwanda	1990	7	1.6 (0.67–3)	23 (9.4–43)	14 (5.9–29)	202 (82–399)	12 (6.6–17)	167 (92–242)
	1995	5	2.2 (1.5–3)	40 (28–55)	17 (7.8–29)	310 (144–526)	13 (10–16)	241 (193–289)
	2000	8	5 (3.6–6.5)	63 (46–82)	38 (18–63)	475 (222–791)	28 (22–33)	348 (278–417)
	2005	9	7.9 (6.2–9.9)	88 (68–110)	58 (27–96)	650 (302–1063)	38 (30–45)	418 (335–502)
	2006	9	7.8 (6.1–9.7)	84 (66–105)	58 (27–95)	630 (293–1027)	38 (30–45)	408 (326–489)
	2007	9	7.4 (5.7–9.2)	78 (61–98)	55 (26–90)	586 (275–952)	38 (30–45)	397 (318–476)
	2008	10	7.5 (5.9–9.4)	77 (60–97)	56 (26–92)	577 (268–942)	38 (30–45)	387 (309–464)
	2009	10	7.5 (5.9–9.3)	75 (59–93)	56 (26–91)	558 (260–908)	38 (31–45)	376 (306–454)
Sao Tome and Principe	1990	<1	0.036 (0.015–0.066)	31 (13–57)	0.3 (0.11–0.6)	256 (98–515)	0.16 (0.086–0.23)	135 (74–196)
	1995	<1	0.046 (0.035–0.058)	36 (27–45)	0.34 (0.16–0.56)	267 (122–440)	0.16 (0.13–0.19)	124 (99–149)
	2000	<1	0.027 (0.017–0.04)	19 (12–29)	0.26 (0.11–0.44)	188 (81–317)	0.16 (0.13–0.19)	114 (91–137)
	2005	<1	0.013 (<0.01–0.025)	8.8 (4.4–16)	0.2 (0.068–0.35)	133 (45–230)	0.16 (0.14–0.19)	105 (89–126)
	2006	<1	0.017 (0.011–0.025)	11 (6.9–16)	0.22 (0.085–0.36)	141 (55–235)	0.16 (0.15–0.19)	103 (99–123)
	2007	<1	0.022 (0.013–0.034)	14 (8.1–22)	0.23 (0.099–0.39)	148 (63–250)	0.16 (0.13–0.19)	101 (81–121)
	2008	<1	0.03 (0.02–0.042)	19 (12–26)	0.26 (0.12–0.44)	165 (75–275)	0.16 (0.13–0.19)	99 (79–119)
	2009	<1	0.03 (0.021–0.042)	19 (13–26)	0.26 (0.12–0.43)	160 (75–266)	0.16 (0.13–0.19)	97 (79–118)
Senegal	1990	8	3.5 (1.6–6.1)	46 (22–81)	28 (11–56)	375 (146–738)	15 (8.1–21)	195 (107–282)
	1995	9	4.3 (3.1–5.7)	49 (36–65)	35 (16–58)	404 (187–665)	19 (15–22)	215 (172–258)
	2000	10	5.8 (4.3–7.5)	58 (43–76)	46 (21–75)	462 (214–756)	23 (19–28)	237 (189–284)
	2005	11	7.4 (5.5–9.6)	65 (49–85)	58 (27–95)	512 (239–839)	29 (24–35)	261 (209–313)
	2006	12	7.7 (5.8–9.9)	67 (50–86)	60 (28–99)	522 (243–854)	31 (25–37)	266 (213–320)
	2007	12	8.1 (6.1–10)	68 (51–88)	63 (29–100)	531 (247–871)	32 (26–39)	272 (217–326)
	2008	12	8.4 (6.4–11)	69 (52–89)	66 (31–110)	539 (251–881)	34 (27–41)	277 (221–332)
	2009	13	9 (6.8–12)	72 (54–92)	70 (33–110)	558 (261–912)	35 (29–43)	282 (230–340)
Seychelles	1990	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0.035 (<0.01–0.062)	48 (11–86)	0.031 (0.017–0.045)	43 (24–63)
	1995	<1	<0.01 (<0.01–<0.01)	3.7 (2.8–4.8)	0.063 (0.029–0.1)	83 (38–136)	0.03 (0.024–0.036)	40 (32–48)
	2000	<1	<0.01 (<0.01–<0.01)	1.9 (1.1–2.9)	0.046 (0.019–0.079)	57 (23–97)	0.03 (0.024–0.036)	37 (29–44)
	2005	<1	<0.01 (<0.01–<0.01)	2.5 (2.2–2.7)	0.051 (0.023–0.085)	62 (28–102)	0.028 (0.022–0.033)	33 (27–40)
	2006	<1	<0.01 (<0.01–<0.01)	3.1 (2.3–4)	0.057 (0.026–0.093)	69 (32–112)	0.027 (0.022–0.033)	33 (26–40)
	2007	<1	<0.01 (<0.01–<0.01)	3.4 (2.6–4.3)	0.06 (0.027–0.099)	72 (33–119)	0.027 (0.022–0.032)	32 (26–39)
	2008	<1	<0.01 (<0.01–<0.01)	2.9 (2.2–3.8)	0.055 (0.026–0.091)	66 (31–108)	0.027 (0.021–0.032)	32 (25–38)
	2009	<1	<0.01 (<0.01–<0.01)	2.6 (1.9–3.4)	0.051 (0.023–0.084)	61 (28–99)	0.026 (0.021–0.032)	31 (25–38)
Sierra Leone	1990	4	2.8 (1.6–4.2)	68 (39–104)	20 (7.6–38)	482 (187–921)	8.4 (4.6–12)	207 (114–300)
	1995	4	3.2 (2.5–4.1)	80 (62–102)	24 (11–39)	596 (272–984)	11 (8.9–13)	279 (223–335)
	2000	4	4.2 (3.2–5.4)	100 (76–128)	32 (15–53)	755 (350–1244)	16 (13–19)	377 (302–452)
	2005	5	6.7 (5.1–8.5)	131 (99–166)	50 (23–83)	987 (459–1626)	26 (21–31)	509 (407–611)
	2006	5	7.1 (5.4–9.1)	135 (102–172)	54 (25–89)	1030 (482–1694)	28 (23–34)	540 (432–649)
	2007	5	7.5 (5.7–9.6)	139 (104–178)	58 (27–95)	1075 (502–1753)	31 (25–37)	574 (459–689)
	2008	6	8 (6–10)	144 (108–187)	63 (29–100)	1126 (527–1843)	34 (27–41)	608 (487–730)
	2009	6	9 (6.9–12)	158 (121–202)	70 (33–110)	1229 (572–1999)	37 (30–44)	644 (524–777)

[a] Rates are per 100 000 population.

Data can be downloaded from www.who.int/tb/data

TABLE A2.1 **Estimates of the burden of disease caused by TB, 1990–2009**

			MORTALITY (EXCLUDING HIV)		PREVALENCE (INCLUDING HIV)		INCIDENCE (INCLUDING HIV)	
	YEAR	POPULATION (MILLIONS)	NUMBER (THOUSANDS)	RATE[a]	NUMBER (THOUSANDS)	RATE	NUMBER (THOUSANDS)	RATE
South Africa	1990	37	14 (5.1–30)	38 (14–81)	160 (55–310)	431 (149–838)	110 (80–160)	301 (219–436)
	1995	41	12 (6.5–20)	30 (16–49)	150 (66–250)	358 (158–598)	130 (100–160)	317 (254–380)
	2000	45	21 (12–31)	46 (27–70)	240 (110–380)	526 (254–854)	260 (210–310)	576 (461–691)
	2005	48	29 (16–47)	61 (33–98)	380 (180–610)	783 (366–1273)	440 (360–530)	925 (740–1110)
	2006	49	29 (15–48)	60 (32–99)	390 (180–630)	792 (369–1294)	460 (370–550)	940 (752–1128)
	2007	49	27 (14–47)	55 (28–95)	390 (180–640)	787 (356–1293)	470 (370–560)	948 (759–1138)
	2008	50	24 (11–45)	49 (22–91)	390 (170–640)	781 (335–1298)	480 (380–570)	960 (768–1152)
	2009	50	23 (9.9–44)	45 (20–88)	390 (160–650)	782 (324–1302)	490 (400–590)	970 (789–1168)
Swaziland	1990	<1	0.23 (0.073–0.56)	26 (8.4–65)	2.9 (0.94–5.9)	339 (108–681)	2.3 (1.3–3.3)	267 (147–387)
	1995	<1	0.32 (0.18–0.5)	33 (19–51)	3.6 (1.7–5.9)	370 (174–610)	3.3 (2.6–3.9)	337 (270–404)
	2000	1	0.59 (0.33–0.94)	55 (31–87)	7.5 (3.5–12)	693 (328–1128)	8.7 (6.9–10)	801 (641–962)
	2005	1	0.76 (0.41–1.2)	67 (37–110)	10 (4.8–16)	907 (425–1467)	13 (10–15)	1141 (913–1369)
	2006	1	0.78 (0.42–1.3)	69 (37–111)	11 (4.9–17)	927 (429–1503)	13 (11–16)	1169 (936–1403)
	2007	1	0.93 (0.57–1.4)	80 (50–120)	12 (5.7–19)	1020 (494–1607)	14 (11–17)	1198 (958–1438)
	2008	1	0.78 (0.47–1.2)	67 (41–101)	11 (5.2–17)	936 (444–1475)	14 (11–17)	1227 (982–1473)
	2009	1	0.75 (0.47–1.1)	64 (40–94)	11 (5.1–17)	914 (430–1439)	15 (12–18)	1257 (1022–1517)
Togo	1990	4	3.8 (2.2–5.8)	96 (57–147)	27 (10–51)	675 (262–1288)	12 (6.6–18)	308 (169–446)
	1995	4	4 (3.1–5)	91 (71–113)	28 (12–47)	637 (281–1061)	15 (12–18)	339 (271–407)
	2000	5	4.9 (3.8–6)	93 (73–115)	34 (15–57)	644 (279–1078)	20 (16–24)	374 (299–449)
	2005	6	5.9 (4.6–7.4)	98 (77–123)	42 (18–70)	698 (308–1160)	25 (20–30)	413 (330–495)
	2006	6	6.2 (4.9–7.7)	101 (79–126)	44 (19–73)	711 (315–1185)	26 (21–31)	421 (337–505)
	2007	6	6.5 (5.1–8.1)	103 (81–129)	46 (20–77)	729 (321–1216)	27 (22–32)	429 (343–515)
	2008	6	6.5 (4.9–8.3)	101 (76–128)	46 (20–78)	712 (311–1203)	28 (23–34)	438 (350–525)
	2009	7	7.5 (5.8–9.3)	113 (88–141)	53 (23–88)	795 (352–1322)	30 (24–36)	446 (363–539)
Uganda	1990	18	1.3 (0.32–3.2)	7.3 (1.8–18)	18 (6.7–36)	104 (38–203)	29 (16–42)	163 (90–236)
	1995	21	4.7 (2.3–8)	22 (11–38)	48 (22–84)	227 (104–403)	67 (53–80)	319 (255–383)
	2000	24	7.2 (4.1–11)	30 (17–46)	69 (33–120)	284 (134–489)	83 (66–100)	340 (272–408)
	2005	29	11 (6.2–16)	37 (22–56)	98 (47–170)	341 (162–581)	110 (85–130)	370 (296–444)
	2006	30	10 (6.2–16)	35 (21–53)	97 (46–160)	326 (156–554)	100 (83–120)	350 (280–420)
	2007	31	10 (6–15)	33 (19–49)	94 (45–160)	308 (147–521)	100 (81–120)	330 (264–395)
	2008	32	9.2 (3.5–18)	29 (11–56)	89 (37–170)	280 (116–545)	98 (79–120)	311 (249–373)
	2009	33	9.4 (4–18)	29 (12–54)	91 (39–170)	277 (119–527)	96 (78–120)	293 (238–353)
United Republic of Tanzania	1990	25	9.2 (6.8–12)	36 (27–47)	79 (39–130)	311 (152–500)	57 (50–68)	226 (196–267)
	1995	30	6.7 (4.2–9.8)	22 (14–33)	72 (35–120)	241 (116–389)	68 (59–80)	226 (196–267)
	2000	34	6.3 (3.6–10)	19 (11–29)	81 (38–130)	239 (111–387)	81 (71–93)	236 (209–273)
	2005	39	6.2 (3.8–9.3)	16 (9.7–24)	84 (39–130)	216 (99–345)	83 (77–90)	213 (197–231)
	2006	40	5.9 (3.6–8.9)	15 (9–22)	82 (38–130)	204 (94–326)	80 (75–87)	200 (187–216)
	2007	41	7.2 (5.7–8.9)	17 (14–21)	94 (43–150)	227 (104–351)	79 (74–85)	192 (180–205)
	2008	42	4.7 (1.8–10)	11 (4.1–24)	75 (29–130)	176 (69–312)	81 (76–86)	190 (178–203)
	2009	44	3.9 (1.5–9.1)	9 (3.4–21)	72 (27–130)	165 (61–293)	80 (75–85)	183 (171–195)
Zambia	1990	8	1.4 (0.44–3.9)	17 (5.5–49)	23 (7.7–46)	296 (98–585)	24 (17–34)	297 (213–431)
	1995	9	3.4 (1.6–6.1)	37 (18–67)	49 (21–81)	534 (230–891)	49 (39–59)	536 (429–643)
	2000	10	4.5 (2.3–7.9)	43 (22–75)	63 (28–110)	605 (266–1003)	63 (50–76)	602 (482–722)
	2005	12	5.2 (2.6–8.9)	44 (22–76)	70 (31–120)	597 (262–993)	69 (55–83)	588 (470–705)
	2006	12	5 (2.6–8.5)	41 (21–71)	67 (30–110)	557 (249–924)	66 (53–79)	547 (437–656)
	2007	12	5.1 (2.8–8.4)	42 (23–68)	68 (30–110)	548 (243–906)	62 (50–75)	506 (405–607)
	2008	13	3.7 (1.9–6.2)	29 (15–49)	55 (24–90)	437 (193–712)	59 (47–71)	468 (375–562)
	2009	13	3.5 (1.6–6.5)	27 (12–51)	54 (22–92)	421 (174–707)	56 (46–67)	433 (352–521)
Zimbabwe	1990	10	6 (3.1–9.9)	57 (29–94)	48 (20–90)	456 (191–864)	34 (19–50)	329 (181–476)
	1995	12	4.8 (3–7.1)	41 (26–60)	52 (26–84)	446 (220–718)	56 (44–67)	474 (380–569)
	2000	12	6.3 (3.7–9.7)	50 (30–78)	76 (36–120)	611 (292–987)	85 (68–100)	685 (548–822)
	2005	12	10 (6.8–15)	82 (54–117)	100 (51–170)	824 (409–1326)	100 (82–120)	824 (659–988)
	2006	12	11 (7.3–15)	87 (59–121)	100 (51–170)	827 (408–1335)	100 (80–120)	803 (642–963)
	2007	12	11 (7.8–16)	91 (63–125)	100 (51–170)	834 (412–1345)	97 (78–120)	782 (626–938)
	2008	12	12 (8.7–16)	97 (70–128)	110 (54–170)	870 (434–1393)	95 (76–110)	762 (609–914)
	2009	13	10 (7.4–14)	82 (59–109)	96 (48–150)	765 (383–1214)	93 (76–110)	742 (604–894)

[a] Rates are per 100 000 population.

TABLE A2.2 **Incidence, notification and case detection rates, all forms, 1990–2009**

			INCIDENCE (INCLUDING HIV)		INCIDENCE HIV-POSITIVE		NOTIFIED NEW AND RELAPSE[a]		CASE DETECTION RATE[a]
	YEAR	POPULATION (MILLIONS)	NUMBER (THOUSANDS)	RATE[b]	NUMBER (THOUSANDS)	RATE[b]	NUMBER	RATE[b]	PERCENT
Algeria	1990	25	9.5 (5.2–14)	38 (21–54)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	11 607	46	122 (84–222)
	1995	28	12 (9.6–14)	42 (34–51)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	13 507	48	113 (94–141)
	2000	31	15 (12–17)	48 (38–57)	0.013 (<0.01–0.02)	<1 (<1–<1)	18 572	61	127 (106–159)
	2005	33	18 (14–21)	54 (43–65)	0.027 (0.016–0.042)	<1 (<1–<1)	21 336	65	120 (100–151)
	2006	33	18 (15–22)	55 (44–66)	0.031 (0.018–0.048)	<1 (<1–<1)	21 143	63	115 (96–143)
	2007	34	19 (15–23)	57 (45–68)	0.034 (0.024–0.048)	<1 (<1–<1)	21 369	63	112 (93–139)
	2008	34	20 (16–24)	58 (46–70)	0.038 (0.022–0.059)	<1 (<1–<1)	20 588	60	103 (86–129)
	2009	35	21 (17–25)	59 (48–72)	0.042 (0.024–0.065)	<1 (<1–<1)	21 701	62	105 (87–129)
Angola	1990	11	22 (12–32)	205 (113–298)	0.63 (0.17–1.5)	5.9 (1.6–14)	10 271	96	47 (32–85)
	1995	13	28 (23–34)	226 (181–272)	2 (1.2–3)	16 (9.6–24)	5 143	41	18 (15–23)
	2000	14	36 (29–43)	250 (200–300)	2.9 (2–4.1)	21 (14–29)	16 062	112	45 (38–56)
	2005	17	46 (37–55)	276 (224–331)	4 (2.7–5.5)	24 (17–33)	37 175	224	81 (68–100)
	2006	17	48 (38–58)	281 (225–337)	4.2 (2.9–5.8)	25 (17–34)	50 419	295	105 (88–131)
	2007	18	50 (41–60)	287 (235–344)	4.4 (3.1–6.1)	25 (18–35)	41 292	235	82 (68–100)
	2008	18	53 (45–63)	292 (247–351)	4.7 (3.3–6.3)	26 (18–35)	44 576	247	85 (71–100)
	2009	18	55 (46–65)	298 (249–352)	5 (3.4–6.8)	27 (19–37)	41 221	223	75 (63–90)
Benin	1990	5	3.7 (2.1–5.3)	77 (43–111)	0.093 (<0.01–0.85)	1.9 (<1–18)	2 084	43	57 (39–100)
	1995	6	4.6 (3.7–5.5)	80 (64–97)	0.63 (0.32–1)	11 (5.5–18)	2 332	41	51 (42–63)
	2000	7	5.6 (4.5–6.8)	85 (68–102)	0.99 (0.68–1.4)	15 (10–20)	2 706	41	48 (40–60)
	2005	8	7 (5.6–8.4)	89 (71–107)	1.2 (0.83–1.6)	15 (11–20)	3 270	42	47 (39–58)
	2006	8	7.3 (5.8–8.8)	90 (72–108)	1.2 (0.86–1.7)	15 (11–20)	3 619	45	50 (41–62)
	2007	8	7.6 (6.1–9.2)	91 (73–109)	1.3 (0.89–1.7)	15 (11–20)			–
	2008	9	7.9 (6.4–9.5)	92 (73–110)	1.3 (1.1–1.6)	15 (12–19)	3 872	45	49 (41–61)
	2009	9	8.3 (6.7–10)	93 (75–112)	1.3 (1.1–1.6)	15 (12–18)	3 878	43	47 (39–58)
Botswana	1990	1	4.2 (2.9–6)	307 (217–446)	0.83 (0.52–1.2)	61 (39–90)	2 938	217	71 (49–100)
	1995	2	6.9 (5.7–8.3)	444 (366–532)	3.1 (2.5–3.7)	198 (159–240)	5 665	366	82 (69–100)
	2000	2	11 (9.3–13)	640 (539–768)	5.8 (4.8–6.9)	334 (276–400)	9 292	539	84 (70–100)
	2005	2	14 (11–17)	770 (616–924)	7.4 (6–9)	403 (324–490)	10 058	547	71 (59–89)
	2006	2	14 (11–17)	751 (601–901)	6 (4.9–7.2)	320 (260–386)	8 413	451	60 (50–75)
	2007	2	14 (11–17)	731 (585–878)	6.7 (5.5–8.1)	355 (289–428)	7 622	403	55 (46–69)
	2008	2	14 (11–16)	712 (570–855)	9.2 (6–13)	480 (314–655)	8 562	446	63 (52–78)
	2009	2	14 (11–16)	694 (564–835)	6.8 (5.5–8.1)	346 (283–416)	8 089	415	60 (50–74)
Burkina Faso	1990	9	8.4 (4.6–12)	95 (52–138)	3.6 (2–5.7)	41 (23–64)	1 497	17	18 (12–33)
	1995	10	14 (11–17)	137 (110–165)	5.7 (4–7.7)	57 (40–76)	2 572	25	19 (15–23)
	2000	12	23 (18–28)	198 (158–238)	7.8 (5.5–10)	67 (47–89)	2 310	20	10 (8–12)
	2005	14	33 (26–39)	238 (191–286)	8.4 (5.9–11)	61 (43–83)	3 484	25	11 (9–13)
	2006	14	33 (26–40)	232 (186–279)	6.2 (5–7.5)	44 (35–53)	3 941	28	12 (10–15)
	2007	15	33 (27–40)	226 (181–271)	10 (6.8–14)	68 (46–94)	3 960	27	12 (10–15)
	2008	15	34 (27–40)	220 (176–264)	7.5 (6–9.1)	49 (40–60)	4 237	28	13 (11–16)
	2009	16	34 (27–41)	215 (174–258)	7 (5.7–8.5)	45 (36–54)	4 716	30	14 (12–17)
Burundi	1990	6	8.8 (4.8–13)	154 (85–224)	2 (1.2–3.1)	35 (21–54)	4 575	81	52 (36–95)
	1995	6	14 (11–16)	223 (178–267)	4.2 (3.2–5.4)	68 (52–87)	3 326	54	24 (20–30)
	2000	6	21 (17–25)	321 (257–386)	6.2 (4.7–7.9)	96 (73–123)			–
	2005	7	29 (23–34)	387 (309–464)	7.7 (5.8–9.9)	104 (78–134)	6 585	89	23 (19–29)
	2006	8	29 (23–34)	377 (301–452)	7.5 (5.6–9.6)	98 (74–127)	6 114	80	21 (18–27)
	2007	8	29 (23–35)	367 (294–440)	7.3 (5.4–9.4)	93 (69–120)	6 284	80	22 (18–27)
	2008	8	29 (23–35)	357 (286–429)	7.1 (5.3–9.2)	88 (66–114)	6 808	84	24 (20–29)
	2009	8	29 (24–35)	348 (283–420)	6.9 (5.1–9)	83 (62–108)	7 277	88	25 (21–31)
Cameroon	1990	12	9.9 (5.9–14)	81 (48–117)	0.48 (0.058–1.3)	3.9 (<1–11)	5 892	48	60 (41–100)
	1995	14	16 (13–20)	116 (93–140)	3.8 (2.8–4.9)	27 (20–35)	3 292	23	20 (17–25)
	2000	16	27 (21–32)	168 (134–201)	7.6 (5.8–9.8)	48 (36–62)	5 251	33	20 (16–25)
	2005	18	36 (29–43)	202 (162–242)	11 (8.1–14)	60 (45–76)	21 499	121	60 (50–75)
	2006	18	36 (29–43)	197 (157–236)	11 (8.1–14)	58 (44–75)	23 483	129	65 (55–82)
	2007	19	36 (29–43)	192 (153–230)	11 (8.1–14)	57 (43–73)	24 062	129	67 (56–84)
	2008	19	36 (29–43)	187 (149–224)	10 (8.5–13)	55 (45–66)	24 622	129	69 (58–86)
	2009	20	36 (29–43)	182 (148–219)	11 (8.8–13)	55 (45–66)	24 662	126	69 (58–85)
Cape Verde	1990	0	0.62 (0.34–0.9)	175 (96–254)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	221	62	36 (25–65)
	1995	0	0.67 (0.53–0.8)	168 (134–201)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	303	76	45 (38–57)
	2000	0	0.7 (0.56–0.84)	160 (128–192)	<0.01 (<0.01–<0.01)	<1 (<1–<1)			–
	2005	0	0.73 (0.59–0.88)	153 (123–184)	0.035 (0.018–0.058)	7.3 (3.8–12)	292	61	40 (33–50)
	2006	0	0.74 (0.59–0.88)	152 (122–182)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	262	54	36 (30–44)
	2007	0	0.74 (0.59–0.89)	151 (120–181)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	274	56	37 (31–46)
	2008	0	0.74 (0.6–0.89)	149 (119–179)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	334	67	45 (37–56)
	2009	1	0.75 (0.61–0.9)	148 (120–178)	0.13 (0.092–0.17)	25 (18–34)	332	66	44 (37–55)
Central African Republic	1990	3	4.2 (2.3–6.2)	145 (80–210)	0.82 (0.38–1.5)	28 (13–50)	2 124	73	50 (35–91)
	1995	3	7 (5.6–8.4)	209 (167–251)	2.8 (2.1–3.7)	85 (63–111)	3 339	100	48 (40–60)
	2000	4	11 (9.1–14)	302 (242–363)	4.7 (3.6–6)	126 (97–160)			–
	2005	4	15 (12–18)	363 (291–436)	5.4 (4.1–6.8)	131 (101–167)	3 210	78	22 (18–27)
	2006	4	15 (12–18)	354 (283–425)	5.1 (4–6.5)	123 (95–156)	6 045	145	41 (34–51)
	2007	4	15 (12–18)	345 (276–414)	4.9 (3.7–6.2)	115 (88–146)			–
	2008	4	15 (12–18)	336 (269–403)	4.6 (3.5–6)	107 (81–137)	6 803	157	47 (39–58)
	2009	4	14 (12–17)	328 (266–395)	4.4 (3.3–5.7)	100 (76–128)	8 743	198	60 (50–74)
Chad	1990	6	7.7 (4.2–11)	125 (69–182)	0.68 (0.29–1.3)	11 (4.7–21)	2 591	42	34 (23–61)
	1995	7	13 (10–15)	181 (145–217)	2 (1.2–3)	27 (16–42)	3 186	45	25 (21–31)
	2000	8	22 (18–26)	262 (209–314)	4.5 (3–6.2)	53 (36–74)			–
	2005	10	32 (25–38)	315 (252–378)	7.2 (5.3–9.4)	72 (53–94)	6 311	63	20 (17–25)
	2006	10	32 (25–38)	307 (245–368)	7.3 (5.3–9.6)	70 (51–93)			–
	2007	11	32 (25–38)	299 (239–358)	7.3 (5.3–9.6)	68 (49–91)	5 879	55	19 (15–23)
	2008	11	32 (25–38)	291 (233–349)	7.3 (5.1–9.8)	66 (47–90)	6 912	63	22 (18–27)
	2009	11	32 (26–38)	283 (230–342)	7.2 (5–9.9)	64 (44–89)	8 411	75	26 (22–33)
Comoros	1990	0	0.37 (0.21–0.54)	85 (47–124)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	140	32	37 (26–68)
	1995	0	0.34 (0.27–0.41)	69 (55–83)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	123	25	36 (30–45)
	2000	1	0.31 (0.25–0.37)	56 (45–68)	<0.01 (<0.01–<0.01)	<1 (<1–1)	120	22	39 (32–48)
	2005	1	0.28 (0.23–0.34)	46 (37–55)	<0.01 (<0.01–0.016)	<1 (<1–2.7)	111	18	39 (33–49)
	2006	1	0.28 (0.22–0.33)	44 (35–53)	<0.01 (<0.01–<0.01)	<1 (<1–1.3)	112	18	41 (34–51)
	2007	1	0.27 (0.22–0.33)	42 (34–50)	<0.01 (<0.01–<0.01)	<1 (<1–1.4)			–
	2008	1	0.27 (0.21–0.32)	40 (32–48)	<0.01 (<0.01–<0.01)	<1 (<1–1.5)	132	20	50 (41–62)
	2009	1	0.26 (0.21–0.31)	39 (31–47)	<0.01 (<0.01–0.01)	<1 (<1–1.5)	120	18	46 (38–57)
Congo	1990	2	4.1 (2.3–6)	169 (93–246)	1.2 (0.67–1.8)	48 (27–75)	591	24	14 (10–26)
	1995	3	6.8 (5.4–8.2)	245 (196–293)	1.8 (1.4–2.4)	66 (49–87)	3 615	130	53 (44–66)
	2000	3	11 (9.2–13)	353 (304–424)	2.8 (2.1–3.5)	91 (69–117)	9 239	304	86 (72–100)
	2005	3	15 (12–17)	425 (340–509)	3.7 (2.7–4.8)	107 (79–139)	9 853	288	68 (57–85)
	2006	3	14 (12–17)	414 (331–497)	3.6 (2.7–4.7)	103 (77–134)	8 478	243	59 (49–73)
	2007	4	14 (11–17)	403 (322–484)	3.6 (2.6–4.6)	100 (74–130)	9 002	253	63 (52–79)
	2008	4	14 (11–17)	393 (314–471)	3.5 (2.6–4.5)	97 (72–126)	8 886	246	63 (52–78)
	2009	4	14 (11–17)	382 (311–461)	3.4 (2.6–4.5)	94 (70–121)	9 765	265	69 (58–85)
Côte d'Ivoire	1990	13	22 (12–32)	177 (97–256)	3 (0.85–6.6)	24 (6.8–52)	7 841	62	35 (24–64)
	1995	15	38 (31–46)	255 (204–306)	11 (8.2–15)	76 (55–100)	11 988	80	31 (26–39)
	2000	17	64 (51–76)	368 (295–442)	19 (15–25)	113 (86–143)	12 943	75	20 (17–25)
	2005	19	85 (68–100)	443 (354–531)	22 (17–28)	115 (87–148)	19 681	102	23 (19–29)
	2006	20	85 (68–100)	432 (345–518)	21 (16–27)	108 (81–139)	20 746	105	24 (20–31)
	2007	20	85 (68–100)	420 (336–505)	20 (15–26)	100 (76–130)	23 033	114	27 (23–34)
	2008	21	84 (67–100)	410 (328–492)	18 (15–22)	88 (71–106)	23 688	115	28 (23–35)
	2009	21	84 (68–100)	399 (325–480)	19 (16–23)	92 (75–111)	22 571	107	27 (22–33)

[a] Where notification data from a country had not been received by 31 August, the notification rate was assumed to be the same as for 2008 (in *italics*).
[b] Rates are per 100 000 population.

Data can be downloaded from www.who.int/tb/data

TABLE A2.2 **Incidence, notification and case detection rates, all forms, 1990–2009**

			INCIDENCE (INCLUDING HIV)		INCIDENCE HIV-POSITIVE		NOTIFIED NEW AND RELAPSE[a]		CASE DETECTION RATE[a]
	YEAR	POPULATION (MILLIONS)	NUMBER (THOUSANDS)	RATE[b]	NUMBER (THOUSANDS)	RATE[b]	NUMBER	RATE[b]	PERCENT
Democratic Republic of the Congo	1990	37	61 (34–88)	165 (91–239)	5.1 (2.9–8.1)	14 (7.8–22)	21 131	57	35 (24–63)
	1995	45	110 (85–130)	238 (190–285)	8.6 (6–12)	19 (13–26)	42 819	95	40 (33–50)
	2000	51	170 (140–210)	343 (274–412)	14 (9.7–19)	27 (19–37)	60 627	119	35 (29–43)
	2005	59	240 (190–290)	413 (330–495)	20 (14–27)	34 (24–46)	97 075	164	40 (33–50)
	2006	61	240 (200–290)	402 (322–483)	20 (14–27)	33 (23–45)	95 666	157	39 (33–49)
	2007	63	240 (200–290)	392 (313–470)	21 (14–29)	34 (23–47)	99 810	160	41 (34–51)
	2008	64	250 (200–290)	382 (305–458)	20 (13–27)	31 (21–43)	104 426	163	43 (35–53)
	2009	66	250 (200–300)	372 (303–448)	21 (15–28)	31 (22–43)	112 222	170	46 (38–56)
Equatorial Guinea	1990	0	0.33 (0.26–0.39)	86 (69–103)	<0.01 (<0.01–<0.01)	<1 (<1–1.1)	260	69	80 (67–100)
	1995	0	0.35 (0.31–0.4)	78 (68–88)	<0.01 (<0.01–0.01)	1.4 (<1–2.3)	306	68	87 (77–100)
	2000	1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)			–
	2005	1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)			–
	2006	1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)			–
	2007	1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)			–
	2008	1	0.83 (0.72–0.93)	125 (109–142)	0.047 (0.033–0.064)	7.1 (5–9.7)	718	109	87 (77–100)
	2009	1	0.79 (0.71–0.92)	117 (105–136)	0.14 (0.11–0.17)	20 (16–24)	707	105	89 (77–100)
Eritrea	1990	3	2.3 (1.2–3.3)	72 (40–104)	0.14 (0.028–0.36)	4.5 (<1–11)	3 699	117	163 (112–296)
	1995	3	2.5 (2–3)	78 (63–94)	0.43 (0.25–0.67)	14 (7.8–21)	21 453	669	856 (713–1070)
	2000	4	3.1 (2.5–3.7)	85 (68–102)	0.65 (0.43–0.92)	18 (12–25)	6 652	182	214 (178–268)
	2005	4	4.1 (3.5–5)	92 (79–111)	0.78 (0.52–1.1)	18 (12–25)	3 549	79	86 (72–100)
	2006	5	4.3 (3.5–5.2)	94 (75–113)	0.8 (0.52–1.1)	17 (11–25)	3 026	65	70 (58–87)
	2007	5	4.6 (3.6–5.5)	95 (76–115)	0.058 (0.04–0.081)	1.2 (<1–1.7)	3 641	76	80 (67–100)
	2008	5	4.8 (3.8–5.7)	97 (78–116)	1.6 (1.1–2.2)	32 (22–44)	2 970	60	62 (52–78)
	2009	5	5 (4.1–6)	99 (80–119)	0.83 (0.53–1.2)	16 (10–24)	2 904	57	58 (48–71)
Ethiopia	1990	48	77 (42–110)	159 (87–230)	4.6 (2.3–8)	9.5 (4.8–17)	88 634	184	116 (80–210)
	1995	57	130 (100–160)	229 (184–275)	21 (15–28)	36 (26–49)	26 034	46	20 (17–25)
	2000	66	220 (170–260)	331 (265–397)	37 (27–49)	57 (41–75)	91 101	139	42 (35–52)
	2005	75	300 (240–360)	398 (319–478)	42 (30–56)	56 (40–76)	124 262	166	42 (35–52)
	2006	77	300 (240–360)	388 (311–466)	40 (29–54)	52 (37–70)	122 198	159	41 (34–51)
	2007	79	300 (240–360)	378 (303–454)	38 (27–51)	48 (34–65)	128 844	164	43 (36–54)
	2008	81	300 (240–360)	368 (295–442)	36 (26–49)	45 (32–60)	141 157	175	47 (40–59)
	2009	83	300 (240–360)	359 (292–432)	34 (24–46)	41 (29–56)	148 936	180	50 (42–61)
Gabon	1990	1	1.4 (0.92–2.1)	153 (99–222)	0.13 (0.063–0.22)	14 (6.8–24)	917	99	65 (44–100)
	1995	1	1.6 (1.3–2)	151 (121–182)	0.4 (0.28–0.54)	36 (26–49)	1 115	103	68 (57–85)
	2000	1	3.1 (2.5–3.8)	254 (204–305)	1.1 (0.8–1.4)	88 (65–117)			–
	2005	1	4.4 (3.6–5.3)	325 (260–390)	1.7 (1.2–2.2)	121 (90–158)	2 512	183	56 (47–71)
	2006	1	5.1 (4.1–6.1)	366 (292–439)	1.9 (1.4–2.5)	137 (102–177)	3 051	219	60 (50–75)
	2007	1	5.8 (4.6–6.9)	406 (325–488)	1.9 (1.3–2.6)	134 (90–185)	3 766	265	65 (54–81)
	2008	1	6.5 (5.2–7.9)	452 (362–542)	2.7 (1.9–3.8)	190 (128–262)	4 540	314	69 (58–87)
	2009	1	7.4 (6–8.9)	501 (408–604)	2.8 (2.1–3.6)	188 (141–243)	3 073	208	42 (35–51)
Gambia	1990	1	1.7 (0.91–2.4)	185 (102–269)	0.016 (<0.01–0.14)	1.8 (<1–16)			–
	1995	1	2.2 (1.8–2.7)	204 (163–245)	0.058 (<0.01–0.18)	5.4 (<1–16)	1 023	94	46 (38–58)
	2000	1	2.9 (2.3–3.5)	225 (180–270)	0.16 (0.069–0.28)	12 (5.3–21)			–
	2005	2	3.8 (3–4.6)	248 (199–298)	0.37 (0.23–0.56)	24 (15–37)	2 031	133	54 (45–67)
	2006	2	4 (3.2–4.8)	253 (203–304)	0.44 (0.27–0.65)	28 (17–41)	1 795	114	45 (38–56)
	2007	2	4.2 (3.3–5)	258 (207–310)	0.51 (0.32–0.75)	32 (20–46)	1 916	119	46 (38–57)
	2008	2	4.4 (3.5–5.2)	263 (211–316)	0.6 (0.38–0.86)	36 (23–52)	2 107	127	48 (40–60)
	2009	2	4.6 (3.7–5.5)	268 (218–323)	0.7 (0.55–0.86)	41 (32–50)	2 145	126	47 (39–58)
Ghana	1990	15	33 (18–48)	223 (123–323)	0.97 (0.068–3.1)	6.5 (<1–21)	6 407	43	19 (13–35)
	1995	17	37 (30–45)	217 (173–260)	4.6 (3–6.5)	27 (18–38)	8 636	50	23 (19–29)
	2000	20	41 (33–49)	211 (169–253)	6.8 (4.9–9)	35 (25–46)	10 933	56	27 (22–33)
	2005	22	45 (36–54)	205 (164–246)	7 (5.1–9.3)	32 (23–43)	12 124	55	27 (22–34)
	2006	22	46 (37–55)	204 (163–245)	7 (5.1–9.3)	31 (23–42)	12 471	56	27 (23–34)
	2007	23	46 (37–56)	203 (162–243)	7.2 (4.9–10)	31 (21–44)	12 743	56	27 (23–34)
	2008	23	47 (38–57)	202 (161–242)	6.9 (4.7–9.6)	30 (20–41)	14 149	61	30 (25–38)
	2009	24	48 (39–58)	201 (163–242)	7.1 (5.8–8.6)	30 (24–36)	14 892	62	31 (26–38)
Guinea	1990	6	7.3 (4–11)	119 (66–173)	0.73 (<0.01–2.9)	12 (<1–47)	1 988	32	27 (19–49)
	1995	7	12 (9.2–14)	154 (124–185)	2.1 (0.74–4.1)	28 (9.8–55)	3 523	47	30 (25–38)
	2000	8	17 (13–20)	200 (160–240)	3.2 (1.9–4.7)	38 (23–57)	5 440	65	32 (27–41)
	2005	9	24 (19–29)	259 (207–311)	4.2 (2.9–5.7)	46 (32–62)	6 863	74	29 (24–36)
	2006	9	26 (21–31)	273 (218–327)	4.5 (3.1–6)	47 (33–64)	8 787	93	34 (29–43)
	2007	10	28 (22–33)	287 (230–345)	4.7 (3.3–6.4)	49 (34–67)	9 411	98	34 (28–43)
	2008	10	30 (24–36)	302 (242–363)	5 (3.5–6.8)	51 (36–69)	10 025	102	34 (28–42)
	2009	10	32 (26–39)	318 (259–383)	5.3 (3.6–7.4)	53 (36–73)	8 357	83	26 (22–32)
Guinea-Bissau	1990	1	1.6 (1.2–2.3)	158 (114–229)	0.05 (0.023–0.092)	4.9 (2.2–9)	1 163	114	72 (50–100)
	1995	1	2 (1.6–2.4)	174 (139–209)	0.17 (0.11–0.24)	14 (9.2–21)	1 613	138	80 (66–99)
	2000	1	2.5 (2–3)	192 (153–230)	0.36 (0.26–0.5)	28 (20–38)	1 273	98	51 (42–64)
	2005	1	3.1 (2.5–3.7)	211 (169–254)	0.55 (0.39–0.74)	37 (27–50)	1 774	120	57 (47–71)
	2006	2	3.2 (2.6–3.9)	216 (172–259)	0.58 (0.42–0.78)	39 (28–52)	2 137	142	66 (55–82)
	2007	2	3.4 (2.7–4.1)	220 (176–264)	0.61 (0.44–0.83)	40 (28–54)			–
	2008	2	3.5 (2.8–4.2)	224 (179–269)	0.64 (0.46–0.86)	41 (29–55)	2 417	153	68 (57–86)
	2009	2	3.7 (3–4.4)	228 (186–275)	0.67 (0.48–0.91)	42 (30–56)	2 171	135	59 (49–73)
Kenya	1990	23	26 (14–38)	112 (62–162)	6.6 (3.4–11)	28 (15–46)	11 788	50	45 (31–82)
	1995	27	62 (49–74)	224 (179–269)	29 (23–37)	106 (82–133)	28 142	102	46 (38–57)
	2000	31	130 (100–150)	405 (324–486)	60 (47–75)	191 (148–238)	64 159	204	50 (42–63)
	2005	36	150 (120–170)	406 (325–488)	61 (47–77)	172 (133–216)	102 680	287	71 (59–88)
	2006	37	140 (110–160)	371 (296–445)	45 (37–55)	124 (101–149)	108 342	295	80 (66–99)
	2007	38	130 (110–160)	353 (282–423)	55 (45–66)	146 (118–176)	106 438	282	80 (67–100)
	2008	39	130 (100–150)	328 (262–393)	57 (46–70)	147 (119–180)	99 941	258	79 (66–98)
	2009	40	120 (99–150)	305 (248–368)	53 (43–65)	134 (109–162)	102 997	259	85 (70–104)
Lesotho	1990	2	2.9 (2.5–4.3)	184 (158–267)	0.2 (0.12–0.31)	13 (7.3–19)	2 525	158	86 (59–100)
	1995	2	5.6 (5.2–6.7)	323 (300–388)	2.5 (2.1–3)	147 (121–175)	5 181	300	93 (77–100)
	2000	2	10 (9.7–13)	553 (516–664)	6.2 (5.3–7.2)	328 (280–380)	9 746	516	93 (78–100)
	2005	2	13 (11–15)	639 (541–767)	7.7 (6.3–9.3)	387 (318–465)	10 802	541	85 (71–100)
	2006	2	13 (12–15)	638 (600–765)	7.8 (6.7–9)	388 (332–448)	12 073	600	94 (78–100)
	2007	2	13 (10–16)	637 (509–764)	7.9 (6.3–9.7)	389 (311–476)	2 319	114	18 (15–22)
	2008	2	13 (12–16)	635 (586–763)	7.4 (6.4–8.5)	361 (313–412)	12 019	586	92 (77–100)
	2009	2	13 (11–15)	634 (549–725)	8.7 (7.5–9.9)	420 (364–479)	12 213	591	93 (82–108)
Liberia	1990	2	4.3 (2.4–6.2)	199 (109–288)	0.011 (<0.01–0.024)	<1 (<1–1.1)			–
	1995	2	4.3 (3.4–5.1)	219 (175–263)	0.074 (0.041–0.12)	3.8 (2.1–6.1)	1 393	72	33 (27–41)
	2000	3	6.8 (5.5–8.2)	242 (193–290)	0.13 (0.089–0.18)	4.6 (3.2–6.5)	1 500	53	22 (18–27)
	2005	3	8.9 (7.1–11)	266 (213–320)	0.14 (0.099–0.18)	4.1 (3–5.5)	3 432	103	39 (32–48)
	2006	3	9.4 (7.5–11)	272 (217–326)	0.14 (0.1–0.18)	4 (2.9–5.3)	4 447	128	47 (39–59)
	2007	4	10 (8–12)	277 (222–333)	0.14 (0.1–0.18)	3.8 (2.8–5.1)			–
	2008	4	11 (8.6–13)	283 (226–339)	0.14 (0.099–0.19)	3.6 (2.6–4.9)	4 970	131	46 (39–58)
	2009	4	11 (9.3–14)	288 (234–347)	0.14 (0.1–0.18)	3.5 (2.5–4.7)	5 918	150	52 (43–64)
Madagascar	1990	11	20 (11–29)	177 (98–257)	0.51 (0.27–0.85)	4.5 (2.4–7.5)	6 261	56	31 (22–57)
	1995	13	26 (22–31)	196 (165–236)	0.66 (0.42–0.96)	5 (3.2–7.3)	21 616	165	84 (70–100)
	2000	15	33 (27–40)	217 (174–261)	0.9 (0.58–1.3)	5.9 (3.8–8.5)			–
	2005	18	42 (34–51)	241 (193–289)	1.2 (0.75–1.7)	6.7 (4.3–9.8)	18 993	108	45 (37–56)
	2006	18	44 (36–53)	246 (197–295)	1.2 (0.8–1.8)	6.9 (4.4–10)	21 966	121	49 (41–62)
	2007	19	47 (37–56)	251 (201–301)	1.3 (0.84–1.9)	7.1 (4.5–10)	21 857	117	47 (39–59)
	2008	19	49 (39–59)	256 (205–307)	1.4 (0.88–2)	7.3 (4.6–11)	22 034	115	45 (38–56)
	2009	20	51 (42–62)	261 (212–315)	1.5 (0.92–2.2)	7.5 (4.7–11)	22 676	116	44 (37–54)

[a] Where notification data from a country had not been received by 31 August, the notification rate was assumed to be the same as for 2008 (in *italics*).

[b] Rates are per 100 000 population.

TABLE A2.2 **Incidence, notification and case detection rates, all forms, 1990–2009**

			INCIDENCE (INCLUDING HIV)		INCIDENCE HIV-POSITIVE		NOTIFIED NEW AND RELAPSE[a]		CASE DETECTION RATE[a]
	YEAR	POPULATION (MILLIONS)	NUMBER (THOUSANDS)	RATE[b]	NUMBER (THOUSANDS)	RATE[b]	NUMBER	RATE[b]	PERCENT
Malawi	1990	9	24 (13–35)	258 (142–374)	10 (5.4–16)	107 (57–174)	12 395	131	51 (35–92)
	1995	10	40 (32–47)	390 (312–468)	24 (19–30)	237 (185–295)	19 155	189	48 (40–60)
	2000	12	50 (40–60)	425 (340–510)	31 (25–39)	266 (209–330)	23 604	200	47 (39–59)
	2005	14	53 (43–64)	391 (313–469)	32 (25–40)	234 (183–291)	25 491	187	48 (40–60)
	2006	14	52 (41–62)	368 (295–442)	25 (20–30)	177 (144–214)	25 054	178	48 (40–61)
	2007	14	50 (40–60)	346 (277–415)	32 (26–38)	219 (178–264)	24 461	169	49 (41–61)
	2008	15	48 (39–58)	324 (260–389)	30 (20–42)	205 (135–280)	23 929	161	50 (41–62)
	2009	15	46 (38–56)	304 (248–367)	27 (22–33)	179 (146–215)	22 674	149	49 (40–60)
Mali	1990	9	24 (13–34)	275 (151–399)	1.2 (0.031–4.7)	14 (<1–54)	2 933	34	12 (9–22)
	1995	10	27 (22–33)	287 (230–345)	5.7 (3–9.3)	60 (31–97)	3 087	32	11 (9–14)
	2000	11	32 (25–38)	300 (240–360)	6.6 (4.6–9.1)	63 (43–86)	4 216	40	13 (11–17)
	2005	12	37 (30–45)	313 (251–376)	6.5 (4.5–8.9)	55 (38–75)	4 697	40	13 (11–16)
	2006	12	38 (31–46)	316 (253–379)	6.5 (4.5–9)	54 (37–74)	4 989	41	13 (11–16)
	2007	12	40 (32–47)	319 (255–383)	6.4 (4.4–8.9)	52 (35–72)	5 166	42	13 (11–16)
	2008	13	41 (33–49)	322 (257–386)	6.5 (3–11)	51 (24–89)	5 989	47	15 (12–18)
	2009	13	42 (34–51)	324 (264–391)	6.8 (2.9–12)	52 (22–92)	6 611	51	16 (13–19)
Mauritania	1990	2	4.5 (2.5–6.6)	228 (125–330)	0.068 (0.032–0.12)	3.4 (1.6–6.2)	5 284	266	117 (81–212)
	1995	2	5.7 (4.6–6.8)	251 (201–301)	0.15 (0.1–0.22)	6.8 (4.4–9.8)	3 849	170	68 (56–84)
	2000	3	7.2 (5.8–8.7)	277 (222–332)	0.3 (0.2–0.42)	11 (7.5–16)	3 067	118	43 (35–53)
	2005	3	9.1 (7.3–11)	305 (244–367)	0.45 (0.3–0.62)	15 (10–21)	2 162	72	24 (20–30)
	2006	3	9.5 (7.6–11)	312 (249–374)	0.48 (0.32–0.67)	16 (10–22)	2 694	88	28 (24–35)
	2007	3	10 (8–12)	318 (254–381)	0.5 (0.34–0.69)	16 (11–22)	2 969	95	30 (25–37)
	2008	3	10 (8.3–12)	324 (259–389)	0.54 (0.34–0.8)	17 (11–25)	2 698	84	26 (22–32)
	2009	3	11 (8.8–13)	330 (268–398)	0.56 (0.38–0.79)	17 (11–24)	2 640	80	24 (20–30)
Mauritius	1990	1	0.29 (0.16–0.42)	28 (15–40)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	119	11	41 (28–74)
	1995	1	0.29 (0.23–0.35)	26 (21–31)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	131	12	45 (37–56)
	2000	1	0.29 (0.23–0.35)	24 (20–29)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	160	13	55 (46–69)
	2005	1	0.29 (0.23–0.34)	23 (18–28)	<0.01 (<0.01–0.015)	<1 (<1–1.2)	125	10	43 (36–54)
	2006	1	0.29 (0.23–0.34)	23 (18–27)	0.013 (<0.01–0.028)	<1 (<1–2.2)	114	9	40 (33–50)
	2007	1	0.28 (0.23–0.34)	22 (18–27)	0.019 (<0.01–0.037)	1.5 (<1–2.9)	106	8	37 (31–47)
	2008	1	0.28 (0.23–0.34)	22 (18–27)	0.026 (0.012–0.047)	2.1 (<1–3.6)	107	8	38 (32–47)
	2009	1	0.28 (0.23–0.34)	22 (18–26)	0.017 (<0.01–0.034)	1.3 (<1–2.6)	115	9	41 (34–50)
Mozambique	1990	14	25 (16–36)	181 (117–263)	2.8 (1.2–5.3)	21 (8.5–39)	15 899	117	65 (45–100)
	1995	16	42 (33–50)	262 (209–314)	11 (7–16)	68 (44–98)	17 882	112	43 (36–54)
	2000	18	69 (55–83)	378 (302–453)	27 (20–35)	149 (111–193)	21 158	116	31 (26–38)
	2005	21	95 (76–110)	454 (363–545)	43 (33–55)	208 (159–263)	33 231	160	35 (29–44)
	2006	21	95 (76–110)	443 (354–531)	44 (33–55)	205 (157–260)	35 257	165	37 (31–47)
	2007	22	94 (75–110)	431 (345–518)	31 (26–38)	144 (117–174)	37 651	172	40 (33–50)
	2008	22	94 (75–110)	420 (336–504)	46 (38–56)	207 (168–249)	39 261	175	42 (35–52)
	2009	23	94 (76–110)	409 (332–492)	54 (44–65)	237 (194–285)	43 221	189	46 (38–57)
Namibia	1990	1	4.6 (2.7–6.6)	322 (189–467)	0.52 (0.27–0.89)	37 (19–63)	2 671	189	59 (40–100)
	1995	2	7.5 (6–9)	465 (372–558)	2.4 (1.8–3.2)	150 (112–195)	1 540	95	20 (17–26)
	2000	2	12 (11–15)	671 (592–806)	6 (4.9–7.3)	330 (268–399)	10 799	592	88 (73–100)
	2005	2	16 (15–19)	808 (743–969)	8.3 (6.9–9.9)	414 (343–492)	14 920	743	92 (77–100)
	2006	2	16 (15–19)	787 (716–945)	8.2 (6.8–9.8)	400 (330–477)	14 673	716	91 (76–100)
	2007	2	16 (15–19)	767 (728–920)	5.1 (4.4–5.7)	242 (213–274)	15 205	728	95 (79–100)
	2008	2	16 (13–19)	747 (626–896)	9.4 (6.3–13)	441 (296–597)	13 340	626	84 (70–100)
	2009	2	16 (13–19)	728 (600–872)	9.2 (7–12)	422 (323–533)	11 980	552	76 (63–92)
Niger	1990	8	9.9 (5.4–14)	125 (69–181)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	5 200	66	53 (36–96)
	1995	9	13 (10–15)	138 (110–165)	1 (0.68–1.4)	11 (7.3–15)	1 980	21	15 (13–19)
	2000	11	17 (13–20)	152 (122–182)	2 (1.4–2.8)	18 (13–25)	4 701	43	28 (23–35)
	2005	13	22 (18–26)	168 (134–201)	2.5 (1.8–3.5)	19 (14–26)	7 873	60	36 (30–45)
	2006	14	23 (19–28)	171 (137–205)	2.6 (1.8–3.6)	19 (14–27)	8 474	62	36 (30–46)
	2007	14	25 (20–30)	174 (139–209)	2.8 (1.9–3.8)	20 (14–27)	9 276	66	38 (31–47)
	2008	15	26 (21–31)	178 (142–213)	2.9 (2–4)	20 (13–27)	9 209	63	35 (29–44)
	2009	15	28 (23–33)	181 (148–218)	3.1 (2.3–3.9)	20 (15–26)	9 904	65	36 (30–44)
Nigeria	1990	97	130 (70–180)	131 (72–189)	9.5 (4–18)	9.7 (4.1–18)	20 122	21	16 (11–29)
	1995	110	210 (170–250)	188 (151–226)	37 (25–51)	33 (23–46)	13 423	12	6 (5–8)
	2000	125	340 (270–410)	272 (218–326)	63 (47–82)	50 (37–66)	25 821	21	8 (6–10)
	2005	141	460 (370–550)	327 (262–393)	85 (63–110)	60 (45–78)	62 598	44	14 (11–17)
	2006	144	460 (370–550)	319 (255–383)	84 (63–110)	59 (44–76)	70 734	49	15 (13–19)
	2007	148	460 (370–550)	311 (249–373)	84 (63–110)	57 (43–74)	82 417	56	18 (15–22)
	2008	151	460 (370–550)	303 (242–363)	82 (66–99)	54 (44–65)	85 674	57	19 (16–23)
	2009	155	460 (370–550)	295 (240–356)	87 (71–100)	56 (46–67)	88 589	57	19 (16–24)
Rwanda	1990	7	12 (6.6–17)	167 (92–242)	5 (2.8–8)	70 (39–112)	6 387	89	54 (37–97)
	1995	5	13 (10–16)	241 (193–289)	5.7 (4–7.5)	104 (74–139)	3 054	56	23 (19–29)
	2000	8	28 (22–33)	348 (278–417)	11 (8.1–14)	137 (102–179)	6 093	77	22 (18–28)
	2005	9	38 (30–45)	418 (335–502)	12 (9.6–14)	132 (107–159)	7 220	80	19 (16–24)
	2006	9	38 (30–45)	408 (326–489)	12 (9.6–14)	129 (105–155)	8 117	88	22 (18–27)
	2007	9	38 (30–45)	397 (318–476)	13 (11–16)	139 (113–168)	7 638	81	20 (17–25)
	2008	10	38 (30–45)	387 (309–464)	13 (10–16)	132 (108–160)	7 472	77	20 (17–25)
	2009	10	38 (31–45)	376 (306–454)	13 (11–16)	131 (107–158)	7 251	73	19 (16–24)
Sao Tome and Principe	1990	0	0.16 (0.086–0.23)	135 (74–196)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	17	15	11 (7–20)
	1995	0	0.16 (0.13–0.19)	124 (99–149)	<0.01 (<0.01–<0.01)	<1 (<1–<1)			–
	2000	0	0.16 (0.13–0.19)	114 (91–137)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	97	69	61 (51–76)
	2005	0	0.16 (0.14–0.19)	105 (89–126)	<0.01 (<0.01–0.013)	3.9 (1.1–8.4)	136	89	85 (71–100)
	2006	0	0.16 (0.15–0.19)	103 (99–123)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	153	99	96 (80–100)
	2007	0	0.16 (0.13–0.19)	101 (81–121)	0.015 (<0.01–0.028)	9.8 (4.2–18)	93	59	58 (49–73)
	2008	0	0.16 (0.13–0.19)	99 (79–119)	0.014 (<0.01–0.029)	9 (3–18)	66	41	41 (35–52)
	2009	0	0.16 (0.13–0.19)	97 (79–118)	0.02 (<0.01–0.035)	12 (5.8–22)	78	48	49 (41–60)
Senegal	1990	8	15 (8.1–21)	195 (107–282)	0.16 (0.08–0.27)	2.1 (1.1–3.6)	4 977	66	34 (23–62)
	1995	9	19 (15–22)	215 (172–258)	0.4 (0.26–0.57)	4.6 (3–6.6)	7 561	87	41 (34–51)
	2000	10	23 (19–28)	237 (189–284)	0.78 (0.53–1.1)	7.9 (5.4–11)	8 508	86	36 (30–45)
	2005	11	29 (24–35)	261 (209–313)	1.3 (0.87–1.8)	11 (7.7–16)	9 765	87	33 (28–41)
	2006	12	31 (25–37)	266 (213–320)	1.4 (0.95–1.9)	12 (8.2–17)	10 133	87	33 (27–41)
	2007	12	32 (26–39)	272 (217–326)	1.5 (1–2.1)	13 (8.6–17)	10 297	87	32 (27–40)
	2008	12	34 (27–41)	277 (221–332)	1.8 (1.5–2.3)	15 (12–18)	11 040	90	33 (27–41)
	2009	13	35 (29–43)	282 (230–340)	1.4 (1.2–1.8)	12 (9.2–14)	11 139	89	31 (26–39)
Seychelles	1990	0	0.031 (0.017–0.045)	43 (24–63)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	41	57	131 (91–239)
	1995	0	0.03 (0.024–0.036)	40 (32–48)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	8	11	27 (22–33)
	2000	0	0.03 (0.024–0.036)	37 (29–44)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	20	25	68 (56–84)
	2005	0	0.028 (0.022–0.033)	33 (27–40)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	14	17	51 (42–63)
	2006	0	0.027 (0.022–0.033)	33 (26–40)	<0.01 (<0.01–<0.01)	<1 (<1–<1)			–
	2007	0	0.027 (0.022–0.032)	32 (26–39)	<0.01 (<0.01–<0.01)	<1 (<1–<1)			–
	2008	0	0.027 (0.021–0.032)	32 (25–38)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	6	7	22 (19–28)
	2009	0	0.026 (0.021–0.032)	31 (25–38)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	15	18	57 (47–70)
Sierra Leone	1990	4	8.4 (4.6–12)	207 (114–300)	0.024 (<0.01–0.049)	<1 (<1–1.2)	632	15	7 (5–14)
	1995	4	11 (8.9–13)	279 (223–335)	0.2 (<0.01–0.69)	4.9 (<1–17)	1 955	49	18 (15–22)
	2000	4	16 (13–19)	377 (302–452)	1 (0.54–1.7)	24 (13–40)	3 760	89	24 (20–29)
	2005	5	26 (21–31)	509 (407–611)	2.5 (1.7–3.4)	49 (34–66)	6 737	132	26 (22–32)
	2006	5	28 (23–34)	540 (432–649)	2.8 (2–3.8)	53 (38–72)	8 041	153	28 (24–35)
	2007	5	31 (25–37)	574 (459–689)	3.4 (2.3–4.7)	62 (43–86)	9 418	174	30 (25–38)
	2008	6	34 (27–41)	608 (487–730)	3.7 (2.5–5.1)	66 (45–92)	10 786	194	32 (27–40)
	2009	6	37 (30–44)	644 (524–777)	3.1 (2.5–3.8)	55 (45–67)	11 524	202	31 (26–39)

[a] Where notification data from a country had not been received by 31 August, the notification rate was assumed to be the same as for 2008 (in *italics*).

[b] Rates are per 100 000 population.

Data can be downloaded from www.who.int/tb/data

TABLE A2.2 **Incidence, notification and case detection rates, all forms, 1990–2009**

			INCIDENCE (INCLUDING HIV)		INCIDENCE HIV-POSITIVE		NOTIFIED NEW AND RELAPSE[a]		CASE DETECTION RATE[a]
	YEAR	POPULATION (MILLIONS)	NUMBER (THOUSANDS)	RATE[b]	NUMBER (THOUSANDS)	RATE[b]	NUMBER	RATE[b]	PERCENT
South Africa	1990	37	110 (80–160)	301 (219–436)	8.1 (4.8–13)	22 (13–34)	80 400	219	73 (50–100)
	1995	41	130 (100–160)	317 (254–380)	44 (34–56)	106 (81–135)	73 917	179	56 (47–70)
	2000	45	260 (210–310)	576 (461–691)	140 (110–180)	319 (254–393)	151 239	337	59 (49–73)
	2005	48	440 (360–530)	925 (740–1110)	260 (210–320)	549 (439–673)	270 178	562	61 (51–76)
	2006	49	460 (370–550)	940 (752–1128)	270 (220–330)	559 (447–685)	303 114	623	66 (55–83)
	2007	49	470 (370–560)	948 (759–1138)	280 (220–340)	564 (451–692)	315 315	641	68 (56–85)
	2008	50	480 (380–570)	960 (768–1152)	280 (230–350)	571 (456–700)	343 855	692	72 (60–90)
	2009	50	490 (400–590)	970 (789–1168)	290 (230–350)	577 (463–705)	367 178	733	76 (63–93)
Swaziland	1990	1	2.3 (1.3–3.3)	267 (147–387)	0.34 (0.19–0.55)	40 (22–63)			–
	1995	1	3.3 (2.6–3.9)	337 (270–404)	1.3 (1–1.7)	136 (105–171)	2 050	212	63 (52–78)
	2000	1	8.7 (6.9–10)	801 (641–962)	5 (4–6.2)	468 (373–573)	5 877	544	68 (57–85)
	2005	1	13 (10–15)	1141 (913–1369)	8.1 (6.5–9.9)	721 (578–881)	8 062	717	63 (52–79)
	2006	1	13 (11–16)	1169 (936–1403)	8.5 (6.8–10)	744 (598–908)	8 278	728	62 (52–78)
	2007	1	14 (11–17)	1198 (958–1438)	8.2 (6.6–9.8)	708 (575–854)	8 888	772	64 (54–81)
	2008	1	14 (11–17)	1227 (982–1473)	9.4 (7.6–11)	805 (655–970)	8 685	744	61 (51–76)
	2009	1	15 (12–18)	1257 (1022–1517)	10 (8.4–12)	863 (705–1038)	10 038	847	67 (56–83)
Togo	1990	4	12 (6.6–18)	308 (169–446)	0.81 (0.28–1.7)	21 (7.2–43)	1 324	34	11 (8–20)
	1995	4	15 (12–18)	339 (271–407)	3.2 (2.1–4.5)	72 (48–101)	1 520	34	10 (8–13)
	2000	5	20 (16–24)	374 (299–449)	5.6 (4–7.5)	107 (77–143)	1 409	27	7 (6–9)
	2005	6	25 (20–30)	413 (330–495)	7.2 (5.2–9.5)	120 (87–158)	2 537	42	10 (9–13)
	2006	6	26 (21–31)	421 (337–505)	7.5 (5.4–9.9)	122 (88–161)	2 819	46	11 (9–14)
	2007	6	27 (22–32)	429 (343–515)	7.8 (5.6–10)	123 (89–163)	2 436	39	9 (8–11)
	2008	6	28 (23–34)	438 (350–525)	9 (6.1–13)	140 (95–194)	2 967	46	10 (9–13)
	2009	7	30 (24–36)	446 (363–539)	7.4 (5–10)	112 (76–154)	2 986	45	10 (8–12)
Uganda	1990	18	29 (16–42)	163 (90–236)	22 (13–33)	123 (73–186)	14 740	83	51 (35–93)
	1995	21	67 (53–80)	319 (255–383)	47 (37–59)	226 (175–283)	25 316	121	38 (32–47)
	2000	24	83 (66–100)	340 (272–408)	53 (41–67)	217 (167–273)	30 372	124	37 (30–46)
	2005	29	110 (85–130)	370 (296–444)	62 (47–79)	217 (165–275)	41 040	143	39 (32–48)
	2006	30	100 (83–120)	350 (280–420)	60 (46–76)	203 (155–257)	40 782	138	39 (33–49)
	2007	31	100 (81–120)	330 (264–395)	58 (45–74)	191 (145–242)	40 909	134	41 (34–51)
	2008	32	98 (79–120)	311 (249–373)	58 (39–80)	184 (122–253)	42 178	133	43 (36–54)
	2009	33	96 (78–120)	293 (238–353)	54 (36–74)	164 (110–225)	41 703	127	44 (36–54)
United Republic of Tanzania	1990	25	57 (50–68)	226 (196–267)	18 (14–23)	73 (56–91)	22 249	87	39 (33–45)
	1995	30	68 (59–80)	226 (196–267)	30 (24–37)	100 (79–122)	39 847	133	59 (50–68)
	2000	34	81 (71–93)	236 (209–273)	36 (29–43)	105 (85–126)	54 442	160	67 (59–76)
	2005	39	83 (77–90)	213 (197–231)	34 (28–40)	88 (73–104)	61 022	156	74 (68–79)
	2006	40	80 (75–87)	200 (187–216)	33 (27–39)	82 (68–96)	59 282	148	74 (69–79)
	2007	41	79 (74–85)	192 (180–205)	20 (18–21)	47 (44–51)	59 371	144	75 (70–80)
	2008	42	81 (76–86)	190 (178–203)	38 (27–50)	89 (63–117)	60 490	142	75 (70–80)
	2009	44	80 (75–85)	183 (171–195)	38 (27–49)	86 (61–112)	71 643	164	90 (84–96)
Zambia	1990	8	24 (17–34)	297 (213–431)	8.5 (4.4–14)	107 (55–177)	16 863	213	72 (49–100)
	1995	9	49 (39–59)	536 (429–643)	20 (16–25)	224 (178–278)	35 958	395	74 (61–92)
	2000	10	63 (50–76)	602 (482–722)	26 (21–33)	253 (200–313)	49 806	476	79 (66–99)
	2005	12	69 (55–83)	588 (470–705)	29 (23–35)	244 (193–302)	49 576	422	72 (60–90)
	2006	12	66 (53–79)	547 (437–656)	27 (22–34)	227 (179–280)	47 790	398	73 (61–91)
	2007	12	62 (50–75)	506 (405–607)	22 (18–26)	177 (145–214)	46 320	376	74 (62–93)
	2008	13	59 (47–71)	468 (375–562)	28 (23–34)	223 (182–269)	43 686	346	74 (62–92)
	2009	13	56 (46–67)	433 (352–521)	23 (18–28)	178 (142–220)	44 879	347	80 (67–99)
Zimbabwe	1990	10	34 (19–50)	329 (181–476)	12 (7.4–19)	119 (70–182)	9 132	87	27 (18–48)
	1995	12	56 (44–67)	474 (380–569)	30 (24–37)	258 (207–316)	30 831	263	55 (46–69)
	2000	12	85 (68–100)	685 (548–822)	48 (38–58)	384 (308–469)	50 855	408	60 (50–75)
	2005	12	100 (82–120)	824 (659–988)	54 (43–66)	429 (342–527)	50 454	404	49 (41–61)
	2006	12	100 (80–120)	803 (642–963)	51 (41–63)	410 (327–503)	44 328	356	44 (37–55)
	2007	12	97 (78–120)	782 (626–938)	49 (39–60)	391 (312–480)	40 277	324	41 (34–52)
	2008	12	95 (76–110)	762 (609–914)	43 (35–52)	345 (281–416)	36 650	294	39 (32–48)
	2009	13	93 (76–110)	742 (604–894)	48 (39–58)	384 (314–461)	42 504	339	46 (38–56)

[a] Where notification data from a country had not been received by 31 August, the notification rate was assumed to be the same as for 2008 (in *italics*).

[b] Rates are per 100 000 population.

TABLE A2.3 **Case notifications, 1990–2009**

	NEW AND RELAPSE NOTIFICATION RATE[a] 1990–2009	YEAR	NEW AND RELAPSE[a]	NEW CASES				RELAPSE	RE-TREAT EXCL. RELAPSE	TOTAL RETREAT	HISTORY UNKNOWN	% SMEAR-POS AMONG NEW PULM
				SMEAR-POSITIVE	SMEAR-NEGATIVE/ UNKNOWN	EXTRA-PULMONARY	OTHER					
Algeria		1990	11 607									–
		1995	13 507	5 735	2 256	5 065		451		451		72
		2000	18 572	8 328	2 019	7 758		467	80	547		80
		2005	21 336	8 654	1 651	10 216	267	548	165	713		84
		2006	21 143	8 538	1 827	10 219		559	120	679		82
		2007	21 369	8 439	1 807	10 576	0	547	171	718	0	82
		2008	20 588	8 643	1 528	9 908	0	509	142	651		85
	46 62	2009	21 701	8 402	1 691	10 888	230	490	122	612	0	83
Angola		1990	10 271									–
		1995	5 143	3 804	1 631	266		134		134		70
		2000	16 062	9 053	5 367	1 102		540		540		63
		2005	37 175	20 410	12 467	2 569		1 729	1 142	2 871		62
		2006	50 419	21 499	11 635	2 719	0	14 566	4 280	18 846	0	65
		2007	41 292	21 422	14 733	2 911		2 226	1 091	3 317		59
		2008	44 576	22 562	16 490	3 287	0	2 237	1 347	3 584	0	58
	96 223	2009	41 221	22 488	13 755	2 580	0	2 398	2 930	5 328	0	62
Benin		1990	2 084									–
		1995	2 332	1 839	281	212		68		68		87
		2000	2 706	2 286	129	200		91	374	465		95
		2005	3 270	2 739	96	285		150	187	337		97
		2006	3 619	2 943	206	322	0	148	115	263	0	93
		2007										–
		2008	3 872	2 966	375	400	0	131	105	236	0	89
	43 43	2009	3 878	2 960	338	418	0	162	109	271	0	90
Botswana		1990	2 938									–
		1995	5 665	1 903	2 885	720		147		147		40
		2000	9 292	3 091	4 789	1 231		181	1 058	1 239		39
		2005	10 058	3 170	5 166	1 220		502	46	548		38
		2006	8 413	3 252	3 776	1 149		236	106	342		46
		2007	7 622	3 002	3 092	1 305	0	223	474	697		49
		2008	8 562	3 351	3 803	1 172	0	236	103	339	0	47
	217 415	2009	8 089	3 204	3 089	1 397	0	399	692	1 091	0	51
Burkina Faso		1990	1 497									–
		1995	2 572	1 028	195	195		45		45		84
		2000	2 310	1 560	216	439		95		95		88
		2005	3 484	2 294	371	571	89	159	175	334	0	86
		2006	3 941	2 659	506	551	50	175	307	482	0	84
		2007	3 960	2 614	577	513	77	179	283	462	0	82
		2008	4 237	2 756	626	599	68	188	317	505	0	81
	17 30	2009	4 716	3 061	679	671	92	213	389	602	0	82
Burundi		1990	4 575									–
		1995	3 326	1 121	908	1 116		181		181		55
		2000										–
		2005	6 585	3 262	1 160	2 089	0	74	42	116	0	74
		2006	6 114	3 119	950	1 900	0	145	62	207		77
		2007	6 284	3 595	826	1 697	0	166	59	225	0	81
		2008	6 808	3 610	863	2 187	0	148	57	205	0	81
	81 88	2009	7 277	3 974	1 207	1 880	24	192	46	238	0	77
Cameroon		1990	5 892									–
		1995	3 292	2 896	142	18		236		236		95
		2000	5 251	3 960	625	415		251		251		86
		2005	21 499	13 001	5 021	2 461	0	1 016	574	1 590	0	72
		2006	23 483	12 870	6 539	3 100	0	974	519	1 493	0	66
		2007	24 062	13 220	6 752	3 152	0	938	527	1 465	0	66
		2008	24 622	14 232	6 282	3 191		917	503	1 420	0	69
	48 126	2009	24 662	14 635	5 780	3 190	0	1 057	512	1 569	0	72
Cape Verde		1990	221									–
		1995	303	111	150	12		30		30		43
		2000										–
		2005	292	135	93	43	0	21	13	34	0	59
		2006	262	131	88	33		10	14	24		60
		2007	274	158	63	39	0	14	18	32	0	71
		2008	334	197	82	39	0	16	15	31	0	71
	62 66	2009	332	172	94	53	0	13	20	33	0	65
Central African Republic		1990	2 124									–
		1995	3 339	1 794	964	393		188		188		65
		2000										–
		2005	3 210	2 153	608	286	0	163	128	291	0	78
		2006	6 045	4 448	707	664	0	226	330	556	0	86
		2007										–
		2008	6 803	4 232	1 387	943	0	241	132	373	0	75
	73 198	2009	8 743	5 132	1 841	1 394		376	253	629		74
Chad		1990	2 591									–
		1995	3 186	2 002	518	463		203		203		79
		2000										–
		2005	6 311	2 516	2 419	1 055		321	194	515		51
		2006										–
		2007	5 879	2 513	2 378	907		81	321	402		51
		2008	6 912	3 309	2 331	924	0	348	283	631	0	59
	42 75	2009	8 411	3 820	2 949	1 206	0	436	240	676	0	56
Comoros		1990	140									–
		1995	123	103	10	7		7		7		91
		2000	120	87	14	15		4	1	5		86
		2005	111	79	14	16	0	2	1	3	0	85
		2006	112	67	22	20	0	3	4	7		75
		2007										–
		2008	132	77	20	27	5	3	3	6	2	79
	32 18	2009	120	76	15	24	0	5	1	6	8	84
Congo		1990	591									–
		1995	3 615	2 013	849	675		78		78		70
		2000	9 239	4 218	2 016	2 810		169	650	819		68
		2005	9 853	3 640	3 249	2 665		299	108	407		53
		2006	8 478	3 340	2 504	2 353		281	122	403		57
		2007	9 002	3 552	2 938	2 282	0	230	119	349	0	55
		2008	8 886	3 371	2 868	2 345		302	171	473		54
	24 265	2009	9 765	3 433	3 398	2 653	0	281	170	451	0	50
Côte d'Ivoire		1990	7 841									–
		1995	11 988	8 254	1 508	1 577		649		649		85
		2000	12 943	8 497	1 443	2 600		403	814	1 217		85
		2005	19 681	12 496	2 315	4 235	0	635	345	980	0	84
		2006	20 746	12 867	2 675	4 411	0	793	399	1 192	0	83
		2007	23 033	14 071	3 009	4 988	0	965	350	1 315	0	82
		2008	23 688	15 294	2 733	4 592	0	1 069	360	1 429	0	85
	62 107	2009	22 571	14 300	2 321	4 952	0	998	438	1 436	0	86

[a] Rates are per 100 000 population. Where notification data from a country had not been received by 31 August, the notification rate was assumed to be the same as for 2008 (in italics).

Data can be downloaded from www.who.int/tb/data

TABLE A2.3 **Case notifications, 1990–2009**

	NEW AND RELAPSE NOTIFICATION RATE[a] 1990–2009	YEAR	NEW AND RELAPSE[a]	NEW CASES				RELAPSE	RE-TREAT EXCL. RELAPSE	TOTAL RETREAT	HISTORY UNKNOWN	% SMEAR-POS AMONG NEW PULM
				SMEAR-POSITIVE	SMEAR-NEGATIVE/ UNKNOWN	EXTRA-PULMONARY	OTHER					
Democratic Republic of the Congo		1990	21 131									–
		1995	42 819	20 914	7 953	9 112		2 891		2 891		72
		2000	60 627	36 123	8 089	13 785		2 630	0	2 630		82
		2005	97 075	65 040	9 959	18 494		3 582	1 909	5 491	574	87
		2006	95 666	63 488	10 093	18 213		3 872	1 989	5 861	484	86
		2007	99 810	66 099	10 968	18 737		4 006	2 406	6 412	548	86
		2008	104 426	69 477	11 498	19 450		4 001	3 789	7 790		86
	57 170	2009	112 222	73 191	12 941	21 707		4 383	4 442	8 825		85
Equatorial Guinea		1990	260									–
		1995	306	219	45	41		1		1		83
		2000										–
		2005										–
		2006										–
		2007										–
		2008	718	541	92	58	0	27	23	50	0	85
	69 105	2009	707	490	109	77	0	31	13	44	0	82
Eritrea		1990	3 699									–
		1995	21 453		18 205	3 248						–
		2000	6 652	590	5 332	683		47	20	67		10
		2005	3 549	687	1 764	1 001		97	27	124	36	28
		2006	3 026	680	1 484	782	0	80	110	190	0	31
		2007	3 641	694	2 086	753	0	108	102	210	0	25
		2008	2 970	839	1 063	880	79	109	36	145		44
	117 57	2009	2 904	802	1 123	890	0	89	118	207	0	42
Ethiopia		1990	88 634									–
		1995	26 034	9 040	8 888	7 763		343		343		50
		2000	91 101	30 510	30 565	28 907		1 119	1 658	2 777		50
		2005	124 262	38 525	39 816	43 675		2 246	873	3 119		49
		2006	122 198	36 674	40 234	43 255		2 035	811	2 846		48
		2007	128 844	38 040	43 500	45 269	0	2 035	899	2 934	0	47
		2008	141 157	40 794	49 372	48 794		2 197	752	2 949		45
	184 180	2009	148 936	44 396	52 053	50 228		2 259	1 285	3 544		46
Gabon		1990	917									–
		1995	1 115	486	517	68		44		44		48
		2000										–
		2005	2 512	1 042	1 071	241		158	99	257		49
		2006	3 051	1 145	1 478	313		115	155	270		44
		2007	3 766	1 462	1 678	409	52	165	177	342	0	47
		2008	4 540	1 502	2 306	419	155	158	138	296		39
	99 208	2009	3 073	1 244	1 414	246	0	169	486	655	0	47
Gambia		1990										–
		1995	1 023	778	171	68		6		6		82
		2000										–
		2005	2 031	1 127	749	78	0	77	89	166	0	60
		2006	1 795	1 209	467	102	0	17	86	103	0	72
		2007	1 916	1 238	541	91	0	46	94	140	0	70
		2008	2 107	1 300	610	116	0	81	62	143	0	68
	– 126	2009	2 145	1 316	622	141	0	66	41	107		68
Ghana		1990	6 407									–
		1995	8 636	2 638	1 225	109		159		159		68
		2000	10 933	7 316	2 500	615		502		502		75
		2005	12 124	7 505	3 068	1 019		532		532		71
		2006	12 471	7 786	3 139	1 049	0	497	40	537		71
		2007	12 743	7 429	3 759	1 092	0	463	218	681	0	66
		2008	14 149	7 904	4 416	1 383	0	446	318	764	0	64
	43 62	2009	14 892	8 255	4 734	1 437	0	466	394	860	0	64
Guinea		1990	1 988									–
		1995	3 523	2 263	527	620		55		55		81
		2000	5 440	3 920	430	938		152	294	446		90
		2005	6 863	5 479	524	629		231	227	458		91
		2006	8 787	5 903	898	1 699		287	289	576		87
		2007	9 411	6 199	1 167	1 708	0	337	315	652	0	84
		2008	10 025	6 561	1 288	1 825	0	351	320	671	0	84
	32 83	2009	8 357	5 377	1 021	1 611	0	348	241	589	16	84
Guinea-Bissau		1990	1 163									–
		1995	1 613	956	714	19		59		59		57
		2000	1 273	526	600	57		90		90		47
		2005	1 774	1 132	522	24	0	96	42	138	0	68
		2006	2 137	1 030	955	19	0	133	24	157	0	52
		2007										–
		2008	2 417	1 223	1 097	28	0	69	13	82	0	53
	114 135	2009	2 171	1 310	786	16	0	59	17	76	0	63
Kenya		1990	11 788	6 800								–
		1995	28 142	13 934	9 676	3 468		1 064		1 064		59
		2000	64 159	28 773	24 143	9 118		1 773	704	2 477		54
		2005	102 680	40 389	43 772	15 265		3 254	5 721	8 975		48
		2006	108 342	39 154	48 338	17 443		3 407	6 892	10 299		45
		2007	106 438	38 360	49 869	18 032	0	177	10 285	10 462	0	43
		2008	99 941	36 811	46 115	16 881	0	134	10 310	10 444	0	44
	50 259	2009	102 997	37 402	44 514	17 438		3 643	7 068	10 711		46
Lesotho		1990	2 525									–
		1995	5 181	1 361	2 685	653		147		147		34
		2000	9 746	3 041	2 838	2 520		385	1 096	1 481		52
		2005	10 802	4 280	4 063	2 020		439	602	1 041		51
		2006	12 073	4 024	4 934	2 477		638	1 040	1 678	255	45
		2007	2 319	788	904	529	0	98	202	300	0	47
		2008	12 019	3 862	4 879	2 692		586	1 200	1 786		44
	158 591	2009	12 213	3 976	5 083	2 486		668	1 302	1 970		44
Liberia		1990										–
		1995	1 393	1 154	119	120						91
		2000	1 500	1 021	285	187		7	25	32		78
		2005	3 432	2 167	575	657		33	24	57		79
		2006	4 447	2 906	646	829	0	66	67	133		82
		2007										–
		2008	4 970	3 038	941	912	0	79	53	132	0	76
	– 150	2009	5 918	3 796	1 022	1 023	0	77	46	123	0	79
Madagascar		1990	6 261									–
		1995	21 616	8 026	987	2 219		596		596		89
		2000										–
		2005	18 993	13 056	1 287	3 634	0	1 016	482	1 498	0	91
		2006	21 966	15 613	1 175	4 011		1 167	551	1 718		93
		2007	21 857	15 344	1 321	3 973	0	1 219	584	1 803	0	92
		2008	22 034	15 391	1 311	4 111	0	1 221	741	1 962	0	92
	56 116	2009	22 676	15 663	1 635	3 987	0	1 391	687	2 078	0	91

[a] Rates are per 100 000 population. Where notification data from a country had not been received by 31 August, the notification rate was assumed to be the same as for 2008 (in italics).

TABLE A2.3 **Case notifications, 1990–2009**

	NEW AND RELAPSE NOTIFICATION RATE[a] 1990–2009	YEAR	NEW AND RELAPSE[a]	NEW CASES				RELAPSE	RE-TREAT EXCL. RELAPSE	TOTAL RETREAT	HISTORY UNKNOWN	% SMEAR-POS AMONG NEW PULM
				SMEAR-POSITIVE	SMEAR-NEGATIVE/ UNKNOWN	EXTRA-PULMONARY	OTHER					
Malawi		1990	12 395	4 301	5 827	1 885		382		382		42
		1995	19 155	6 285	7 054	5 257		551		551		47
		2000	23 604	8 260	8 846	5 734		764	0	764		48
		2005	25 491	8 443	10 132	5 823		1 093	2 119	3 212		45
		2006	25 054	8 166	10 608	5 268		1 012	1 957	2 969		43
		2007	24 461	7 608	10 704	5 195	0	954	1 838	2 792	0	42
		2008	23 929	7 627	10 155	5 369		778	1 755	2 533		43
	131 149	2009	22 674	7 623	9 297	4 966	0	788	1 682	2 470	0	45
Mali		1990	2 933									–
		1995	3 087	1 866	609	459		153		153		75
		2000	4 216	2 527	797	653		239		239		76
		2005	4 697	3 523	482	492		200	180	380	0	88
		2006	4 989	3 802	386	580	0	221	235	456	0	91
		2007	5 166	3 894	391	674	0	207	216	423	13	91
		2008	5 989	4 734	403	660	0	192	219	411	0	92
	34 51	2009	6 611	5 163	429	818	0	201	224	425	0	92
Mauritania		1990	5 284									–
		1995	3 849	2 074	800	455		520		520		72
		2000	3 067	1 583	687	580		580	358	938		70
		2005	2 162	1 155	454	403	0	150	56	206	0	72
		2006	2 694	1 486	480	536	0	192	72	264	0	76
		2007	2 969	1 714	494	603	0	158	56	214	0	78
		2008	2 698	1 605	415	512		166	28	194		79
	266 80	2009	2 640	1 555	444	483	0	158	24	182	0	78
Mauritius		1990	119									–
		1995	131	113	8	12		2		2		93
		2000	160	115	14	23		8	4	12		89
		2005	125	110	4	8		3	2	5		96
		2006	114	85	11	15		3	1	4		89
		2007	106	86	12	4	0	4	2	6	0	88
		2008	107	85	14	5	0	3	1	4	0	86
	11 9	2009	115	98	7	6	0	4	1	5	0	93
Mozambique		1990	15 899									–
		1995	17 882	10 566	5 054	1 363		899		899		68
		2000	21 158	13 257	4 037	2 262		917	546	1 463		77
		2005	33 231	17 877	9 184	4 771		1 399	487	1 886		66
		2006	35 257	18 275	10 618	4 929	0	1 435	375	1 810	0	63
		2007	37 651	18 214	13 064	5 020	0	1 353	393	1 746	0	58
		2008	39 261	18 824	14 117	5 012	0	1 308	474	1 782	0	57
	117 189	2009	43 221	19 579	17 019	5 301	0	1 322	2 308	3 630	0	53
Namibia		1990	2 671									–
		1995	1 540	697	507	248		88		88		58
		2000	10 799	4 012	4 724	1 459		604	930	1 534		46
		2005	14 920	5 222	4 455	1 907	2 487	849	974	1 823		54
		2006	14 673	5 356	4 178	2 450	1 674	1 015	1 098	2 113		56
		2007	15 205	5 091	4 948	2 681	1 055	1 430	327	1 757	0	51
		2008	13 340	4 828	3 714	2 582	1 074	1 142	297	1 439	0	57
	189 552	2009	11 980	4 608	3 628	2 538	0	1 206	1 352	2 558	0	56
Niger		1990	5 200									–
		1995	1 980	1 492	116	372						93
		2000	4 701	3 045	699	702		255		255		81
		2005	7 873	5 050	1 193	1 227		403	351	754	0	81
		2006	8 474	5 279	1 443	1 275		477	281	758		79
		2007	9 276	5 773	1 676	1 349	0	478	316	794	0	78
		2008	9 209	5 853	1 593	1 227	103	433	184	617		79
	66 65	2009	9 904	6 347	1 689	1 385	0	483	207	690	117	79
Nigeria		1990	20 122									–
		1995	13 423	9 476	3 364	280		303		303		74
		2000	25 821	17 423	6 613	1 069		716	1 640	2 356		72
		2005	62 598	35 048	22 705	2 836	0	2 009	2 858	4 867	1 392	61
		2006	70 734	39 903	25 782	2 975	0	2 074	3 491	5 565	0	61
		2007	82 417	44 016	32 088	4 044	0	2 269	3 824	6 093	0	58
		2008	85 674	46 026	34 211	3 026	0	2 411	4 637	7 048	0	57
	21 57	2009	88 589	44 863	37 540	3 560	0	2 626	5 525	8 151	0	54
Rwanda		1990	6 387									–
		1995	3 054	1 840	676	338		200		200		73
		2000	6 093	3 681	845	1 289		278	96	374		81
		2005	7 220	4 166	859	1 727	97	371	460	831		83
		2006	8 117	4 220	1 603	1 766	136	392	166	558		72
		2007	7 638	4 053	1 589	1 663		333	145	478	231	72
		2008	7 472	4 173	1 311	1 743	0	245	152	397	217	76
	89 73	2009	7 251	4 184	1 239	1 582	0	246	229	475	164	77
Sao Tome and Principe		1990	17									–
		1995										–
		2000	97	30	56	7		4		4		35
		2005	136	49	75	1	0	11	16	27		40
		2006	153	36	116	1	0	0	0	0	0	24
		2007	93	58	28	2	0	5	0	5	0	67
		2008	66	52	11	0	0	3	3	6	2	83
	15 48	2009	78	52	20	4	0	2	1	3	0	72
Senegal		1990	4 977									–
		1995	7 561	5 421	1 073	504		563		563		83
		2000	8 508	5 823	1 370	800	0	515	541	1 056		81
		2005	9 765	6 722	1 557	921		565	355	920		81
		2006	10 133	6 882	1 640	1 136		475	531	1 006	0	81
		2007	10 297	7 108	1 620	1 109	0	460	383	843	0	81
		2008	11 040	7 584	1 580	1 283	0	593	551	1 144	0	83
	66 89	2009	11 139	7 883	1 504	1 233	0	519	593	1 112	0	84
Seychelles		1990	41									–
		1995	8	6	2	1		0		0		75
		2000	20	11	7	2		0		0		61
		2005	14	8	3	1	0	2	0	2		73
		2006										–
		2007										–
		2008	6	4	0	2	0	0	0	0	0	100
	57 18	2009	15	11	2	2	0	0	0	0	0	85
Sierra Leone		1990	632									–
		1995	1 955	1 454	339	121		41		41		81
		2000	3 760	2 472	821	400		67	374	441		75
		2005	6 737	4 370	1 679	551		137	193	330		72
		2006	8 041	4 629	2 802	480	0	130	167	297		62
		2007	9 418	5 347	3 197	706	0	168	205	373		63
		2008	10 786	5 826	3 952	854		154	235	389		60
	15 202	2009	11 524	6 092	4 491	776	0	165	302	467	0	58

[a] Rates are per 100 000 population. Where notification data from a country had not been received by 31 August, the notification rate was assumed to be the same as for 2008 (in italics).

Data can be downloaded from www.who.int/tb/data

TABLE A2.3 **Case notifications, 1990–2009**

	NEW AND RELAPSE NOTIFICATION RATE[a] 1990–2009	YEAR	NEW AND RELAPSE[a]	NEW CASES				RELAPSE	RE-TREAT EXCL. RELAPSE	TOTAL RETREAT	HISTORY UNKNOWN	% SMEAR-POS AMONG NEW PULM
				SMEAR-POSITIVE	SMEAR-NEGATIVE/ UNKNOWN	EXTRA-PULMONARY	OTHER					
South Africa		1990	80 400									–
		1995	73 917	23 112	74 399	10 636		179		179		24
		2000	151 239	75 967	16 392	17 486			56 202	56 202		82
		2005	270 178	125 460	76 680	39 739	0	28 299	32 289	60 588	0	62
		2006	303 114	131 099	93 348	47 849	0	30 818	38 051	68 869	0	58
		2007	315 315	135 604	105 631	45 738	0	28 342	38 304	66 646	0	56
		2008	343 855	138 803	132 972	48 251	0	23 829	40 641	64 470	4 386	51
	219 733	2009	367 178	139 468	147 187	60 406	0	20 117	16 492	36 609	0	49
Swaziland		1990										–
		1995	2 050	660	687	219		489		489		49
		2000	5 877	1 823	3 198	583		273	976	1 249		36
		2005	8 062	2 187	4 106	1 458		311	159	470	643	35
		2006	8 278	2 539	3 842	1 584		313	177	490	740	40
		2007	8 888	2 764	3 956	1 833	0	335	748	1 083	0	41
		2008	8 685	3 105	3 379	1 762	0	439	880	1 319	0	48
	– 847	2009	10 038	3 498	4 157	1 903	0	480	994	1 474	0	46
Togo		1990	1 324									–
		1995	1 520	887	304	236		93		93		74
		2000	1 409	984	91	287		47	86	133		92
		2005	2 537	1 798	170	484		85	94	179	4	91
		2006	2 819	2 131	279	319	0	90	105	195	0	88
		2007	2 436	1 796	211	356	0	73	57	130	0	89
		2008	2 967	2 234	231	408	0	94	102	196	0	91
	34 45	2009	2 986	2 267	235	377	0	107	107	214	0	91
Uganda		1990	14 740									–
		1995	25 316	13 631	5 912	2 070		955		955		70
		2000	30 372	17 246	9 003	2 618		1 505	0	1 505		66
		2005	41 040	20 559	15 040	3 780	0	1 661	769	2 430		58
		2006	40 782	20 364	14 940	4 027		1 451	797	2 248		58
		2007	40 909	21 303	13 713	4 460	0	1 433	703	2 136		61
		2008	42 178	22 766	13 190	4 710	0	1 512	1 665	3 177	0	63
	83 127	2009	41 703	23 113	12 315	4 893	0	1 382	2 632	4 014		65
United Republic of Tanzania		1990	22 249	11 553								–
		1995	39 847	19 955	12 362	6 195		1 335		1 335		62
		2000	54 442	24 049	17 624	10 997		1 772		1 772		58
		2005	61 022	25 264	20 810	13 094		1 854	3 178	5 032		55
		2006	59 282	24 724	20 120	12 621		1 817	2 818	4 635		55
		2007	59 371	24 520	20 521	12 526		1 804	2 721	4 525		54
		2008	60 490	24 171	21 935	12 784		1 600	2 874	4 474		52
	87 164	2009	71 643	24 960	21 780	13 417	9 999	1 487	2 722	4 209		53
Zambia		1990	16 863									–
		1995	35 958	10 038	3 268	656		243		243		75
		2000	49 806	12 927	25 222	10 202		1 455		1 455		34
		2005	49 576	14 857	24 327	8 587		1 805	3 691	5 496		38
		2006	47 790	14 025	22 059	9 841		1 865	3 389	5 254		39
		2007	46 320	13 378	21 189	10 015	0	1 738	4 095	5 833	0	39
		2008	43 686	13 211	19 344	9 580	0	1 551	3 685	5 236	0	41
	213 347	2009	44 879	12 995	20 825	9 246	0	1 813	672	2 485	0	38
Zimbabwe		1990	9 132									–
		1995	30 831	8 965	10 934	5 040		737		737		45
		2000	50 855	14 392	27 626	8 837						34
		2005	50 454	13 155	29 074	6 721	0	1 504	4 437	5 941		31
		2006	44 328	12 718	23 775	6 559		1 276	3 446	4 722		35
		2007	40 277	10 583	21 964	6 381	0	1 349	1 137	2 486	0	33
		2008	36 650	9 830	19 956	5 931	0	933	2 698	3 631	0	33
	87 339	2009	42 504	10 113	24 718	6 636	0	1 037	3 466	4 503		29

[a] Rates are per 100 000 population. Where notification data from a country had not been received by 31 August, the notification rate was assumed to be the same as for 2008 (in italics).

TABLE A2.4 **Treatment outcomes, new smear-positive cases, 1995–2008**

	TREATMENT SUCCESS (%)[a] 1995–2008	YEAR	NUMBER NOTIFIED	SIZE OF COHORT	COHORT AS % NOTIFIED	% OF COHORT					
						CURED	COMPLETED	DIED	FAILED	DEFAULTED	NOT EVALUATED
Algeria		1995	5 735		–						
		2000	8 328	8 328	100	80	7	1	2	5	5
		2005	8 654	8 379	97	74	13	2	0	3	8
		2006	8 538	8 285	97	86	5	2	0	3	4
		2007	8 439	8 510	101	79	11	2	1	4	4
–	90	2008	8 643	8 190	95	80	10	2	0	3	4
Angola		1995	3 804		–						
		2000	9 053	6 392	71	68		3	2	26	2
		2005	20 410	20 113	99	45	28	3	3	19	3
		2006	21 499	21 499	100	11	7	1	0	4	77
		2007	21 422	21 422	100	48	26	3	2	18	3
–	70	2008	22 562	22 562	100	45	24	4	2	18	6
Benin		1995	1 839	1 785	97	52	22	6	2	17	2
		2000	2 286		–						
		2005	2 739	2 766	101	74	13	7	2	3	1
		2006	2 943		–						
		2007		2 770	–	79	8	6	3	3	1
73	89	2008	2 966	2 979	100	81	8	6	2	2	1
Botswana		1995	1 903	2 060	108	13	54	5	1	12	15
		2000	3 091	3 991	129	22	55	6	0	7	10
		2005	3 170	3 335	105	37	33	7	1	8	15
		2006	3 252	3 463	106	43	30	7	2	7	12
		2007	3 002	3 335	111	50	23	5	2	6	15
67	65	2008	3 351	3 289	98	46	18	5	2	4	24
Burkina Faso		1995	1 028	1 200	117	22	2	5	1	3	67
		2000	1 560	1 574	101	53	7	13	2	16	9
		2005	2 294	2 290	100	66	5	14	7	6	1
		2006	2 659	2 660	100	67	6	12	8	5	1
		2007	2 614	2 605	100	67	5	14	7	6	1
25	76	2008	2 756	2 757	100	73	3	11	8	4	1
Burundi		1995	1 121	1 798	160	25	20	3	0	14	38
		2000		3 465	–	42	39	4	0	13	1
		2005	3 262	3 424	105	52	27	4	0	17	1
		2006	3 119	3 233	104	66	16	4	1	11	1
		2007	3 595	3 169	88	74	12	5	1	8	0
45	90	2008	3 610	3 635	101	76	14	4	0	6	0
Cameroon		1995	2 896	2 740	95	45	8	7	1	35	4
		2000	3 960	3 164	80	67	10	7	2	13	1
		2005	13 001	13 169	101	66	7	6	1	14	5
		2006	12 870	13 811	107	64	10	6	1	13	6
		2007	13 220	13 025	99	61	15	7	1	11	6
53	–	2008	14 232		–						
Cape Verde		1995	111		–						
		2000		14	–	64	0	7	0	0	29
		2005	135	135	100	56	8	3	2	19	12
		2006	131	131	100	66	13	4	2	6	9
		2007	158		–						
–	74	2008	197	197	100	57	17	4	2	11	11
Central African Republic		1995	1 794	692	39	16	21	7	0	53	3
		2000		1 366	–	36	21	0	3	34	5
		2005	2 153	3 217	149	38	28	6	2	8	19
		2006	4 448		–						
		2007		4 130	–	47	20	8	2	12	11
37	71	2008	4 232	3 571	84	43	29	7	2	12	9
Chad		1995	2 002	529	26	17	30	6	1	43	3
		2000			–						
		2005	2 516		–						
		2006		2 768	–	35	19	6	2	30	8
		2007	2 513		–						
47	–	2008	3 309	0	0	–	–	–	–	–	–
Comoros		1995	103	113	110	90	0	4	0	6	0
		2000	87	85	98	91	2	4	4	0	0
		2005	79	70	89	91	0	3	4	0	1
		2006	67		–						
		2007		56	–	91	2	2	4	2	0
90	90	2008	77	77	100	90	0	4	0	4	3
Congo		1995	2 013		–						
		2000	4 218	3 114	74	57	12	4	0	22	5
		2005	3 640	4 121	113	24	4	0	1	13	58
		2006	3 340	3 340	100	41	12	1	1	26	20
		2007	3 552		–						
–	76	2008	3 371	3 263	97	63	13	1	0	21	1
Côte d'Ivoire		1995	8 254	7 221	87	63	6	4	1	17	9
		2000	8 497	10 631	125	47	10	5	2	16	20
		2005	12 496	12 496	100	63	11	8	2	10	6
		2006	12 867	12 868	100	61	12	8	2	10	8
		2007	14 071	14 071	100	62	11	7	1	13	5
68	76	2008	15 294	15 294	100	67	9	9	2	9	4
Democratic Republic of the Congo		1995	20 914	16 247	78	55	20	5	1	10	9
		2000	36 123	36 123	100	69	8	6	1	8	7
		2005	65 040	65 066	100	80	5	6	1	4	4
		2006	63 488	63 488	100	82	5	5	1	5	2
		2007	66 099	65 975	100	83	4	4	1	4	4
74	87	2008	69 477	65 962	95	83	4	4	1	3	4
Equatorial Guinea		1995	219	219	100	89	0	3	0	8	0
		2000			–						
		2005			–						
		2006			–						
		2007		436	–	60	0	7	1	26	6
89	56	2008	541	541	100	42	14	4	1	31	7
Eritrea		1995			–						
		2000	590	765	130	64	12	8	1	9	6
		2005	687	688	100	83	5	7	1	2	1
		2006	680	735	108	80	9	6	1	1	2
		2007	694	795	115	83	5	5	2	2	3
–	76	2008	839	839	100	72	3	4	1	1	18
Ethiopia		1995	9 040	5 087	56	56	5	5	2	13	19
		2000	30 510	29 662	97	63	17	6	1	9	4
		2005	38 525	39 430	102	64	14	5	1	4	12
		2006	36 674	36 674	100	69	15	5	1	5	6
		2007	38 040	38 078	100	67	17	4	1	3	8
61	84	2008	40 794	40 794	100	67	17	3	1	3	10

[a] TREATMENT SUCCESS = percent cured + percent completed then rounded to the nearest digit.

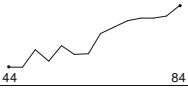
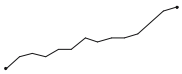
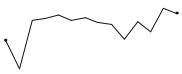
Data can be downloaded from www.who.int/tb/data

TABLE A2.4 **Treatment outcomes, new smear-positive cases, 1995–2008**

	TREATMENT SUCCESS (%)[a] 1995–2008	YEAR	NUMBER NOTIFIED	SIZE OF COHORT	COHORT AS % NOTIFIED	% OF COHORT					
						CURED	COMPLETED	DIED	FAILED	DEFAULTED	NOT EVALUATED
Gabon		1995	486	249	51	63	22	1	2	9	2
		2000			–						
		2005	1 042	1 165	112	35	12	10	1	42	1
	—	2006	1 145	1 145	100	34	13	5	1	44	4
		2007	1 462	1 484	102	22	14	3	0	18	43
86	53	2008	1 502	1 502	100	30	24	1	0	19	27
Gambia		1995	778	686	88	69	7	5	1	13	5
		2000			–						
		2005	1 127	1 127	100	81	6	7	1	3	2
		2006	1 209	1 812	150	56	2	5	1	2	34
		2007	1 238	1 199	97	80	4	8	2	3	3
76	84	2008	1 300	1 318	101	80	4	9	2	2	3
Ghana		1995	2 638	361	14	41	13	11	2	11	22
		2000	7 316	7 316	100	45	5	6	3	14	27
		2005	7 505	7 584	101	68	5	9	2	11	5
		2006	7 786	7 786	100	71	6	9	2	6	6
		2007	7 429	7 429	100	77	7	9	1	3	3
54	86	2008	7 904	7 904	100	78	8	8	1	2	3
Guinea		1995	2 263	2 263	100	62	17	6	2	9	5
		2000	3 920	3 920	100	59	9	7	1	15	9
		2005	5 479	5 811	106	65	7	6	2	10	10
		2006	5 903	6 075	103	66	9	4	1	9	10
		2007	6 199	6 199	100	71	8	4	1	7	9
78	78	2008	6 561	4 984	76	70	8	5	2	7	8
Guinea-Bissau		1995	956	959	100	42	23	6	0	23	6
		2000	526		–						
		2005	1 132	1 167	103	51	18	12	1	11	7
		2006	1 030		–						
		2007		1 237	–	64	7	5	0	14	9
65	70	2008	1 223	1 242	102	59	11	4	0	17	9
Kenya		1995	13 934	6 470	46	60	14	9	1	9	7
		2000	28 773	28 376	99	66	14	5	0	9	6
		2005	40 389	40 436	100	71	11	5	0	8	5
		2006	39 154	39 154	100	73	12	5	0	7	3
		2007	38 360	38 360	100	75	11	4	0	7	4
75	85	2008	36 811	36 811	100	76	9	4	0	7	4
Lesotho		1995	1 361	1 788	131	32	14	7	0	9	36
		2000	3 041		–						
		2005	4 280	5 542	129		73	8	1	4	14
		2006	4 024	725	18	56	11	12	2	6	14
		2007	788	3 728	473	55	12	10	2	4	16
47	73	2008	3 862	3 858	100	64	9	11	2	4	9
Liberia		1995	1 154	1 595	138	79		5	5	12	0
		2000	1 021	924	90	71	9	2	6	10	3
		2005	2 167	2 167	100	60	16	3	0	12	8
		2006	2 906		–						
		2007		2 309	–	58	13	6	1	16	5
79	79	2008	3 038	3 042	100	64	15	4	2	10	5
Madagascar		1995	8 026	9 101	113	47	8	6	2	16	20
		2000		10 506	–	61	9	7	1	17	5
		2005	13 056	15 298	117	67	7	6	1	13	5
		2006	15 613	15 668	100	73	5	5	1	11	4
		2007	15 344	15 261	99	75	5	5	1	11	4
55	81	2008	15 391	15 376	100	77	4	5	1	9	5
Malawi		1995	6 285	6 293	100	65	6	19	1	0	10
		2000	8 260	8 296	100	70	3	19	1	4	3
		2005	8 443	8 443	100	72	2	15	1	3	7
		2006	8 166	8 166	100	77	1	12	1	3	5
		2007	7 608	8 065	106	83	2	9	3	1	2
71	87	2008	7 627	7 632	100	85	2	8	1	2	2
Mali		1995	1 866	1 290	69	41	18	5	0	22	14
		2000	2 527		–						
		2005	3 523	3 530	100	69	6	11	4	7	3
		2006	3 802	3 803	100	70	6	11	4	6	3
		2007	3 894	3 897	100	72	6	11	3	5	2
59	82	2008	4 734	4 734	100	75	6	9	4	4	2
Mauritania		1995	2 074		–						
		2000	1 583		–						
		2005	1 155	1 761	152	44	11	2	1	19	24
		2006	1 486	1 652	111	31	9	2	0	12	45
		2007	1 714	1 716	100	55	11	2	0	17	15
–	68	2008	1 605	1 605	100	54	14	2	1	12	17
Mauritius		1995	113		–						
		2000	115	160	139	0	93	3	2	3	0
		2005	110	110	100	86		3		6	5
		2006	85	157	185	46	46	3	0	5	0
		2007	86	86	100	85	0	3	0	8	3
–	87	2008	85	85	100	87	0	6	0	5	2
Mozambique		1995	10 566	10 566	100	34	5	3	1	9	48
		2000	13 257	13 296	100	73	2	10	1	11	3
		2005	17 877	17 877	100	78	1	12	1	5	2
		2006	18 275	18 275	100	82	1	10	1	5	2
		2007	18 214	18 214	100	78	1	10	1	5	5
39	84	2008	18 824	18 824	100	83	1	10	1	4	1
Namibia		1995	697		–						
		2000	4 012	4 012	100	41	15	6	2	15	21
		2005	5 222	5 222	100	59	16	7	2	10	7
		2006	5 356	5 177	97	64	12	7	3	8	6
		2007	5 091	5 114	100	72	11	5	3	5	5
–	82	2008	4 828	4 928	102	72	10	6	4	4	4
Niger		1995	1 492		–						
		2000	3 045	3 193	105	42	22	8	4	12	11
		2005	5 050	5 050	100	49	25	5	2	14	5
		2006	5 279	5 228	99	63	14	6	2	11	5
		2007	5 773	5 722	99	68	11	5	3	10	4
–	81	2008	5 853	5 860	100	71	10	6	2	7	4
Nigeria		1995	9 476	9 476	100	34	15	5	2	9	35
		2000	17 423	16 372	94	65	14	6	2	11	2
		2005	35 048	35 080	100	50	25	9	4	11	1
		2006	39 903	39 903	100	65	11	6	2	10	6
		2007	44 016	44 070	100	71	11	5	2	9	2
49	78	2008	46 026	46 026	100	68	11	2	5	9	6

[a] TREATMENT SUCCESS = percent cured + percent completed then rounded to the nearest digit.

TABLE A2.4 **Treatment outcomes, new smear-positive cases, 1995–2008**

	TREATMENT SUCCESS (%)[a] 1995–2008	YEAR	NUMBER NOTIFIED	SIZE OF COHORT	COHORT AS % NOTIFIED	% OF COHORT					
						CURED	COMPLETED	DIED	FAILED	DEFAULTED	NOT EVALUATED
Rwanda		1995	1 840		–						
		2000	3 681	3 776	103	52	9	6	1	4	28
		2005	4 166	4 175	100	73	10	6	2	3	6
		2006	4 220	4 158	99	77	9	5	2	2	4
		2007	4 053	4 081	101	77	9	5	3	2	4
	– 87	2008	4 173	4 173	100	79	8	5	4	2	3
Sao Tome and Principe		1995			–						
		2000	30	97	323	52	27	9	5	7	0
		2005	49	49	100	98	0	2	0	0	0
		2006	36	36	100	94	0	3	3	0	0
		2007	58	58	100	90	0	2	5	3	0
	– 94	2008	52	52	100	94	0	4	2	0	0
Senegal		1995	5 421	5 421	100	35	9	4	6	16	31
		2000	5 823	5 823	100	43	9	3	1	21	22
		2005	6 722	6 722	100	70	6	4	2	11	8
		2006	6 882	6 882	100	69	7	4	2	10	8
		2007	7 108	7 109	100	72	6	4	2	10	7
	44 84	2008	7 584	7 584	100	79	5	4	2	7	4
Seychelles		1995	6	9	150	89	0	11	0	0	0
		2000	11	11	100	82	0	0	0	9	9
		2005	8		–						
		2006			–						
		2007		9	–	44	44	0	0	11	0
	89 100	2008	4	6	150	33	67	0	0	0	0
Sierra Leone		1995	1 454	1 315	90	55	15	5	7	16	2
		2000	2 472	2 296	93	70	7	6	2	13	2
		2005	4 370	4 370	100	77	8	6	1	6	2
		2006	4 629	4 660	101	75	12	5	1	6	1
		2007	5 347	5 346	100	77	13	4	1	5	1
	69 86	2008	5 826	5 847	100	73	13	4	1	7	2
South Africa		1995	23 112	28 209	122	40	18	4	4	15	19
		2000	75 967	86 276	114	54	9	6	1	13	17
		2005	125 460	134 782	107	58	13	7	2	10	10
		2006	131 099	139 516	106	63	11	7	2	9	8
		2007	135 604	143 222	106	64	10	8	2	8	8
	58 76	2008	138 803	143 520	103	67	9	8	2	8	7
Swaziland		1995	660		–						
		2000	1 823		–						
		2005	2 187	2 187	100	22	20	6	2	5	45
		2006	2 539	2 538	100	27	15	6	4	13	34
		2007	2 764	2 879	104	36	22	7	6	11	18
	– 68	2008	3 105	3 213	103	50	18	10	7	8	7
Togo		1995	887	856	97	42	18	9	3	17	11
		2000	984		–						
		2005	1 798	1 796	100	66	5	12	4	11	2
		2006	2 131	2 131	100	63	4	11	2	17	2
		2007	1 796	1 796	100	71	4	12	3	6	3
	60 79	2008	2 234	2 229	100	76	3	11	3	3	3
Uganda		1995	13 631	15 301	112	26	18	7	1	13	36
		2000	17 246	13 874	80	33	30	7	0	17	12
		2005	20 559	20 559	100	32	41	6	0	16	5
		2006	20 364	20 364	100	29	41	6	1	13	12
		2007	21 303	21 303	100	31	44	5	0	15	5
	44 70	2008	22 766	22 766	100	28	42	5	1	11	14
United Republic of Tanzania		1995	19 955	19 955	100	69	5	9	1	6	11
		2000	24 049	23 923	99	72	6	10	0	6	5
		2005	25 264	25 324	100	79	4	9	0	4	4
		2006	24 724	24 724	100	80	5	8	0	3	4
		2007	24 520	24 520	100	83	4	6	0	3	3
	73 89	2008	24 171	23 859	99	84	5	5	0	2	4
Zambia		1995	10 038	5 957	59	47	23	7	2	14	8
		2000	12 927	7 014	54	48	19	7	6	6	14
		2005	14 857	14 857	100	76	8	8	1	2	5
		2006	14 025	14 025	100	77	8	7	1	3	5
		2007	13 378	13 378	100	78	7	6	1	3	5
	70 88	2008	13 211	13 173	100	83	5	5	1	3	4
Zimbabwe		1995	8 965	9 702	108	32	21	10	0	10	26
		2000	14 392	14 392	100	61	8	12	0	7	13
		2005	13 155	12 860	98	59	9	12	2	7	12
		2006	12 718	16 205	127	54	6	8	0	5	27
		2007	10 583	10 583	100	70	7	8	0	6	8
	53 74	2008	9 830	10 370	105	67	7	9	0	7	9

[a] TREATMENT SUCCESS = percent cured + percent completed then rounded to the nearest digit.

Data can be downloaded from www.who.int/tb/data

TABLE A2.5 **Treatment outcomes, retreatment cases, 1995–2008**

	TREATMENT SUCCESS (%)[a] 1995–2008	YEAR	NUMBER NOTIFIED	SIZE OF COHORT	COHORT AS % NOTIFIED	% OF COHORT					
						CURED	COMPLETED	DIED	FAILED	DEFAULTED	NOT EVALUATED
Algeria		1995	451		–						
		2000	547	512	94	61	16	5	4	5	10
		2005	713	713	100	48	24	2	1	6	19
		2006	679	607	89	65	14	4	2	9	6
		2007	718		–						
–	83	2008	651	620	95	72	11	4	2	6	6
Angola		1995	134		–						
		2000	540		–						
		2005	2 871	1 613	56	23	24	5	17	26	4
		2006	18 846		–						
		2007	3 317	3 317	100	43	22	5	4	21	5
–	56	2008	3 584	3 584	100	39	18	4	4	18	18
Benin		1995	68	139	204	48	19	9	4	19	1
		2000	465		–						
		2005	337	341	101	60	21	10	3	6	1
		2006	263		–						
		2007		278	–	70	16	6	4	3	2
67	77	2008	236	230	97	65	12	13	7	3	0
Botswana		1995	147		–						
		2000	1 239	395	32	21	54	8	1	11	6
		2005	548	219	40	33	28	11	5	12	11
		2006	342	356	104	33	21	10	7	9	20
		2007	697	350	50	32	20	10	8	10	21
–	45	2008	339	1 067	315	15	30	11	3	11	30
Burkina Faso		1995	45	26	58	65	12	8	12	0	4
		2000	95	166	175	57	4	13	5	15	7
		2005	334	272	81	71	4	6	10	6	4
		2006	482	409	85	70	5	10	9	5	2
		2007	462	413	89	71	4	9	9	6	1
77	77	2008	505	427	85	72	5	10	9	4	1
Burundi		1995	181	265	146	25	21	6	2	28	18
		2000		92	–	50	13	15	3	17	1
		2005	116		–						
		2006	207		–						
		2007	225	219	97	69	9	8	4	10	0
46	76	2008	205	205	100	67	9	7	1	10	5
Cameroon		1995	236		–						
		2000	251	347	138	50	10	9	5	26	2
		2005	1 590	1 611	101	49	7	6	3	16	19
		2006	1 493	10 148	680	10	34	6	1	12	37
		2007	1 465	1 522	104	49	15	9	2	15	10
–	–	2008	1 420		–						
Cape Verde		1995	30		–						
		2000			–						
		2005	34	34	100	41	15	0	0	24	21
		2006	24	23	96	35	17	9	9	17	13
		2007	32		–						
–	48	2008	31	31	100	32	16	6	3	29	13
Central African Republic		1995	188		–						
		2000		353	–	33	16	1	4	39	8
		2005	291	291	100	53	30	9	0	8	1
		2006	556		–						
		2007			–						
–	82	2008	373	1 139	305	41	41	3	3	6	6
Chad		1995	203	92	45	29	18	5	2	40	4
		2000			–						
		2005	515		–						
		2006			–						
		2007	402		–						
48	–	2008	631	0	0	–	–	–	–	–	–
Comoros		1995	7	7	100	43	0	29	0	29	0
		2000	5	5	100	100	0	0	0	0	0
		2005	3	5	167	100	0	0	0	0	0
		2006	7		–						
		2007		6	–	67	0	0	33	0	0
43	100	2008	6	6	100	100	0	0	0	0	0
Congo		1995	78		–						
		2000	819	187	23	49	13	3	3	28	4
		2005	407	477	117	12	2	0	0	3	83
		2006	403	302	75	42	15	2	2	38	1
		2007	349		–						
–	72	2008	473	524	111	49	22	3	4	21	0
Côte d'Ivoire		1995	649		–						
		2000	1 217	507	42	45	10	8	9	21	7
		2005	980	980	100	43	14	8	7	13	15
		2006	1 192	1 192	100	50	18	8	7	10	7
		2007	1 315	1 315	100	46	21	8	4	16	4
–	68	2008	1 429	1 429	100	55	12	7	12	9	4
Democratic Republic of the Congo		1995	2 891	1 202	42	56	16	8	2	12	6
		2000	2 630		–						
		2005	5 491	5 448	99	71	4	10	4	6	5
		2006	5 861	6 345	108	63	4	8	3	14	9
		2007	6 412	6 412	100	61	14	8	3	6	8
72	75	2008	7 790	5 399	69	70	5	9	3	5	8
Equatorial Guinea		1995	1	6	600	83	0	0	17	0	0
		2000			–						
		2005			–						
		2006			–						
		2007		27	–	19	0	15	0	63	4
83	36	2008	50	50	100	26	10	14	4	38	8
Eritrea		1995			–						
		2000	67		–						
		2005	124		–						
		2006	190	69	36	72	7	7	6	4	3
		2007	210	133	63	66	12	9	8	2	3
–	68	2008	145	145	100	66	2	7	7	1	17
Ethiopia		1995	343	193	56	71	8	3	5	8	5
		2000	2 777	1 556	56	60	11	10	4	8	7
		2005	3 119	3 116	100	41	15	9	2	5	28
		2006	2 846	2 846	100	54	16	8	2	4	16
		2007	2 934	3 014	103	47	16	6	2	3	26
79	75	2008	2 949	2 949	100	46	29	6	2	4	13

[a] TREATMENT SUCCESS = percent cured + percent completed then rounded to the nearest digit.

TABLE A2.5 **Treatment outcomes, retreatment cases, 1995–2008**

	TREATMENT SUCCESS (%)[a] 1995–2008	YEAR	NUMBER NOTIFIED	SIZE OF COHORT	COHORT AS % NOTIFIED	% OF COHORT					
						CURED	COMPLETED	DIED	FAILED	DEFAULTED	NOT EVALUATED
Gabon		1995	44		–						
		2000			–						
		2005	257	150	58	18	12	5	3	60	3
		2006	270	115	43	28	23	3	3	42	3
		2007	342	167	49	19	23	1	0	26	31
	– 31	2008	296	158	53	10	21	18	2	11	39
Gambia		1995	6	45	750	69	0	11	2	11	7
		2000			–						
		2005	166		–						
		2006	103		–						
		2007	140	88	63	72	3	14	0	7	5
	69 74	2008	143	118	83	68	6	15	3	3	6
Ghana		1995	159	47	30	68	6	6	9	9	2
		2000	502		–						
		2005	532	540	102	40	8	6	3	11	32
		2006	537	537	100	46	16	11	3	8	16
		2007	681	681	100	41	17	9	2	1	30
	74 67	2008	764	764	100	40	27	8	2	2	21
Guinea		1995	55	112	204	44	23	3	9	13	8
		2000	446	299	67	63	8	5	3	8	13
		2005	458	458	100	45	16	10	7	13	11
		2006	576	568	99	62	13	3	4	8	10
		2007	652	652	100	33	8	4	1	6	49
	67 71	2008	671	414	62	60	11	7	4	10	8
Guinea-Bissau		1995	59		–						
		2000	90		–						
		2005	138	146	106	44	34	8	0	8	7
		2006	157		–						
		2007		40	–	70	18	5	0	0	8
	– 66	2008	82	92	112	53	13	9	0	13	12
Kenya		1995	1 064	879	83	61	11	9	1	10	8
		2000	2 477	1 964	79	65	11	2	8	10	4
		2005	8 975	3 794	42	68	9	10	1	7	5
		2006	10 299	3 945	38	71	8	7	1	8	5
		2007	10 462	3 285	31	73	8	7	1	7	4
	72 72	2008	10 444	10 444	100	25	47	7	0	7	14
Lesotho		1995	147		–						
		2000	1 481		–						
		2005	1 041	597	57		71	11	2	2	14
		2006	1 678	201	12	23	30	22	1	1	22
		2007	300	700	233	13	31	11	3	6	36
	– 62	2008	1 786	1 746	98	23	39	18	2	3	14
Liberia		1995			–						
		2000	32	41	128	39	22	12	7	20	0
		2005	57	57	100	75	9	2		9	5
		2006	133		–						
		2007		120	–	60	21	6	8	4	2
	– 88	2008	132	112	85	72	15	8	2	3	0
Madagascar		1995	596		–						
		2000			–						
		2005	1 498	1 825	122	65	7	7	2	12	6
		2006	1 718	1 780	104	66	7	7	2	12	6
		2007	1 803	1 803	100	67	9	8	1	10	6
	– 77	2008	1 962	1 676	85	74	3	6	1	10	7
Malawi		1995	551	492	89	65	4	22	2	1	6
		2000	764	797	104	61	5	23	1	6	3
		2005	3 212	1 093	34	74	1	19	1	3	3
		2006	2 969	1 006	34	78	2	12	1	2	4
		2007	2 792	932	33	82	2	10	2	2	2
	69 84	2008	2 533	779	31	80	4	10	1	1	4
Mali		1995	153		–						
		2000	239		–						
		2005	380	379	100	67	6	10	5	10	3
		2006	456	449	98	63	5	10	7	10	5
		2007	423	423	100	69	7	11	6	5	2
	– 74	2008	411	407	99	69	5	12	7	5	2
Mauritania		1995	520		–						
		2000	938		–						
		2005	206		–						
		2006	264	280	106	25	7	1	2	11	54
		2007	214	168	79	46	8	5	5	22	13
	– 58	2008	194	216	111	44	13	3	1	22	15
Mauritius		1995	2		–						
		2000	12	2	17	0	0	50	50	0	0
		2005	5	5	100	60	20			20	0
		2006	4	7	175	57	43	0	0	0	0
		2007	6	6	100	50	0	17	0	33	0
	– 50	2008	4	4	100	50	0	25	0	25	0
Mozambique		1995	899		–						
		2000	1 463	1 594	109	69	3	11	4	11	2
		2005	1 886	1 855	98	69	1	15	2	10	3
		2006	1 810	1 818	100	63	2	12	2	7	14
		2007	1 746	1 746	100	68	2	12	3	8	7
	– 65	2008	1 782	1 782	100	63	2	10	6	5	14
Namibia		1995	88		–						
		2000	1 534	604	39	41	14	8	6	13	17
		2005	1 823	2 009	110	24	29	11	3	13	22
		2006	2 113	2 255	107	28	35	13	6	12	6
		2007	1 757	1 486	85	53	12	10	11	10	4
	– 74	2008	1 439	1 439	100	58	15	9	10	5	2
Niger		1995			–						
		2000	255		–						
		2005	754		–						
		2006	758	730	96	57	18	6	7	8	5
		2007	794	790	99	54	20	7	7	8	3
	– 79	2008	617	616	100	67	12	8	5	6	3
Nigeria		1995	303		–						
		2000	2 356	1 848	78	58	13	7	7	11	4
		2005	4 867	3 662	75	48	18	2	11	20	1
		2006	5 565	4 605	83	60	17	4	7	10	3
		2007	6 093	6 093	100	54	13	6	3	7	17
	– 59	2008	7 048	7 048	100	47	12	2	5	6	27

[a] TREATMENT SUCCESS = percent cured + percent completed then rounded to the nearest digit.

Data can be downloaded from www.who.int/tb/data

TABLE A2.5 **Treatment outcomes, retreatment cases, 1995–2008**

	TREATMENT SUCCESS (%)[a] 1995–2008	YEAR	NUMBER NOTIFIED	SIZE OF COHORT	COHORT AS % NOTIFIED	% OF COHORT					
						CURED	COMPLETED	DIED	FAILED	DEFAULTED	NOT EVALUATED
Rwanda		1995	200		–						
		2000	374	296	79	49	5	14	1	5	25
		2005	831	506	61	56	9	15	3	4	13
		2006	558	618	111	52	20	10	9	3	6
		2007	478	448	94	62	8	7	14	3	6
	– 73	2008	397	397	100	64	9	7	7	5	8
Sao Tome and Principe		1995			–						
		2000	4		–						
		2005	27	0	0	–	–	–	–	–	–
		2006	0	6	–	67	0	33	0	0	0
		2007	5	5	100	60	0	0	20	20	0
	– 67	2008	6	3	50	67	0	0	33	0	0
Senegal		1995	563	634	113	45	11	5	10	25	4
		2000	1 056	931	88	40	8	4	3	23	23
		2005	920	920	100	58	5	8	5	13	11
		2006	1 006	896	89	59	6	6	5	13	11
		2007	843	843	100	62	5	8	4	13	8
	56 75	2008	1 144	972	85	70	5	7	4	10	5
Seychelles		1995	0		–						
		2000	0		–						
		2005	2		–						
		2006			–						
		2007		0	–	–	–	–	–	–	–
	– –	2008	0	0	–	–	–	–	–	–	–
Sierra Leone		1995	41	69	168	72	14	3	4	4	1
		2000	441		–						
		2005	330	328	99	68	7	6	3	15	1
		2006	297	297	100	72	11	8	2	7	1
		2007	373	168	45	80	10	8	0	2	0
	87 85	2008	389	153	39	78	7	5	1	6	3
South Africa		1995	179		–						
		2000	56 202	24 847	44	43	8	8	3	19	19
		2005	60 588	64 923	107	29	29	11	2	16	13
		2006	68 869	43 225	63	56	10	5	9	12	7
		2007	66 646	60 084	90	54	10	5	6	13	13
	– 70	2008	64 470	28 147	44	56	14	9	5	10	6
Swaziland		1995	489		–						
		2000	1 249		–						
		2005	470	1 113	237	7	21	11	3	5	54
		2006	490	1 048	214	8	20	12	6	11	42
		2007	1 083	663	61	20	17	12	11	12	27
	– 48	2008	1 319	1 418	108	14	34	15	11	9	17
Togo		1995	93	93	100	16	17	5	4	19	38
		2000	133		–						
		2005	179	128	72	73	2	14	4	7	0
		2006	195		–						
		2007	130	133	102	59	4	23	2	11	2
	33 75	2008	196	194	99	73	2	14	4	7	0
Uganda		1995	955		–						
		2000	1 505	1 209	80	34	30	13	0	13	10
		2005	2 430		–						
		2006	2 248	1 357	60	33	43	8	1	10	4
		2007	2 136	1 433	67	32	49	8	1	6	4
	– 79	2008	3 177	2 491	78	31	48	8	1	12	0
United Republic of Tanzania		1995	1 335	1 455	109	66	10	11	1	8	4
		2000	1 772	3 356	189	49	24	14	1	6	6
		2005	5 032	5 067	101	37	39	13	1	4	6
		2006	4 635	4 639	100	38	39	12	1	4	6
		2007	4 525	4 525	100	39	43	10	0	3	5
	76 83	2008	4 474	4 537	101	34	49	1	10	3	4
Zambia		1995	243		–						
		2000	1 455	894	61	52	15	11	4	5	12
		2005	5 496	5 496	100	24	60	9	1	3	4
		2006	5 254	5 254	100	29	52	10	1	3	5
		2007	5 833	5 833	100	24	58	9	0	3	6
	– 80	2008	5 236	2 958	56	0	80	9	0	4	6
Zimbabwe		1995	737		–						
		2000		1 063	–	51	14	17	1	8	9
		2005	5 941	4 667	79	13	46	16	0	13	11
		2006	4 722	929	20	54	3	17	1	7	19
		2007	2 486	2 486	100	35	15	19	1	14	16
	– 73	2008	3 631	1 109	31	63	10	12	1	7	7

[a] TREATMENT SUCCESS = percent cured + percent completed then rounded to the nearest digit.

TABLE A.6 **HIV testing and provision of CPT, ART and IPT, 2005–2009**

	% OF TB PATIENTS WITH KNOWN HIV STATUS 2005–2009	YEAR	% OF TB PATIENTS WITH KNOWN HIV STATUS	NUMBER OF TB PATIENTS WITH KNOWN HIV STATUS	PATIENTS NOTIFIED (NEW AND RETREAT)[a]	NUMBER OF HIV-POSITIVE TB PATIENTS	% OF TESTED TB PATIENTS HIV-POSITIVE	% OF HIV-POSITIVE TB PATIENTS ON CPT	% OF HIV-POSITIVE TB PATIENTS ON ART	NUMBER OF HIV-POSITIVE PEOPLE PROVIDED IPT
Algeria		2005	–		21 501		–	–	–	
		2006	–		21 263		–	–	–	
		2007	–		21 540		–	–	–	
		2008	–		20 730		–	–	–	
	–	2009	–		21 823		–	–	–	
Angola		2005	–		38 317		–	–	–	
		2006	–		54 699		–	–	–	
		2007	9	3 800	42 383	450	12	62	13	
		2008	–		45 923		–	–	–	
	–	2009	5	2 023	44 151	306	15	14	9	
Benin		2005	23	796	3 457	110	14	–	–	
		2006	89	3 318	3 734	494	15	68	43	0
		2007	–	3 386		501	15	94	44	
		2008	96	3 802	3 977	653	17	97	40	
	23	2009	96	3 845	3 987	629	16	–	–	
Botswana		2005	23	2 291	10 104	1 829	80	–	–	18 762
		2006	59	5 046	8 519	3 590	71	–	–	19 034
		2007	68	5 480	8 096	3 698	67	28	28	6 042
		2008	71	6 120	8 665	4 149	68	32	32	12 802
	23	2009	70	6 128	8 781	4 036	66	36	36	11 732
Burkina Faso		2005	33	1 213	3 659	559	46	68	32	
		2006	62	2 624	4 248	739	28	81	39	
		2007	80	3 390	4 243	781	23	93	47	
		2008	95	4 308	4 554	948	22	98	52	0
	33	2009	94	4 817	5 105	981	20	98	51	
Burundi		2005	–		6 627		–	–	–	0
		2006	–		6 176		–	–	–	
		2007	–		6 343		–	–	–	416
		2008	8	526	6 865	243	46	25	14	
	–	2009	39	2 857	7 323	1 305	46	47	32	617
Cameroon		2005	–		22 073		–	–	–	0
		2006	36	8 639	24 002	3 363	39	11	3	
		2007	48	11 825	24 589	5 378	45	55	37	
		2008	71	17 885	25 125	7 211	40	59	36	0
	–	2009	74	18 677	25 174	7 494	40	–	–	0
Cape Verde		2005	98	298	305	14	5	–	100	
		2006	98	270	276	8	3	100	–	0
		2007	70	205	292		–	–	–	
		2008	–		349		–	–	–	
	98	2009	80	282	352	57	20	–	–	0
Central African Republic		2005	–		3 338		–	–	–	
		2006	–		6 375		–	–	–	0
		2007	–				–	–	–	
		2008	–		6 935		–	–	–	0
	–	2009	42	3 749	8 996	1 230	33	66	35	0
Chad		2005	–		6 505		–	–	–	
		2006	–				–	–	–	
		2007	–		6 200		–	–	–	
		2008	–		7 195		–	–	–	
	–	2009	–		8 651		–	–	–	0
Comoros		2005	100	112	112	2	2	100	100	
		2006	100	116	116	2	2	0	0	2
		2007	–				–	–	–	
		2008	80	110	137	0	0	–	–	0
	100	2009	91	117	129	0	0	–	–	0
Congo		2005	–		9 961		–	–	–	
		2006	–		8 600		–	–	–	
		2007	7	616	9 121	383	62	100	49	0
		2008	2	180	9 057	36	20	100	100	
	–	2009	2	205	9 935	99	48	100	100	
Côte d'Ivoire		2005	20	4 079	20 026	1 551	38	38	14	
		2006	27	5 810	21 145	2 130	37	56	47	
		2007	48	11 264	23 383	4 370	39	90	26	0
		2008	72	17 201	24 048	5 073	29	60	22	
	20	2009	75	17 253	23 009	5 207	30	71	31	0
Democratic Republic of the Congo		2005	2	1 885	99 558	386	20	74	1	
		2006	4	3 931	98 139	188	5	90	64	0
		2007	14	14 484	102 764	2 129	15	95	20	
		2008	20	21 856	108 215	3 932	18	42	18	
	2	2009	18	20 630	116 664	4 173	20	34	16	0
Equatorial Guinea		2005	–				–	–	–	
		2006	–				–	–	–	
		2007	–	320		109	34	–	–	
		2008	100	741	741	41	6	–	–	0
	–	2009	100	720	720	121	17	–	–	
Eritrea		2005	–		3 612		–	–	–	
		2006	–		3 136		–	–	–	
		2007	–		3 743		–	–	–	
		2008	–		3 006		–	–	–	
	–	2009	–		3 022		–	–	–	
Ethiopia		2005	3	3 211	125 135	1 321	41	88	29	1 983
		2006	3	3 255	123 009	1 295	40	86	27	1 399
		2007	16	20 723	129 743	6 342	31	71	42	2 381
		2008	23	33 021	141 909	7 891	24	67	44	1 493
	3	2009	37	56 040	150 221	11 098	20	68	41	2 403
Gabon		2005	7	185	2 611	185	100	100	–	0
		2006	20	645	3 206	645	100	100	–	0
		2007	18	719	3 943	719	100	–	–	0
		2008	21	966	4 678	613	63	49	49	0
	7	2009	32	1 130	3 559	667	59	52	52	
Gambia		2005	–		2 120		–	–	–	
		2006	29	550	1 881	142	26	–	16	
		2007	47	937	2 010	230	25	0	5	
		2008	73	1 578	2 169	294	19	–	18	
	–	2009	94	2 045	2 186	326	16	–	11	
Ghana		2005	7	844	12 124	340	40	100	37	
		2006	17	2 136	12 511	711	33	68	14	
		2007	44	5 695	12 961	1 621	28	72	17	0
		2008	51	7 373	14 467	1 630	22	87	24	0
	7	2009	65	9 870	15 286	2 218	22	72	24	0

[a] Data presented as of 31 August 2010. Notification data for European Union countries were not available.

Data can be downloaded from www.who.int/tb/data

TABLE A.6 **HIV testing and provision of CPT, ART and IPT, 2005–2009**

	% OF TB PATIENTS WITH KNOWN HIV STATUS 2005–2009	YEAR	% OF TB PATIENTS WITH KNOWN HIV STATUS	NUMBER OF TB PATIENTS WITH KNOWN HIV STATUS	PATIENTS NOTIFIED (NEW AND RETREAT)[a]	NUMBER OF HIV-POSITIVE TB PATIENTS	% OF TESTED TB PATIENTS HIV-POSITIVE	% OF HIV-POSITIVE TB PATIENTS ON CPT	% OF HIV-POSITIVE TB PATIENTS ON ART	NUMBER OF HIV-POSITIVE PEOPLE PROVIDED IPT
Guinea		2005	–		7 090		–	–	–	
		2006	–		9 076		–	–	–	
		2007	9	870	9 726	140	16	100	100	
		2008	10	1 020	10 345	197	19	97	24	0
	– 63	2009	63	5 444	8 614	1 288	24	40	7	
Guinea-Bissau		2005	11	200	1 816	110	55	100	30	0
		2006	7	151	2 161	85	56	100	51	42
		2007	–	683		283	41	80	13	
		2008	22	543	2 430	250	46	83	–	
	11 –	2009	–		2 188		–	–	–	
Kenya		2005	14	15 658	108 401	8 954	57	44	17	
		2006	60	69 337	115 234	36 136	52	141	43	
		2007	79	91 841	116 723	43 954	48	93	37	0
		2008	83	91 463	110 251	41 174	45	92	30	0
	14 88	2009	88	96 676	110 065	42 294	44	92	34	
Lesotho		2005	1	156	11 404	127	81	79	–	
		2006	11	1 470	13 368	1 228	84	52	16	
		2007	247	6 223	2 521	4 974	80	70	18	
		2008	68	9 008	13 219	6 830	76	82	27	
	1 78	2009	78	10 563	13 515	8 084	77	94	28	
Liberia		2005	3	114	3 456	14	12	–	–	
		2006	15	688	4 514	101	15	–	–	
		2007	–				–	–	–	
		2008	80	4 002	5 023	64	2	50	39	
	3 100	2009	100	5 964	5 964	72	1	42	49	0
Madagascar		2005	9	1 759	19 475	16	1	–	–	
		2006	–		22 517		–	–	–	
		2007	6	1 381	22 441	8	1	–	–	0
		2008	28	6 471	22 775	9	0	–	–	0
	9 –	2009	–		23 363		–	–	–	
Malawi		2005	44	12 243	27 610	8 447	69	92	49	
		2006	64	17 253	27 011	12 064	70	93	36	
		2007	86	22 744	26 299	15 491	68	89	42	0
		2008	84	21 557	25 684	13 687	63	96	38	
	44 86	2009	86	21 041	24 356	13 558	64	94	45	0
Mali		2005	–		4 877		–	–	–	
		2006	9	478	5 224	70	15	–	–	
		2007	25	1 362	5 395	279	20	–	–	
		2008	49	3 041	6 208	452	15	9	4	0
	– 55	2009	55	3 760	6 835	585	16	45	10	0
Mauritania		2005	0	10	2 218	0	0	–	–	
		2006	–		2 766		–	–	–	
		2007	2	63	3 025	63	100	100	86	0
		2008	2	52	2 726	52	100	100	100	
	0 7	2009	7	199	2 664	23	12	–	–	
Mauritius		2005	91	115	127	2	2	100	50	
		2006	87	100	115	5	5	80	80	2
		2007	96	104	108	7	7	100	86	3
		2008	94	101	108	10	10	50	50	0
	91 95	2009	95	110	116	7	6	100	71	0
Mozambique		2005	–		33 718		–	–	–	
		2006	24	8 631	35 632	6 079	70	17	46	109
		2007	70	26 548	38 044	12 563	47	93	33	676
		2008	81	32 182	39 735	19 330	60	92	30	724
	– 84	2009	84	38 087	45 529	25 056	66	89	22	2 429
Namibia		2005	16	2 547	15 894	1 465	58	–	–	
		2006	30	4 653	15 771	3 117	67	100	–	
		2007	53	8 186	15 532	4 803	59	31	16	
		2008	67	9 188	13 637	5 718	62	92	35	
	16 74	2009	74	9 849	13 332	5 676	58	91	35	17 737
Niger		2005	–		8 224	152	–	43	34	
		2006	–		8 755		–	–	–	
		2007	11	1 088	9 592	303	28	24	–	0
		2008	24	2 243	9 393	320	14	45	–	
	– 24	2009	24	2 424	10 228	300	12	–	–	
Nigeria		2005	10	6 897	66 848	1 241	18	–	–	
		2006	10	7 422	74 225	1 558	21	–	–	
		2007	32	27 849	86 241	6 275	23	31	–	76
		2008	62	56 053	90 311	15 301	27	26	45	2 099
	10 75	2009	75	70 693	94 114	18 087	26	48	39	1 853
Rwanda		2005	65	5 003	7 680	2 276	45	15	13	
		2006	76	6 300	8 283	2 561	41	44	31	0
		2007	89	7 132	8 014	2 673	37	61	39	
		2008	96	7 510	7 841	2 560	34	87	60	0
	65 97	2009	97	7 448	7 644	2 529	34	92	49	0
Sao Tome and Principe		2005	100	152	152	5	3	–	–	
		2006	100	153	153	3	2	0	0	0
		2007	100	93	93	9	10	100	22	0
		2008	97	69	71	6	9	100	50	
	100 100	2009	100	79	79	10	13	100	30	2
Senegal		2005	–		10 120		–	–	–	
		2006	–		10 664		–	–	–	
		2007	22	2 367	10 680	367	16	77	32	0
		2008	51	5 963	11 591	601	10	71	34	0
	– 59	2009	59	6 906	11 732	455	7	85	27	0
Seychelles		2005	–		14	2	–	100	100	
		2006	–				–	–	–	
		2007	–				–	–	–	
		2008	100	6	6	0	0	–	–	0
	– 100	2009	100	15	15	3	20	100	67	0
Sierra Leone		2005	–		6 930		–	–	–	
		2006	25	2 080	8 208	174	8	60	–	
		2007	38	3 621	9 623	414	11	–	–	
		2008	72	7 949	11 021	920	12	–	–	
	– 73	2009	73	8 625	11 826	987	11	–	–	
South Africa		2005	22	67 988	302 467	35 299	52	100	33	1 466
		2006	32	110 235	341 165	58 249	53	98	53	2 512
		2007	39	136 247	353 619	87 764	64	67	24	5 642
		2008	39	150 542	388 882	89 950	60	72	25	7 359
	22 51	2009	51	197 448	383 670	114 523	58	71	42	23 583

[a] Data presented as of 31 August 2010. Notification data for European Union countries were not available.

TABLE A.6 **HIV testing and provision of CPT, ART and IPT, 2005–2009**

	% OF TB PATIENTS WITH KNOWN HIV STATUS 2005–2009		YEAR	% OF TB PATIENTS WITH KNOWN HIV STATUS	NUMBER OF TB PATIENTS WITH KNOWN HIV STATUS	PATIENTS NOTIFIED (NEW AND RETREAT)[a]	NUMBER OF HIV-POSITIVE TB PATIENTS	% OF TESTED TB PATIENTS HIV-POSITIVE	% OF HIV-POSITIVE TB PATIENTS ON CPT	% OF HIV-POSITIVE TB PATIENTS ON ART	NUMBER OF HIV-POSITIVE PEOPLE PROVIDED IPT
Swaziland			2005	–		8 864		–	–	–	
			2006	20	1 847	9 195	1 476	80	88	19	0
			2007	68	6 517	9 636	5 252	81	95	19	
			2008	71	6 805	9 565	5 699	84	95	24	0
	–	75	2009	75	8 272	11 032	6 895	83	–	–	
Togo			2005	–		2 635		–	–	–	0
			2006	–		2 924		–	–	–	
			2007	5	134	2 493	17	13	100	–	0
			2008	17	512	3 069	162	32	34	30	0
	–	46	2009	46	1 429	3 093	357	25	–	26	0
Uganda			2005	25	10 555	41 809	7 523	71	25	10	
			2006	28	11 590	41 579	6 838	59	52	13	
			2007	40	16 527	41 612	9 687	59	67	16	121
			2008	63	27 695	43 843	16 432	59	78	22	
	25	71	2009	71	31 695	44 335	17 131	54	86	22	
United Republic of Tanzania			2005	3	1 613	64 200	841	52	61	22	
			2006	3	1 613	62 100	841	52	50	22	
			2007	50	31 305	62 092	14 669	47	72	31	
			2008	77	48 846	63 364	19 940	41	82	30	
	3	76	2009	76	56 162	74 365	21 031	37	90	32	153
Zambia			2005	2	1 082	53 267	614	57	–	68	
			2006	11	5 485	51 179	3 514	64	62	77	
			2007	47	23 574	50 415	16 240	69	40	41	0
			2008	65	30 654	47 371	20 839	68	46	41	850
	2	77	2009	77	34 992	45 551	23 584	67	64	42	
Zimbabwe			2005	–		54 891		–	–	–	
			2006	–		47 774		–	–	–	0
			2007	26	10 711	41 414	7 373	69	79	23	0
			2008	56	22 062	39 348	16 619	75	75	28	226
	–	61	2009	61	28 006	45 970	21 967	78	–	–	

[a] Data presented as of 31 August 2010. Notification data for European Union countries were not available.

TABLE A2.7 **Testing for MDR-TB and number of confirmed cases of MDR-TB, 2005–2009**

			NEW CASES				PREVIOUSLY TREATED CASES			
	YEAR	TOTAL CONFIRMED CASES OF MDR-TB[a]	NOTIFIED	NUMBER OF NOTIFIED TESTED FOR MDR-TB	% OF NOTIFIED TESTED FOR MDR-TB	NUMBER OF CONFIRMED CASES OF MDR-TB	NOTIFIED	NUMBER OF NOTIFIED TESTED FOR MDR-TB	% OF NOTIFIED TESTED FOR MDR-TB	NUMBER OF CONFIRMED CASES OF MDR-TB
Algeria	2005	74	20 788	809	4	14	713	164	23	60
	2006		20 584		–		679		–	
	2007		20 822		–		718		–	
	2008		20 079		–		651		–	
	2009		21 211		–		612		–	
Angola	2005		35 446		–		2 871		–	
	2006		35 853		–		18 846		–	
	2007		39 066		–		3 317		–	
	2008		42 339		–		3 584		–	
	2009		38 823		–		5 328		–	
Benin	2005	28	3 120	31	1	3	337	107	32	25
	2006	21	3 471	81	2	3	263	66	25	17
	2007				–				–	
	2008	4	3 741	0	0	0	236	141	60	4
	2009	14	3 716		–		271	94	35	14
Botswana	2005	12	9 556		–		548		–	
	2006		8 177		–		342		–	
	2007	139	7 399		–		697		–	
	2008	126	8 326	530	6	51	339	299	88	75
	2009	101	7 690	268	3	30	1 091	251	23	54
Burkina Faso	2005	3	3 325		–		334	126	38	3
	2006	6	3 766	0	0	0	482	0	0	0
	2007	12	3 781	1	0	1	462	14	3	8
	2008	16	4 049	1	0	1	505	0	0	0
	2009	19	4 503	3	0	0	602	52	9	19
Burundi	2005		6 511		–		116		–	
	2006	0	5 969	0	0	0	207	0	0	0
	2007	26	6 118	0	0	0	225	0	0	0
	2008	17	6 660	0	0	0	205	0	0	0
	2009	0	7 085	0	0	0	238	0	0	0
Cameroon	2005		20 483		–		1 590		–	
	2006		22 509		–		1 493		–	
	2007	0	23 124	0	0	0	1 465	0	0	0
	2008		23 705		–		1 420		–	
	2009		23 605		–		1 569		–	
Cape Verde	2005		271		–		34		–	
	2006		252		–		24		–	
	2007	0	260	0	0	0	32	0	0	0
	2008	0	318	0	0	0	31	1	3	0
	2009	0	319	0	0	0	33	0	0	0
Central African Republic	2005		3 047		–		291		–	
	2006	0	5 819	0	0	0	556	0	0	0
	2007				–				–	
	2008	12	6 562	233	4	1	373	21	6	11
	2009	7	8 367	225	3	1	629	21	3	6
Chad	2005		5 990		–		515		–	
	2006				–				–	
	2007	0	5 798	0	0	0	402	0	0	0
	2008	0	6 564	0	0	0	631	0	0	0
	2009	0	7 975	0	0	0	676	0	0	0
Comoros	2005	0	109	0	0	0	3	0	0	0
	2006	0	109	0	0	0	7	0	0	0
	2007				–				–	
	2008	2	129	0	0	0	6	0	0	0
	2009	0	115	0	0	0	6	0	0	0
Congo	2005		9 554		–		407		–	
	2006		8 197		–		403		–	
	2007	0	8 772	0	0	0	349	0	0	0
	2008		8 584		–		473		–	
	2009		9 484		–		451		–	
Côte d'Ivoire	2005	47	19 046	0	0		980	0	0	
	2006		19 953		–		1 192		–	
	2007	0	22 068	0	0	0	1 315	0	0	0
	2008	24	22 619	0	0	0	1 429	53	4	24
	2009	43	21 573	0	0	0	1 436	309	22	43
Democratic Republic of the Congo	2005		93 493		–		5 491		–	
	2006	1	91 794		–		5 861	75	1	1
	2007	15	95 804	37	0	15	6 412	123	2	67
	2008	128	100 425	40	0	3	7 790	190	2	125
	2009	91	107 839		–		8 825	111	1	91
Equatorial Guinea	2005				–				–	
	2006				–				–	
	2007				–				–	
	2008	5	691	1	0	1	50	0	0	0
	2009		676		–		44		–	
Eritrea	2005		3 452		–		124		–	
	2006		2 946		–		190		–	
	2007		3 533		–		210		–	
	2008		2 861		–		145		–	
	2009		2 815		–		207		–	
Ethiopia	2005		122 016		–		3 119		–	
	2006		120 163		–		2 846		–	
	2007	145	126 809	13	0	1	2 934	296	10	144
	2008	130	138 960		–		2 949		–	
	2009	233	146 677	16	0	12	3 544	298	8	180
Gabon	2005	0	2 354	0	0	0	257	0	0	0
	2006		2 936		–		270		–	
	2007	0	3 601	0	0	0	342	0	0	0
	2008		4 382		–		296		–	
	2009		2 904		–		655		–	
Gambia	2005		1 954		–		166		–	
	2006	1	1 778	1	0	1	103	29	28	0
	2007	0	1 870	0	0	0	140	58	41	0
	2008	0	2 026	0	0	0	143	143	100	0
	2009	0	2 079	0	0	0	107	0	0	0
Ghana	2005	1	11 592	50	0	0	532	2	0	1
	2006		11 974		–		537		–	
	2007	7	12 280	0	0	0	681		–	
	2008	2	13 703	0	0	0	764	100	13	2
	2009		14 426		–		860		–	

[a] TOTAL CONFIRMED CASES OF MDR-TB includes cases with unknown previous treatment history (i.e. not included under NEW CASES or PREVIOUSLY TREATED CASES).

TABLE A2.7 **Testing for MDR-TB and number of confirmed cases of MDR-TB, 2005–2009**

	YEAR	TOTAL CONFIRMED CASES OF MDR-TB[a]	NEW CASES				PREVIOUSLY TREATED CASES			
			NOTIFIED	NUMBER OF NOTIFIED TESTED FOR MDR-TB	% OF NOTIFIED TESTED FOR MDR-TB	NUMBER OF CONFIRMED CASES OF MDR-TB	NOTIFIED	NUMBER OF NOTIFIED TESTED FOR MDR-TB	% OF NOTIFIED TESTED FOR MDR-TB	NUMBER OF CONFIRMED CASES OF MDR-TB
Guinea	2005	20	6 632	215	3	5	458	34	7	15
	2006	25	8 500	104	1	2	576	33	6	17
	2007	36	9 074	9	0	1	652	34	5	36
	2008	72	9 674	0	0	0	671	0	0	0
	2009	69	8 009	6	0	6	589	63	11	63
Guinea-Bissau	2005	0	1 678	0	0		138		–	
	2006	0	2 004	0	0	0	157	0	0	0
	2007				–				–	
	2008	0	2 348	0	0	0	82	0	0	0
	2009		2 112		–		76		–	
Kenya	2005	44	99 426	0	0	0	8 975	1 829	20	44
	2006	89	104 935	0	0	0	10 299	1 049	10	89
	2007	82	106 261	0	0	0	10 462	4 403	42	82
	2008	102	99 807	0	0	0	10 444	5 043	48	102
	2009	150	99 354	0	0	0	10 711	1 971	18	130
Lesotho	2005		10 363		–		1 041		–	
	2006	0	11 435	0	0	0	1 678	0	0	0
	2007		2 221		–		300		–	
	2008		11 433		–		1 786		–	
	2009		11 545		–		1 970		–	
Liberia	2005	0	3 399	0	0	0	57	0	0	0
	2006		4 381		–		133		–	
	2007				–				–	
	2008	0	4 891	0	0	0	132	0	0	0
	2009		5 841		–		123		–	
Madagascar	2005		17 977		–		1 498		–	
	2006	2	20 799	53	0	0	1 718	35	2	6
	2007	5	20 638	103	0	1	1 803	29	2	4
	2008	6	20 813		–		1 962	144	7	6
	2009	3	21 285	44	0	0	2 078	22	1	3
Malawi	2005	9	24 398		–		3 212	917	29	9
	2006		24 042		–		2 969	875	29	8
	2007	12	23 507	0	0	0	2 792	854	31	12
	2008	16	23 151	0	0	0	2 533	867	34	16
	2009	6	21 886	0	0	0	2 470	34	1	
Mali	2005	2	4 497	0	0	0	380	0	0	0
	2006	0	4 768	0	0	0	456	0	0	0
	2007	11	4 959		–	2	423	6	1	
	2008	7	5 797	0	0	0	411	16	4	7
	2009	22	6 410	14	0	11	425	14	3	11
Mauritania	2005	11	2 012	161	8	4	206	30	15	7
	2006	7	2 502	61	2	3	264	12	5	4
	2007	14	2 811	0	0	0	214		–	
	2008	6	2 532		–	6	194	6	3	
	2009		2 482		–		182		–	
Mauritius	2005	0	122	114	93	0	5	3	60	0
	2006	2	111	85	77	0	4	4	100	2
	2007	0	102	86	84	0	6	6	100	0
	2008	1	104	85	82	0	4	4	100	1
	2009	1	111	98	88	1	5	5	100	0
Mozambique	2005	115	31 832	113	0	18	1 886	305	16	97
	2006	129	33 822	61	0	61	1 810	149	8	49
	2007	163	36 298	56	0	14	1 746	308	18	149
	2008	181	37 953	75	0	30	1 782	277	16	109
	2009	140	41 899	73	0	45	3 630	213	6	95
Namibia	2005		14 071		–		1 823		–	
	2006		13 658		–		2 113		–	
	2007	291	13 775	0	0		1 757		–	
	2008	221	12 198		–	13	1 439		–	208
	2009	301	10 774		–	25	2 558		–	267
Niger	2005		7 470		–		754		–	
	2006		7 997		–		758		–	
	2007	0	8 798	0	0	0	794	0	0	0
	2008	52	8 776		–		617		–	
	2009	24	9 421	0	0	0	690	33	5	24
Nigeria	2005		60 589		–		4 867	0	0	
	2006		68 660		–		5 565		–	
	2007	45	80 148	32	0	4	6 093	41	1	41
	2008	23	83 263	168	0	9	7 048	19	0	14
	2009	28	85 963	17	0	12	8 151	25	0	11
Rwanda	2005	35	6 849	57	1	35	831	0	0	0
	2006		7 725		–		558		–	
	2007	102	7 305	0	0		478		–	
	2008	79	7 227	41	1	31	397	76	19	48
	2009	78	7 005	77	1	8	475	138	29	70
Sao Tome and Principe	2005		125		–		27		–	
	2006	0	153	0	0	0	0	0	–	0
	2007	0	88	0	0	0	5	0	0	0
	2008		63	0	0		6		–	
	2009		76		–		3		–	
Senegal	2005		9 200		–		920		–	
	2006		9 658		–		1 006		–	
	2007	10	9 837	170	2	7	843	30	4	3
	2008	7	10 447	168	2	3	1 144	31	3	4
	2009	11	10 620	57	1	3	1 112	31	3	8
Seychelles	2005		12		–		2		–	
	2006				–				–	
	2007				–				–	
	2008	0	6	0	0	0	0	0	–	0
	2009	0	15		–		0		–	
Sierra Leone	2005		6 600		–		330		–	
	2006		7 911		–		297		–	
	2007	0	9 250	0	0	0	373	0	0	0
	2008		10 632		–		389		–	
	2009		11 359		–		467		–	
South Africa	2005	2 000	241 879		–	197	60 588		–	1 803
	2006	6 716	272 296		–		68 869		–	
	2007	7 350	286 973		–		66 646		–	
	2008	6 219	320 026		–		64 470		–	
	2009	7 343	347 061		–		36 609		–	

[a] TOTAL CONFIRMED CASES OF MDR-TB includes cases with unknown previous treatment history (i.e. not included under NEW CASES or PREVIOUSLY TREATED CASES).

Data can be downloaded from www.who.int/tb/data

TABLE A2.7 **Testing for MDR-TB and number of confirmed cases of MDR-TB, 2005–2009**

			NEW CASES				PREVIOUSLY TREATED CASES			
	YEAR	TOTAL CONFIRMED CASES OF MDR-TB[a]	NOTIFIED	NUMBER OF NOTIFIED TESTED FOR MDR-TB	% OF NOTIFIED TESTED FOR MDR-TB	NUMBER OF CONFIRMED CASES OF MDR-TB	NOTIFIED	NUMBER OF NOTIFIED TESTED FOR MDR-TB	% OF NOTIFIED TESTED FOR MDR-TB	NUMBER OF CONFIRMED CASES OF MDR-TB
Swaziland	2005		7 751		–		470		–	
	2006		7 965		–		490		–	
	2007	110	8 553	0	0	0	1 083	320	30	110
	2008	170	8 246	298	4	17	1 319	980	74	105
	2009		9 558		–		1 474		–	
Togo	2005	0	2 452	0	0	0	179	0	0	0
	2006		2 729		–		195		–	
	2007	1	2 363	16	1	1	130	21	16	1
	2008	2	2 873	0	0	0	196	39	20	2
	2009	4	2 879	0	0	0	214	4	2	4
Uganda	2005	46	39 379		–		2 430		–	
	2006		39 331		–		2 248		–	
	2007		39 476		–		2 136		–	
	2008	26	40 666	476	1	5	3 177	407	13	21
	2009	57	40 321	369	1	6	4 014	228	6	41
United Republic of Tanzania	2005	10	59 168	276	0	1	5 032	405	8	9
	2006	13	57 465	369	1	4	4 635	171	4	9
	2007	169	57 567		–		4 525		–	25
	2008	24	58 890	450	1	6	4 474	191	4	17
	2009	24	70 156	348	0	9	4 209	177	4	15
Zambia	2005		47 771		–		5 496		–	
	2006	50	45 925		–		5 254		–	
	2007	27	44 582	0	0	0	5 833	500	9	27
	2008	56	42 135	0	0	0	5 236	566	11	56
	2009	29	43 066	63	0	13	2 485	30	1	16
Zimbabwe	2005		48 950		–		5 941		–	
	2006	0	43 052	0	0	0	4 722	0	0	0
	2007	0	38 928	0	0	0	2 486	0	0	0
	2008	0	35 717	0	0	0	3 631	0	0	0
	2009		41 467		–		4 503		–	

[a] TOTAL CONFIRMED CASES OF MDR-TB includes cases with unknown previous treatment history (i.e. not included under NEW CASES or PREVIOUSLY TREATED CASES).

TABLE A2.8 **New smear-positive case notification by age and sex, 1995–2009**

		MALE								FEMALE								
	YEAR	0–14	15–24	25–34	35–44	45–54	55–64	65+	UNKNOWN	0–14	15–24	25–34	35–44	45–54	55–64	65+	UNKNOWN	MALE/FEMALE RATIO
Algeria	1995																	–
	2000	59	927	1 516	610	491	234	299		36	1 005	1 293	746	314	208	312		1.1
	2005	53	1 309	1 841	919	473	314	426		102	1 044	820	389	270	229	465		1.6
	2009	43	1 225	1 827	898	541	319	364		90	1 021	860	363	270	241	340		1.6
Angola	1995	386	724	562	346	224	155	14		371	707	443	264	248	130	18		1.1
	2000	186	999	1 003	912	482	312	194		247	1 142	1 091	844	417	200	120		1.0
	2005	520	2 549	2 797	1 918	1 255	665	461		704	2 926	2 682	1 797	1 138	581	417		1.0
	2009	392	3 054	3 600	2 420	1 590	748	463		568	3 152	2 798	1 790	1 069	572	272		1.2
Benin	1995	14	186	352	306	176	101	92		26	148	197	118	69	32	22		2.0
	2000	19	277	428	327	213	103	74		36	239	275	149	76	45	25		1.7
	2005	21	306	595	396	270	135	87		25	249	331	145	89	51	39		1.9
	2009	32	284	575	452	323	157	99	0	39	265	392	178	85	42	37	0	1.9
Botswana	1995																	–
	2000	25	185	605	488	267	135	96		37	335	469	262	98	57	36		1.4
	2005	27	260	563	506	272	135	97		45	321	491	253	97	55	48		1.4
	2009	37	259	551	471	276	137	104	0	64	336	476	260	134	54	45	0	1.3
Burkina Faso	1995	4	67	133	124	62	48	29		7	76	53	39	26	11	10		2.1
	2000	12	91	274	252	133	68	65		7	59	128	101	45	38	14		2.3
	2005	18	181	430	370	273	144	113		15	125	248	174	109	54	40		2.0
	2009	27	221	592	467	336	230	189	0	38	156	269	209	154	96	77	0	2.1
Burundi	1995	5	128	238	224	73	32	19		19	109	124	89	33	12	4		1.8
	2000																	–
	2005	34	352	591	525	372	111	55		46	298	399	288	122	36	33		1.7
	2009	34	452	717	584	468	240	117		50	326	397	309	157	83	40		1.9
Cameroon	1995	20	208	569	323	287	204	164		9	185	313	223	153	106	93		1.6
	2000	41	518	842	584	284	130	75		63	368	530	293	139	60	33		1.7
	2005	134	1 472	2 482	1 766	1 035	463	289		226	1 467	1 788	1 028	503	205	143		1.4
	2009	106	1 605	2 765	1 981	1 210	553	343		153	11 480	1 959	1 097	519	237	151		0.5
Cape Verde	1995																	–
	2000																	–
	2005	0	22	23	26	9	2	8		2	9	16	4	5	3	6		2.0
	2009	1	27	40	31	19	3	6		4	13	10	8	4	1	5		2.8
Central African Republic	1995	38	162	356	206	120	40	18		39	233	350	145	57	21	9		1.1
	2000																	–
	2005	29	40	1 136	160	26	35	15		30	32	420	145	30	40	15		2.0
	2009	124	546	850	662	351	184	94		137	611	723	426	228	128	68		1.2
Chad	1995																	–
	2000																	–
	2005	25	194	535	409	229	123	82		28	148	298	211	148	59	27		1.7
	2009	48	355	808	642	336	196	126	0	47	256	339	319	196	90	60	0	1.9
Comoros	1995	0	18	13	9	7	8	4		1	13	9	8	6	5	2		1.3
	2000	0	18	7	14	9	3	4		1	9	6	12	1	2	1		1.7
	2005	0	12	9	6	4	2	4		2	10	7	4	8	3	8		0.9
	2009	1	9	12	12	11	6	3	0	1	8	4	4	2	2	1	0	2.5
Congo	1995	16	265	409	221	73	44	15		17	296	353	167	61	38	11		1.1
	2000																	–
	2005																	–
	2009	50	474	644	376	220	87	56		65	426	493	292	127	76	47		1.2
Côte d'Ivoire	1995	41	989	2 092	1 344	759	283	130		99	810	813	497	273	105	19		2.2
	2000																	–
	2005	128	1 346	2 449	1 606	888	422	385		193	1 280	1 756	989	528	232	201		1.4
	2009	199	1 758	2 886	1 762	1 048	527	354	0	237	1 473	1 913	1 073	559	301	210	0	1.5
Democratic Republic of the Congo	1995	373	1 572	2 382	1 890	1 184	634	289		331	1 223	1 532	1 232	863	427	137		1.4
	2000	485	4 048	5 833	4 151	2 549	1 295	602		718	4 422	5 146	3 309	1 724	855	351		1.1
	2005	1 321	6 675	9 808	7 577	5 022	2 637	1 499		1 695	7 570	8 501	5 832	3 898	2 054	951		1.1
	2009	1 453	6 587	9 964	8 475	6 155	3 393	1 821		1 773	7 091	8 753	6 477	4 556	2 655	1 336		1.2
Equatorial Guinea	1995	8	15	45	37	15	11	7		2	18	28	20	4	7	1		1.7
	2000																	–
	2005																	–
	2009	10	53	79	64	52	20	4	0	2	57	66	54	19	4	6	0	1.4
Eritrea	1995																	–
	2000	9	70	75	57	32	25	20		10	100	87	71	21	12	8		0.9
	2005	9	68	73	50	45	51	39		8	67	127	72	39	21	18		1.0
	2009	6	104	111	79	46	57	44	0	4	85	88	88	39	27	24	0	1.3
Ethiopia	1995	247	1 221	1 017	541	276	142	51		283	908	781	382	152	64	15		1.4
	2000	915	5 095	5 187	3 082	1 495	610	397		1 037	4 699	4 424	2 105	976	366	122		1.2
	2005	1 109	6 726	6 181	3 454	1 985	1 027	475		1 326	5 885	5 663	2 730	1 296	513	155		1.2
	2009	1 421	7 215	7 193	4 267	2 452	1 331	794		1 593	5 556	6 075	3 499	1 798	824	378		1.3
Gabon	1995	3	45	74	80	54	30	15		9	47	54	28	25	19	3		1.6
	2000																	–
	2005	13	123	199	140	70	38	25		19	128	123	88	29	29	18		1.4
	2009	45	145	163	158	138	42	29	0	14	103	118	121	105	33	29	0	1.4
Gambia	1995	3	68	181	88	72	29	24		4	39	61	44	25	12	8		2.4
	2000																	–
	2005	13	133	292	206	62	53	44		2	84	87	64	38	22	27		2.5
	2009	12	159	240	185	124	74	49	0	20	91	143	84	70	37	28	0	1.8
Ghana	1995	42	223	397	398	302	190	112		40	199	272	205	122	88	48		1.7
	2000	73	550	1 266	1 115	811	495	426		74	456	791	566	338	179	176		1.8
	2005	49	592	1 201	1 311	944	462	414		68	450	693	527	366	207	221		2.0
	2009	66	674	1 285	1 423	1 064	505	539		58	491	701	605	362	197	285		2.1
Guinea	1995	18	244	538	357	189	98	61		28	202	255	153	64	37	19		2.0
	2000	39	551	860	570	282	203	103		66	314	446	245	114	82	45		2.0
	2005	51	749	1 165	778	463	195	130		65	594	583	354	203	94	55		1.8
	2009	65	746	1 064	655	376	208	150		68	549	644	429	225	132	66		1.5
Guinea-Bissau	1995																	–
	2000	2	52	92	80	64	39	19		4	30	46	47	24	15	12		2.0
	2005	14	116	167	153	130	72	42		13	78	110	92	82	44	19		1.6
	2009	8	124	230	172	138	82	38	0	5	88	149	119	92	47	18	0	1.5
Kenya	1995	154	2 072	3 073	1 675	920	485	296		187	1 802	1 759	741	411	242	117		1.6
	2000	264	3 739	6 653	3 548	1 630	630	414		416	3 916	4 363	1 874	831	347	148		1.4
	2005	359	4 790	8 832	5 069	2 521	1 031	590		577	5 144	6 521	2 781	1 266	593	315		1.3
	2009	470	4 667	8 081	5 067	2 565	1 030	659	0	662	4 306	5 387	2 512	1 104	540	352	0	1.5
Lesotho	1995	9	108	214	256	189	96	88		14	106	125	71	49	17	19		2.4
	2000	8	165	458	517	395	198	76		11	222	336	195	83	36	29		2.0
	2005	32	395	695	397	148	82	37		19	226	721	616	494	297	121		0.7
	2009	26	217	685	549	411	257	118		30	326	659	409	167	79	43		1.3
Liberia	1995																	–
	2000	12	133	196	127	52	17	26		21	140	149	88	28	16	16		1.2
	2005	26	240	352	333	155	74	65		37	232	297	171	108	52	25		1.4
	2009	95	360	591	592	346	135	0	0	105	354	541	399	222	0	96	0	1.2
Madagascar	1995	79	791	1 289	1 173	630	423	242		100	799	1 108	744	340	230	78		1.4
	2000																	–
	2005	98	1 159	1 867	1 732	1 349	582	333		150	1 012	1 451	1 047	614	248	129		1.5
	2009	150	1 463	2 377	2 132	1 662	942	433	0	230	1 527	1 886	1 428	906	390	187	0	1.4

[a] Data presented as of 31 August 2010. Notification data for countries that are members of the European Union were not available.

Data can be downloaded from www.who.int/tb/data

TABLE A2.8 **New smear-positive case notification by age and sex, 1995–2009**

		MALE								FEMALE								
	YEAR	0–14	15–24	25–34	35–44	45–54	55–64	65+	UN-KNOWN	0–14	15–24	25–34	35–44	45–54	55–64	65+	UN-KNOWN	MALE/FEMALE RATIO
Malawi	1995	25	493	1 195	833	519	215	89		65	802	1 028	573	294	108	45		1.2
	2000	50	653	1 476	1 113	585	245	114		66	1 038	1 481	831	401	148	64		1.1
	2005	58	622	1 653	1 031	549	279	157		84	913	1 598	859	386	180	74		1.1
	2009	53	565	1 645	1 066	503	278	199	0	75	691	1 246	706	318	174	104	0	1.3
Mali	1995	27	72	357	294	181	138	102		31	132	184	128	107	61	52		1.7
	2000	23	206	430	396	297	235	144		14	174	232	152	106	75	43		2.2
	2005	26	350	628	539	365	263	193		33	208	348	245	152	101	72		2.0
	2009	37	489	978	758	510	379	275	0	44	365	494	384	211	135	104	0	2.0
Mauritania	1995																	–
	2000																	–
	2005																	–
	2009	25	217	328	198	150	116	85		24	111	127	76	49	27	22		2.6
Mauritius	1995	2	17	13	22	27	13	8		2	4	12	10	8	4	4		2.3
	2000	2	6	9	18	19	14	8		1	5	8	8	6	7	4		1.9
	2005		10	15	21	20	10	6			4	5	5	11	2	1		2.9
	2009	0	5	7	10	19	10	9	0	0	6	10	7	5	6	4	0	1.6
Mozambique	1995	187	1 136	1 475	1 338	1 022	664	320		226	994	1 314	1 016	551	234	89		1.4
	2000																	–
	2005																	–
	2009																	–
Namibia	1995	0	68	235	113	55	21	6		5	49	78	50	16	1	0		2.5
	2000	18	269	874	665	300	147	81		16	352	654	348	161	76	52		1.4
	2005	98	355	1 027	874	365	146	120		105	399	809	525	213	95	91		1.3
	2009	41	357	936	689	348	166	121		84	384	678	407	214	97	86		1.4
Niger	1995																	–
	2000	29	270	174	441	252	151	78		31	123	206	168	151	63	9		1.9
	2005	35	557	1 204	819	497	350	198		34	214	388	330	223	131	70		2.6
	2009	52	602	1 552	1 019	654	478	328		36	248	464	339	239	209	127		2.8
Nigeria	1995	450	845	921	937	557	611	515		404	842	795	770	724	654	451		1.0
	2000	157	2 173	3 164	1 836	1 091	566	463		239	2 934	2 434	1 110	676	344	231		1.2
	2005	325	3 824	6 758	4 544	2 863	1 464	950		482	3 996	4 884	2 448	1 350	745	415		1.4
	2009	711	4 342	8 649	5 975	3 766	2 057	1 269	0	804	4 199	6 100	3 473	1 872	1 023	623	0	1.5
Rwanda	1995																	–
	2000	155	466	974	824	393	129	56		105	396	473	309	109	52	14		2.1
	2005	45	494	713	592	408	142	71		73	483	442	262	157	60	29		1.6
	2009	25	519	829	650	390	196	114	0	46	388	464	266	184	70	43	0	1.9
Sao Tome and	1995																	–
Principe	2000	1	5	11	4	7	3	10		3	7	15	5	7	4	15		0.7
	2005	2	5	7	6	4	5	2		1	4	5	3	2	3	0		1.7
	2009	0	2	10	8	4	6	0	0	1	4	10	4	2	1	0	0	1.4
Senegal	1995	94	717	1 219	813	408	300	213		84	428	461	283	203	126	72		2.3
	2000	60	772	1 297	857	470	279	189		77	521	540	376	217	107	61		2.1
	2005	71	1 050	1 561	904	533	274	236		83	709	568	351	185	116	81		2.2
	2009	66	1 362	1 790	1 035	638	335	250	0	108	815	660	352	231	127	114	0	2.3
Seychelles	1995	0	2	0	1	1	2	1		0	0	1	0	0	0	1		3.5
	2000			2	4	1	1					1	0	1	1			2.7
	2005	0	2	1	2	1	0	0		0	0	1	1	0	0	0		3.0
	2009	0	0	4	1	1	1	2	0	0	0	1	0	1	0	0	0	4.5
Sierra Leone	1995	10	184	305	201	99	47	22		18	165	193	110	65	24	11		1.5
	2000	18	287	486	361	190	113	47		27	249	298	225	92	49	30		1.5
	2005	45	490	792	651	397	226	124		54	393	518	312	207	114	47		1.7
	2009	44	737	1 073	905	621	280	195		66	524	645	506	260	146	90		1.7
South Africa	1995																	–
	2000	116	723	1 999	2 135	1 146	435	212		122	1 283	1 716	933	423	167	80		1.4
	2005	2 035	10 422	20 576	19 465	11 143	4 124	1 705		2 561	13 632	19 343	11 338	5 416	2 352	1 348		1.2
	2009	1 685	8 609	22 620	21 164	12 949	5 256	2 207		2 358	14 361	21 944	13 777	7 114	3 320	2 106		1.1
Swaziland	1995	4	59	117	130	98	40	16		5	52	57	39	29	8	6		2.4
	2000	11	130	352	249	138	37	17		10	198	298	62	62	24	5		1.4
	2005	9	162	406	285	139	57	27		14	318	453	207	73	21	8		1.0
	2009	26	221	637	417	208	109	45	0	54	459	759	353	121	57	32	0	0.9
Togo	1995	7	95	151	123	82	64	49		9	80	96	45	38	23	15		1.9
	2000	4	101	168	144	109	48	39		13	107	124	50	36	24	15		1.7
	2005	11	177	320	283	125	79	69		23	157	236	146	67	41	32		1.5
	2009	15	168	378	331	233	130	89		27	197	288	166	86	42	46		1.6
Uganda	1995	370	1 193	2 491	1 797	1 115	602	323		402	1 376	1 845	1 104	635	312	113		1.4
	2000	283	1 511	3 497	2 479	1 279	607	395		400	1 649	2 782	1 510	671	316	163		1.3
	2005	257	1 598	4 075	3 209	1 576	725	539		371	1 811	3 099	1 800	818	389	257		1.4
	2009	250	1 853	4 816	4 115	2 089	901	578		372	2 151	2 919	1 673	811	369	216		1.7
United Republic	1995	183	2 108	4 091	2 916	1 754	1 007	640		201	1 904	2 532	1 324	735	380	179		1.8
of Tanzania	2000	200	2 357	4 836	3 430	2 022	1 202	834		257	2 106	3 426	1 738	868	494	269		1.6
	2005	190	2 062	4 939	4 025	2 310	1 279	1 054		271	1 852	3 521	1 892	968	547	354		1.7
	2009	196	2 086	4 594	4 135	2 397	1 299	1 124	0	247	1 642	3 108	2 086	1 064	566	416	0	1.7
Zambia	1995	91	659	1 668	1 124	487	231	130		129	1 125	1 779	717	257	117	63		1.0
	2000	349	2 175	2 610	3 045	435	261	174		150	932	1 118	1 305	186	112	75		2.3
	2005	135	1 240	3 166	2 160	917	358	321		168	1 507	2 463	1 433	569	235	185		1.3
	2009	92	1 057	3 181	2 169	792	270	237		145	1 051	1 935	1 151	468	192	126		1.5
Zimbabwe	1995																	–
	2000																	–
	2005	210	837	2 264	1 855	762	295	656		269	1 136	2 242	1 255	578	193	603		1.1
	2009	124	576	0	3 439	675	291	190		179	869	0	3 007	411	226	126		1.1

[a] Data presented as of 31 August 2010. Notification data for countries that are members of the European Union were not available.

TABLE A2.9 **Laboratories, NTP services, drug management, human resources and infection control, 2009**

	LABORATORIES					FREE THROUGH NTP		DRUG MANAGEMENT			% OF STAFF TRAINED BY THE NTP (IN 2009)[c]				TB NOTIFICATION RATE PER 100 000 HEALTH-CARE WORKERS
	SMEAR LABS PER 100K POPULATION	CULTURE LABS PER 5M POPULATION	DST LABS PER 10M POPULATION	SECOND-LINE DST AVAILABLE	NRL[a]	TB DIAGNOSIS	FIRST-LINE DRUGS	RIFAMPICIN USED THROUGHOUT TREATMENT	% OF PATIENTS TREATED WITH FDC[b]	PAEDIATRIC FORMULATIONS PROCURED	MEDICAL OFFICERS	NURSES	HEALTH ASSISTANTS	LABORATORY TECHNICIANS	
Algeria	0.7	3.7	0.9	In country	Yes	Yes, all suspects	Yes	Yes	98	Yes	50	10	10	30	
Angola	0.8	0.3	0.5	No	Yes	Yes, all suspects	Yes	No	98	No	0	40	0	6	0
Benin	0.6	0.6	1.1	In country	Yes	If TB is confirmed	Yes	Yes	100	Yes					
Botswana	2.3	2.6	5.1	Out of country	Yes	If TB is confirmed	Yes	Yes	100	Yes					
Burkina Faso	0.7	0	0	Out of country	Yes	Yes, all suspects	Yes	Yes	100	Yes	11			34	
Burundi	2.0	0.6	0	No	Yes	Yes, all suspects	Yes	Yes	100	Yes	100	100	100	82	0
Cameroon															
Cape Verde	3.2	0	0	Out of country	Yes	Yes, all suspects	Yes	Yes	100	Yes	0	0	0	0	
Central African Republic	1.6	1.1	2.3	No	Yes	Yes, all suspects	Yes	No	100	No	10	30	17	45	
Chad	0.5	0	0	No	Yes	Yes, all suspects	Yes	No	0	No	47	0	0	95	
Comoros				No	Yes	Yes, all suspects	Yes	Yes	100	No					
Congo	0.7	0	0	Out of country	Yes	If TB is confirmed	Yes	Yes		Yes					
Côte d'Ivoire	0.5	0.2	0.5	No	Yes	Yes, all suspects	Yes	Yes	100	Yes	3	2		5	
Democratic Republic of the Congo	2.2	<0.1	0.2	No	Yes	If TB is confirmed	Yes	Yes	100	Yes	20				
Equatorial Guinea	4.3	0	0	No	No	Yes, all suspects	Yes	Yes	100	No					
Eritrea	1.5	1.0	2.0	No	Yes	If TB is confirmed	Yes	No	100	Yes					
Ethiopia	1.4	0.1	0.2	Out of country	Yes	If TB is confirmed	Yes	No	100	Yes					
Gabon	0.9	3.4	6.8	Out of country	No	No	Yes	Yes	100	No	3	25		5	23
Gambia	1.9	2.9	5.9	No	Yes	Yes, all suspects	Yes	Yes	100	Yes					
Ghana	1.0	0.6	0.8	No	Yes	Yes, all suspects	Yes	Yes	100	No	35	60	70	65	
Guinea	0.5	0.5	1.0	In country	Yes	If TB is confirmed	Yes	Yes	100	Yes					
Guinea-Bissau	3.3			No	Yes	Yes, all suspects	Yes	Yes		Yes					
Kenya	3.0	0.8	1.0	Out of country	Yes	Yes, all suspects	Yes	Yes	100	Yes					
Lesotho	0.9	2.4	4.8	Out of country	No	If TB is confirmed	Yes	Yes	100	Yes					
Liberia	3.7	0	0	In country	No	Yes, all suspects	Yes	Yes	90	Yes					
Madagascar	1.3	0.3	0.5	In country	Yes	Yes, all suspects	Yes	Yes	100	Yes					
Malawi	1.3	0.7	0.7	Out of country	Yes	Yes, all suspects	Yes	Yes	100	Yes					
Mali	0.6	0.8	1.5	Out of country	Yes	Yes, all suspects	Yes	Yes	100	Yes	10	25	5	15	0
Mauritania	2.2	1.5	3.0	No	Yes	Yes, all suspects	Yes	No	100	Yes					
Mauritius				No	Yes	Yes, all suspects	Yes	Yes	100	No					
Mozambique	1.9	0.2	0.4	Out of country	Yes	Yes, all suspects	Yes	Yes	95	Yes	22	1	0	18	
Namibia	1.4	2.3	4.6	Out of country	Yes	If TB is confirmed	Yes	Yes	98	Yes	83	89	65	90	41
Niger	0.3	0	0	Out of country	No	Yes, all suspects	Yes	Yes	100	Yes					
Nigeria	0.7	0.1	0.2	Out of country	Yes	Yes, all suspects	Yes	No	100	Yes	100	100		100	
Rwanda	1.9	0.5	1.0	No	Yes	Yes, all suspects	Yes	Yes	100	Yes					
Sao Tome and Principe	1.2	0	0	No	Yes	Yes, all suspects	Yes	Yes	0	No	0	0	0	0	100
Senegal	0.7	1.2	2.4	In country	Yes	If TB is confirmed	Yes	Yes	100	Yes	5	4	0	16	0
Seychelles				In and out of cty	No	Yes, all suspects	Yes	Yes	100	No					
Sierra Leone	2.0			No	Yes	If TB is confirmed	Yes	No	100	Yes					
South Africa	0.5	1.6	3.2	In and out of cty	Yes	Yes, all suspects	Yes	Yes	100	Yes					
Swaziland															
Togo	1.7	0.8	1.5	No	Yes	For certain income groups	Yes	Yes	100	Yes	0	0	0	0	
Uganda	2.5	0.9	1.2	In country	Yes	If TB is confirmed	Yes	Yes	100	Yes					
United Republic of Tanzania	1.6	0.1	0.2	Out of country	Yes	Yes, all suspects	Yes	Yes	100	Yes	2	1	48	39	
Zambia	1.7		2.3	No	Yes	Yes, all suspects	Yes	Yes		Yes					
Zimbabwe	1.0	0.4	0.8	No	Yes	Yes, all suspects	Yes	Yes	100	Yes	65	78	80	90	

a NRL = national reference laboratory
b FDC = fixed-dose combination
c NURSES (Registered Nurses, Registered Midwives, Enrolled Nurses, Enrolled Midwives); HEALTH ASSISTANTS (Medical Assistants, Clinical Officers); LABORATORY TECHNICIANS (Microscopists)

Region of the Americas

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Estimates of mortality, prevalence and incidence

Estimated values are shown as best estimates followed by lower and upper bounds. The lower and upper bounds are defined as the 2.5th and 97.5th centiles of outcome distributions produced in simulations. See ANNEX 1 for further details.

Estimated numbers are shown rounded to two significant figures. Estimated rates are shown rounded to three significant figures unless the value is under 100, in which case rates are shown rounded to two significant figures.

Estimates for all years are recalculated as new information becomes available and techniques are refined, so they may differ from those published in previous reports in this series. Estimates published in previous global TB control reports should no longer be used.

Graphs

Graphs where displayed show data from all years within the range stated.

Data source

Data shown in this annex are taken from the WHO global TB database on 31 August 2010. Data shown in the main part of the report were taken from the database on 17 June 2010. As a result, data in this annex may differ slightly from those in the main part of the report.

Data can be downloaded from www.who.int/tb/data.

Country notes

Caribbean Islands

Data from the territories of Anguilla, Bermuda, British Virgin Islands, Cayman Islands, Montserrat, Netherlands Antilles, Turks & Caicos Islands and US Virgin Islands are no longer included in the tables. Data collected in previous years from these territories can still be downloaded from www.who.int/tb/data.

USA

In addition to the 51 reporting areas, the USA includes territories that report separately to WHO. The data for these territories are not included in the data reported by the USA.

Definitions of case types and outcomes do not exactly match those used by WHO.

TABLE A2.1 **Estimates of the burden of disease caused by TB, 1990–2009**

			MORTALITY (EXCLUDING HIV)		PREVALENCE (INCLUDING HIV)		INCIDENCE (INCLUDING HIV)	
	YEAR	POPULATION (MILLIONS)	NUMBER (THOUSANDS)	RATE[a]	NUMBER (THOUSANDS)	RATE	NUMBER (THOUSANDS)	RATE
Antigua and Barbuda	1990	<1	<0.01 (<0.01–<0.01)	3.8 (2.9–4.9)	<0.01 (<0.01–<0.01)	3.9 (1.8–6.5)	<0.01 (<0.01–<0.01)	2 (1.6–2.4)
	1995	<1	<0.01 (<0.01–<0.01)	2.4 (2.3–2.5)	<0.01 (<0.01–<0.01)	2.8 (<1–4.9)	<0.01 (<0.01–<0.01)	<1 (<1–<1)
	2000	<1	<0.01 (<0.01–<0.01)	9.5 (7.7–12)	<0.01 (<0.01–0.012)	10 (4.6–16)	<0.01 (<0.01–<0.01)	6 (5.2–6.7)
	2005	<1	<0.01 (<0.01–0.013)	6.3 (1.9–15)	<0.01 (<0.01–0.016)	8 (2.4–19)	<0.01 (<0.01–<0.01)	8.3 (7.2–9.3)
	2006	<1	<0.01 (<0.01–<0.01)	1.6 (1.4–1.8)	<0.01 (<0.01–<0.01)	3.5 (<1–9.3)	<0.01 (<0.01–<0.01)	5.4 (4.7–6.1)
	2007	<1	<0.01 (<0.01–<0.01)	2.6 (2.5–2.7)	<0.01 (<0.01–<0.01)	3 (<1–5.3)	<0.01 (<0.01–<0.01)	2.7 (2.3–3)
	2008	<1	<0.01 (<0.01–<0.01)	2.5 (2.4–2.6)	<0.01 (<0.01–<0.01)	3 (<1–5.2)	<0.01 (<0.01–<0.01)	1.3 (1.2–1.5)
	2009	<1	<0.01 (<0.01–<0.01)	8.3 (6.7–10)	<0.01 (<0.01–0.012)	8.8 (4.1–14)	<0.01 (<0.01–<0.01)	5.1 (4.6–5.9)
Argentina	1990	32	1.6 (0.59–3.3)	5 (1.8–10)	31 (11–61)	94 (33–189)	19 (12–28)	60 (38–87)
	1995	35	0.96 (0.48–1.7)	2.7 (1.4–4.9)	23 (8.4–40)	67 (24–116)	17 (14–20)	49 (39–59)
	2000	37	0.83 (0.74–0.91)	2.2 (2–2.5)	20 (7.4–35)	55 (20–96)	15 (12–18)	40 (32–49)
	2005	39	0.71 (0.64–0.78)	1.8 (1.6–2)	18 (6.7–30)	46 (17–78)	13 (10–15)	33 (27–40)
	2006	39	0.69 (0.62–0.76)	1.8 (1.6–1.9)	17 (6.5–30)	44 (17–76)	13 (10–15)	32 (26–38)
	2007	39	0.68 (0.61–0.75)	1.7 (1.5–1.9)	17 (6.3–28)	42 (16–72)	12 (9.8–15)	31 (25–37)
	2008	40	0.72 (0.38–1.2)	1.8 (<1–3.1)	16 (6.3–28)	41 (16–71)	12 (9.4–14)	30 (24–36)
	2009	40	0.72 (0.4–1.2)	1.8 (<1–2.9)	16 (6.4–27)	40 (16–68)	11 (9.3–14)	28 (23–34)
Bahamas	1990	<1	<0.01 (<0.01–<0.01)	2.3 (1.5–3.7)	0.059 (0.021–0.11)	23 (8.1–42)	0.058 (0.046–0.069)	22 (18–27)
	1995	<1	<0.01 (<0.01–<0.01)	1.9 (1.5–2.3)	0.059 (0.018–0.1)	21 (6.3–37)	0.066 (0.057–0.074)	23 (20–26)
	2000	<1	<0.01 (<0.01–<0.01)	2.4 (2.1–2.7)	0.1 (0.04–0.17)	33 (13–57)	0.094 (0.082–0.11)	31 (27–35)
	2005	<1	<0.01 (<0.01–<0.01)	1.5 (1.3–1.7)	0.041 (<0.01–0.076)	12 (2.8–23)	<0.01 (<0.01–<0.01)	<1 (<1–<1)
	2006	<1	<0.01 (<0.01–<0.01)	1.3 (1–1.5)	0.039 (<0.01–0.073)	12 (2.6–22)	<0.01 (<0.01–<0.01)	<1 (<1–<1)
	2007	<1	<0.01 (<0.01–<0.01)	1.6 (1.1–2.5)	0.054 (0.017–0.096)	16 (5.2–29)	0.053 (0.046–0.06)	16 (14–18)
	2008	<1	<0.01 (<0.01–<0.01)	1.6 (1–2.6)	0.056 (0.021–0.099)	16 (6.1–29)	0.055 (0.048–0.062)	16 (14–18)
	2009	<1	<0.01 (<0.01–<0.01)	1.3 (<1–2.2)	0.048 (0.015–0.087)	14 (4.5–25)	0.05 (0.045–0.059)	15 (13–17)
Barbados	1990	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–0.015)	3.3 (1.1–5.8)	<0.01 (<0.01–<0.01)	2.4 (1.9–2.9)
	1995	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	1.4 (<1–2.5)	<0.01 (<0.01–<0.01)	1.3 (1.2–1.5)
	2000	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	1.4 (<1–2.4)	<0.01 (<0.01–<0.01)	1.4 (1.2–1.5)
	2005	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–0.015)	3.1 (<1–5.8)	<0.01 (<0.01–<0.01)	<1 (<1–<1)
	2006	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–0.019)	3.4 (<1–7.4)	<0.01 (<0.01–<0.01)	2.3 (2–2.6)
	2007	<1	<0.01 (<0.01–<0.01)	2.4 (1.6–3.3)	0.031 (0.014–0.053)	12 (5.5–21)	0.018 (0.016–0.021)	7.2 (6.3–8.2)
	2008	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–0.012)	1.9 (<1–4.5)	<0.01 (<0.01–<0.01)	1.4 (1.2–1.5)
	2009	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–1.5)	<0.01 (<0.01–<0.01)	<1 (<1–1)
Belize	1990	<1	0.012 (<0.01–0.036)	6.4 (3.1–19)	0.087 (0.021–0.17)	46 (11–88)	0.076 (0.057–0.11)	40 (30–58)
	1995	<1	0.012 (<0.01–0.028)	5.7 (3–12)	0.096 (0.027–0.17)	44 (12–76)	0.088 (0.07–0.11)	40 (32–48)
	2000	<1	0.011 (<0.01–0.012)	4.2 (3.7–4.7)	0.12 (0.032–0.2)	46 (13–80)	0.1 (0.08–0.12)	40 (32–48)
	2005	<1	<0.01 (<0.01–<0.01)	2.5 (2.2–2.8)	0.13 (0.051–0.22)	46 (18–78)	0.11 (0.1–0.14)	40 (36–48)
	2006	<1	0.039 (0.02–0.067)	13 (6.8–23)	0.16 (0.063–0.27)	54 (22–94)	0.12 (0.092–0.14)	40 (32–48)
	2007	<1	0.043 (0.023–0.072)	15 (7.7–24)	0.16 (0.068–0.28)	55 (23–95)	0.12 (0.094–0.14)	40 (32–48)
	2008	<1	0.042 (0.023–0.069)	14 (7.5–23)	0.16 (0.069–0.27)	53 (23–91)	0.12 (0.096–0.14)	40 (32–48)
	2009	<1	0.037 (0.018–0.066)	12 (6–21)	0.16 (0.063–0.27)	51 (21–88)	0.12 (0.099–0.15)	40 (32–48)
Bolivia (Plurinational State of)	1990	7	2.5 (0.9–5.3)	38 (14–79)	26 (9–52)	392 (135–778)	17 (11–24)	251 (167–364)
	1995	7	2.2 (1.4–3.1)	29 (19–42)	24 (10–39)	320 (134–526)	16 (14–19)	215 (193–258)
	2000	8	2.2 (1.3–3.4)	27 (16–41)	24 (9.9–40)	283 (119–475)	15 (12–18)	184 (148–221)
	2005	9	2.2 (1.3–3.3)	23 (14–36)	22 (9.5–38)	243 (104–410)	15 (12–17)	158 (126–190)
	2006	9	2.2 (1.4–3.3)	24 (15–36)	23 (9.7–38)	241 (104–402)	14 (11–17)	153 (123–184)
	2007	10	2.2 (1.4–3.3)	23 (15–35)	22 (9.7–38)	235 (102–395)	14 (11–17)	148 (119–178)
	2008	10	2.2 (1.3–3.3)	23 (14–34)	22 (9.5–37)	227 (98–382)	14 (11–17)	144 (115–173)
	2009	10	2 (1.2–3.1)	21 (13–31)	21 (9–36)	215 (91–362)	14 (11–17)	139 (113–168)
Brazil	1990	150	14 (4.6–29)	9.1 (3.1–20)	200 (68–420)	135 (45–278)	130 (75–180)	84 (50–121)
	1995	162	9.8 (5.2–16)	6.1 (3.2–10)	170 (64–290)	104 (40–180)	110 (92–140)	71 (57–85)
	2000	174	7.6 (6.6–8.7)	4.4 (3.8–5)	150 (60–270)	89 (35–154)	110 (84–130)	60 (48–72)
	2005	186	6.3 (5.4–7.1)	3.4 (2.9–3.8)	120 (40–200)	62 (21–107)	95 (80–110)	51 (43–62)
	2006	188	5.4 (2.6–10)	2.9 (1.4–5.3)	120 (42–200)	62 (22–107)	93 (78–110)	50 (41–60)
	2007	190	5.3 (2.6–9.9)	2.8 (1.4–5.2)	110 (41–200)	60 (22–104)	91 (75–110)	48 (39–58)
	2008	192	5 (2.5–9.3)	2.6 (1.3–4.8)	110 (39–190)	57 (20–99)	89 (73–110)	46 (38–56)
	2009	194	4.5 (2.2–8.4)	2.3 (1.2–4.3)	100 (36–180)	54 (19–93)	87 (72–100)	45 (37–54)
Canada	1990	28	0.13 (0.095–0.2)	<1 (<1–<1)	3.2 (1.1–5.6)	11 (4.1–20)	2.5 (2–3)	8.9 (7.1–11)
	1995	29	0.11 (0.086–0.15)	<1 (<1–<1)	2.6 (0.9–4.5)	9 (3.1–15)	2.2 (1.9–2.5)	7.5 (6.6–8.5)
	2000	31	0.082 (0.073–0.09)	<1 (<1–<1)	2.3 (0.76–3.8)	7.3 (2.5–12)	1.9 (1.7–2.2)	6.2 (5.4–7.1)
	2005	32	0.084 (0.064–0.12)	<1 (<1–<1)	2 (0.71–3.4)	6.2 (2.2–11)	1.7 (1.5–1.9)	5.3 (4.6–6)
	2006	33	0.078 (0.061–0.11)	<1 (<1–<1)	1.9 (0.65–3.3)	5.9 (2–10)	1.6 (1.4–1.9)	5.1 (4.4–5.7)
	2007	33	0.084 (0.064–0.12)	<1 (<1–<1)	2 (0.72–3.5)	6.1 (2.2–11)	1.7 (1.5–1.9)	5.2 (4.5–5.8)
	2008	33	0.08 (0.064–0.11)	<1 (<1–<1)	1.9 (0.69–3.3)	5.9 (2.1–9.9)	1.7 (1.5–1.9)	5 (4.4–5.7)
	2009	34	0.077 (0.06–0.11)	<1 (<1–<1)	1.9 (0.63–3.2)	5.6 (1.9–9.7)	1.6 (1.5–1.9)	4.9 (4.4–5.7)
Chile	1990	13	0.61 (0.4–0.81)	4.6 (3–6.2)	6.3 (1.4–11)	48 (11–85)	5 (2.7–7.2)	38 (21–55)
	1995	14	0.43 (0.28–0.58)	3 (2–4)	4.5 (1–8)	31 (7.2–56)	3.9 (3.1–4.7)	27 (22–32)
	2000	15	0.3 (0.27–0.33)	1.9 (1.7–2.1)	3.4 (0.8–6)	22 (5.2–39)	3 (2.4–3.6)	19 (16–23)
	2005	16	0.25 (0.22–0.28)	1.5 (1.4–1.7)	2.7 (0.66–4.8)	17 (4–30)	2.3 (1.8–2.7)	14 (11–17)
	2006	16	0.25 (0.16–0.33)	1.5 (<1–2)	2.7 (0.63–4.7)	16 (3.8–28)	2.2 (1.7–2.6)	13 (10–16)
	2007	17	0.25 (0.16–0.33)	1.5 (<1–2)	2.6 (0.63–4.6)	16 (3.8–28)	2 (1.6–2.4)	12 (9.8–15)
	2008	17	0.24 (0.16–0.33)	1.4 (<1–1.9)	2.6 (0.62–4.6)	15 (3.7–27)	1.9 (1.5–2.3)	11 (9.2–14)
	2009	17	0.24 (0.16–0.33)	1.4 (<1–1.9)	2.6 (0.62–4.6)	15 (3.7–27)	1.8 (1.5–2.2)	11 (8.7–13)
Colombia	1990	33	1.6 (0.58–3.3)	4.7 (1.7–9.8)	27 (9.2–54)	81 (28–161)	18 (12–26)	54 (37–78)
	1995	36	2 (1.3–2.8)	5.4 (3.6–7.7)	29 (13–48)	79 (36–132)	18 (14–21)	48 (38–58)
	2000	40	1.5 (1.3–1.7)	3.7 (3.2–4.2)	25 (11–42)	63 (27–106)	17 (14–21)	43 (34–52)
	2005	43	1.3 (1.1–1.5)	3 (2.6–3.4)	25 (11–43)	59 (25–100)	17 (13–20)	38 (31–46)
	2006	44	1.3 (1.1–1.5)	3 (2.6–3.3)	25 (11–42)	58 (25–97)	16 (13–20)	38 (30–45)
	2007	44	1.5 (0.86–2.3)	3.3 (1.9–5.1)	25 (10–43)	57 (23–96)	16 (13–20)	37 (29–44)
	2008	45	1.3 (0.75–2)	2.9 (1.7–4.5)	23 (9.6–38)	51 (21–85)	16 (13–19)	36 (29–43)
	2009	46	1.2 (0.68–2)	2.7 (1.5–4.3)	22 (9.3–38)	49 (20–83)	16 (13–19)	35 (29–42)
Costa Rica	1990	3	0.44 (0.21–0.77)	14 (6.7–25)	1.1 (0.43–2.1)	35 (14–68)	0.56 (0.31–0.81)	18 (10–26)
	1995	3	0.1 (0.052–0.21)	2.9 (1.5–6.2)	0.62 (0.17–1.1)	18 (4.9–32)	0.54 (0.44–0.65)	16 (13–19)
	2000	4	0.072 (0.064–0.08)	1.8 (1.6–2)	0.73 (0.18–1.3)	19 (4.7–33)	0.53 (0.42–0.64)	14 (11–16)
	2005	4	0.066 (0.058–0.073)	1.5 (1.3–1.7)	0.61 (0.16–1.1)	14 (3.6–24)	0.5 (0.4–0.61)	12 (9.3–14)
	2006	4	0.059 (0.052–0.066)	1.3 (1.2–1.5)	0.55 (0.14–0.97)	13 (3.2–22)	0.5 (0.49–0.6)	11 (11–14)
	2007	4	0.062 (0.041–0.084)	1.4 (<1–1.9)	0.54 (0.14–0.95)	12 (3–21)	0.49 (0.39–0.59)	11 (8.8–13)
	2008	5	0.06 (0.039–0.081)	1.3 (<1–1.8)	0.52 (0.13–0.91)	12 (3–20)	0.48 (0.39–0.58)	11 (8.6–13)
	2009	5	0.057 (0.037–0.077)	1.2 (<1–1.7)	0.5 (0.13–0.87)	11 (2.8–19)	0.48 (0.39–0.57)	10 (8.4–12)
Cuba	1990	11	0.46 (0.25–0.72)	4.3 (2.4–6.8)	5.9 (2.4–11)	56 (22–108)	2.7 (1.5–3.9)	25 (14–37)
	1995	11	0.093 (0.046–0.17)	<1 (<1–1.6)	2.4 (0.79–4.3)	22 (7.3–39)	1.8 (1.6–2.2)	17 (14–20)
	2000	11	0.078 (0.07–0.086)	<1 (<1–<1)	1.6 (0.55–2.7)	15 (4.9–25)	1.3 (1.2–1.5)	11 (11–14)
	2005	11	0.035 (0.032–0.039)	<1 (<1–<1)	1 (0.3–1.8)	9.1 (2.7–16)	0.85 (0.77–1)	7.6 (6.9–9.1)
	2006	11	0.033 (0.03–0.036)	<1 (<1–<1)	0.86 (0.21–1.5)	7.7 (1.9–13)	0.78 (0.77–0.94)	7 (6.8–8.4)
	2007	11	0.024 (0.022–0.027)	<1 (<1–<1)	0.84 (0.2–1.5)	7.5 (1.7–13)	0.72 (0.58–0.86)	6.4 (5.1–7.7)
	2008	11	0.016 (0.01–0.021)	<1 (<1–<1)	0.8 (0.2–1.4)	7.2 (1.8–12)	0.67 (0.53–0.8)	5.9 (4.8–7.1)
	2009	11	0.017 (0.011–0.023)	<1 (<1–<1)	0.84 (0.19–1.5)	7.5 (1.7–13)	0.61 (0.49–0.74)	5.5 (4.4–6.6)
Dominica	1990	<1	<0.01 (<0.01–<0.01)	<1 (<1–1.3)	0.011 (<0.01–0.02)	16 (3.6–29)	0.01 (<0.01–0.015)	15 (8.7–21)
	1995	<1	<0.01 (<0.01–<0.01)	<1 (<1–1)	0.011 (<0.01–0.02)	16 (3.6–28)	<0.01 (<0.01–0.012)	14 (12–17)
	2000	<1	<0.01 (<0.01–<0.01)	3.1 (2.8–3.5)	0.023 (<0.01–0.039)	35 (15–58)	<0.01 (<0.01–0.011)	14 (11–17)
	2005	<1	<0.01 (<0.01–<0.01)	1.8 (1.2–2.5)	0.026 (<0.01–0.045)	38 (8.4–67)	<0.01 (<0.01–0.011)	13 (11–16)
	2006	<1	<0.01 (<0.01–<0.01)	1.5 (1.3–1.6)	0.018 (<0.01–0.032)	27 (6–48)	<0.01 (<0.01–0.011)	13 (11–16)
	2007	<1	<0.01 (<0.01–<0.01)	<1 (<1–1.2)	0.013 (<0.01–0.023)	19 (4.3–34)	<0.01 (<0.01–0.011)	13 (11–16)
	2008	<1	<0.01 (<0.01–<0.01)	2.2 (1.1–3.7)	0.013 (<0.01–0.022)	19 (7.2–33)	<0.01 (<0.01–0.011)	13 (11–16)
	2009	<1	<0.01 (<0.01–<0.01)	<1 (<1–2)	<0.01 (<0.01–0.019)	13 (3–28)	<0.01 (<0.01–0.011)	13 (11–16)

[a] Rates are per 100 000 population.

TABLE A2.1 **Estimates of the burden of disease caused by TB, 1990–2009**

			MORTALITY (EXCLUDING HIV)		PREVALENCE (INCLUDING HIV)		INCIDENCE (INCLUDING HIV)	
	YEAR	POPULATION (MILLIONS)	NUMBER (THOUSANDS)	RATE[a]	NUMBER (THOUSANDS)	RATE	NUMBER (THOUSANDS)	RATE
Dominican Republic	1990	7	3.2 (1.8–5)	43 (24–68)	23 (9.2–44)	315 (125–603)	11 (6–16)	148 (81–214)
	1995	8	1.9 (1.3–2.6)	23 (16–32)	17 (7.6–27)	204 (93–336)	9.9 (7.9–12)	121 (97–146)
	2000	9	1.4 (0.88–2)	16 (10–23)	14 (6.1–23)	153 (69–255)	8.8 (7.1–11)	100 (80–120)
	2005	10	1.2 (0.78–1.8)	13 (8.2–19)	12 (5.4–20)	126 (57–209)	7.8 (6.3–9.4)	82 (66–98)
	2006	10	1.2 (0.76–1.7)	12 (7.9–18)	12 (5.2–20)	121 (54–202)	7.6 (6.1–9.2)	79 (63–95)
	2007	10	1.2 (0.78–1.7)	12 (8–18)	12 (5.2–19)	119 (53–196)	7.4 (6–8.9)	76 (61–91)
	2008	10	1.2 (0.76–1.7)	12 (7.7–17)	11 (5.1–19)	114 (51–189)	7.3 (5.8–8.7)	73 (58–87)
	2009	10	1.1 (0.69–1.6)	11 (6.9–16)	11 (4.8–18)	107 (48–178)	7.1 (5.7–8.5)	70 (57–84)
Ecuador	1990	10	2.2 (0.98–3.9)	21 (9.6–38)	32 (13–64)	316 (124–623)	18 (9.9–26)	174 (96–253)
	1995	11	1.5 (0.95–2.1)	13 (8.3–18)	25 (11–41)	216 (98–358)	16 (12–19)	136 (109–164)
	2000	12	1.5 (1.3–1.7)	12 (11–14)	22 (10–36)	180 (83–296)	13 (10–16)	107 (85–128)
	2005	13	1.1 (0.98–1.3)	8.8 (7.5–10)	19 (8.6–30)	142 (66–233)	11 (8.7–13)	83 (67–100)
	2006	13	1.1 (0.94–1.3)	8.3 (7.1–9.5)	18 (8.5–30)	138 (64–227)	10 (8.4–13)	79 (63–95)
	2007	13	1.1 (0.75–1.5)	8.1 (5.6–11)	17 (7.9–28)	128 (59–210)	10 (8.1–12)	76 (60–91)
	2008	13	1 (0.7–1.4)	7.5 (5.2–10)	16 (7.6–27)	121 (56–199)	9.7 (7.8–12)	72 (58–86)
	2009	14	0.94 (0.64–1.3)	6.9 (4.7–9.5)	15 (7.1–25)	112 (52–184)	9.3 (7.6–11)	68 (56–82)
El Salvador	1990	5	0.22 (0.079–0.46)	4.1 (1.5–8.6)	5.2 (1.8–10)	97 (33–192)	3.4 (2.4–4.9)	63 (44–92)
	1995	6	0.047 (0.031–0.063)	<1 (<1–1.1)	2.9 (0.69–5.1)	50 (12–88)	2.6 (2.4–3.1)	45 (42–53)
	2000	6	0.15 (0.13–0.17)	2.5 (2.1–2.8)	3.1 (1.3–5.3)	53 (22–90)	2.2 (1.8–2.6)	37 (29–44)
	2005	6	0.11 (0.092–0.12)	1.8 (1.5–2)	3.4 (1.4–5.7)	56 (24–93)	2.4 (1.9–2.8)	39 (31–47)
	2006	6	0.069 (0.059–0.079)	1.1 (<1–1.3)	2.6 (0.94–4.5)	43 (15–75)	2.1 (1.7–2.5)	34 (27–41)
	2007	6	0.075 (0.037–0.14)	1.2 (<1–2.3)	2.4 (0.85–4.2)	40 (14–69)	2 (1.7–2.4)	33 (27–39)
	2008	6	0.066 (0.034–0.12)	1.1 (<1–1.9)	2.3 (0.81–4)	38 (13–65)	2 (1.7–2.3)	32 (28–38)
	2009	6	0.046 (0.024–0.087)	<1 (<1–1.4)	2 (0.63–3.5)	33 (10–56)	1.8 (1.6–2.1)	30 (25–35)
Grenada	1990	<1	<0.01 (<0.01–<0.01)	2.5 (1.4–3.9)	0.01 (<0.01–0.02)	11 (4.2–21)	<0.01 (<0.01–<0.01)	4.6 (2.5–6.7)
	1995	<1	<0.01 (<0.01–<0.01)	1.4 (1.1–1.9)	<0.01 (<0.01–0.013)	8 (3.7–13)	<0.01 (<0.01–<0.01)	4.5 (4–5.4)
	2000	<1	<0.01 (<0.01–<0.01)	1.3 (<1–1.9)	<0.01 (<0.01–0.013)	7.5 (3.3–12)	<0.01 (<0.01–<0.01)	4.4 (3.5–5.2)
	2005	<1	<0.01 (<0.01–<0.01)	2.6 (2.3–3)	<0.01 (<0.01–0.014)	8.5 (3.9–14)	<0.01 (<0.01–<0.01)	4.2 (3.4–5.1)
	2006	<1	<0.01 (<0.01–<0.01)	1.5 (1–2)	<0.01 (<0.01–0.013)	7.8 (3.6–13)	<0.01 (<0.01–<0.01)	4.2 (3.4–5.1)
	2007	<1	<0.01 (<0.01–<0.01)	<1 (<1–1.5)	<0.01 (<0.01–0.011)	6.4 (2.6–11)	<0.01 (<0.01–<0.01)	4.2 (3.3–5)
	2008	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	4.6 (1–8.2)	<0.01 (<0.01–<0.01)	4.2 (3.3–5)
	2009	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–0.01)	4.7 (1.2–9.7)	<0.01 (<0.01–<0.01)	4.1 (3.4–5)
Guatemala	1990	9	0.37 (0.16–0.69)	4.1 (1.8–7.7)	12 (4.6–24)	135 (52–266)	6.6 (3.8–9.6)	74 (43–108)
	1995	10	0.42 (0.31–0.56)	4.2 (3.1–5.6)	13 (6.1–22)	132 (61–216)	7.1 (5.7–8.5)	71 (57–85)
	2000	11	0.52 (0.46–0.58)	4.7 (4.1–5.2)	14 (6.7–23)	127 (59–209)	7.6 (6.1–9.1)	68 (54–81)
	2005	13	0.4 (0.35–0.45)	3.2 (2.8–3.5)	14 (6.7–24)	114 (53–186)	8.2 (6.6–9.9)	65 (52–78)
	2006	13	0.38 (0.33–0.42)	2.9 (2.5–3.2)	15 (6.9–24)	113 (53–185)	8.4 (6.7–10)	64 (51–77)
	2007	13	0.49 (0.35–0.64)	3.6 (2.6–4.8)	15 (7–25)	112 (53–184)	8.5 (6.8–10)	63 (51–76)
	2008	14	0.52 (0.39–0.68)	3.8 (2.8–5)	16 (7.4–25)	114 (54–186)	8.6 (6.9–10)	63 (50–75)
	2009	14	0.52 (0.39–0.67)	3.7 (2.8–4.8)	16 (7.4–25)	111 (53–180)	8.7 (7.1–11)	62 (51–75)
Guyana	1990	<1	0.25 (0.14–0.41)	34 (19–54)	1.3 (0.52–2.5)	171 (69–328)	0.67 (0.37–0.97)	89 (49–130)
	1995	<1	0.18 (0.13–0.25)	24 (17–32)	1 (0.5–1.7)	137 (65–224)	0.68 (0.54–0.81)	89 (72–107)
	2000	<1	0.17 (0.11–0.24)	22 (14–32)	1.1 (0.51–1.8)	143 (67–235)	0.79 (0.63–0.94)	104 (83–125)
	2005	<1	0.14 (0.12–0.15)	18 (15–20)	1.2 (0.47–2)	153 (62–261)	0.88 (0.7–1.1)	115 (92–138)
	2006	<1	0.15 (0.08–0.24)	19 (11–31)	1.2 (0.48–2)	155 (62–263)	0.88 (0.71–1.1)	115 (93–138)
	2007	<1	0.099 (0.05–0.17)	13 (6.5–22)	0.91 (0.4–1.5)	119 (52–198)	0.87 (0.69–1)	114 (91–136)
	2008	<1	0.13 (0.065–0.22)	17 (8.5–28)	1.1 (0.44–1.8)	139 (57–238)	0.86 (0.69–1)	113 (90–135)
	2009	<1	0.11 (0.058–0.19)	15 (7.6–25)	1 (0.42–1.7)	132 (54–222)	0.85 (0.69–1)	112 (91–134)
Haiti	1990	7	3.3 (1.4–6.3)	47 (19–88)	29 (11–58)	411 (157–816)	18 (9.7–26)	247 (136–359)
	1995	8	3.7 (2.7–4.9)	47 (34–63)	30 (14–50)	386 (183–635)	19 (16–23)	247 (198–297)
	2000	9	4.2 (3–5.7)	49 (34–66)	36 (17–59)	416 (198–682)	23 (19–28)	271 (217–325)
	2005	9	3.8 (2.5–5.5)	41 (26–58)	37 (17–61)	390 (181–645)	26 (20–31)	272 (217–326)
	2006	10	3.8 (2.5–5.4)	40 (26–57)	37 (17–60)	382 (176–630)	25 (20–30)	264 (211–317)
	2007	10	3.9 (2.5–5.5)	40 (26–57)	37 (17–61)	383 (176–629)	25 (20–30)	256 (205–307)
	2008	10	3.2 (2–4.8)	33 (20–49)	33 (15–55)	333 (153–554)	24 (19–29)	246 (197–296)
	2009	10	3.2 (2–4.8)	32 (20–48)	33 (15–55)	331 (150–547)	24 (19–29)	238 (194–287)
Honduras	1990	5	0.88 (0.3–1.9)	18 (6.1–39)	9.2 (3.1–19)	188 (64–382)	6.1 (3.6–8.9)	125 (74–182)
	1995	6	1 (0.63–1.5)	18 (11–27)	11 (4.6–18)	188 (83–314)	7 (5.6–8.4)	125 (100–150)
	2000	6	0.84 (0.52–1.3)	14 (8.3–21)	10 (4.1–17)	161 (67–265)	7.2 (6.4–8.7)	116 (103–139)
	2005	7	1.1 (0.71–1.5)	16 (10–22)	10 (4.5–17)	145 (65–240)	6.1 (4.9–7.3)	89 (71–106)
	2006	7	1 (0.68–1.4)	14 (9.7–20)	9.4 (4.2–15)	133 (60–219)	5.7 (4.6–6.8)	81 (65–97)
	2007	7	0.9 (0.6–1.3)	13 (8.3–18)	8.5 (3.9–14)	118 (54–195)	5.2 (4.2–6.3)	73 (58–87)
	2008	7	0.75 (0.48–1.1)	10 (6.5–15)	7.3 (3.3–12)	100 (45–166)	4.7 (3.8–5.7)	64 (52–77)
	2009	7	0.59 (0.35–0.91)	7.9 (4.7–12)	6.3 (2.7–11)	85 (36–143)	4.3 (3.5–5.2)	58 (47–69)
Jamaica	1990	2	0.013 (<0.01–0.028)	<1 (<1–1.2)	0.18 (0.064–0.33)	7.5 (2.7–14)	0.15 (0.12–0.22)	6.5 (5.2–9.5)
	1995	2	0.016 (<0.01–0.028)	<1 (<1–1.1)	0.19 (0.083–0.33)	7.9 (3.4–14)	0.16 (0.13–0.19)	6.5 (5.2–7.9)
	2000	3	0.016 (<0.01–0.029)	<1 (<1–1.1)	0.2 (0.085–0.34)	7.8 (3.3–13)	0.17 (0.13–0.2)	6.5 (5.2–7.9)
	2005	3	0.022 (0.012–0.034)	<1 (<1–1.3)	0.22 (0.1–0.37)	8.2 (3.8–14)	0.17 (0.14–0.21)	6.5 (5.2–7.9)
	2006	3	0.024 (0.015–0.037)	<1 (<1–1.4)	0.24 (0.11–0.4)	8.8 (4.1–15)	0.18 (0.14–0.21)	6.5 (5.2–7.9)
	2007	3	0.024 (0.014–0.036)	<1 (<1–1.4)	0.24 (0.11–0.4)	8.8 (4.1–15)	0.18 (0.14–0.21)	6.5 (5.2–7.9)
	2008	3	0.023 (0.013–0.037)	<1 (<1–1.4)	0.25 (0.11–0.42)	9.1 (3.9–15)	0.18 (0.14–0.21)	6.5 (5.2–7.9)
	2009	3	0.02 (0.011–0.033)	<1 (<1–1.2)	0.23 (0.099–0.39)	8.5 (3.6–14)	0.18 (0.15–0.21)	6.6 (5.3–7.9)
Mexico	1990	83	10 (5.5–17)	13 (6.6–21)	100 (41–200)	123 (49–237)	51 (28–74)	61 (34–89)
	1995	92	7.2 (5.2–9.5)	7.8 (5.6–10)	75 (35–120)	82 (38–134)	40 (32–48)	44 (35–53)
	2000	100	3.5 (3.1–3.9)	3.5 (3.2–3.9)	50 (22–84)	51 (22–84)	32 (25–38)	32 (25–38)
	2005	105	2.6 (2.4–2.9)	2.5 (2.2–2.8)	35 (14–59)	33 (13–56)	24 (19–29)	23 (18–27)
	2006	106	2.4 (2.2–2.7)	2.3 (2–2.5)	30 (11–52)	28 (10–49)	23 (18–27)	21 (17–26)
	2007	107	2.2 (2–2.5)	2.1 (1.9–2.3)	27 (9–47)	25 (8.4–44)	21 (18–26)	20 (17–24)
	2008	109	1 (0.55–1.8)	<1 (<1–1.7)	24 (7.3–41)	22 (6.7–38)	20 (19–24)	19 (17–22)
	2009	110	0.62 (0.38–1.2)	<1 (<1–1.1)	21 (5–36)	19 (4.6–33)	19 (17–22)	17 (15–20)
Nicaragua	1990	4	0.71 (0.26–1.5)	17 (6.3–35)	7.1 (2.5–14)	172 (60–344)	4.5 (2.9–6.5)	108 (71–156)
	1995	5	0.52 (0.29–0.85)	11 (6.2–18)	5.9 (2.3–10)	126 (50–216)	4 (3.2–4.8)	85 (68–102)
	2000	5	0.45 (0.26–0.72)	8.9 (5–14)	5.1 (2–8.7)	100 (40–170)	3.4 (2.8–4.1)	68 (54–81)
	2005	5	0.4 (0.23–0.62)	7.3 (4.2–11)	4.4 (1.8–7.4)	80 (33–136)	2.9 (2.3–3.5)	53 (43–64)
	2006	6	0.35 (0.19–0.58)	6.4 (3.5–10)	4.1 (1.6–7)	74 (29–127)	2.8 (2.3–3.4)	51 (41–61)
	2007	6	0.27 (0.14–0.47)	4.9 (2.5–8.4)	3.7 (1.3–6.3)	65 (23–113)	2.7 (2.3–3.3)	49 (41–58)
	2008	6	0.21 (0.11–0.37)	3.7 (1.9–6.5)	3.3 (1.1–5.7)	58 (19–100)	2.6 (2.3–3.2)	46 (41–56)
	2009	6	0.17 (0.091–0.31)	3 (1.6–5.4)	3.1 (0.92–5.3)	53 (16–93)	2.5 (2.2–3)	44 (38–51)
Panama	1990	2	0.49 (0.18–1.1)	20 (7.4–44)	1.6 (0.55–3.2)	68 (23–133)	1.1 (0.85–1.7)	47 (35–69)
	1995	3	0.27 (0.13–0.57)	10 (4.7–21)	1.4 (0.45–2.5)	53 (17–93)	1.3 (1–1.5)	47 (38–57)
	2000	3	0.19 (0.17–0.22)	6.6 (5.8–7.4)	1.4 (0.39–2.5)	49 (13–85)	1.4 (1.2–1.7)	47 (40–57)
	2005	3	0.2 (0.13–0.27)	6.3 (4.1–8.4)	1.7 (0.46–3)	53 (14–91)	1.5 (1.2–1.8)	47 (38–57)
	2006	3	0.18 (0.16–0.2)	5.4 (4.7–6)	1.6 (0.46–2.8)	49 (14–85)	1.6 (1.2–1.9)	47 (38–57)
	2007	3	0.19 (0.12–0.25)	5.6 (3.7–7.6)	1.6 (0.44–2.8)	48 (13–83)	1.6 (1.3–1.9)	47 (38–57)
	2008	3	0.25 (0.14–0.51)	7.5 (4.2–15)	1.7 (0.48–3)	51 (14–89)	1.6 (1.5–1.9)	47 (45–57)
	2009	3	0.31 (0.18–0.55)	9 (5.1–16)	1.9 (0.54–3.2)	54 (16–92)	1.6 (1.4–1.9)	48 (42–54)
Paraguay	1990	4	0.074 (0.049–0.1)	1.7 (1.2–2.3)	2.4 (0.54–4.3)	57 (13–101)	2.1 (1.1–3)	49 (27–70)
	1995	5	0.19 (0.092–0.36)	4 (1.9–7.5)	3.1 (1.1–5.5)	64 (22–114)	2.3 (1.9–2.8)	48 (39–58)
	2000	5	0.22 (0.11–0.4)	4.2 (2.1–7.5)	3.5 (1.2–6.1)	65 (23–113)	2.6 (2.1–3.1)	48 (38–58)
	2005	6	0.28 (0.23–0.32)	4.7 (4–5.4)	3.7 (1.3–6.6)	63 (23–111)	2.8 (2.3–3.4)	48 (38–57)
	2006	6	0.24 (0.2–0.27)	3.9 (3.4–4.5)	3.9 (1.5–6.6)	65 (24–110)	2.9 (2.4–3.4)	48 (41–57)
	2007	6	0.26 (0.13–0.46)	4.2 (2.1–7.6)	3.9 (1.4–6.9)	64 (23–112)	2.9 (2.3–3.5)	48 (38–57)
	2008	6	0.28 (0.14–0.48)	4.5 (2.3–7.7)	4.1 (1.5–7.1)	66 (25–114)	3 (2.4–3.6)	47 (38–57)
	2009	6	0.29 (0.15–0.48)	4.5 (2.4–7.6)	4.2 (1.6–7.2)	66 (26–113)	3 (2.5–3.6)	47 (39–57)

[a] Rates are per 100 000 population.

TABLE A2.1 **Estimates of the burden of disease caused by TB, 1990–2009**

			MORTALITY (EXCLUDING HIV)		PREVALENCE (INCLUDING HIV)		INCIDENCE (INCLUDING HIV)	
	YEAR	POPULATION (MILLIONS)	NUMBER (THOUSANDS)	RATE[a]	NUMBER (THOUSANDS)	RATE	NUMBER (THOUSANDS)	RATE
Peru	1990	22	13 (4.7–25)	58 (22–116)	120 (41–240)	536 (189–1086)	69 (38–100)	317 (175–460)
	1995	24	6.3 (3.2–11)	26 (13–46)	80 (30–140)	335 (123–583)	58 (46–69)	242 (193–290)
	2000	26	4.8 (2.4–8.8)	19 (9.1–34)	64 (22–110)	248 (86–432)	48 (39–57)	184 (149–221)
	2005	28	3.3 (1.7–6)	12 (6–21)	50 (16–87)	179 (59–311)	39 (33–47)	140 (120–168)
	2006	28	2.8 (1.5–4.9)	9.8 (5.3–17)	46 (15–80)	164 (52–283)	37 (34–45)	133 (122–159)
	2007	29	2.3 (1.2–4.3)	8.2 (4.4–15)	43 (13–74)	150 (44–260)	36 (32–43)	126 (114–151)
	2008	29	2.1 (1.1–3.7)	7.1 (4–13)	40 (11–70)	140 (40–242)	34 (32–41)	119 (112–143)
	2009	29	1.5 (0.88–2.9)	5.2 (3–9.9)	37 (8.8–64)	126 (30–219)	33 (29–37)	113 (98–128)
Puerto Rico	1990	4	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0.22 (0.049–0.39)	6.2 (1.4–11)	0.2 (0.16–0.24)	5.6 (4.5–6.8)
	1995	4	0.017 (0.013–0.023)	<1 (<1–<1)	0.4 (0.14–0.68)	11 (3.8–18)	0.3 (0.26–0.34)	8.1 (7.1–9.2)
	2000	4	0.012 (<0.01–0.015)	<1 (<1–<1)	0.27 (0.099–0.45)	7.1 (2.6–12)	0.2 (0.17–0.23)	5.2 (4.6–5.9)
	2005	4	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0.14 (0.048–0.23)	3.5 (1.2–6)	0.13 (0.11–0.15)	3.3 (2.9–3.8)
	2006	4	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0.15 (0.056–0.26)	3.8 (1.4–6.5)	0.13 (0.11–0.15)	3.3 (2.8–3.7)
	2007	4	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0.12 (0.042–0.21)	3 (1.1–5.2)	0.11 (0.098–0.13)	2.9 (2.5–3.2)
	2008	4	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0.13 (0.051–0.21)	3.2 (1.3–5.4)	0.11 (0.095–0.12)	2.8 (2.4–3.1)
	2009	4	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0.081 (0.021–0.14)	2 (<1–3.6)	0.071 (0.063–0.082)	1.8 (1.6–2.1)
Saint Kitts and Nevis	1990	<1	<0.01 (<0.01–<0.01)	4.1 (2.3–6.4)	<0.01 (<0.01–0.019)	24 (9.2–47)	<0.01 (<0.01–<0.01)	10 (5.7–15)
	1995	<1	<0.01 (<0.01–<0.01)	1.4 (<1–2.4)	<0.01 (<0.01–0.011)	14 (5.2–25)	<0.01 (<0.01–<0.01)	10 (8–12)
	2000	<1	<0.01 (<0.01–<0.01)	2.2 (2–2.4)	<0.01 (<0.01–0.015)	19 (8.9–32)	<0.01 (<0.01–<0.01)	9.7 (7.8–12)
	2005	<1	<0.01 (<0.01–<0.01)	3.4 (2.6–4.3)	0.01 (<0.01–0.017)	21 (9.4–34)	<0.01 (<0.01–<0.01)	9.4 (7.6–11)
	2006	<1	<0.01 (<0.01–<0.01)	4 (3.6–4.4)	<0.01 (<0.01–0.015)	19 (8.7–31)	<0.01 (<0.01–<0.01)	9.4 (7.5–11)
	2007	<1	<0.01 (<0.01–<0.01)	<1 (<1–2.8)	<0.01 (<0.01–0.011)	8.7 (2.3–22)	<0.01 (<0.01–<0.01)	9.3 (7.9–11)
	2008	<1	<0.01 (<0.01–<0.01)	<1 (<1–1.5)	<0.01 (<0.01–0.01)	11 (3.2–20)	<0.01 (<0.01–<0.01)	9.3 (7.4–11)
	2009	<1	<0.01 (<0.01–<0.01)	<1 (<1–1.4)	<0.01 (<0.01–<0.01)	11 (2.7–19)	<0.01 (<0.01–<0.01)	9.2 (7.5–11)
Saint Lucia	1990	<1	<0.01 (<0.01–<0.01)	<1 (<1–1.7)	0.028 (<0.01–0.057)	20 (5.2–41)	0.022 (0.013–0.032)	16 (9.4–23)
	1995	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0.026 (<0.01–0.046)	17 (3.9–31)	0.023 (0.018–0.027)	15 (12–18)
	2000	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0.04 (0.018–0.067)	25 (11–43)	0.023 (0.019–0.028)	15 (12–18)
	2005	<1	<0.01 (<0.01–<0.01)	1.1 (<1–1.6)	0.039 (0.017–0.066)	24 (10–40)	0.024 (0.019–0.029)	14 (12–17)
	2006	<1	<0.01 (<0.01–<0.01)	<1 (<1–1.5)	0.038 (0.016–0.064)	22 (9.5–38)	0.024 (0.019–0.029)	14 (11–17)
	2007	<1	<0.01 (<0.01–<0.01)	<1 (<1–1.4)	0.032 (0.011–0.059)	19 (6.6–35)	0.024 (0.019–0.029)	14 (11–17)
	2008	<1	<0.01 (<0.01–<0.01)	<1 (<1–1.4)	0.031 (0.011–0.058)	18 (6.7–34)	0.024 (0.021–0.029)	14 (12–17)
	2009	<1	<0.01 (<0.01–<0.01)	<1 (<1–1.4)	0.028 (<0.01–0.057)	16 (5.7–33)	0.024 (0.021–0.028)	14 (12–17)
Saint Vincent and the Grenadines	1990	<1	<0.01 (<0.01–<0.01)	4.2 (2.5–6.4)	0.071 (0.027–0.14)	66 (25–128)	0.029 (0.016–0.043)	27 (15–40)
	1995	<1	<0.01 (<0.01–<0.01)	3.4 (2.6–4.4)	0.063 (0.029–0.1)	58 (27–96)	0.029 (0.023–0.034)	27 (21–32)
	2000	<1	<0.01 (<0.01–<0.01)	3 (2.7–3.4)	0.053 (0.025–0.088)	49 (23–82)	0.028 (0.022–0.033)	26 (21–31)
	2005	<1	<0.01 (<0.01–<0.01)	2.4 (1.3–3.9)	0.048 (0.02–0.09)	44 (18–83)	0.027 (0.022–0.033)	25 (20–30)
	2006	<1	<0.01 (<0.01–<0.01)	1.6 (<1–3)	0.035 (0.014–0.069)	32 (12–64)	0.027 (0.022–0.033)	25 (20–30)
	2007	<1	<0.01 (<0.01–<0.01)	<1 (<1–2.4)	0.025 (<0.01–0.055)	23 (7.7–51)	0.027 (0.022–0.032)	25 (20–30)
	2008	<1	<0.01 (<0.01–<0.01)	1.3 (<1–2.8)	0.029 (0.01–0.063)	26 (9.3–57)	0.027 (0.021–0.032)	25 (20–30)
	2009	<1	<0.01 (<0.01–<0.01)	<1 (<1–1.8)	0.016 (<0.01–0.041)	14 (3.6–37)	0.027 (0.022–0.032)	24 (20–30)
Suriname	1990	<1	<0.01 (<0.01–<0.01)	1.5 (<1–2.4)	0.56 (0.23–1.1)	139 (56–264)	0.27 (0.15–0.39)	66 (36–95)
	1995	<1	<0.01 (<0.01–<0.01)	<1 (<1–1.3)	0.41 (0.19–0.68)	93 (43–155)	0.22 (0.18–0.27)	51 (41–61)
	2000	<1	<0.01 (<0.01–<0.01)	1.3 (1.1–1.5)	0.64 (0.3–1.1)	136 (64–226)	0.37 (0.29–0.44)	79 (63–95)
	2005	<1	0.011 (<0.01–0.012)	2.1 (1.8–2.4)	0.86 (0.4–1.4)	172 (79–285)	0.5 (0.4–0.6)	100 (80–120)
	2006	<1	0.01 (<0.01–0.013)	2 (1.5–2.6)	0.94 (0.44–1.6)	186 (86–309)	0.55 (0.44–0.66)	108 (87–130)
	2007	<1	0.011 (<0.01–0.014)	2.2 (1.7–2.8)	1 (0.47–1.7)	203 (93–338)	0.59 (0.48–0.71)	116 (93–140)
	2008	<1	0.011 (<0.01–0.015)	2.2 (1.7–2.9)	1.1 (0.49–1.8)	207 (96–344)	0.64 (0.52–0.77)	125 (100–150)
	2009	<1	0.012 (<0.01–0.016)	2.4 (1.8–3)	1.1 (0.53–1.9)	220 (102–362)	0.7 (0.57–0.84)	135 (109–162)
Trinidad and Tobago	1990	1	0.024 (0.018–0.035)	2 (1.5–2.9)	0.19 (0.06–0.33)	15 (4.9–27)	0.15 (0.12–0.18)	12 (9.8–15)
	1995	1	0.028 (0.021–0.038)	2.2 (1.7–3)	0.22 (0.078–0.38)	18 (6.2–30)	0.19 (0.17–0.22)	15 (13–17)
	2000	1	0.029 (0.025–0.032)	2.2 (1.9–2.5)	0.26 (0.1–0.44)	20 (7.9–34)	0.23 (0.2–0.26)	18 (15–20)
	2005	1	0.02 (0.018–0.022)	1.5 (1.4–1.7)	0.18 (0.054–0.31)	14 (4.1–24)	0.19 (0.17–0.22)	14 (13–16)
	2006	1	0.048 (0.038–0.062)	3.7 (2.9–4.7)	0.36 (0.15–0.6)	28 (11–45)	0.27 (0.23–0.3)	20 (18–23)
	2007	1	0.023 (0.02–0.034)	1.8 (1.5–2.5)	0.23 (0.074–0.39)	17 (5.5–29)	0.25 (0.22–0.28)	19 (16–21)
	2008	1	0.046 (0.033–0.064)	3.4 (2.5–4.8)	0.37 (0.15–0.62)	28 (11–46)	0.32 (0.28–0.36)	24 (21–27)
	2009	1	0.036 (0.028–0.052)	2.7 (2.1–3.9)	0.31 (0.11–0.54)	23 (8.2–40)	0.3 (0.27–0.35)	23 (20–26)
United States of America	1990	255	1.5 (1.1–2.2)	<1 (<1–<1)	42 (15–74)	17 (6.1–29)	32 (26–39)	13 (10–15)
	1995	271	1.1 (0.9–1.5)	<1 (<1–<1)	32 (11–55)	12 (4.1–20)	26 (23–30)	9.7 (8.4–11)
	2000	288	0.78 (0.7–0.86)	<1 (<1–<1)	23 (7.6–39)	7.9 (2.6–13)	19 (16–21)	6.5 (5.7–7.4)
	2005	303	0.65 (0.59–0.72)	<1 (<1–<1)	20 (6.8–33)	6.5 (2.2–11)	16 (14–18)	5.3 (4.7–6)
	2006	306	0.68 (0.54–0.9)	<1 (<1–<1)	19 (6.9–33)	6.4 (2.2–11)	16 (14–18)	5.2 (4.5–5.9)
	2007	309	0.66 (0.52–0.87)	<1 (<1–<1)	19 (6.5–32)	6 (2.1–10)	15 (13–17)	5 (4.3–5.6)
	2008	312	0.66 (0.52–0.86)	<1 (<1–<1)	19 (6.8–31)	6 (2.2–10)	15 (13–17)	4.8 (4.1–5.4)
	2009	315	0.5 (0.43–0.64)	<1 (<1–<1)	15 (4.2–25)	4.7 (1.3–8)	13 (12–15)	4.1 (3.7–4.8)
Uruguay	1990	3	0.043 (0.02–0.15)	1.4 (<1–4.7)	0.98 (0.23–1.9)	32 (7.4–62)	0.86 (0.47–1.3)	28 (15–40)
	1995	3	0.079 (0.04–0.14)	2.5 (1.2–4.4)	1.1 (0.41–1.9)	35 (13–60)	0.84 (0.67–1)	26 (21–31)
	2000	3	0.067 (0.06–0.074)	2 (1.8–2.2)	1 (0.38–1.8)	31 (11–54)	0.81 (0.65–0.97)	24 (20–29)
	2005	3	0.059 (0.028–0.11)	1.8 (<1–3.3)	0.93 (0.34–1.6)	28 (10–48)	0.76 (0.62–0.91)	23 (19–27)
	2006	3	0.065 (0.032–0.12)	2 (<1–3.5)	0.94 (0.36–1.6)	28 (11–49)	0.75 (0.6–0.9)	23 (18–27)
	2007	3	0.058 (0.028–0.11)	1.7 (<1–3.2)	0.9 (0.33–1.6)	27 (9.8–47)	0.75 (0.61–0.89)	22 (18–27)
	2008	3	0.042 (0.022–0.077)	1.3 (<1–2.3)	0.83 (0.28–1.4)	25 (8.4–42)	0.74 (0.69–0.89)	22 (20–26)
	2009	3	0.032 (0.018–0.059)	<1 (<1–1.8)	0.77 (0.24–1.3)	23 (7.1–39)	0.73 (0.63–0.84)	22 (19–25)
Venezuela (Bolivarian Republic of)	1990	20	0.57 (0.22–1.2)	2.9 (1.1–6.1)	10 (3.3–19)	51 (17–97)	7 (5.5–10)	35 (28–51)
	1995	22	0.72 (0.41–1.1)	3.2 (1.9–5.2)	12 (4.7–20)	52 (21–89)	7.7 (6.1–9.2)	35 (28–42)
	2000	24	0.64 (0.57–0.7)	2.6 (2.3–2.9)	12 (4.4–20)	47 (18–82)	8.4 (6.7–10)	34 (27–41)
	2005	27	0.63 (0.56–0.69)	2.3 (2.1–2.6)	12 (4.8–21)	47 (18–80)	9 (7.2–11)	34 (27–41)
	2006	27	0.75 (0.41–1.2)	2.8 (1.5–4.5)	13 (5.2–22)	47 (19–81)	9.2 (7.3–11)	34 (27–40)
	2007	28	0.67 (0.6–0.74)	2.4 (2.2–2.7)	13 (5.5–22)	48 (20–81)	9.3 (7.4–11)	34 (27–40)
	2008	28	0.86 (0.5–1.3)	3 (1.8–4.8)	14 (5.7–23)	49 (20–82)	9.4 (7.5–11)	33 (27–40)
	2009	29	0.88 (0.52–1.4)	3.1 (1.8–4.7)	14 (5.9–23)	49 (20–82)	9.5 (7.8–11)	33 (27–40)

[a] Rates are per 100 000 population.

TABLE A2.2 **Incidence, notification and case detection rates, all forms, 1990–2009**

			INCIDENCE (INCLUDING HIV)		INCIDENCE HIV-POSITIVE		NOTIFIED NEW AND RELAPSE[a]	CASE DETECTION RATE[a]	
	YEAR	POPULATION (MILLIONS)	NUMBER (THOUSANDS)	RATE[b]	NUMBER (THOUSANDS)	RATE[b]	NUMBER	RATE[b]	PERCENT
Antigua and Barbuda	1990	0	<0.01 (<0.01–<0.01)	2 (1.6–2.4)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	1	2	80 (67–100)
	1995	0	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0	<1	–
	2000	0	<0.01 (<0.01–<0.01)	6 (5.2–6.7)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	4	5	87 (77–100)
	2005	0	<0.01 (<0.01–<0.01)	8.3 (7.2–9.3)	<0.01 (<0.01–<0.01)	4.1 (1.2–7.2)	6	7	87 (77–100)
	2006	0	<0.01 (<0.01–<0.01)	5.4 (4.7–6.1)	<0.01 (<0.01–<0.01)	4.1 (1.5–5.7)	4	5	87 (77–100)
	2007	0	<0.01 (<0.01–<0.01)	2.7 (2.3–3)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	2	2	87 (77–100)
	2008	0	<0.01 (<0.01–<0.01)	1.3 (1.2–1.5)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	1	1	87 (77–100)
	2009	0	<0.01 (<0.01–<0.01)	5.1 (4.6–5.9)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	4	5	89 (77–100)
Argentina	1990	32	19 (12–28)	60 (38–87)	0.61 (0.34–1)	1.9 (1–3.1)	12 309	38	63 (44–100)
	1995	35	17 (14–20)	49 (39–59)	0.63 (0.41–0.91)	1.8 (1.2–2.6)	13 450	39	79 (66–98)
	2000	37	15 (12–18)	40 (32–49)	0.66 (0.43–0.94)	1.8 (1.2–2.6)	11 767	32	79 (66–98)
	2005	39	13 (10–15)	33 (27–40)	0.67 (0.44–0.95)	1.7 (1.1–2.4)	9 770	25	76 (63–95)
	2006	39	13 (10–15)	32 (26–38)	0.67 (0.44–0.94)	1.7 (1.1–2.4)	9 406	24	75 (63–94)
	2007	39	12 (9.8–15)	31 (25–37)	0.66 (0.44–0.94)	1.7 (1.1–2.4)	9 755	25	80 (67–100)
	2008	40	12 (9.4–14)	30 (24–36)	0.66 (0.43–0.94)	1.6 (1.1–2.4)	9 196	23	78 (65–97)
	2009	40	11 (9.3–14)	28 (23–34)	0.65 (0.43–0.93)	1.6 (1.1–2.3)	7 701	19	67 (56–83)
Bahamas	1990	0	0.058 (0.046–0.069)	22 (18–27)	0.018 (0.011–0.028)	7.2 (4.2–11)	46	18	80 (67–100)
	1995	0	0.066 (0.057–0.074)	23 (20–26)	0.022 (0.015–0.031)	8 (5.4–11)	57	20	87 (77–100)
	2000	0	0.094 (0.082–0.11)	31 (27–35)	0.03 (0.021–0.041)	9.9 (6.9–13)	82	27	87 (77–100)
	2005	0	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)			–
	2006	0	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)			–
	2007	0	0.053 (0.046–0.06)	16 (14–18)	0.014 (<0.01–0.022)	4.1 (2.2–6.5)	46	14	87 (77–100)
	2008	0	0.055 (0.048–0.062)	16 (14–18)	0.02 (0.012–0.028)	5.8 (3.6–8.3)	48	14	87 (77–100)
	2009	0	0.05 (0.045–0.059)	15 (13–17)	0.017 (<0.01–0.025)	4.9 (2.9–7.2)	45	13	89 (77–100)
Barbados	1990	0	<0.01 (<0.01–<0.01)	2.4 (1.9–2.9)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	5	2	80 (67–100)
	1995	0	<0.01 (<0.01–<0.01)	1.3 (1.2–1.5)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	3	1	87 (77–100)
	2000	0	<0.01 (<0.01–<0.01)	1.4 (1.2–1.5)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	3	1	87 (77–100)
	2005	0	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)			–
	2006	0	<0.01 (<0.01–<0.01)	2.3 (2–2.6)	<0.01 (<0.01–<0.01)	<1 (<1–1.9)	5	2	87 (77–100)
	2007	0	0.018 (0.016–0.021)	7.2 (6.3–8.2)	<0.01 (<0.01–<0.01)	<1 (<1–2.6)	16	6	87 (77–100)
	2008	0	<0.01 (<0.01–<0.01)	1.4 (1.2–1.5)	<0.01 (<0.01–<0.01)	<1 (<1–1.4)	3	1	87 (77–100)
	2009	0	<0.01 (<0.01–<0.01)	<1 (<1–1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	2	<1	89 (77–100)
Belize	1990	0	0.076 (0.057–0.11)	40 (30–58)	<0.01 (<0.01–<0.01)	1.6 (<1–2.6)	57	30	75 (52–100)
	1995	0	0.088 (0.07–0.11)	40 (32–48)	<0.01 (<0.01–0.014)	4.4 (2.9–6.2)	95	43	108 (90–135)
	2000	0	0.1 (0.08–0.12)	40 (32–48)	0.015 (0.011–0.02)	6 (4.3–8.1)	106	42	105 (88–132)
	2005	0	0.11 (0.1–0.14)	40 (36–48)	0.028 (0.018–0.039)	9.8 (6.4–14)	102	36	90 (75–100)
	2006	0	0.12 (0.092–0.14)	40 (32–48)	0.014 (<0.01–0.024)	4.7 (2.1–8.2)	85	29	74 (61–92)
	2007	0	0.12 (0.094–0.14)	40 (32–48)	0.019 (<0.01–0.032)	6.3 (2.9–11)	63	21	54 (45–67)
	2008	0	0.12 (0.096–0.14)	40 (32–48)	0.025 (0.014–0.037)	8.2 (4.8–12)	88	29	73 (61–92)
	2009	0	0.12 (0.099–0.15)	40 (32–48)	0.024 (0.014–0.036)	7.7 (4.4–12)	88	29	72 (59–89)
Bolivia (Plurinational State of)	1990	7	17 (11–24)	251 (167–364)	0.29 (0.12–0.54)	4.3 (1.8–8.1)	11 166	167	67 (46–100)
	1995	7	16 (14–19)	215 (193–258)	0.37 (0.22–0.56)	5 (3–7.5)	14 422	193	90 (75–100)
	2000	8	15 (12–18)	184 (148–221)	0.49 (0.3–0.73)	5.9 (3.6–8.8)	10 127	122	66 (55–83)
	2005	9	15 (12–17)	158 (126–190)	0.43 (0.27–0.64)	4.7 (2.9–6.9)	9 748	106	67 (56–84)
	2006	9	14 (11–17)	153 (123–184)	0.42 (0.26–0.62)	4.5 (2.8–6.6)	9 014	96	63 (52–79)
	2007	10	14 (11–17)	148 (119–178)	0.41 (0.25–0.6)	4.3 (2.6–6.3)	8 574	90	61 (51–76)
	2008	10	14 (11–17)	144 (115–173)	0.4 (0.24–0.59)	4.1 (2.5–6.1)	9 070	94	65 (54–81)
	2009	10	14 (11–17)	139 (113–168)	0.39 (0.24–0.58)	3.9 (2.4–5.9)	8 847	90	64 (53–79)
Brazil	1990	150	130 (75–180)	84 (50–121)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	74 570	50	60 (41–100)
	1995	162	110 (92–140)	71 (57–85)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	91 013	56	79 (66–99)
	2000	174	110 (84–130)	60 (48–72)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	77 899	45	74 (62–93)
	2005	186	95 (80–110)	51 (43–62)	9.8 (8.2–12)	5.3 (4.4–6.2)	80 209	43	84 (70–100)
	2006	188	93 (78–110)	50 (41–60)	9.4 (7.7–11)	5 (4.1–5.9)	77 632	41	83 (69–100)
	2007	190	91 (75–110)	48 (39–58)	11 (8.6–13)	5.5 (4.5–6.6)	74 757	39	82 (68–100)
	2008	192	89 (73–110)	46 (38–56)	10 (8.4–12)	5.3 (4.3–6.3)	73 395	38	82 (69–100)
	2009	194	87 (72–100)	45 (37–54)	10 (8.3–12)	5.2 (4.3–6.2)	75 040	39	86 (72–105)
Canada	1990	28	2.5 (2–3)	8.9 (7.1–11)	0.23 (0.12–0.38)	<1 (<1–1.4)	1 968	7	80 (67–100)
	1995	29	2.2 (1.9–2.5)	7.5 (6.6–8.5)	0.21 (0.12–0.32)	<1 (<1–1.1)	1 921	7	87 (77–100)
	2000	31	1.9 (1.7–2.2)	6.2 (5.4–7.1)	0.19 (0.11–0.3)	<1 (<1–<1)	1 667	5	87 (77–100)
	2005	32	1.7 (1.5–1.9)	5.3 (4.6–6)	0.2 (0.11–0.31)	<1 (<1–<1)	1 484	5	87 (77–100)
	2006	33	1.6 (1.4–1.9)	5.1 (4.4–5.7)	0.2 (0.11–0.32)	<1 (<1–<1)	1 434	4	87 (77–100)
	2007	33	1.7 (1.5–1.9)	5.2 (4.5–5.8)	0.21 (0.11–0.33)	<1 (<1–1)	1 476	4	87 (77–100)
	2008	33	1.7 (1.5–1.9)	5 (4.4–5.7)	0.21 (0.18–0.25)	<1 (<1–<1)	1 452	4	87 (77–100)
	2009	34	1.6 (1.5–1.9)	4.9 (4.4–5.7)	0.21 (0.11–0.35)	<1 (<1–1)	1 450	4	88 (76–99)
Chile	1990	13	5 (2.7–7.2)	38 (21–55)	0.028 (<0.01–0.063)	<1 (<1–<1)	6 151	47	124 (85–225)
	1995	14	3.9 (3.1–4.7)	27 (22–32)	0.061 (0.028–0.11)	<1 (<1–<1)	4 150	29	106 (89–133)
	2000	15	3 (2.4–3.6)	19 (16–23)	0.095 (0.059–0.14)	<1 (<1–<1)	3 021	20	101 (84–126)
	2005	16	2.3 (1.8–2.7)	14 (11–17)	0.1 (0.066–0.15)	<1 (<1–<1)	2 505	15	110 (92–137)
	2006	16	2.2 (1.7–2.6)	13 (10–16)	0.1 (0.065–0.14)	<1 (<1–<1)	2 486	15	115 (96–144)
	2007	17	2 (1.6–2.4)	12 (9.8–15)	0.097 (0.063–0.14)	<1 (<1–<1)	2 418	15	119 (99–148)
	2008	17	1.9 (1.5–2.3)	11 (9.2–14)	0.094 (0.06–0.14)	<1 (<1–<1)	2 427	14	126 (105–157)
	2009	17	1.8 (1.5–2.2)	11 (8.7–13)	0.089 (0.057–0.13)	<1 (<1–<1)	2 398	14	132 (109–162)
Colombia	1990	33	18 (12–26)	54 (37–78)	0.33 (0.16–0.59)	1 (<1–1.8)	12 447	37	70 (48–100)
	1995	36	18 (14–21)	48 (38–58)	0.95 (0.6–1.4)	2.6 (1.6–3.8)	9 912	27	57 (47–71)
	2000	40	17 (14–21)	43 (34–52)	1.3 (0.84–1.8)	3.2 (2.1–4.4)	11 630	29	68 (57–85)
	2005	43	17 (13–20)	38 (31–46)	0.56 (0.45–0.7)	1.3 (1–1.6)	10 360	24	63 (52–78)
	2006	44	16 (13–20)	38 (30–45)	0.67 (0.53–0.82)	1.5 (1.2–1.9)	11 128	25	68 (56–85)
	2007	44	16 (13–20)	37 (29–44)	0.076 (0.053–0.11)	<1 (<1–<1)	10 950	25	67 (56–84)
	2008	45	16 (13–19)	36 (29–43)	1.6 (1.3–2)	3.6 (2.9–4.4)	11 344	25	70 (58–87)
	2009	46	16 (13–19)	35 (29–42)	1.5 (0.96–2.2)	3.3 (2.1–4.9)	11 438	25	71 (59–87)
Costa Rica	1990	3	0.56 (0.31–0.81)	18 (10–26)	0.012 (<0.01–0.023)	<1 (<1–<1)	230	7	41 (28–75)
	1995	3	0.54 (0.44–0.65)	16 (13–19)	0.028 (0.017–0.043)	<1 (<1–1.2)	586	17	108 (90–135)
	2000	4	0.53 (0.42–0.64)	14 (11–16)	0.038 (0.024–0.057)	<1 (<1–1.4)	585	15	110 (92–138)
	2005	4	0.5 (0.4–0.61)	12 (9.3–14)	0.047 (0.033–0.065)	1.1 (<1–1.5)	534	12	106 (88–132)
	2006	4	0.5 (0.49–0.6)	11 (11–14)	0.039 (0.027–0.053)	<1 (<1–1.2)	488	11	98 (82–100)
	2007	4	0.49 (0.39–0.59)	11 (8.8–13)	0.038 (0.026–0.053)	<1 (<1–1.2)	550	12	112 (93–140)
	2008	5	0.48 (0.39–0.58)	11 (8.6–13)	0.043 (0.029–0.059)	<1 (<1–1.3)	501	11	104 (86–130)
	2009	5	0.48 (0.39–0.57)	10 (8.4–12)	0.044 (0.03–0.061)	<1 (<1–1.3)	443	10	93 (77–115)
Cuba	1990	11	2.7 (1.5–3.9)	25 (14–37)	<0.01 (<0.01–0.019)	<1 (<1–<1)	546	5	20 (14–37)
	1995	11	1.8 (1.6–2.2)	17 (14–20)	0.011 (<0.01–0.02)	<1 (<1–<1)	1 553	14	84 (70–100)
	2000	11	1.3 (1.2–1.5)	11 (11–14)	0.016 (<0.01–0.024)	<1 (<1–<1)	1 183	11	94 (79–100)
	2005	11	0.85 (0.77–1)	7.6 (6.9–9.1)	0.017 (0.01–0.025)	<1 (<1–<1)	770	7	91 (76–100)
	2006	11	0.78 (0.77–0.94)	7 (6.8–8.4)	0.019 (0.012–0.028)	<1 (<1–<1)	765	7	98 (82–100)
	2007	11	0.72 (0.58–0.86)	6.4 (5.1–7.7)	0.02 (0.012–0.03)	<1 (<1–<1)	762	7	106 (88–132)
	2008	11	0.67 (0.53–0.8)	5.9 (4.8–7.1)	0.058 (0.042–0.077)	<1 (<1–<1)	817	7	123 (102–153)
	2009	11	0.61 (0.49–0.74)	5.5 (4.4–6.6)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	712	6	116 (96–144)
Dominica	1990	0	0.01 (<0.01–0.015)	15 (8.7–21)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	6	9	59 (41–100)
	1995	0	<0.01 (<0.01–0.012)	14 (12–17)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	8	12	81 (68–100)
	2000	0	<0.01 (<0.01–0.011)	14 (11–17)	<0.01 (<0.01–<0.01)	<1 (<1–<1)			–
	2005	0	<0.01 (<0.01–0.011)	13 (11–16)	<0.01 (<0.01–<0.01)	<1 (<1–<1)			–
	2006	0	<0.01 (<0.01–0.011)	13 (11–16)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	19	28	211 (176–263)
	2007	0	<0.01 (<0.01–0.011)	13 (11–16)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	3	4	34 (28–42)
	2008	0	<0.01 (<0.01–0.011)	13 (11–16)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	13	19	147 (122–184)
	2009	0	<0.01 (<0.01–0.011)	13 (11–16)	<0.01 (<0.01–<0.01)	3.3 (<1–9.7)	4	6	46 (38–56)

[a] Where notification data from a country had not been received by 31 August, the notification rate was assumed to be the same as for 2008 (in *italics*).

[b] Rates are per 100 000 population.

TABLE A2.2 **Incidence, notification and case detection rates, all forms, 1990–2009**

			INCIDENCE (INCLUDING HIV)		INCIDENCE HIV-POSITIVE		NOTIFIED NEW AND RELAPSE[a]		CASE DETECTION RATE[a]
	YEAR	POPULATION (MILLIONS)	NUMBER (THOUSANDS)	RATE[b]	NUMBER (THOUSANDS)	RATE[b]	NUMBER	RATE[b]	PERCENT
Dominican Republic	1990	7	11 (6–16)	148 (81–214)	0.4 (0.064–1.1)	5.4 (<1–14)	2 597	35	24 (16–43)
	1995	8	9.9 (7.9–12)	121 (97–146)	0.8 (0.5–1.2)	9.9 (6.1–15)	4 053	50	41 (34–51)
	2000	9	8.8 (7.1–11)	100 (80–120)	0.81 (0.55–1.1)	9.1 (6.3–13)	5 291	60	60 (50–75)
	2005	10	7.8 (6.3–9.4)	82 (66–98)	0.68 (0.47–0.94)	7.2 (5–9.8)	5 003	52	64 (53–80)
	2006	10	7.6 (6.1–9.2)	79 (63–95)	0.66 (0.46–0.9)	6.8 (4.8–9.4)	4 561	47	60 (50–75)
	2007	10	7.4 (6–8.9)	76 (61–91)	0.64 (0.44–0.89)	6.5 (4.4–9)	4 150	42	56 (46–70)
	2008	10	7.3 (5.8–8.7)	73 (58–87)	0.62 (0.43–0.86)	6.3 (4.4–8.6)	4 280	43	59 (49–74)
	2009	10	7.1 (5.7–8.5)	70 (57–84)	0.61 (0.42–0.83)	6 (4.2–8.3)	4 256	42	60 (50–74)
Ecuador	1990	10	18 (9.9–26)	174 (96–253)	1 (0.42–1.9)	9.9 (4.1–19)	8 243	80	46 (32–84)
	1995	11	16 (12–19)	136 (109–164)	1.4 (0.89–2.1)	12 (7.8–18)	7 893	69	51 (42–63)
	2000	12	13 (10–16)	107 (85–128)	1.2 (0.76–1.7)	9.7 (6.2–14)	6 908	56	53 (44–66)
	2005	13	11 (8.7–13)	83 (67–100)	0.94 (0.59–1.4)	7.2 (4.6–11)	4 416	34	41 (34–51)
	2006	13	10 (8.4–13)	79 (63–95)	0.9 (0.57–1.3)	6.8 (4.3–10)	4 594	35	44 (37–55)
	2007	13	10 (8.1–12)	76 (60–91)	0.91 (0.62–1.3)	6.8 (4.6–9.4)	4 877	37	48 (40–61)
	2008	13	9.7 (7.8–12)	72 (58–86)	0.75 (0.51–1)	5.5 (3.8–7.7)	4 845	36	50 (42–63)
	2009	14	9.3 (7.6–11)	68 (56–82)	0.82 (0.56–1.1)	6 (4.1–8.3)	4 703	35	51 (42–62)
El Salvador	1990	5	3.4 (2.4–4.9)	63 (44–92)	0.058 (0.023–0.11)	1.1 (<1–2.1)	2 367	44	70 (48–100)
	1995	6	2.6 (2.4–3.1)	45 (42–53)	0.12 (0.069–0.17)	2 (1.2–3)	2 422	42	95 (79–100)
	2000	6	2.2 (1.8–2.6)	37 (29–44)	0.17 (0.11–0.25)	2.9 (1.9–4.2)	1 485	25	68 (56–85)
	2005	6	2.4 (1.9–2.8)	39 (31–47)	0.25 (0.19–0.31)	4.1 (3.2–5.1)	1 794	30	76 (63–95)
	2006	6	2.1 (1.7–2.5)	34 (27–41)	0.22 (0.17–0.28)	3.6 (2.8–4.6)	1 644	27	79 (66–99)
	2007	6	2 (1.7–2.4)	33 (27–39)	0.2 (0.13–0.27)	3.2 (2.1–4.5)	1 666	27	84 (70–100)
	2008	6	2 (1.7–2.3)	32 (28–38)	0.22 (0.18–0.27)	3.6 (2.9–4.4)	1 718	28	88 (73–100)
	2009	6	1.8 (1.6–2.1)	30 (25–35)	0.22 (0.18–0.27)	3.6 (2.9–4.4)	1 686	27	92 (79–108)
Grenada	1990	0	<0.01 (<0.01–<0.01)	4.6 (2.5–6.7)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0	<1	0 (0–0)
	1995	0	<0.01 (<0.01–<0.01)	4.5 (4–5.4)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	4	4	89 (74–100)
	2000	0	<0.01 (<0.01–<0.01)	4.4 (3.5–5.2)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0	<1	0 (0–0)
	2005	0	<0.01 (<0.01–<0.01)	4.2 (3.4–5.1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)			–
	2006	0	<0.01 (<0.01–<0.01)	4.2 (3.4–5.1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	1	<1	23 (19–29)
	2007	0	<0.01 (<0.01–<0.01)	4.2 (3.3–5)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	3	3	69 (58–87)
	2008	0	<0.01 (<0.01–<0.01)	4.2 (3.3–5)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	5	5	116 (97–145)
	2009	0	<0.01 (<0.01–<0.01)	4.1 (3.4–5)	<0.01 (<0.01–<0.01)	<1 (<1–2.7)	5	5	116 (96–143)
Guatemala	1990	9	6.6 (3.8–9.6)	74 (43–108)	0.089 (0.029–0.19)	1 (<1–2.1)	3 813	43	57 (40–100)
	1995	10	7.1 (5.7–8.5)	71 (57–85)	0.28 (0.15–0.46)	2.8 (1.5–4.6)	3 119	31	44 (37–55)
	2000	11	7.6 (6.1–9.1)	68 (54–81)	0.53 (0.33–0.79)	4.7 (3–7)	2 913	26	38 (32–48)
	2005	13	8.2 (6.6–9.9)	65 (52–78)	0.76 (0.49–1.1)	6 (3.9–8.7)	3 365	26	41 (34–51)
	2006	13	8.4 (6.7–10)	64 (51–77)	0.82 (0.53–1.2)	6.3 (4.1–9)	3 626	28	43 (36–54)
	2007	13	8.5 (6.8–10)	63 (51–76)	0.88 (0.57–1.3)	6.6 (4.3–9.5)	3 140	24	37 (31–46)
	2008	14	8.6 (6.9–10)	63 (50–75)	0.87 (0.69–1.1)	6.3 (5–7.8)	3 246	24	38 (31–47)
	2009	14	8.7 (7.1–11)	62 (51–75)	1 (0.82–1.3)	7.3 (5.9–9)	2 902	21	33 (28–41)
Guyana	1990	1	0.67 (0.37–0.97)	89 (49–130)	0.093 (0.051–0.15)	12 (6.9–20)	168	22	25 (17–46)
	1995	1	0.68 (0.54–0.81)	89 (72–107)	0.15 (0.1–0.2)	19 (14–26)	296	39	44 (36–55)
	2000	1	0.79 (0.63–0.94)	104 (83–125)	0.2 (0.15–0.27)	27 (19–36)	422	56	54 (45–67)
	2005	1	0.88 (0.7–1.1)	115 (92–138)	0.11 (0.081–0.14)	14 (11–19)	639	84	73 (61–91)
	2006	1	0.88 (0.71–1.1)	115 (93–138)	0.093 (0.068–0.12)	12 (8.9–16)	710	93	81 (68–100)
	2007	1	0.87 (0.69–1)	114 (91–136)	0.33 (0.26–0.4)	43 (34–53)	594	78	68 (57–85)
	2008	1	0.86 (0.69–1)	113 (90–135)	0.18 (0.12–0.24)	23 (16–31)	653	86	76 (63–95)
	2009	1	0.85 (0.69–1)	112 (91–134)	0.2 (0.16–0.25)	26 (21–33)	660	87	77 (64–95)
Haiti	1990	7	18 (9.7–26)	247 (136–359)	1.9 (0.84–3.6)	27 (12–50)			–
	1995	8	19 (16–23)	247 (198–297)	4.7 (3.4–6.3)	60 (43–80)	6 212	79	32 (27–40)
	2000	9	23 (19–28)	271 (217–325)	5.2 (3.8–6.8)	60 (43–79)	10 420	120	44 (37–56)
	2005	9	26 (20–31)	272 (217–326)	5 (3.6–6.6)	53 (38–70)	14 311	152	56 (47–70)
	2006	10	25 (20–30)	264 (211–317)	4.8 (3.5–6.4)	50 (36–67)	13 959	146	55 (46–69)
	2007	10	25 (20–30)	256 (205–307)	3.6 (2.9–4.3)	37 (30–44)	14 133	145	57 (47–71)
	2008	10	24 (19–29)	246 (197–296)	5.6 (4–7.4)	57 (41–75)	14 602	148	60 (50–75)
	2009	10	24 (19–29)	238 (194–287)	4.4 (3.2–5.9)	44 (32–59)	*14 833*	*148*	*62 (51–76)*
Honduras	1990	5	6.1 (3.6–8.9)	125 (74–182)	0.37 (0.2–0.61)	7.5 (4–12)	3 647	74	59 (41–100)
	1995	6	7 (5.6–8.4)	125 (100–150)	0.56 (0.37–0.79)	9.9 (6.6–14)	4 984	89	71 (59–89)
	2000	6	7.2 (6.4–8.7)	116 (103–139)	0.53 (0.36–0.75)	8.6 (5.7–12)	6 406	103	89 (74–100)
	2005	7	6.1 (4.9–7.3)	89 (71–106)	0.39 (0.25–0.55)	5.6 (3.7–8)	3 333	48	55 (45–68)
	2006	7	5.7 (4.6–6.8)	81 (65–97)	0.36 (0.28–0.45)	5.1 (4–6.4)	3 197	45	56 (47–70)
	2007	7	5.2 (4.2–6.3)	73 (58–87)	0.34 (0.27–0.43)	4.8 (3.7–6)	2 772	39	53 (44–66)
	2008	7	4.7 (3.8–5.7)	64 (52–77)	0.34 (0.27–0.43)	4.7 (3.6–5.8)	2 829	39	60 (50–75)
	2009	7	4.3 (3.5–5.2)	58 (47–69)	0.28 (0.22–0.35)	3.8 (3–4.7)	2 924	39	68 (56–84)
Jamaica	1990	2	0.15 (0.12–0.22)	6.5 (5.2–9.5)	0.039 (0.024–0.06)	1.7 (1–2.5)	123	5	79 (55–100)
	1995	2	0.16 (0.13–0.19)	6.5 (5.2–7.9)	0.044 (0.03–0.061)	1.8 (1.2–2.5)	109	4	67 (56–84)
	2000	3	0.17 (0.13–0.2)	6.5 (5.2–7.9)	0.044 (0.03–0.061)	1.7 (1.2–2.4)	127	5	76 (63–94)
	2005	3	0.17 (0.14–0.21)	6.5 (5.2–7.9)	0.054 (0.036–0.076)	2 (1.4–2.9)	90	3	52 (43–64)
	2006	3	0.18 (0.14–0.21)	6.5 (5.2–7.9)	0.046 (0.03–0.066)	1.7 (1.1–2.5)	95	4	54 (45–68)
	2007	3	0.18 (0.14–0.21)	6.5 (5.2–7.9)	0.043 (0.028–0.062)	1.6 (1–2.3)	104	4	59 (49–74)
	2008	3	0.18 (0.14–0.21)	6.5 (5.2–7.9)	0.027 (0.015–0.042)	1 (<1–1.6)	105	4	59 (49–74)
	2009	3	0.18 (0.15–0.21)	6.6 (5.3–7.9)	0.037 (0.024–0.053)	1.4 (<1–1.9)	139	5	78 (65–96)
Mexico	1990	83	51 (28–74)	61 (34–89)	2.5 (1.4–4.2)	3 (1.6–5)	14 437	17	28 (19–51)
	1995	92	40 (32–48)	44 (35–53)	1.9 (1.2–2.7)	2.1 (1.3–3)	11 329	12	28 (23–35)
	2000	100	32 (25–38)	32 (25–38)	1.4 (0.94–2.1)	1.4 (<1–2.1)	18 434	19	58 (49–73)
	2005	105	24 (19–29)	23 (18–27)	1.1 (0.74–1.6)	1.1 (<1–1.5)	18 524	18	77 (64–96)
	2006	106	23 (18–27)	21 (17–26)	1.1 (0.7–1.6)	1 (<1–1.5)	17 887	17	79 (66–98)
	2007	107	21 (18–26)	20 (17–24)	1.1 (0.7–1.5)	<1 (<1–1.4)	18 324	17	85 (71–100)
	2008	109	20 (19–24)	19 (17–22)	1 (0.67–1.4)	<1 (<1–1.3)	18 810	17	93 (77–100)
	2009	110	19 (17–22)	17 (15–20)	0.96 (0.71–1.2)	<1 (<1–1.1)	18 846	17	99 (86–114)
Nicaragua	1990	4	4.5 (2.9–6.5)	108 (71–156)	0.024 (0.01–0.045)	<1 (<1–1.1)	2 944	71	66 (46–100)
	1995	5	4 (3.2–4.8)	85 (68–102)	0.043 (0.024–0.068)	<1 (<1–1.5)	2 842	61	72 (60–89)
	2000	5	3.4 (2.8–4.1)	68 (54–81)	0.058 (0.035–0.088)	1.1 (<1–1.7)	2 402	47	70 (58–87)
	2005	5	2.9 (2.3–3.5)	53 (43–64)	0.066 (0.041–0.099)	1.2 (<1–1.8)	1 907	35	65 (54–82)
	2006	6	2.8 (2.3–3.4)	51 (41–61)	0.067 (0.042–0.1)	1.2 (<1–1.8)	1 997	36	71 (59–88)
	2007	6	2.7 (2.3–3.3)	49 (41–58)	0.068 (0.042–0.1)	1.2 (<1–1.8)	2 303	41	84 (70–100)
	2008	6	2.6 (2.3–3.2)	46 (41–56)	0.069 (0.042–0.1)	1.2 (<1–1.8)	2 336	41	89 (74–100)
	2009	6	2.5 (2.2–3)	44 (38–51)	0.069 (0.043–0.1)	1.2 (<1–1.8)	2 283	40	90 (77–105)
Panama	1990	2	1.1 (0.85–1.7)	47 (35–69)	0.036 (<0.01–0.092)	1.5 (<1–3.8)	846	35	74 (51–100)
	1995	3	1.3 (1–1.5)	47 (38–57)	0.2 (0.12–0.31)	7.5 (4.3–11)	1 300	49	103 (85–128)
	2000	3	1.4 (1.2–1.7)	47 (40–57)	0.22 (0.11–0.35)	7.3 (3.9–12)	1 169	40	84 (70–100)
	2005	3	1.5 (1.2–1.8)	47 (38–57)	0.19 (0.15–0.23)	5.8 (4.5–7.3)	1 637	51	107 (89–133)
	2006	3	1.6 (1.2–1.9)	47 (38–57)	0.26 (0.2–0.32)	7.8 (6.2–9.7)	1 636	50	105 (87–131)
	2007	3	1.6 (1.3–1.9)	47 (38–57)	0.24 (0.19–0.29)	7.1 (5.6–8.8)	1 596	48	101 (84–126)
	2008	3	1.6 (1.5–1.9)	47 (45–57)	0.19 (0.1–0.3)	5.5 (3–8.7)	1 532	45	95 (79–100)
	2009	3	1.6 (1.4–1.9)	48 (42–54)	0.11 (0.091–0.14)	3.3 (2.6–4.1)	1 539	45	94 (83–107)
Paraguay	1990	4	2.1 (1.1–3)	49 (27–70)	<0.01 (<0.01–0.013)	<1 (<1–<1)	2 167	51	105 (72–191)
	1995	5	2.3 (1.9–2.8)	48 (39–58)	0.065 (0.031–0.11)	1.3 (<1–2.3)	1 745	36	75 (63–94)
	2000	5	2.6 (2.1–3.1)	48 (38–58)	0.093 (0.058–0.14)	1.7 (1.1–2.6)	1 950	36	76 (63–95)
	2005	6	2.8 (2.3–3.4)	48 (38–57)	0.11 (0.07–0.16)	1.9 (1.2–2.7)	2 075	35	74 (61–92)
	2006	6	2.9 (2.4–3.4)	48 (41–57)	0.11 (0.073–0.16)	1.9 (1.2–2.7)	2 447	41	85 (71–100)
	2007	6	2.9 (2.3–3.5)	48 (38–57)	0.12 (0.074–0.17)	1.9 (1.2–2.8)	2 269	37	78 (65–97)
	2008	6	3 (2.4–3.6)	47 (38–57)	0.12 (0.076–0.18)	1.9 (1.2–2.9)	2 222	36	75 (62–94)
	2009	6	3 (2.5–3.6)	47 (39–57)	0.12 (0.078–0.18)	2 (1.2–2.9)	2 346	37	78 (65–96)

[a] Where notification data from a country had not been received by 31 August, the notification rate was assumed to be the same as for 2008 (in *italics*).

[b] Rates are per 100 000 population.

Data can be downloaded from www.who.int/tb/data

TABLE A2.2 **Incidence, notification and case detection rates, all forms, 1990–2009**

			INCIDENCE (INCLUDING HIV)		INCIDENCE HIV-POSITIVE		NOTIFIED NEW AND RELAPSE[a]		CASE DETECTION RATE[a]
	YEAR	POPULATION (MILLIONS)	NUMBER (THOUSANDS)	RATE[b]	NUMBER (THOUSANDS)	RATE[b]	NUMBER	RATE[b]	PERCENT
Peru	1990	22	69 (38–100)	317 (175–460)	1.1 (0.55–1.9)	5 (2.5–8.6)	37 905	174	55 (38–100)
	1995	24	58 (46–69)	242 (193–290)	1.3 (0.88–1.9)	5.6 (3.7–8)	45 310	189	78 (65–98)
	2000	26	48 (39–57)	184 (149–221)	1.2 (0.76–1.7)	4.4 (2.9–6.3)	38 661	149	81 (67–100)
	2005	28	39 (33–47)	140 (120–168)	0.86 (0.57–1.2)	3.1 (2.1–4.4)	33 421	120	86 (71–100)
	2006	28	37 (34–45)	133 (122–159)	0.81 (0.54–1.1)	2.9 (1.9–4.1)	34 311	122	92 (76–100)
	2007	29	36 (32–43)	126 (114–151)	0.95 (0.81–1.1)	3.3 (2.8–3.9)	32 407	114	90 (75–100)
	2008	29	34 (32–41)	119 (112–143)	0.71 (0.46–1)	2.5 (1.6–3.5)	32 193	112	94 (78–100)
	2009	29	33 (29–37)	113 (98–128)	0.49 (0.35–0.67)	1.7 (1.2–2.3)	31 844	109	97 (85–112)
Puerto Rico	1990	4	0.2 (0.16–0.24)	5.6 (4.5–6.8)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	159	5	80 (67–100)
	1995	4	0.3 (0.26–0.34)	8.1 (7.1–9.2)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	262	7	87 (77–100)
	2000	4	0.2 (0.17–0.23)	5.2 (4.6–5.9)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	174	5	87 (77–100)
	2005	4	0.13 (0.11–0.15)	3.3 (2.9–3.8)	0.032 (0.022–0.045)	<1 (<1–1.1)	113	3	87 (77–100)
	2006	4	0.13 (0.11–0.15)	3.3 (2.8–3.7)	0.023 (0.014–0.034)	<1 (<1–<1)	112	3	87 (77–100)
	2007	4	0.11 (0.098–0.13)	2.9 (2.5–3.2)	0.024 (0.015–0.035)	<1 (<1–<1)	98	2	87 (77–100)
	2008	4	0.11 (0.095–0.12)	2.8 (2.4–3.1)	0.026 (0.017–0.037)	<1 (<1–<1)	95	2	87 (77–100)
	2009	4	0.071 (0.063–0.082)	1.8 (1.6–2.1)	<0.01 (<0.01–0.016)	<1 (<1–<1)	63	2	89 (77–100)
Saint Kitts and Nevis	1990	0	<0.01 (<0.01–<0.01)	10 (5.7–15)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0	<1	0 (0–0)
	1995	0	<0.01 (<0.01–<0.01)	10 (8–12)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	5	12	116 (97–145)
	2000	0	<0.01 (<0.01–<0.01)	9.7 (7.8–12)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0	<1	0 (0–0)
	2005	0	<0.01 (<0.01–<0.01)	9.4 (7.6–11)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0	<1	0 (0–0)
	2006	0	<0.01 (<0.01–<0.01)	9.4 (7.5–11)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	1	2	21 (18–27)
	2007	0	<0.01 (<0.01–<0.01)	9.3 (7.9–11)	<0.01 (<0.01–<0.01)	4.6 (<1–8.6)	4	8	85 (71–100)
	2008	0	<0.01 (<0.01–<0.01)	9.3 (7.4–11)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	5	10	106 (88–132)
	2009	0	<0.01 (<0.01–<0.01)	9.2 (7.5–11)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	4	8	84 (70–103)
Saint Lucia	1990	0	0.022 (0.013–0.032)	16 (9.4–23)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	13	9	59 (41–100)
	1995	0	0.023 (0.018–0.027)	15 (12–18)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	11	7	49 (41–61)
	2000	0	0.023 (0.019–0.028)	15 (12–18)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	9	6	38 (32–48)
	2005	0	0.024 (0.019–0.029)	14 (12–17)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	14	8	59 (49–73)
	2006	0	0.024 (0.019–0.029)	14 (11–17)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	15	9	63 (52–78)
	2007	0	0.024 (0.019–0.029)	14 (11–17)	<0.01 (<0.01–<0.01)	1.5 (<1–4.4)	19	11	79 (66–99)
	2008	0	0.024 (0.021–0.029)	14 (12–17)	<0.01 (<0.01–<0.01)	2.7 (<1–5.7)	21	12	87 (72–100)
	2009	0	0.024 (0.021–0.028)	14 (12–17)	<0.01 (<0.01–0.016)	4.7 (1.4–9)	12	7	49 (42–59)
Saint Vincent and the Grenadines	1990	0	0.029 (0.016–0.043)	27 (15–40)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	2	2	7 (5–12)
	1995	0	0.029 (0.023–0.034)	27 (21–32)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	13	12	45 (38–57)
	2000	0	0.028 (0.022–0.033)	26 (21–31)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	16	15	58 (48–72)
	2005	0	0.027 (0.022–0.033)	25 (20–30)	<0.01 (<0.01–0.014)	3.6 (<1–13)	7	6	26 (21–32)
	2006	0	0.027 (0.022–0.033)	25 (20–30)	0.01 (<0.01–0.019)	9.6 (3.4–17)	13	12	48 (40–60)
	2007	0	0.027 (0.022–0.032)	25 (20–30)	0.016 (<0.01–0.024)	14 (7.1–22)	12	11	44 (37–56)
	2008	0	0.027 (0.021–0.032)	25 (20–30)	0.013 (<0.01–0.022)	12 (5.4–20)	12	11	45 (37–56)
	2009	0	0.027 (0.022–0.032)	24 (20–30)	0.021 (0.011–0.029)	19 (11–26)	9	8	34 (28–41)
Suriname	1990	0	0.27 (0.15–0.39)	66 (36–95)	<0.01 (<0.01–0.018)	2 (<1–4.4)	82	20	31 (21–56)
	1995	0	0.22 (0.18–0.27)	51 (41–61)	0.035 (0.018–0.058)	8 (4–13)			–
	2000	0	0.37 (0.29–0.44)	79 (63–95)	0.079 (0.05–0.11)	17 (11–24)	89	19	24 (20–30)
	2005	0	0.5 (0.4–0.6)	100 (80–120)	0.11 (0.073–0.16)	23 (15–32)	117	23	23 (19–29)
	2006	1	0.55 (0.44–0.66)	108 (87–130)	0.12 (0.079–0.18)	24 (16–35)	127	25	23 (19–29)
	2007	1	0.59 (0.48–0.71)	116 (93–140)	0.13 (0.086–0.19)	26 (17–38)			–
	2008	1	0.64 (0.52–0.77)	125 (100–150)	0.17 (0.11–0.24)	32 (21–46)	108	21	17 (14–21)
	2009	1	0.7 (0.57–0.84)	135 (109–162)	0.19 (0.14–0.26)	37 (27–50)	177	34	25 (21–31)
Trinidad and Tobago	1990	1	0.15 (0.12–0.18)	12 (9.8–15)	<0.01 (<0.01–0.014)	<1 (<1–1.1)	120	10	80 (67–100)
	1995	1	0.19 (0.17–0.22)	15 (13–17)	0.026 (0.016–0.038)	2.1 (1.3–3)	166	13	87 (77–100)
	2000	1	0.23 (0.2–0.26)	18 (15–20)	0.046 (0.032–0.063)	3.6 (2.5–4.9)	198	15	87 (77–100)
	2005	1	0.19 (0.17–0.22)	14 (13–16)	0.048 (0.035–0.063)	3.7 (2.7–4.8)	166	13	87 (77–100)
	2006	1	0.27 (0.23–0.3)	20 (18–23)	0.015 (<0.01–0.025)	1.1 (<1–1.9)	232	18	87 (77–100)
	2007	1	0.25 (0.22–0.28)	19 (16–21)	0.09 (0.071–0.11)	6.8 (5.4–8.3)	218	16	87 (77–100)
	2008	1	0.32 (0.28–0.36)	24 (21–27)	0.074 (0.052–0.099)	5.5 (3.9–7.4)	279	21	87 (77–100)
	2009	1	0.3 (0.27–0.35)	23 (20–26)	0.079 (0.055–0.11)	5.9 (4.1–8)	272	20	89 (77–100)
United States of America	1990	255	32 (26–39)	13 (10–15)	1.9 (1.2–2.9)	<1 (<1–1.1)	25 701	10	80 (67–100)
	1995	271	26 (23–30)	9.7 (8.4–11)	1.5 (1–2.2)	<1 (<1–<1)	22 728	8	87 (77–100)
	2000	288	19 (16–21)	6.5 (5.7–7.4)	1.2 (0.83–1.7)	<1 (<1–<1)	16 310	6	87 (77–100)
	2005	303	16 (14–18)	5.3 (4.7–6)	1.2 (1–1.4)	<1 (<1–<1)	14 080	5	87 (77–100)
	2006	306	16 (14–18)	5.2 (4.5–5.9)	1.1 (0.95–1.3)	<1 (<1–<1)	13 779	5	87 (77–100)
	2007	309	15 (13–17)	5 (4.3–5.6)	1 (0.88–1.2)	<1 (<1–<1)	13 299	4	87 (77–100)
	2008	312	15 (13–17)	4.8 (4.1–5.4)	0.95 (0.82–1.1)	<1 (<1–<1)	12 904	4	87 (77–100)
	2009	315	13 (12–15)	4.1 (3.7–4.8)	0.79 (0.68–0.91)	<1 (<1–<1)	11 545	4	89 (77–100)
Uruguay	1990	3	0.86 (0.47–1.3)	28 (15–40)	0.034 (0.011–0.072)	1.1 (<1–2.3)	886	28	103 (71–187)
	1995	3	0.84 (0.67–1)	26 (21–31)	0.055 (0.033–0.083)	1.7 (1–2.6)	625	19	74 (62–93)
	2000	3	0.81 (0.65–0.97)	24 (20–29)	0.089 (0.058–0.13)	2.7 (1.7–3.8)	645	19	80 (66–99)
	2005	3	0.76 (0.62–0.91)	23 (19–27)	0.091 (0.067–0.12)	2.7 (2–3.6)	622	19	82 (68–100)
	2006	3	0.75 (0.6–0.9)	23 (18–27)	0.11 (0.081–0.14)	3.3 (2.4–4.3)	557	17	74 (62–92)
	2007	3	0.75 (0.61–0.89)	22 (18–27)	0.11 (0.081–0.14)	3.2 (2.4–4.2)	607	18	81 (68–100)
	2008	3	0.74 (0.69–0.89)	22 (20–26)	0.11 (0.078–0.15)	3.3 (2.3–4.5)	686	20	93 (77–100)
	2009	3	0.73 (0.63–0.84)	22 (19–25)	0.12 (0.096–0.15)	3.6 (2.8–4.4)	704	21	96 (84–111)
Venezuela (Bolivarian Republic of)	1990	20	7 (5.5–10)	35 (28–51)	0.054 (0.015–0.12)	<1 (<1–<1)	5 457	28	78 (54–100)
	1995	22	7.7 (6.1–9.2)	35 (28–42)	0.16 (0.076–0.28)	<1 (<1–1.2)	5 578	25	73 (60–91)
	2000	24	8.4 (6.7–10)	34 (27–41)	0.37 (0.24–0.54)	1.5 (<1–2.2)	6 466	26	77 (64–97)
	2005	27	9 (7.2–11)	34 (27–41)	0.6 (0.39–0.86)	2.3 (1.5–3.2)	6 847	26	76 (63–95)
	2006	27	9.2 (7.3–11)	34 (27–40)	0.64 (0.42–0.91)	2.4 (1.5–3.4)	6 705	25	73 (61–91)
	2007	28	9.3 (7.4–11)	34 (27–40)	0.67 (0.54–0.83)	2.4 (1.9–3)	6 456	23	69 (58–87)
	2008	28	9.4 (7.5–11)	33 (27–40)	0.71 (0.57–0.87)	2.5 (2–3.1)	6 408	23	68 (57–85)
	2009	29	9.5 (7.8–11)	33 (27–40)	0.72 (0.57–0.88)	2.5 (2–3.1)	6 474	23	68 (56–83)

[a] Where notification data from a country had not been received by 31 August, the notification rate was assumed to be the same as for 2008 (in *italics*).

[b] Rates are per 100 000 population.

TABLE A2.3 **Case notifications, 1990–2009**

	NEW AND RELAPSE NOTIFICATION RATE[a] 1990–2009	YEAR	NEW AND RELAPSE[a]	NEW CASES				RELAPSE	RE-TREAT EXCL. RELAPSE	TOTAL RETREAT	HISTORY UNKNOWN	% SMEAR-POS AMONG NEW PULM
				SMEAR-POSITIVE	SMEAR-NEGATIVE/ UNKNOWN	EXTRA-PULMONARY	OTHER					
Antigua and Barbuda		1990	1									–
		1995	0									–
		2000	4	3	1	0		0		0		75
		2005	6	6	0	0	0	0	0	0	0	100
		2006	4	4	0	0	0	0	0	0	0	100
		2007	2	2	0	0	0	0	0	0	0	100
		2008	1	1	0	0	0	0	0	0	0	100
	2 5	2009	4	2	1	0	0	1	1	2	0	67
Argentina		1990	12 309									–
		1995	13 450	5 698	4 668	3 067						55
		2000	11 767	4 749	4 110	1 773		104	1 724	1 828		54
		2005	9 770	4 709	3 357	1 561	0	143	666	809	806	58
		2006	9 406	4 834	2 669	1 266	585	52	457	509	269	64
		2007	9 755	4 985	3 103	1 444	61	162	456	618	472	62
		2008	9 196	4 758	2 783	1 493	24	138	1 254	1 392		63
	38 19	2009	7 701	4 044	2 165	937	217	338	489	827		65
Bahamas		1990	46									–
		1995	57	38	11	8		1		1		78
		2000	82	56	23	4		0	0	0		71
		2005										–
		2006										–
		2007	46	32	6	7	0	1	2	3	0	84
		2008	48	31	10	5	0	2	2	4	1	76
	18 13	2009	45	26	10	5	0	4	1	5	0	72
Barbados		1990	5									–
		1995	3	3								–
		2000	3	3	0	0		0	0	0		100
		2005										–
		2006	5	4	0	1	0	0	0	0	0	100
		2007	16	8	0	8	0	0	0	0	0	100
		2008	3	1	2	0	0	0	0	0	0	33
	2 1	2009	2	2	0	0	0	0	0	0	0	100
Belize		1990	57									–
		1995	95	36	34	1		4		4		51
		2000	106	44	55	1		6	0	6		44
		2005	102	59	29	3	0	11	4	15	0	67
		2006	85	60	18	0	0	7	2	9		77
		2007	63	54	0	2	0	7		7		100
		2008	88	83				5		5		–
	30 29	2009	88	82	0		0	6	6	12	0	100
Bolivia (Plurinational State of)		1990	11 166									–
		1995	14 422	7 010	1 408	1 133		63		63		83
		2000	10 127	6 458	1 565	1 288		451	1 630	2 081		80
		2005	9 748	6 278	1 250	1 673		547	225	772		83
		2006	9 014	5 788	1 064	1 654		508	186	694		84
		2007	8 574	5 686	861	1 502		525	127	652		87
		2008	9 070	6 048	893	1 693		436	154	590		87
	167 90	2009	8 847	5 937	699	1 742		469	263	732	18	89
Brazil		1990	74 570									–
		1995	91 013	45 650	29 291	13 814						61
		2000	77 899	41 186	23 622	10 457		2 634	8 700	11 334		64
		2005	80 209	42 093	23 990	11 037		3 089	6 548	9 637	466	64
		2006	77 632	41 117	22 585	10 656	0	3 274	5 661	8 935	0	65
		2007	74 757	38 444	23 065	10 318	0	2 930	5 704	8 634	0	63
		2008	73 395	37 697	22 665	10 122	10	2 901	8 263	11 164	0	62
	50 39	2009	75 040	39 267	22 144	10 275	14	3 340	6 478	9 818	3 641	64
Canada		1990	1 968	549	516	723	0	180		180	29	52
		1995	1 921	436	656	634	0	195		195	44	40
		2000	1 667	492	528	482	20	145		145	56	48
		2005	1 484	433	446	562	4	39	64	103	68	49
		2006	1 434	407	586	402	0	39	86	125	101	41
		2007	1 476	463	449	484	0	80	29	109	42	51
		2008	1 452	488	466	416	0	82	40	122	109	51
	7 4	2009	1 450	444	491	460	0	55	36	91	114	47
Chile		1990	6 151									–
		1995	4 150	1 561	1 284	1 017		225		225		55
		2000	3 021	1 290	879	694		158		158		59
		2005	2 505	1 186	502	631		186	128	314		70
		2006	2 486	1 533	233	571	0	149	27	176	46	87
		2007	2 418	1 166	496	604	0	152	74	226	0	70
		2008	2 427	1 114	525	636		152	67	219		68
	47 14	2009	2 398	1 152	509	549	0	188	118	306	0	69
Colombia		1990	12 447									–
		1995	9 912	7 530	1 380	1 002						85
		2000	11 630	8 358	1 446	1 487		339		339		85
		2005	10 360	6 870	1 429	1 618		443		443		83
		2006	11 128	7 648	1 348	1 700	0	432		432	0	85
		2007	10 950	7 188	1 636	1 703	0	423		423		81
		2008	11 344	7 196	1 709	2 026	0	413	0	413	0	81
	37 25	2009	11 438	7 319	1 611	2 117		391		391		82
Costa Rica		1990	230									–
		1995	586	245	71	31		0		0		78
		2000	585	349	184	98		35		35		65
		2005	534	330	81	104		19	26	45		80
		2006	488	285	92	95	0	16	24	40	0	76
		2007	550	322	110	91	0	27	15	42	0	75
		2008	501	287	14	107	79	14	10	24		95
	7 10	2009	443	271	66	89		17	14	31		80
Cuba		1990	546									–
		1995	1 553	834	520	199		54		54		62
		2000	1 183	675	257	201		50	122	172		72
		2005	770	467	160	103		40	9	49	2	74
		2006	765	432	188	96		49		49		70
		2007	762	432	184	98		48	11	59		70
		2008	817	498	167	106		46	14	60		75
	5 6	2009	712	418	150	91	7	46	5	51	0	74
Dominica		1990	6									–
		1995	8	5				3		3		–
		2000										–
		2005										–
		2006	19	8	11	0	0	0	0	0	0	42
		2007	3	3	0	0	0	0	0	0	0	100
		2008	13	3	9	0	0	1	3	4	0	25
	9 6	2009	4	4	0	0	0	0	1	1	0	100

[a] Rates are per 100 000 population. Where notification data from a country had not been received by 31 August, the notification rate was assumed to be the same as for 2008 (in italics).

Data can be downloaded from www.who.int/tb/data

TABLE A2.3 **Case notifications, 1990–2009**

	NEW AND RELAPSE NOTIFICATION RATE[a] 1990–2009	YEAR	NEW AND RELAPSE[a]	NEW CASES				RELAPSE	RE-TREAT EXCL. RELAPSE	TOTAL RETREAT	HISTORY UNKNOWN	% SMEAR-POS AMONG NEW PULM
				SMEAR-POSITIVE	SMEAR-NEGATIVE/ UNKNOWN	EXTRA-PULMONARY	OTHER					
Dominican Republic		1990	2 597									–
		1995	4 053	2 787	1 418	244		204		204		66
		2000	5 291	2 907	1 234	540		610		610		70
		2005	5 003	2 949	1 032	602		420	309	729		74
		2006	4 561	2 658	893	631	41	338	258	596	0	75
		2007	4 150	2 373	830	593		354	211	565	0	74
		2008	4 280	2 458	933	580	0	309	188	497	0	72
	35 42	2009	4 256	2 441	822	615	112	266	186	452	0	75
Ecuador		1990	8 243									–
		1995	7 893	5 890	2 237	420						72
		2000	6 908	5 064	1 338	400		106	280	386		79
		2005	4 416	3 048	635	330		403	392	795		83
		2006	4 594	3 182	540	455		417	326	743		85
		2007	4 877	3 448	480	503	0	446	385	831	0	88
		2008	4 845	3 380	435	609	0	421	357	778	0	89
	80 35	2009	4 703	3 317	369	584		433	323	756		90
El Salvador		1990	2 367									–
		1995	2 422		2 241	181						–
		2000	1 485	1 008	278	108		91	180	271		78
		2005	1 794	1 059	402	255		78	36	114	0	72
		2006	1 644	913	347	283	0	101	35	136	0	72
		2007	1 666	942	358	306	0	60	26	86	0	72
		2008	1 718	985	362	313	0	58	28	86	0	73
	44 27	2009	1 686	930	363	329	1	63	50	113	0	72
Grenada		1990	0									–
		1995	4	2								–
		2000	0	0	0	0		0	0	0		–
		2005										–
		2006	1	1	0	0	0	0	0	0	0	100
		2007	3	3	0	0	0	0	0	0	0	100
		2008	5	5	0	0	0	0	1	1	0	100
	0 5	2009	5	4	1	0	0	0	0	0	0	80
Guatemala		1990	3 813									–
		1995	3 119	2 368	546	205		249		249		81
		2000	2 913	2 052	518	202		141		141		80
		2005	3 365	2 420	588	256		101	58	159	438	80
		2006	3 626	2 501	414	238	360	113	48	161		86
		2007	3 140	2 348	376	282	0	134	63	197	0	86
		2008	3 246	2 070	326	346	372	132	70	202	0	86
	43 21	2009	2 902	1 609	170	207	828	88	40	128	0	90
Guyana		1990	168									–
		1995	296	85	187	22		2		2		31
		2000	422	119	231	34		38	46	84		34
		2005	639	240	352	33	6	8	17	25	0	41
		2006	710	294	372	19		25	37	62		44
		2007	594	233	301	43	1	16	62	78	0	44
		2008	653	320	242	61	0	30	87	117	0	57
	22 87	2009	660	330	252	46	0	32	138	170	0	57
Haiti		1990										–
		1995	6 212									–
		2000	10 420	5 887	2 930	1 367		236	110	346		67
		2005	14 311	7 340	5 292	1 484		195	33	228		58
		2006	13 959	7 461	4 796	1 436	0	266	43	309	0	61
		2007	14 133	7 915	4 472	1 437	0	309	65	374	0	64
		2008	14 602	8 171	4 655	1 463	0	313	60	373	0	64
	– *148*	2009	*14 833*									–
Honduras		1990	3 647									–
		1995	4 984	2 306	2 214	232		100		100		51
		2000	6 406	3 404	2 396	370		236		236		59
		2005	3 333	2 069	721	362		181		181		74
		2006	3 197	2 018	656	350	0	173	0	173	0	75
		2007	2 772	1 974	470	328	0	0	189	189	0	81
		2008	2 829	1 897	451	330	0	151	33	184	0	81
	74 39	2009	2 924	1 881	520	331	0	192	33	225	0	78
Jamaica		1990	123									–
		1995	109	93	14	2		2		2		87
		2000	127	90	20	4		13		13		82
		2005	90	53	31	6	0	0	5	5	0	63
		2006	95	61	18	13	1	2	3	5	0	77
		2007	104	78	20	4	0	2	0	2	0	80
		2008	105	78	22	2	0	3	0	3	0	78
	5 5	2009	139	77	48	5	0	9	11	20	0	62
Mexico		1990	14 437									–
		1995	11 329	9 220	1 807	302						84
		2000	18 434	11 676	1 675	2 081		421	914	1 335		87
		2005	18 524	11 997	421	2 657	2 831	618	1 408	2 026		97
		2006	17 887	11 874	2 468	2 751		794	776	1 570	47	83
		2007	18 324	11 531	3 213	2 869	0	711	945	1 656	116	78
		2008	18 810	11 903	1 062	3 175	1 896	774	596	1 370	0	92
	17 17	2009	18 846	11 862	958	3 193	2 114	719	816	1 535	111	93
Nicaragua		1990	2 944									–
		1995	2 842	1 568	854	253		167		167		65
		2000	2 402	1 471	541	231		159		159		73
		2005	1 907	1 253	395	160		99	169	268	0	76
		2006	1 997	1 285	408	177	0	127	108	235	0	76
		2007	2 303	1 453	455	237	0	158	138	296	0	76
		2008	2 336	1 394	530	245	0	167	0	167	0	72
	71 40	2009	2 283	1 329	541	261	0	152	130	282	0	71
Panama		1990	846									–
		1995	1 300	1 066	114	28		108		108		90
		2000	1 169	460	589	74	5	41	93	134		44
		2005	1 637	860	505	216		56	191	247		63
		2006	1 636	858	464	254	0	60	211	271	0	65
		2007	1 596	833	470	242	0	51	177	228	0	64
		2008	1 532	829	402	251	0	50	141	191	52	67
	35 45	2009	1 539	755	452	287	0	45	190	235		63
Paraguay		1990	2 167	993								–
		1995	1 745	748	870	127		28		28		46
		2000	1 950	900	791	170		14	516	530		53
		2005	2 075	1 260	665	150			273	273		65
		2006	2 447	1 452	745	174	6	70	94	164	100	66
		2007	2 269	1 276	686	215	6	86	77	163	74	65
		2008	2 222	1 345	554	240	7	76	78	154	70	71
	51 37	2009	2 346	1 498	428	283	41	96	81	177	0	78

[a] Rates are per 100 000 population. Where notification data from a country had not been received by 31 August, the notification rate was assumed to be the same as for 2008 (in italics).

TABLE A2.3 **Case notifications, 1990–2009**

	NEW AND RELAPSE NOTIFICATION RATE[a] 1990–2009	YEAR	NEW AND RELAPSE[a]	NEW CASES				RELAPSE	RE-TREAT EXCL. RELAPSE	TOTAL RETREAT	HISTORY UNKNOWN	% SMEAR-POS AMONG NEW PULM
				SMEAR-POSITIVE	SMEAR-NEGATIVE/ UNKNOWN	EXTRA-PULMONARY	OTHER					
Peru		1990	37 905									–
		1995	45 310	32 096	7 803	5 411						80
		2000	38 661	22 580	6 018	5 682		4 381		4 381		79
		2005	33 421	18 490	5 592	5 335	809	3 195	1 794	4 989	326	77
		2006	34 311	19 251	6 045	5 035	835	3 145	2 332	5 477		76
		2007	32 407	17 796	5 510	5 312	775	3 014	2 127	5 141	0	76
		2008	32 193	17 989	5 176	5 137	831	3 060	1 474	4 534	0	78
	174 109	2009	31 844	17 391	5 203	5 380	871	2 999	1 325	4 324	0	77
Puerto Rico		1990	159									–
		1995	262	128	111	23						54
		2000	174	81	69	24						54
		2005	113	60	37	16	0	0	0	0	0	62
		2006	112	69	36	7	0	0	0	0	0	66
		2007	98	56	29	13	0	0	0	0	0	66
		2008	95	52	30	13	0	0	0	0	0	63
	5 2	2009	63	30	25	8	0	0	0	0	0	55
Saint Kitts and Nevis		1990	0									–
		1995	5	4								–
		2000	0	0	0	0		0	0	0		–
		2005	0	0	0	0	0	0	2	2		–
		2006	1	1								–
		2007	4	4	0	0	0	0	0	0	0	100
		2008	5	5	0	0	0	0	0	0	0	100
	0 8	2009	4	4	0	0	0	0	0	0	0	100
Saint Lucia		1990	13									–
		1995	11	11								–
		2000	9	7	1	0		1	2	3		88
		2005	14	11	1	0	0	2	0	2		92
		2006	15	13	0	0	0	2	0	2	0	100
		2007	19	18	0	0	0	1	0	1	0	100
		2008	21	18	1	1	0	1	0	1	0	95
	9 7	2009	12	7	1	1	0	3	0	3	0	88
Saint Vincent and the Grenadines		1990	2									–
		1995	13	5	7	0		4		4		42
		2000	16	9	4	0		3	0	3		69
		2005	7	6	1	0	0	0	0	0	0	86
		2006	13	8	4	0	0	1	6	7	0	67
		2007	12	4	8	0	0	0	6	6	0	33
		2008	12	11	0	0	0	1	3	4	0	100
	2 8	2009	9	3	6	0	0	0	2	2	0	33
Suriname		1990	82									–
		1995										–
		2000	89	37	40	12		0	1	1		48
		2005	117	49	54	6	2	6	2	8	0	48
		2006	127	63	43	16	1	4	7	11	2	59
		2007										–
		2008	108	68	24	13	1	2	5	7	0	74
	20 34	2009	177	149	14	9	0	5	10	15	1	91
Trinidad and Tobago		1990	120									–
		1995	166	7	68	12		22		22		9
		2000	198	115	61	17		5	26	31		65
		2005	166	95	50	12	0	9	13	22		66
		2006	232	149	60	17	0	6	21	27		71
		2007	218	130	59	17	2	10	42	52		69
		2008	279	169	97	9	0	4	43	47	0	64
	10 20	2009	272	154	91	19	0	8	52	60	0	63
United States of America		1990	25 701									–
		1995	22 728	8 093	10 795	3 835	5					43
		2000	16 310	5 883	7 204	3 211	12					45
		2005	14 080	5 111	6 030	2 939	0					46
		2006	13 779	5 091	5 792	2 889	7					47
		2007	13 299	4 864	5 726	2 697	12	0	0	0	0	46
		2008	12 904	4 742	5 515	2 638	9					46
	10 4	2009	11 545	4 014	4 990	2 383	158					45
Uruguay		1990	886									–
		1995	625	349	178	78		20		20		66
		2000	645	348	165	77		39		39		68
		2005	622	355	147	73	32	15	4	19		71
		2006	557	305	152	70	0	30	14	44		67
		2007	607	380	132	57	0	38	9	47	0	74
		2008	686	424	159	72	0	31	25	56	0	73
	28 21	2009	704	409	192	66	0	37		37		68
Venezuela (Bolivarian Republic of)		1990	5 457									–
		1995	5 578	3 056	1 517	709		272		272		67
		2000	6 466	3 525	1 616	948		377		377		69
		2005	6 847	3 653	1 853	1 094		247	103	350		66
		2006	6 705	3 547	1 659	1 157	85	257	134	391		68
		2007	6 456	3 392	1 535	1 148	133	248	103	351	0	69
		2008	6 408	3 344	1 599	1 116	114	235	197	432	0	68
	28 23	2009	6 474	3 436	1 665	1 112	0	261	167	428	0	67

[a] Rates are per 100 000 population. Where notification data from a country had not been received by 31 August, the notification rate was assumed to be the same as for 2008 (in italics).

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TABLE A2.4 **Treatment outcomes, new smear-positive cases, 1995–2008**

	TREATMENT SUCCESS (%)[a] 1995–2008	YEAR	NUMBER NOTIFIED	SIZE OF COHORT	COHORT AS % NOTIFIED	% OF COHORT					
						CURED	COMPLETED	DIED	FAILED	DEFAULTED	NOT EVALUATED
Antigua and Barbuda		1995			–						
		2000	3	4	133	100	0	0	0	0	0
		2005	6	6	100	50		33			17
		2006	4		–						
		2007	2	2	100	0	50	0	0	50	0
–	100	2008	1	1	100	100	0	0	0	0	0
Argentina		1995	5 698	5 707	100	5	7	1	0	3	84
		2000	4 749	5 177	109	26	20	5	0	6	43
		2005	4 709	4 709	100	19	34	5	0	5	37
		2006	4 834	4 622	96	24	40	6	0	8	23
		2007	4 985	5 036	101	26	36	5	0	11	21
12	44	2008	4 758	2 577	54	24	19	4	0	5	47
Bahamas		1995	38		–						
		2000	56		–						
		2005			–						
		2006		40	–	0	75	20	5	0	0
		2007	32	32	100	6	56	13	0	25	0
–	74	2008	31	31	100	32	42	6	3	10	6
Barbados		1995	3		–						
		2000	3		–						
		2005		11	–	45	45	9			0
		2006	4	5	125	100	0	0	0	0	0
		2007	8	8	100	100	0	0	0	0	0
–	100	2008	1	3	300	100	0	0	0	0	0
Belize		1995	36	29	81	52	0	10	3	28	7
		2000	44	45	102	78	0	9	0	2	11
		2005	59	59	100	56	19	12	2	12	0
		2006	60		–						
		2007	54	63	117	44	2	6	3	13	32
52	83	2008	83	82	99	83	0	17	0	0	0
Bolivia (Plurinational State of)		1995	7 010	7 010	100	53	9	4	1	9	24
		2000	6 458	6 212	96	73	6	4	1	9	7
		2005	6 278	6 278	100	76	2	3	1	5	12
		2006	5 788	5 642	97	81	2	3	1	6	7
		2007	5 686	5 686	100	82	2	4	1	5	5
62	84	2008	6 048	6 048	100	82	2	4	1	5	7
Brazil		1995	45 650	45 650	100	17	0	1	1	3	79
		2000	41 186	34 007	83	49	22	4	0	9	16
		2005	42 093	42 093	100	31	44	5	1	9	9
		2006	41 117	48 305	117	31	42	4	0	9	14
		2007	38 444	38 133	99	33	39	5	1	10	12
17	71	2008	37 697	40 714	108	33	38	5	1	9	14
Canada		1995	436		–						
		2000	492	492	100	22	13	5		1	59
		2005	433	459	106	8	59	9	0	1	22
		2006	407	411	101	6	51	7	0	1	35
		2007	463	813	176	5	59	10	0	2	24
–	75	2008	488	877	180	11	64	8		1	15
Chile		1995	1 561	1 111	71	79		7	0	8	5
		2000	1 290	1 360	105	82		9	0	6	3
		2005	1 186	1 147	97	83	0	9	0	6	2
		2006	1 533	1 142	74	85		7	0	7	0
		2007	1 166	1 143	98	78	7	9	0	6	0
79	72	2008	1 114	1 259	113	72		9	0	7	12
Colombia		1995	7 530		–						
		2000	8 358	1 634	20	70	10	5	1	8	6
		2005	6 870	7 778	113	63	9	6	1	7	14
		2006	7 648	7 648	100	62	9	6	1	8	14
		2007	7 188	7 027	98	66	11	7	1	9	6
–	76	2008	7 196	7 288	101	67	9	6	2	8	8
Costa Rica		1995	245		–						
		2000	349	349	100	43	14	10	1	12	19
		2005	330	306	93	85	4	5	2	3	1
		2006	285	296	104	83	5	3	2	4	3
		2007	322	296	92	83	5	3	2	4	3
–	89	2008	287	280	98	86	3	5	1	2	3
Cuba		1995	834	834	100	90	0	4	3	2	2
		2000	675	673	100	91	2	4	1	1	1
		2005	467	466	100	90	2	6	1	1	1
		2006	432	431	100	87	3	7	1	3	0
		2007	432	430	100	89	3	6	0	1	1
90	88	2008	498	496	100	88	0	8	1	2	0
Dominica		1995	5		–						
		2000			–						
		2005			–						
		2006	8	8	100	25	25				50
		2007	3	3	100	67	0	0	0	33	0
–	100	2008	3	3	100	100	0	0	0	0	0
Dominican Republic		1995	2 787	2 007	72	43	21	5	2	13	16
		2000	2 907	2 760	95	37	34	5	2	19	4
		2005	2 949	2 697	91	80	5	4	2	7	3
		2006	2 658	2 356	89	73	5	3	1	6	12
		2007	2 373	2 373	100	72	5	3	1	8	10
64	75	2008	2 458	2 458	100	71	4	3	1	8	12
Ecuador		1995	5 890	5 236	89		39	2	8	14	37
		2000	5 064		–						
		2005	3 048	2 150	71	81	3	3	3	6	5
		2006	3 182	3 182	100	58	3	2	2	6	29
		2007	3 448	3 448	100	72	3	3	3	6	12
39	78	2008	3 380	3 380	100	74	4	4	4	8	7
El Salvador		1995			–						
		2000	1 008	1 008	100	78	1	7	1	5	8
		2005	1 059	1 059	100	91	0	4	1	2	1
		2006	913	913	100	90	1	4	2	3	0
		2007	942	942	100	90	1	6	1	3	0
–	91	2008	985	985	100	91	1	5	1	3	0
Grenada		1995	2		–						
		2000	0		–						
		2005		6	–	67		33			0
		2006	1		–						
		2007	3	3	100		100				0
–	33	2008	5	6	120	33		67			0

[a] TREATMENT SUCCESS = percent cured + percent completed then rounded to the nearest digit.

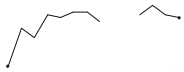
TABLE A2.4 **Treatment outcomes, new smear-positive cases, 1995–2008**

	TREATMENT SUCCESS (%)[a] 1995–2008	YEAR	NUMBER NOTIFIED	SIZE OF COHORT	COHORT AS % NOTIFIED	% OF COHORT					
						CURED	COMPLETED	DIED	FAILED	DEFAULTED	NOT EVALUATED
Guatemala		1995	2 368	2 368	100	56	5	3	1	4	31
		2000	2 052	1 908	93	75	11	5	1	7	1
		2005	2 420		–						
		2006	2 501	2 501	100	42	4	3	1	4	45
		2007	2 348	1 920	82	78	7	5	2	8	2
61	83	2008	2 070	2 070	100	79	4	5	1	9	2
Guyana		1995	85	296	348	10	34	11	1	38	6
		2000	119	119	100	43	13	12	5	24	3
		2005	240	257	107	2	57	7		26	9
		2006	294	280	95	4	60	4	1	27	4
		2007	233	309	133	10	61	7	2	14	6
44	69	2008	320	340	106	14	55	5	2	16	8
Haiti		1995		3 081	–		70	4	1	21	3
		2000	5 887	5 887	100	57	14	5	1	13	10
		2005	7 340	7 340	100	72	8	6	1	7	6
		2006	7 461	7 461	100	73	8	6	1	8	5
		2007	7 915	7 915	100	71	11	5	1	7	5
70	–	2008	8 171		–						
Honduras		1995	2 306	2 226	97	39	25	7	0	4	25
		2000	3 404	2 362	69	81	5	6	1	5	3
		2005	2 069	1 905	92	81	7	5	0	4	3
		2006	2 018	1 944	96	78	7	5	0	5	4
		2007	1 974	1 830	93	80	5	6	0	5	4
64	85	2008	1 897	1 888	100	80	6	5	1	6	3
Jamaica		1995	93	93	100	2	65	10	1	17	5
		2000	90	99	110	5	40	23	0	11	20
		2005	53	53	100	4	53	13	0	26	4
		2006	61	61	100	8	33	18	0	39	2
		2007	78	78	100	14	42	15	0	8	21
67	64	2008	78	78	100	13	51	10	0	10	15
Mexico		1995	9 220	9 220	100	69	6	4	3	12	6
		2000	11 676	11 538	99	64	12	6	1	9	8
		2005	11 997	12 172	101	71	6	5	1	6	11
		2006	11 874	11 564	97	74	6	6	1	6	7
		2007	11 531	11 432	99	78	5	6	1	6	3
75	85	2008	11 903	11 840	99	81	4	6	1	5	3
Nicaragua		1995	1 568	1 536	98	66	14	4	2	10	4
		2000	1 471	1 437	98	70	13	5	1	9	2
		2005	1 253	1 496	119	73	13	5	2	6	3
		2006	1 285	2 504	195	48	41	3	1	5	3
		2007	1 453	1 708	118	72	14	3	1	6	3
80	89	2008	1 394	1 481	106	73	16	3	1	7	0
Panama		1995	1 066	1 388	130	10	60	14	1	13	3
		2000	460	460	100	27	33	7	2	22	10
		2005	860	873	102	68	12	8	0	10	1
		2006	858	853	99	66	13	6	1	12	1
		2007	833	858	103	61	18	6	0	14	1
69	79	2008	829	883	107	67	13	7	0	13	0
Paraguay		1995	748	748	100	8	43	3	0	17	29
		2000	900	900	100	21	45	5	0	22	7
		2005	1 260	1 452	115	46	33	5		8	7
		2006	1 452	1 452	100	46	33	5		8	7
		2007	1 276	1 279	100	64	19	5	0	7	5
51	81	2008	1 345	1 350	100	68	12	5	0	6	8
Peru		1995	32 096	28 185	88	75	9	3	2	6	6
		2000	22 580	22 230	98	90	0	2	2	3	4
		2005	18 490	14 793	80	91		2	2	4	1
		2006	19 251	19 251	100	75	3	2	2	3	15
		2007	17 796	14 056	79	87	5	2	2	4	1
83	82	2008	17 989	14 805	82	78	4	3	1	6	8
Puerto Rico		1995	128	128	100		68	23		8	2
		2000	81	81	100		64	31		5	0
		2005	60	60	100	75	0	22	0	3	0
		2006	69	69	100	80	0	19	0	1	0
		2007	56	56	100	86	0	9	0	2	4
68	63	2008	52	43	83	0	63	33	0	5	0
Saint Kitts and Nevis		1995	4	5	125	20	40	20	0	20	0
		2000	0		–						
		2005	0		–						
		2006	1	2	200		100				0
		2007	4	4	100	0	25	50	0	0	25
60	80	2008	5	5	100		80	0	0	0	20
Saint Lucia		1995	11		–						
		2000	7	8	114	88	13	0	0	0	0
		2005	11	13	118	15	54	31	0	0	0
		2006	13	20	154	15	65	20	0	0	0
		2007	18	19	106	11	74	11	0	5	0
–	94	2008	18	18	100	28	67	6	0	0	0
Saint Vincent and the Grenadines		1995	5		–						
		2000	9	13	144	100	0	0	0	0	0
		2005	6		–						
		2006	8	8	100	25	50	0	13	13	0
		2007	4		–						
–	100	2008	11	4	36		100	0	0	0	0
Suriname		1995		51	–	10	4	12		8	67
		2000	37	37	100	49	19	16	0	14	3
		2005	49		–						
		2006	63		–						
		2007			–						
14	59	2008	68	71	104	0	59	13	0	24	4
Trinidad and Tobago		1995	7	78	1 114	49	21	19	1	10	0
		2000	115	194	169	22	46	11	2	6	13
		2005	95	106	112	68	4	12		16	0
		2006	149	169	113	53	4	12	1	30	0
		2007	130	144	111	61	4	15	2	18	0
69	67	2008	169	169	100	65	2	15	4	14	0
United States of America		1995	8 093	8 116	100		76	15		4	6
		2000	5 883	5 901	100		83	11		3	3
		2005	5 111	5 111	100		64	8		2	27
		2006	5 091	5 140	101		64	9	2		25
		2007	4 864	3 717	76		85	9		2	4
76	85	2008	4 742	3 709	78		85	9		2	5

[a] TREATMENT SUCCESS = percent cured + percent completed then rounded to the nearest digit.

Data can be downloaded from www.who.int/tb/data

TABLE A2.4 **Treatment outcomes, new smear-positive cases, 1995–2008**

	TREATMENT SUCCESS (%)[a] 1995–2008	YEAR	NUMBER NOTIFIED	SIZE OF COHORT	COHORT AS % NOTIFIED	% OF COHORT					
						CURED	COMPLETED	DIED	FAILED	DEFAULTED	NOT EVALUATED
Uruguay	 68 83	1995	349	370	106	41	27	10	1	4	17
		2000	348	344	99	85	0	13	1	1	0
		2005	355	345	97	80	4	11	0	4	1
		2006	305	301	99	82	5	9	0	3	1
		2007	380	373	98	82	2	11	0	6	0
		2008	424	422	100	77	7	9	1	5	2
Venezuela (Bolivarian Republic of)	 74 83	1995	3 056	3 056	100	68	6	4	1	8	13
		2000	3 525	3 390	96	76	0	4	0	13	6
		2005	3 653	3 581	98	83		5	0	10	2
		2006	3 547	3 497	99	82	0	5	0	11	2
		2007	3 392	3 336	98	82	0	5	0	11	2
		2008	3 344	3 301	99	83	0	4	0	11	1

[a] TREATMENT SUCCESS = percent cured + percent completed then rounded to the nearest digit.

TABLE A2.5 **Treatment outcomes, retreatment cases, 1995–2008**

	TREATMENT SUCCESS (%)[a] 1995–2008		YEAR	NUMBER NOTIFIED	SIZE OF COHORT	COHORT AS % NOTIFIED	% OF COHORT					
							CURED	COMPLETED	DIED	FAILED	DEFAULTED	NOT EVALUATED
Antigua and Barbuda			1995			–						
			2000	0		–						
			2005	0		–						
			2006	0		–						
			2007	0		–						
–		–	2008	0	0	–	–	–	–	–	–	–
Argentina			1995			–						
			2000	1 828		–						
			2005	809	1 615	200	7	26	5	0	9	53
			2006	509	750	147	11	31	6	1	13	37
			2007	618	1 083	175	14	29	6	1	16	34
–		25	2008	1 392	374	27	10	16	6	1	9	59
Bahamas			1995	1		–						
			2000	0		–						
			2005			–						
			2006		5	–	0	20	20	40	20	0
			2007	3	1	33	0	100	0	0	0	0
–		33	2008	4	3	75	0	33	33	0	0	33
Barbados			1995			–						
			2000	0		–						
			2005			–						
			2006	0	0	–	–	–	–	–	–	–
			2007	0	0	–	–	–	–	–	–	–
–		–	2008	0	0	–	–	–	–	–	–	–
Belize			1995	4	13	325	23	0	23	8	38	8
			2000	6		–						
			2005	15	14	93	57	29	14	0	0	0
			2006	9		–						
			2007	7		–						
23		–	2008	5	0	0	–	–	–	–	–	–
Bolivia (Plurinational State of)			1995	63	462	733	57	9	7	5	15	7
			2000	2 081	804	39	49	11	12	2	8	16
			2005	772	772	100	63	3	5	3	7	19
			2006	694	694	100	66	4	5	2	10	13
			2007	652	652	100	73	3	4	2	10	9
66		76	2008	590	590	100	72	4	8	2	7	7
Brazil			1995			–						
			2000	11 334	7 859	69	30	10	4	0	14	41
			2005	9 637	9 479	98	26	22	7	2	19	25
			2006	8 935	9 893	111	11	36	6	1	19	27
			2007	8 634	9 519	110	18	33	8	1	23	17
–		50	2008	11 164	9 494	85	18	32	8	2	25	15
Canada			1995	195		–						
			2000	145	145	100	16	16	6	1	2	60
			2005	103	106	103	8	59	7	0	3	23
			2006	125	130	104	8	41	10	0	3	38
			2007	109	110	101	4	59	6	2	3	26
–		74	2008	122	125	102	6	68	10		0	16
Chile			1995	225		–						
			2000	158	150	95	32	26	8	1	18	15
			2005	314	140	45	69	3	14	1	9	3
			2006	176	100	57	47	19	10	2	14	8
			2007	226	212	94	29		3	0	9	58
–		22	2008	219	231	105	22		8	1	10	59
Colombia			1995			–						
			2000	339		–						
			2005	443	0	0	–	–	–	–	–	–
			2006	432		–						
			2007	423		–						
–		–	2008	413		–						
Costa Rica			1995	0		–						
			2000	35	69	197	23	9	10	3	25	30
			2005	45	49	109	55	12	4	2	24	2
			2006	40	34	85	59	9	9	3	21	0
			2007	42	34	81	59	9	9	3	21	0
–		84	2008	24	32	133	56	28	3		6	6
Cuba			1995	54	55	102	82	0	7	5	5	0
			2000	172	58	34	78	7	10	3	2	0
			2005	49	48	98	67		6	4	2	21
			2006	49	59	120	66	17	8		5	3
			2007	59	58	98	83		14		3	0
82		80	2008	60	56	93	64	16	18	0	2	0
Dominica			1995	3		–						
			2000			–						
			2005			–						
			2006	0		–						
			2007	0	1	–	0	0	0	0	100	0
–		–	2008	4	0	0	–	–	–	–	–	–
Dominican Republic			1995	204		–						
			2000	610	498	82	29	26	3	4	27	11
			2005	729	530	73	56	5	7	8	19	6
			2006	596	428	72	43	5	5	6	20	22
			2007	565	565	100	34	4	4	5	16	37
–		–	2008	497	497	100	0	0	0	0	0	100
Ecuador			1995			–						
			2000	386		–						
			2005	795	554	70	56	8	5	10	12	9
			2006	743	739	99	45	11	5	7	13	20
			2007	831	831	100	39	8	5	7	10	31
–		69	2008	778	778	100	61	8	7	8	15	0
El Salvador			1995			–						
			2000	271	181	67	63	3	9	3	18	3
			2005	114	114	100	68	0	6	4	13	8
			2006	136	136	100	76	0	4	4	7	9
			2007	86	86	100	81	1	3	0	14	0
–		84	2008	86	86	100	84	0	8	0	5	3
Grenada			1995			–						
			2000	0		–						
			2005			–						
			2006	0		–						
			2007	0		–						
–		–	2008	1	0	0						

[a] TREATMENT SUCCESS = percent cured + percent completed then rounded to the nearest digit.

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TABLE A2.5 **Treatment outcomes, retreatment cases, 1995–2008**

	TREATMENT SUCCESS (%)[a] 1995–2008	YEAR	NUMBER NOTIFIED	SIZE OF COHORT	COHORT AS % NOTIFIED	% OF COHORT					
						CURED	COMPLETED	DIED	FAILED	DEFAULTED	NOT EVALUATED
Guatemala		1995	249	254	102	59	15	4	2	4	17
		2000	141	164	116	63	16	4	4	10	2
		2005	159		–						
		2006	161		–						
		2007	197	199	101	65	8	5	7	11	5
	73 65	2008	202	202	100	55	10	8	6	16	5
Guyana		1995	2		–						
		2000	84	38	45	24	29	13	5	26	3
		2005	25	23	92	22	35	9	9	13	13
		2006	62	64	103	5	27	3	3	45	17
		2007	78	95	122	3	51	12	4	26	4
	– 26	2008	117	146	125	4	22	10	2	24	38
Haiti		1995			–						
		2000	346	55	16	42	15	5	7	22	9
		2005	228	228	100	63	7	3	0	13	14
		2006	309	309	100	58	8	8	5	13	8
		2007	374	367	98	59	10	10	3	10	8
	– –	2008	373		–						
Honduras		1995	100		–						
		2000	236	180	76	44	10	8	2	6	29
		2005	181	169	93	59	9	6	2	17	7
		2006	173	153	88	66	5	10	1	12	5
		2007	189	189	100	0	100	0	0	0	0
	– 70	2008	184	145	79	65	6	10	3	14	3
Jamaica		1995	2	6	300	0	67	17	0	17	0
		2000	13		–						
		2005	5	5	100		20			80	0
		2006	5	5	100	0	80	0	0	20	0
		2007	2	0	0	–	–	–	–	–	–
	67 67	2008	3	3	100	0	67	0	0	33	0
Mexico		1995			–						
		2000	1 335	138	10	33	4	8	7	12	36
		2005	2 026	1 456	72	48	7	7	4	14	20
		2006	1 570	1 384	88	52	7	9	5	14	14
		2007	1 656	1 806	109	58	8	5	9	13	7
	– 62	2008	1 370	1 829	134	55	7	11	4	11	11
Nicaragua		1995	167	289	173	69	10	4	3	11	3
		2000	159	230	145	65	10	6	2	15	2
		2005	268	181	68	71	12	7	2	7	2
		2006	235	0	0	–	–	–	–	–	–
		2007	296	228	77	72	6	5	3	9	5
	78 97	2008	167	150	90	97	0	0	0	3	0
Panama		1995	108		–						
		2000	134	42	31	19	24	2	0	48	7
		2005	247	237	96	23	35	9	4	22	7
		2006	271	285	105	14	43	15	2	26	1
		2007	228	233	102	19	30	11	2	36	2
	– 46	2008	191	238	125	16	30	9	2	42	1
Paraguay		1995	28		–						
		2000	530	144	27	19	40	6	1	25	9
		2005	273	164	60	44	26	4		10	16
		2006	164	164	100	44	26	4		10	16
		2007	163	160	98	49	21	4	1	14	11
	– 60	2008	154	164	106	46	14	9	1	10	21
Peru		1995			–						
		2000	4 381	4 521	103	78	0	4	7	6	4
		2005	4 989	2 299	46	78		5	5	11	1
		2006	5 477	1 786	33	70	3	3	3	9	11
		2007	5 141	2 201	43	74	7	3	3	11	1
	– –	2008	4 534		–						
Puerto Rico		1995			–						
		2000			–						
		2005	0	113	–		73	23	0	4	1
		2006	0	0	–	–	–	–	–	–	–
		2007	0	0	–	–	–	–	–	–	–
	– –	2008	0	0	–	–	–	–	–	–	–
Saint Kitts and Nevis		1995			–						
		2000	0		–						
		2005	2	2	100		50				50
		2006			–						
		2007	0	0	–	–	–	–	–	–	–
	– –	2008	0	0	–	–	–	–	–	–	–
Saint Lucia		1995			–						
		2000	3	1	33	100	0	0	0	0	0
		2005	2		–						
		2006	2		–						
		2007	1	1	100	100	0	0	0	0	0
	– –	2008	1	1	100	0	0	0	100	0	0
Saint Vincent and the Grenadines		1995	4		–						
		2000	3	3	100	100	0	0	0	0	0
		2005	0		–						
		2006	7	6	86					33	67
		2007	6		–						
	– –	2008	4	4	100	0	0	0	0	100	0
Suriname		1995			–						
		2000	1		–						
		2005	8		–						
		2006	11		–						
		2007			–						
	– 33	2008	7	3	43	0	33	0	0	33	33
Trinidad and Tobago		1995	22		–						
		2000	31	22	71	23	45	14	9	9	0
		2005	22	21	95	19	38	29		14	0
		2006	27	27	100	41	4	22	0	33	0
		2007	52	51	98	27	2	37	0	31	2
	– 36	2008	47	47	100	32	4	11	6	47	0
United States of America		1995			–						
		2000			–						
		2005			–						
		2006			–						
		2007	0		–						
	– –	2008			–						

[a] TREATMENT SUCCESS = percent cured + percent completed then rounded to the nearest digit.

TABLE A2.5 **Treatment outcomes, retreatment cases, 1995–2008**

	TREATMENT SUCCESS (%)[a] 1995–2008	YEAR	NUMBER NOTIFIED	SIZE OF COHORT	COHORT AS % NOTIFIED	% OF COHORT					
						CURED	COMPLETED	DIED	FAILED	DEFAULTED	NOT EVALUATED
Uruguay		1995	20	25	125	56	20	16	0	8	0
		2000	39		–						
		2005	19	30	158	57	17	13	3	7	3
		2006	44	38	86	74	3	11	0	11	3
		2007	47	45	96	69	4	20	0	4	2
	76 72	2008	56	57	102	60	12	14	0	14	0
Venezuela (Bolivarian Republic of)		1995	272		–						
		2000	377		–						
		2005	350	247	71	80		4	2	12	2
		2006	391	257	66	77	0	8	1	11	3
		2007	351	248	71	79	0	6	2	12	1
	– 84	2008	432	227	53	84	0	5	1	10	0

[a] TREATMENT SUCCESS = percent cured + percent completed then rounded to the nearest digit.

TABLE A.6 **HIV testing and provision of CPT, ART and IPT, 2005–2009**

	% OF TB PATIENTS WITH KNOWN HIV STATUS 2005–2009	YEAR	% OF TB PATIENTS WITH KNOWN HIV STATUS	NUMBER OF TB PATIENTS WITH KNOWN HIV STATUS	PATIENTS NOTIFIED (NEW AND RETREAT)[a]	NUMBER OF HIV-POSITIVE TB PATIENTS	% OF TESTED TB PATIENTS HIV-POSITIVE	% OF HIV-POSITIVE TB PATIENTS ON CPT	% OF HIV-POSITIVE TB PATIENTS ON ART	NUMBER OF HIV-POSITIVE PEOPLE PROVIDED IPT
Antigua and Barbuda		2005	100	6	6	3	50	100	100	0
		2006	100	4	4	3	75	100	100	0
		2007	100	2	2	0	0	–	–	0
		2008	100	1	1	0	0	–	–	
	100 80	2009	80	4	5	0	0	–	–	0
Argentina		2005	–		11 242		–	–	–	
		2006	2	229	10 132	221	97	–	–	
		2007	3	326	10 683	314	96	–	–	
		2008	7	715	10 450	375	52	84	84	
	– 2	2009	2	131	8 190	115	88	–	–	
Bahamas		2005	–				–	–	–	
		2006	–	61		33	54	–	–	
		2007	98	47	48	12	26	–	33	
		2008	88	45	51	17	38	59	65	2
	– 100	2009	100	46	46	15	33	40	60	
Barbados		2005	–	8		2	25	–	–	
		2006	100	5	5	2	40	100	100	
		2007	50	8	16	2	25	100	100	10
		2008	100	3	3	2	67	100	100	0
	– 100	2009	100	2	2		–	–	–	0
Belize		2005	100	106	106	25	24	68	68	409
		2006	97	84	87	10	12	10	50	26
		2007	100	63	63	10	16	100	100	10
		2008	100	88	88	18	20	100	100	
	100 95	2009	95	89	94	17	19	100	100	
Bolivia (Plurinational State of)		2005	0	0	9 973	0	–	–	–	50
		2006	–		9 200		–	–	–	
		2007	4	360	8 701	1	0	–	100	
		2008	5	485	9 224	19	4	84	16	
	0 12	2009	12	1 105	9 128	38	3	21	76	
Brazil		2005	59	51 552	87 223	8 249	16	–	85	674
		2006	63	52 115	83 293	7 792	15	–	100	
		2007	50	40 001	80 461	8 613	22	–	90	
		2008	51	41 796	81 658	8 331	20	–	91	
	59 47	2009	47	39 744	85 159	8 668	22	–	92	
Canada		2005	26	414	1 616	63	15	–	–	
		2006	27	441	1 621	62	14	–	–	
		2007	33	505	1 547	63	12	–	–	
		2008	36	581	1 601	73	13	–	–	
	26 32	2009	32	519	1 600	59	11	–	–	
Chile		2005	–		2 633		–	–	–	
		2006	2	61	2 559	61	100	–	–	
		2007	–		2 492		–	–	–	
		2008	–		2 494		–	–	–	
	– –	2009	–		2 516		–	–	–	
Colombia		2005	53	5 537	10 360	353	6	–	–	
		2006	70	7 828	11 128	453	6	–	80	
		2007	54	5 921	10 950	51	1	0	792	
		2008	40	4 540	11 344	956	21	–	–	0
	53 44	2009	44	5 031	11 438	1 018	20	–	23	
Costa Rica		2005	67	374	560	50	13	–	84	
		2006	67	345	512	38	11	–	–	
		2007	89	502	565	43	9	0	–	
		2008	96	491	511	44	9	–	–	
	67 104	2009	104	476	457	41	9	–	–	
Cuba		2005	93	729	781		–	–	–	
		2006	9	66	765	4	6	0	400	
		2007	7	51	773	1	2	0	1 300	297
		2008	84	698	831	71	10	–	17	
	93 96	2009	96	687	717	46	7	0	67	1 561
Dominica		2005	–				–	–	–	
		2006	21	4	19	0	0	–	–	0
		2007	33	1	3	0	0	–	–	1
		2008	19	3	16	2	67	100	50	0
	– 80	2009	80	4	5	1	25	0	100	2
Dominican Republic		2005	1	78	5 312	3	4	–	–	953
		2006	37	1 771	4 819	218	12	–	–	1 033
		2007	37	1 609	4 361	337	21	–	–	848
		2008	48	2 147	4 468	299	14	–	–	443
	1 –	2009	–		4 442		–	–	–	
Ecuador		2005	0	10	4 808	3	30	0	–	
		2006	–		4 920	392	–	–	–	
		2007	32	1 672	5 262	324	19	0	100	
		2008	18	959	5 202	402	42	–	100	3
	0 45	2009	45	2 262	5 026	443	20	–	100	
El Salvador		2005	84	1 544	1 830	188	12	20	38	
		2006	97	1 631	1 679	176	11	13	36	
		2007	93	1 566	1 692	210	13	51	37	110
		2008	95	1 655	1 746	194	12	53	47	
	84 95	2009	95	1 650	1 736	204	12	28	35	97
Grenada		2005	–				–	–	–	
		2006	100	1	1	0	0	–	–	1
		2007	33	1	3		–	–	–	
		2008	33	2	6	2	100	100	100	0
	– 100	2009	100	5	5	1	20	100	100	0
Guatemala		2005	16	600	3 861	478	80	–	243	
		2006	26	960	3 674	142	15	–	–	
		2007	47	1 491	3 203	270	18	6	29	575
		2008	56	1 871	3 316	326	17	100	100	20
	16 65	2009	65	1 920	2 942	342	18	100	100	250
Guyana		2005	70	456	656	80	18	–	–	
		2006	76	566	747	75	13	37	32	610
		2007	102	671	656	223	33	77	32	744
		2008	70	516	740	123	24	97	59	132
	70 70	2009	70	562	798	156	28	74	56	162
Haiti		2005	35	5 062	14 344	1 797	35	–	–	
		2006	43	5 996	14 002	1 584	26	–	–	
		2007	53	7 462	14 198	2 028	27	18	13	974
		2008	65	9 476	14 662	2 068	22	9	10	7 250
	35 –	2009	–				–	–	–	

[a] Data presented as of 31 August 2010. Notification data for European Union countries were not available.

TABLE A.6 **HIV testing and provision of CPT, ART and IPT, 2005–2009**

	% OF TB PATIENTS WITH KNOWN HIV STATUS 2005–2009	YEAR	% OF TB PATIENTS WITH KNOWN HIV STATUS	NUMBER OF TB PATIENTS WITH KNOWN HIV STATUS	PATIENTS NOTIFIED (NEW AND RETREAT)[a]	NUMBER OF HIV-POSITIVE TB PATIENTS	% OF TESTED TB PATIENTS HIV-POSITIVE	% OF HIV-POSITIVE TB PATIENTS ON CPT	% OF HIV-POSITIVE TB PATIENTS ON ART	NUMBER OF HIV-POSITIVE PEOPLE PROVIDED IPT
Honduras		2005	44	1 455	3 333	200	14	–	–	0
		2006	56	1 787	3 197	202	11	–	190	
		2007	59	1 753	2 961	183	10	–	–	
		2008	56	1 595	2 862	205	13	–	100	153
	44 55	2009	55	1 619	2 957	192	12	100	89	96
Jamaica		2005	83	79	95	28	35	43	54	
		2006	83	81	98	25	31	64	72	
		2007	83	86	104	19	22	63	63	
		2008	82	86	105	16	19	63	100	0
	83 64	2009	64	96	150	29	30	–	–	
Mexico		2005	7	1 382	19 932	217	16	–	–	
		2006	6	1 047	18 710	540	52	–	–	
		2007	14	2 627	19 385	866	33	78	17	
		2008	35	6 878	19 406	581	8	100	38	1 490
	7 21	2009	21	4 196	19 773	945	23	100	23	676
Nicaragua		2005	27	556	2 076	30	5	–	–	
		2006	0	0	2 105	0	–	–	–	
		2007	0	0	2 441	0	–	–	–	656
		2008	45	1 062	2 336	28	3	100	100	
	27 45	2009	45	1 081	2 413	30	3	100	100	60
Panama		2005	86	1 569	1 828	200	13	–	10	400
		2006	100	1 854	1 847	270	15	–	21	
		2007	73	1 301	1 773	238	18	–	40	8
		2008	89	1 540	1 725	275	18	–	13	16
	86 86	2009	86	1 494	1 729	107	7	–	100	196
Paraguay		2005	–		2 348		–	–	–	
		2006	2	47	2 641	47	100	–	–	
		2007	4	97	2 420	97	100	–	–	
		2008	4	103	2 370	88	85	0	66	0
	– 10	2009	10	239	2 427	133	56	0	54	0
Peru		2005	2	668	35 541	668	100	–	–	1 214
		2006	14	5 200	36 643	31	1	–	48	
		2007	54	18 575	34 534	860	5	0	3	1 519
		2008	32	10 636	33 667	775	7	0	17	2 137
	2 36	2009	36	11 893	33 169	697	6	–	17	1 361
Puerto Rico		2005	82	93	113	28	30	–	–	
		2006	90	101	112	20	20	30	50	
		2007	95	93	98	21	23	29	29	
		2008	96	91	95	23	25	17	9	
	82 94	2009	94	59	63	8	14	38	38	0
Saint Kitts and Nevis		2005	–		2		–	–	–	
		2006	–		1		–	–	–	
		2007	50	2	4	2	100	–	–	
		2008	–		5		–	–	–	
	– 100	2009	100	4	4	0	0	–	–	
Saint Lucia		2005	7	1	14	0	0	–	–	
		2006	100	15	15	0	0	–	–	
		2007	100	19	19	2	11	50	100	
		2008	86	18	21	4	22	0	100	0
	7 92	2009	92	11	12	4	36	–	100	0
Saint Vincent and the Grenadines		2005	100	7	7	1	14	0	0	
		2006	105	20	19	5	25	100	40	0
		2007	67	12	18	7	58	100	71	0
		2008	100	15	15	6	40	–	33	
	100 118	2009	118	13	11	7	54	–	14	1
Suriname		2005	73	87	119	20	23	–	10	
		2006	–		136	24	–	–	–	
		2007	–				–	–	–	
		2008	89	101	113	28	28	7	32	
	73 82	2009	82	154	188	49	32	12	51	
Trinidad and Tobago		2005	69	124	179	42	34	29	36	0
		2006	99	250	253	13	5	100	277	4
		2007	100	260	260	78	30	14	22	17
		2008	100	322	322	73	23	14	49	6
	69 94	2009	94	306	324	95	31	23	18	4
United States of America		2005	59	8 273	14 080	1 035	13	–	–	
		2006	60	8 234	13 779	960	12	–	–	
		2007	62	8 302	13 299	883	11	–	–	
		2008	63	8 177	12 904	826	10	–	–	
	59 61	2009	61	7 043	11 545	706	10	–	–	
Uruguay		2005	92	574	626	74	13	0	–	
		2006	94	539	571	81	15	–	27	
		2007	94	582	616	88	15	0	25	
		2008	96	686	711	100	15	0	19	
	92 95	2009	95	666	704	109	16	0	17	
Venezuela (Bolivarian Republic of)		2005	39	2 678	6 950	392	15	–	39	
		2006	47	3 224	6 839	400	12	0	47	110
		2007	54	3 549	6 559	468	13	0	34	109
		2008	64	4 248	6 605	482	11	0	17	76
	39 73	2009	73	4 856	6 641	487	10	0	21	102

[a] Data presented as of 31 August 2010. Notification data for European Union countries were not available.

Data can be downloaded from www.who.int/tb/data

TABLE A2.7 **Testing for MDR-TB and number of confirmed cases of MDR-TB, 2005–2009**

			NEW CASES				PREVIOUSLY TREATED CASES			
	YEAR	TOTAL CONFIRMED CASES OF MDR-TB[a]	NOTIFIED	NUMBER OF NOTIFIED TESTED FOR MDR-TB	% OF NOTIFIED TESTED FOR MDR-TB	NUMBER OF CONFIRMED CASES OF MDR-TB	NOTIFIED	NUMBER OF NOTIFIED TESTED FOR MDR-TB	% OF NOTIFIED TESTED FOR MDR-TB	NUMBER OF CONFIRMED CASES OF MDR-TB
Antigua and Barbuda	2005	0	6	0	0	0	0	0	–	0
	2006	0	4	0	0	0	0	0	–	0
	2007	0	2	0	0	0	0	0	–	0
	2008	0	1	0	0	0	0	0	–	0
	2009	0	3	0	0	0	2	1	50	0
Argentina	2005	276	9 627	2 369	25	66	809	1 290	159	210
	2006		9 354		–		509		–	
	2007		9 593		–		618		–	
	2008	142	9 058		–	12	1 392		–	54
	2009	89	7 363		–		827		–	
Bahamas	2005				–				–	
	2006				–				–	
	2007	0	45	35	78	0	3	2	67	0
	2008	1	46	44	96	0	4	3	75	1
	2009	0	41	38	93	0	5	4	80	0
Barbados	2005				–				–	
	2006		5		–		0		–	
	2007	8	16	8	50	0	0	0	–	0
	2008	0	3	0	0	0	0	0	–	0
	2009	0	2	0	0	0	0	0	–	0
Belize	2005	0	91	0	0	0	15	3	20	0
	2006	0	78	0	0	0	9	0	0	0
	2007		56		–	0	7		–	
	2008		83		–	1	5		–	
	2009	1	82	1	1	1	12	0	0	0
Bolivia (Plurinational State of)	2005	63	9 201		–		772		–	
	2006		8 506		–	34	694		–	
	2007	35	8 049	0	0	0	652		–	
	2008	34	8 634		–		590	251	43	34
	2009	60	8 378		–		732	670	92	60
Brazil	2005	373	77 120		–		9 637	5 917	61	373
	2006	399	74 358		–		8 935		–	
	2007	832	71 827	336	0	275	8 634	656	8	557
	2008	339	70 494		–	35	11 164		–	37
	2009	449	71 700		–	397	9 818		–	52
Canada	2005	16	1 445	982	68	8	103	88	85	8
	2006	12	1 395	1 077	77	8	125	104	83	2
	2007	10	1 396	1 113	80	7	109	84	77	3
	2008	13	1 370	1 139	83	9	122	93	76	4
	2009	18	1 395	1 321	95	13	91		–	2
Chile	2005	6	2 319	49	2	0	314	226	72	6
	2006	7	2 337	105	4	0	176	115	65	7
	2007	7	2 266	98	4	2	226	236	104	5
	2008	5	2 275	71	3	1	219	219	100	4
	2009	23	2 210	56	3	3	306	221	72	20
Colombia	2005		9 917		–		443		–	
	2006	39	10 696	263	2	14	432	138	32	25
	2007	111	10 527	200	2	8	423	335	79	103
	2008	91	10 931	696	6	23	413	551	133	68
	2009	110	11 047	455	4	6	391	487	125	102
Costa Rica	2005	3	515	2	0	2	45	1	2	1
	2006	4	472		–		40	40	100	1
	2007	1	523		–	1	42		–	
	2008	0	487	0	0	0	24	28	117	0
	2009		426		–		31		–	
Cuba	2005	0	730	158	22	0	49	18	37	0
	2006	0	716	180	25	0	49	5	10	0
	2007	3	714	118	17	1	59	14	24	2
	2008	10	771	202	26	1	60	33	55	9
	2009	3	666	172	26	1	51	19	37	2
Dominica	2005				–				–	
	2006	0	19	0	0	0	0	0	–	0
	2007	0	3	0	0	0	0	0	–	0
	2008	0	12	0	0	0	4	0	0	0
	2009		4		–		1		–	
Dominican Republic	2005		4 583		–		729		–	
	2006		4 223		–	0	596		–	24
	2007		3 796		–		565		–	
	2008		3 971		–		497		–	
	2009	0	3 990	0	0	0	452	0	0	0
Ecuador	2005	253	4 013	117	3	12	795	502	63	241
	2006		4 177		–		743		–	
	2007	275	4 431	140	3	10	831	576	69	265
	2008	153	4 424	183	4	15	778	548	70	138
	2009	156	4 270		–	10	756		–	133
El Salvador	2005	12	1 716	12	1	7	114	14	12	7
	2006	2	1 543	0	0	0	136		–	
	2007	1	1 606	457	28	0	86	81	94	1
	2008	6	1 660	11	1	0	86	82	95	6
	2009	2	1 623	65	4	1	113	85	75	1
Grenada	2005				–				–	
	2006	0	1	0	0	0	0	0	–	0
	2007		3		–		0		–	
	2008		5	0	0		1	0	0	
	2009		5		–		0		–	
Guatemala	2005	20	3 264	20	1	20	159	40	25	20
	2006		3 513		–		161		–	
	2007	23	3 006	0	0	0	197	0	0	0
	2008	27	3 114	73	2	10	202	37	18	17
	2009	230	2 814	134	5	48	128	182	142	182
Guyana	2005		631		–		25		–	
	2006		685		–		62		–	
	2007	8	578	0	0	0	78	8	10	2
	2008	0	623	34	5	0	117	11	9	0
	2009	0	628	0	0	0	170		–	
Haiti	2005		14 116	53	0		228		–	
	2006		13 693		–		309		–	
	2007	39	13 824	0	0	0	374	0	0	39
	2008	43	14 289	0	0	0	373	43	12	43
	2009				–				–	

[a] TOTAL CONFIRMED CASES OF MDR-TB includes cases with unknown previous treatment history (i.e. not included under NEW CASES or PREVIOUSLY TREATED CASES).

TABLE A2.7 **Testing for MDR-TB and number of confirmed cases of MDR-TB, 2005–2009**

			NEW CASES				PREVIOUSLY TREATED CASES			
	YEAR	TOTAL CONFIRMED CASES OF MDR-TB[a]	NOTIFIED	NUMBER OF NOTIFIED TESTED FOR MDR-TB	% OF NOTIFIED TESTED FOR MDR-TB	NUMBER OF CONFIRMED CASES OF MDR-TB	NOTIFIED	NUMBER OF NOTIFIED TESTED FOR MDR-TB	% OF NOTIFIED TESTED FOR MDR-TB	NUMBER OF CONFIRMED CASES OF MDR-TB
Honduras	2005	0	3 152	3	0	3	181	0	0	0
	2006		3 024		–		173		–	
	2007	4	2 772	0	0	0	189	78	41	4
	2008	10	2 678	0	0	0	184	112	61	10
	2009	4	2 732	27	1	1	225	43	19	3
Jamaica	2005	0	90	11	12	0	5	2	40	0
	2006	0	93	20	22	0	5	1	20	0
	2007	0	102	0	0		2		–	0
	2008	0	102	78	76	0	3	0	0	0
	2009	0	130	67	52	0	20		–	
Mexico	2005	394	17 906	314	2	63	2 026	74	4	63
	2006	123	17 093	479	3	61	1 570	175	11	62
	2007	77	17 613		–		1 656		–	
	2008	121	18 036	0	0	0	1 370	389	28	121
	2009	11	18 127	1	0	1	1 535	11	1	10
Nicaragua	2005	50	1 808	8	0	8	268	8	3	8
	2006	3	1 870	0	0	0	235	140	60	0
	2007	8	2 145	200	9	8	296	237	80	0
	2008	16	2 169	4	0	0	167	103	62	16
	2009		2 131		–		282		–	
Panama	2005	5	1 581	29	2	3	247	48	19	2
	2006	10	1 576	57	4	10	271		–	5
	2007	5	1 545	20	1	5	228	15	7	0
	2008	5	1 482	33	2	1	191	4	2	4
	2009	8	1 494		–		235		–	
Paraguay	2005	13	2 075		–		273		–	
	2006	7	2 377	27	1	1	164	22	13	6
	2007	5	2 183	184	8	1	163	33	20	4
	2008	6	2 146	271	13	0	154	48	31	6
	2009	6	2 250	64	3	2	177	46	26	4
Peru	2005	2 748	30 226		–		4 989	2 336	47	2 102
	2006	893	31 166	876	3	736	5 477	1 123	21	534
	2007	945	29 393	171	1	114	5 141	1 198	23	831
	2008	1 074	29 133	243	1	155	4 534	1 178	26	919
	2009	1 578	28 845	966	3	413	4 324	803	19	524
Puerto Rico	2005	0	113	94	83	0	0	0	–	0
	2006	1	112	97	87	1	0	0	–	0
	2007	2	98	87	89	2	0	0	–	0
	2008	1	95	90	95	1	0	0	–	0
	2009	0	63	54	86	0	0	1	–	0
Saint Kitts and Nevis	2005	0	0	0	–	0	2	0	0	0
	2006		1		–				–	
	2007	0	4	0	0	0	0	0	–	0
	2008	0	5	0	0	0	0	0	–	0
	2009		4		–		0		–	
Saint Lucia	2005	0	12	0	0	0	2	0	0	0
	2006		13		–		2		–	
	2007	0	18	0	0	0	1	0	0	0
	2008	0	20	0	0	0	1	0	0	0
	2009	0	9	0	0	0	3	0	0	0
Saint Vincent and the Grenadines	2005	6	7	6	86	6	0	0	–	0
	2006		12		–		7		–	
	2007	0	12	0	0	0	6	0	0	0
	2008	0	11	0	0	0	4	0	0	0
	2009		9		–		2		–	
Suriname	2005	1	111	49	44	1	8	0	0	0
	2006		123		–		11		–	
	2007				–				–	
	2008	1	106	44	42	1	7	3	43	0
	2009	1	172	1	1	1	15	0	0	0
Trinidad and Tobago	2005	3	157	0	0	0	22	3	14	3
	2006	1	226	18	8	0	27	5	19	1
	2007	0	208	208	100	0	52	40	77	0
	2008	0	275	6	2	0	47	3	6	0
	2009	0	264	0	0	0	60	0	0	0
United States of America	2005	124	14 080	10 445	74	124			–	
	2006	111	13 779	9 722	71	91			–	
	2007	119	13 299	9 274	70	98	0	479	–	19
	2008	103	12 904	8 868	69	86		408	–	17
	2009	114	11 545	8 071	70	94		323	–	19
Uruguay	2005		607		–		19		–	
	2006	1	527	320	61	0	44	29	66	1
	2007	1	569	392	69	0	47	33	70	1
	2008	0	655	468	71	0	56	43	77	0
	2009		667		–		37		–	
Venezuela (Bolivarian Republic of)	2005	21	6 600	163	2	13	350	15	4	15
	2006	22	6 448	30	0	1	391	104	27	21
	2007	3	6 208	19	0	0	351	76	22	3
	2008	8	6 173	13	0	1	432	117	27	7
	2009	21	6 213	20	0	1	428	160	37	20

[a] TOTAL CONFIRMED CASES OF MDR-TB includes cases with unknown previous treatment history (i.e. not included under NEW CASES or PREVIOUSLY TREATED CASES).

Data can be downloaded from www.who.int/tb/data

TABLE A2.8 **New smear-positive case notification by age and sex, 1995–2009**

		MALE								FEMALE								
	YEAR	0–14	15–24	25–34	35–44	45–54	55–64	65+	UNKNOWN	0–14	15–24	25–34	35–44	45–54	55–64	65+	UNKNOWN	MALE/FEMALE RATIO
Antigua and	1995																	–
Barbuda	2000	0	0	0	0	0	0	1		1	1	1	0	0	0	0		0.3
	2005				1	1					2	2						0.5
	2009	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	–
Argentina	1995																	–
	2000	97	278	594	402	419	368	330		121	544	479	262	230	179	216		1.2
	2005	64	621	530	358	384	340	348		90	530	474	290	198	169	240		1.3
	2009	44	546	483	348	327	303	297	9	63	434	406	257	185	137	199	6	1.4
Bahamas	1995	3	3	5	7	4	2	2		0	1	7	2	0	0	1		2.4
	2000	1	2	7	9	4	3	2		2	5	7	8	2	3	1		1.0
	2005																	–
	2009	1	2	7	4	3	1	2	0	1	2	1	1	0	1	0	0	3.3
Barbados	1995																	–
	2000	0	0	0	2	0	0	0		0	0	1	0	0	0	0		2.0
	2005																	–
	2009	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	–
Belize	1995	1	1	2	4	0	1	1		0	6	2	0	1	1	2		0.8
	2000	2	5	7	2	6	3	5		0	2	1	2	4	1	4		2.1
	2005	0	8	8	6	8	5	3		0	4	4	4	3	2	4		1.8
	2009	2	7	9	12	10	6	8	0	3	2	7	6	3	2	5	0	1.9
Bolivia	1995																	–
(Plurinational	2000	166	1 182	797	518	466	340	366		191	831	588	334	254	192	233		1.5
State of)	2005	157	1 320	725	439	391	346	415		160	846	533	276	226	182	262		1.5
	2009	106	1 225	703	393	385	343	429		158	795	502	217	225	161	295		1.5
Brazil	1995																	–
	2000	1 894	7 268	11 568	11 906	8 623	5 085	4 494		1 859	6 719	7 215	5 395	3 582	2 384	2 496		1.7
	2005	317	5 074	6 119	6 128	5 259	2 803	2 140		355	3 496	3 663	2 626	1 897	1 112	1 104		2.0
	2009	328	4 621	6 399	5 291	5 058	2 846	1 994		352	2 880	3 326	2 271	1 758	1 077	1 011		2.1
Canada	1995	1	28	31	60	34	41	70		7	33	28	22	12	18	51		1.5
	2000	5	34	45	46	41	32	79		4	33	40	30	25	12	66		1.3
	2005	3	37	45	44	40	20	68		6	28	40	27	24	13	37		1.5
	2009	2	44	39	50	55	29	56	0	3	18	37	27	23	19	42	0	1.6
Chile	1995	24	148	182	204	155	141	163		24	100	120	108	75	73	107		1.7
	2000	6	81	160	198	150	132	126		10	66	96	70	54	58	83		2.0
	2005	3	74	128	179	162	115	133		4	55	78	60	56	36	93		2.1
	2009	7	85	141	147	169	109	140	0	8	51	67	68	52	49	59	0	2.3
Colombia	1995																	–
	2000	246	763	1 030	963	743	610	746		194	587	758	523	381	304	510		1.6
	2005	178	623	685	666	687	510	695		179	581	533	457	389	292	395		1.4
	2009	124	697	754	651	692	569	838	0	121	575	582	434	423	304	447	0	1.5
Costa Rica	1995	1	17	38	24	19	23	22		2	17	15	11	7	9	14		1.9
	2000	14	31	53	62	39	28	49		13	21	33	24	20	23	24		1.7
	2005	1	43	38	53	34	20	34		1	21	31	18	16	6	14		2.1
	2009		26	49	27	26	24	29			27	22	12	10	8	11		2.0
Cuba	1995	2	59	118	83	75	75	156		1	17	52	29	39	48	80		2.1
	2000	0	71	167	90	74	55	75		2	9	22	26	22	23	39		3.7
	2005	2	20	73	90	50	58	51		2	14	17	26	13	22	29		2.8
	2009		16	57	72	70	42	65			10	13	16	13	14	30		3.4
Dominica	1995																	–
	2000																	–
	2005																	–
	2009	0	0	1	1	0	0	1	0	0	0	0	0	0	0	1	0	3.0
Dominican	1995																	–
Republic	2000	73	410	481	344	173	125	113		65	317	325	212	115	79	75		1.4
	2005	43	399	483	386	228	123	105		57	339	332	209	119	72	54		1.5
	2009	30	344	428	284	217	116	88	0	28	278	271	160	92	49	56	0	1.6
Ecuador	1995																	–
	2000																	–
	2005	48	446	468	308	237	150	159		48	329	305	199	139	85	127		1.5
	2009	40	485	519	296	297	212	230		49	342	312	162	141	99	146		1.7
El Salvador	1995																	–
	2000	13	99	124	114	92	62	107		28	81	76	63	63	39	47		1.5
	2005	5	97	140	128	104	74	117		6	85	82	59	50	42	70		1.7
	2009	7	99	147	111	80	64	111	0	2	59	69	50	46	27	58	0	2.0
Grenada	1995																	–
	2000																	–
	2005																	–
	2009				1		1					1			1			1.0
Guatemala	1995	51	235	280	236	165	142	139		51	224	255	221	146	129	94		1.1
	2000	36	220	236	216	177	112	140		41	199	167	175	135	87	111		1.2
	2005	39	251	258	185	187	127	115		38	339	245	277	176	88	95		0.9
	2009	121	144	168	117	122	91	88		116	148	149	99	107	73	66		1.1
Guyana	1995	7	8	5	6	9	6	7		3	5	7	6	5	2	4		1.5
	2000	4	20	19	14	7	6	9		1	11	8	7	5	5	3		2.0
	2005	12	48	130	116	81	41	20		14	41	62	41	30	11	9		2.2
	2009	9	21	48	61	60	11	20	0	3	21	26	22	12	8	8	0	2.3
Haiti	1995																	–
	2000	67	836	898	613	350	147	118		96	914	857	513	275	132	71		1.1
	2005	69	1 045	1 035	701	451	222	156		116	1 097	1 099	633	414	170	132		1.0
	2009																	–
Honduras	1995	42	280	540	204	130	236	58		54	208	292	134	76	136	48		1.6
	2000	30	123	371	246	277	214	43		25	21	269	258	270	160	38		1.3
	2005	13	238	280	215	152	134	152		27	219	222	125	107	81	104		1.3
	2009	13	227	269	177	155	131	168	0	17	167	172	124	80	73	108	0	1.5
Jamaica	1995	2	9	14	9	11	8	9		2	7	6	5	5	2	2		2.1
	2000	0	6	13	13	15	6	5		1	8	8	7	2	5	1		1.8
	2005	0	4	6	6	10	6	7		0	1	5	4	0	1	3		2.8
	2009	1	5	8	10	7	4	5	0	7	7	8	7	4	3	1	0	1.1
Mexico	1995																	–
	2000	214	1 079	1 387	1 162	1 235	972	1 126		176	663	828	698	832	595	709		1.6
	2005	100	1 095	1 376	1 314	1 238	1 042	1 288		125	771	733	710	784	637	784		1.6
	2009	103	1 030	1 262	1 401	1 360	1 024	1 252	0	131	741	712	665	788	608	785	0	1.7
Nicaragua	1995	23	178	172	175	126	96	92		24	176	215	98	83	64	46		1.2
	2000	18	194	174	147	108	64	90		34	188	173	98	76	46	61		1.2
	2005	17	163	159	116	106	61	79		23	135	122	103	61	54	47		1.3
	2009																	–
Panama	1995	86	155	193	112	126	42	83		72	120	111	75	57	16	40		1.6
	2000	3	44	78	61	37	27	26		6	43	34	35	19	12	16		1.7
	2005	5	76	129	129	84	57	49		11	73	81	62	33	30	41		1.6
	2009	10	61	104	111	69	53	64		4	57	65	62	43	24	28		1.7
Paraguay	1995	18	64	71	96	74	57	61		13	65	49	46	35	34	53		1.5
	2000	16	112	103	105	86	80	71		12	69	86	41	41	30	46		1.8
	2005	23	168	185	136	117	87	99		31	89	98	69	52	29	71		1.9
	2009	15	203	263	173	155	120	102	13	15	121	101	53	62	41	57	4	2.3

[a] Data presented as of 31 August 2010. Notification data for countries that are members of the European Union were not available.

TABLE A2.8 **New smear-positive case notification by age and sex, 1995–2009**

		MALE								FEMALE								
	YEAR	0–14	15–24	25–34	35–44	45–54	55–64	65+	UN-KNOWN	0–14	15–24	25–34	35–44	45–54	55–64	65+	UN-KNOWN	MALE/FEMALE RATIO
Peru	1995	147	1 311	849	454	322	200	216		149	1 005	660	373	259	162	152		1.3
	2000	552	5 290	2 875	1 546	1 041	801	796		633	3 686	2 472	1 156	609	499	624		1.3
	2005	371	3 802	2 670	1 513	1 075	641	708		375	2 674	2 111	1 046	699	333	472		1.4
	2009																	–
Puerto Rico	1995	4	3	12	20	15	9	19		1	2	6	5	7	4	9		2.4
	2000	0	1	4	19	9	10	14		1	4	5	3	7	1	3		2.4
	2005	0	4	4	7	9	7	7		0	3	2	5	4	1	7		1.7
	2009	0	0	0	7	6	3	2	0	0	2	3	1	2	1	3	0	1.5
Saint Kitts and Nevis	1995																	–
	2000																	–
	2005																	–
	2009	0	0	0	2	1	1	0	0	0	0	0	0	0	0	0	0	–
Saint Lucia	1995																	–
	2000	0	0	0	1	0	1	2		0	1	0	1	0	1	0		1.3
	2005	0	0	0	0	2	1	2		1	1	0	1	1	0	2		0.8
	2009	0	1	0	2	1	2	0	0	0	0	0	1	0	0	0	0	6.0
Saint Vincent and the Grenadines	1995																	–
	2000	0	1	0	4	2	0	1		1	0	0	0	0	0	0		8.0
	2005	0	0	0	2	1	0	2		0	0	1	0	1	0	0		2.5
	2009				2	1												–
Suriname	1995																	–
	2000	1	6	6	3	2	0	4		2	3	6	3	0	1	1		1.4
	2005	0	7	8	12	6	3	4		0	3	2	1	2	1	2		3.6
	2009	2	11	17	21	20	11	10	0	1	5	13	11	11	11	5	0	1.6
Trinidad and Tobago	1995	2	6	15	10	12	7	4		0	6	4	2	5	3	0		2.8
	2000	0	7	18	27	17	7	7		0	5	7	9	5	2	4		2.6
	2005	0	10	11	13	21	10	3		0	4	9	3	5	4	3		2.4
	2009	2	6	18	26	20	25	13	0	2	4	11	9	9	4	5	0	2.5
United States of America	1995	19	355	876	1 417	1 121	742	1 099		26	280	579	499	285	202	591		2.3
	2000	6	365	602	906	904	577	738		14	246	376	349	253	152	396		2.3
	2005	14	383	535	666	767	499	624		11	241	348	276	242	161	322		2.2
	2009	11	299	446	431	564	452	496	1	6	203	288	221	211	135	247	0	2.1
Uruguay	1995	4	28	40	35	49	38	50		2	21	26	18	12	9	17		2.3
	2000	0	36	48	45	41	30	34		2	28	22	21	13	12	16		2.1
	2005	1	42	48	39	45	34	36		1	33	30	17	9	8	12		2.2
	2009	1	43	64	50	57	42	38	0	4	21	32	22	14	6	15	0	2.6
Venezuela (Bolivarian Republic of)	1995																	–
	2000																	–
	2005	35	312	395	413	402	265	332		37	351	299	267	183	146	216		1.4
	2009	26	372	385	344	352	258	298	0	33	284	312	217	212	162	181	0	1.5

[a] Data presented as of 31 August 2010. Notification data for countries that are members of the European Union were not available.

Data can be downloaded from www.who.int/tb/data

TABLE A2.9 **Laboratories, NTP services, drug management, human resources and infection control, 2009**

	LABORATORIES					FREE THROUGH NTP		DRUG MANAGEMENT			% OF STAFF TRAINED BY THE NTP (IN 2009)[c]				TB NOTIFICATION RATE PER 100 000 HEALTH-CARE WORKERS
	SMEAR LABS PER 100K POPULATION	CULTURE LABS PER 5M POPULATION	DST LABS PER 10M POPULATION	SECOND-LINE DST AVAILABLE	NRL[a]	TB DIAGNOSIS	FIRST-LINE DRUGS	RIFAMPICIN USED THROUGHOUT TREATMENT	% OF PATIENTS TREATED WITH FDC[b]	PAEDIATRIC FORMULATIONS PROCURED	MEDICAL OFFICERS	NURSES	HEALTH ASSISTANTS	LABORATORY TECHNICIANS	
Antigua and Barbuda				Out of country	Yes	Yes, all suspects	Yes	Yes	100	No					
Argentina	1.8	14.8	4.0	In country	Yes	Yes, all suspects		Yes		Yes					
Bahamas				In and out of cty	Yes	Yes, all suspects	Yes	Yes	0	No					
Barbados				Out of country	Yes	Yes, all suspects	Yes	Yes	0	Yes					
Belize				Out of country	No	Yes, all suspects	Yes	Yes	0	No					
Bolivia (Plurinational State of)	5.2	13.2	1.0	Out of country	Yes	Yes, all suspects	Yes	Yes	100	Yes					
Brazil	2.1	5.8	2.3	In and out of cty	Yes	Yes, all suspects	Yes	Yes	0	Yes					
Canada				In and out of cty	Yes	Yes, all suspects	Yes	No	0	Yes					
Chile	1.7	14.7	0.6	In country	Yes	Yes, all suspects	Yes	Yes	0	Yes	4	9	0	5	
Colombia	5.3	140.8	0.9	In country	Yes	Yes, all suspects	Yes	Yes	93	Yes					
Costa Rica				In country	Yes	Yes, all suspects	Yes	Yes	0	No					
Cuba				In country	Yes	Yes, all suspects	Yes	Yes	0	No					
Dominica				Out of country	Yes	Yes, all suspects	Yes	Yes	100	No					
Dominican Republic	2.0	3.5	1.0	No	Yes	Yes, all suspects	Yes	Yes	80	No	5	8	1	15	0
Ecuador	2.3	5.9	0.7	In country	Yes	Yes, all suspects	Yes	Yes	0	No					
El Salvador	3.2	8.1	1.6	No	Yes	Yes, all suspects	Yes	Yes	100	Yes	100	100	100	100	407
Grenada				Out of country	No	Yes, all suspects	Yes	Yes	0	No					
Guatemala	1.7	4.3	0.7	In and out of cty	Yes	Yes, all suspects	Yes	Yes	100	Yes	50	70	50	80	0
Guyana	2.8	6.6	0	No	Yes	Yes, all suspects	Yes	Yes	84	Yes	40	65		80	
Haiti															
Honduras	1.9	3.3	1.3	In country	Yes	Yes, all suspects	Yes	Yes	100	Yes					63
Jamaica	0.1	0	0	No	Yes	Yes, all suspects	Yes	Yes	0	No	10	20	0	5	0
Mexico	1.1	2.8	1.2	In and out of cty	Yes	Yes, all suspects	Yes	Yes	100	No	70	80	60	100	6
Nicaragua	3.3	1.7	1.7	Out of country	Yes	Yes, all suspects	Yes	Yes	100	No	10	80	0	10	
Panama	1.7	11.6	2.9	No	Yes	Yes, all suspects	Yes	Yes	100	No				50	
Paraguay	1.6	3.9	1.6	In country	Yes	Yes, all suspects	Yes	Yes	0	Yes	3	9	10	23	10
Peru				In country	Yes	Yes, all suspects	Yes	Yes	0	Yes					137
Puerto Rico				Out of country	Yes	Yes, all suspects	Yes	Yes	100	Yes					
Saint Kitts and Nevis				No	No	Yes, all suspects	Yes	Yes	100	No					
Saint Lucia				In and out of cty	Yes	If TB is confirmed	Yes	Yes	100	No					
Saint Vincent and the Grenadines				Out of country	No	Yes, all suspects	Yes	Yes		No					
Suriname				Out of country	Yes	Yes, all suspects	Yes	Yes	0	Yes					
Trinidad and Tobago				No	Yes	Yes, all suspects	Yes	Yes	0	Yes					
United States of America				In country	Yes	Yes, all suspects	Yes	Yes		Yes					
Uruguay				No	Yes	Yes, all suspects	Yes	Yes	93	Yes					
Venezuela (Bolivarian Republic of)	2.0	3.3	0.3	In country	Yes	Yes, all suspects	Yes	Yes	85	Yes	90	82	62	52	

a NRL = national reference laboratory
b FDC = fixed-dose combination
c NURSES (Registered Nurses, Registered Midwives, Enrolled Nurses, Enrolled Midwives); HEALTH ASSISTANTS (Medical Assistants, Clinical Officers); LABORATORY TECHNICIANS (Microscopists)

Eastern Mediterranean Region

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Table A2.9 Laboratories, NTP services, drug management, human resources and infection control, 2009 **136**

Estimates of mortality, prevalence and incidence

Estimated values are shown as best estimates followed by lower and upper bounds. The lower and upper bounds are defined as the 2.5th and 97.5th centiles of outcome distributions produced in simulations. See ANNEX 1 for further details.

Estimated numbers are shown rounded to two significant figures. Estimated rates are shown rounded to three significant figures unless the value is under 100, in which case rates are shown rounded to two significant figures.

Estimates for all years are recalculated as new information becomes available and techniques are refined, so they may differ from those published in previous reports in this series. Estimates published in previous global TB control reports should no longer be used.

Graphs

Graphs where displayed show data from all years within the range stated.

Data source

Data shown in this annex are taken from the WHO global TB database on 31 August 2010. Data shown in the main part of the report were taken from the database on 17 June 2010. As a result, data in this annex may differ slightly from those in the main part of the report.

Data can be downloaded from www.who.int/tb/data.

TABLE A2.1 **Estimates of the burden of disease caused by TB, 1990–2009**

			MORTALITY (EXCLUDING HIV)		PREVALENCE (INCLUDING HIV)		INCIDENCE (INCLUDING HIV)	
	YEAR	POPULATION (MILLIONS)	NUMBER (THOUSANDS)	RATE[a]	NUMBER (THOUSANDS)	RATE	NUMBER (THOUSANDS)	RATE
Afghanistan	1990	13	8.3 (4.1–12)	66 (33–99)	41 (15–85)	329 (116–680)	24 (13–34)	189 (104–274)
	1995	18	12 (7.6–16)	66 (42–89)	61 (28–100)	339 (152–565)	34 (27–41)	189 (151–227)
	2000	21	12 (9.4–15)	59 (46–74)	88 (39–150)	427 (191–708)	39 (31–47)	189 (151–227)
	2005	25	9.9 (6.8–14)	41 (28–56)	85 (39–140)	349 (160–577)	46 (37–56)	189 (151–227)
	2006	25	9.4 (6.3–13)	37 (25–52)	85 (38–140)	334 (149–554)	48 (38–58)	189 (151–227)
	2007	26	9.3 (6–13)	35 (23–51)	86 (38–140)	326 (145–546)	50 (40–60)	189 (151–227)
	2008	27	9.9 (6.5–14)	36 (24–52)	90 (40–150)	331 (148–550)	51 (41–62)	189 (151–227)
	2009	28	11 (7.1–15)	37 (25–52)	94 (42–160)	335 (151–557)	53 (43–64)	189 (154–228)
Bahrain	1990	<1	0.011 (<0.01–0.019)	2.1 (1.1–3.9)	0.31 (0.11–0.65)	64 (21–131)	0.2 (0.12–0.28)	40 (24–58)
	1995	<1	0.018 (0.014–0.023)	3.1 (2.5–3.9)	0.51 (0.23–0.85)	89 (40–147)	0.23 (0.18–0.28)	40 (32–48)
	2000	<1	0.016 (0.014–0.019)	2.5 (2.2–2.8)	0.4 (0.16–0.68)	61 (25–105)	0.26 (0.21–0.31)	40 (32–48)
	2005	<1	0.014 (0.01–0.02)	2 (1.4–2.8)	0.44 (0.15–0.76)	60 (21–105)	0.33 (0.28–0.39)	45 (38–54)
	2006	<1	0.013 (0.01–0.019)	1.7 (1.3–2.5)	0.41 (0.12–0.73)	55 (16–98)	0.32 (0.28–0.39)	43 (37–52)
	2007	<1	0.014 (0.011–0.02)	1.9 (1.4–2.6)	0.44 (0.15–0.77)	58 (20–101)	0.34 (0.3–0.41)	45 (39–54)
	2008	<1	0.014 (0.011–0.02)	1.8 (1.4–2.5)	0.45 (0.14–0.78)	57 (19–100)	0.35 (0.3–0.42)	46 (39–55)
	2009	<1	0.014 (0.011–0.019)	1.8 (1.4–2.5)	0.46 (0.15–0.78)	58 (19–99)	0.37 (0.33–0.42)	46 (41–54)
Djibouti	1990	<1	0.45 (0.15–1)	81 (27–183)	5.1 (1.7–10)	909 (297–1865)	3.5 (2.1–5)	619 (375–898)
	1995	<1	0.3 (0.14–0.6)	48 (22–97)	4.7 (1.6–8.3)	749 (249–1323)	3.9 (3.1–4.6)	619 (495–743)
	2000	<1	0.28 (0.14–0.53)	38 (19–72)	5.1 (1.7–8.8)	698 (228–1202)	4.5 (4–5.4)	619 (544–743)
	2005	<1	0.74 (0.46–1.1)	92 (57–135)	7.4 (3.3–12)	919 (411–1523)	5 (4–6)	619 (495–743)
	2006	<1	0.75 (0.47–1.1)	91 (57–135)	7.5 (3.3–12)	916 (406–1518)	5.1 (4.1–6.1)	619 (495–743)
	2007	<1	0.72 (0.44–1.1)	86 (53–130)	7.4 (3.3–12)	893 (395–1486)	5.2 (4.1–6.2)	619 (495–743)
	2008	<1	0.67 (0.38–1)	79 (45–123)	7.3 (3.1–12)	860 (369–1448)	5.3 (4.2–6.3)	619 (495–743)
	2009	<1	0.65 (0.38–1)	75 (44–117)	7.4 (3.1–12)	853 (359–1430)	5.4 (4.4–6.4)	619 (504–746)
Egypt	1990	58	2.3 (1.9–2.8)	4 (3.3–4.8)	46 (21–74)	79 (36–128)	20 (16–23)	34 (28–40)
	1995	64	1.6 (1.2–2.1)	2.5 (1.9–3.3)	38 (18–61)	59 (28–95)	20 (17–24)	32 (26–37)
	2000	70	1.1 (0.74–1.5)	1.6 (1.1–2.2)	30 (13–49)	42 (19–69)	18 (15–21)	26 (21–30)
	2005	77	0.95 (0.82–1.1)	1.2 (1.1–1.4)	25 (11–42)	33 (14–54)	16 (13–19)	21 (17–25)
	2006	79	0.85 (0.74–0.97)	1.1 (<1–1.2)	25 (11–42)	32 (14–53)	16 (13–19)	20 (17–24)
	2007	80	0.86 (0.74–0.98)	1.1 (<1–1.2)	26 (11–42)	32 (14–52)	16 (13–18)	20 (16–23)
	2008	82	0.87 (0.75–0.99)	1.1 (<1–1.2)	25 (11–41)	31 (14–51)	16 (13–18)	19 (16–22)
	2009	83	0.9 (0.61–1.3)	1.1 (<1–1.5)	25 (11–41)	30 (13–49)	15 (13–18)	19 (16–22)
Iran (Islamic Republic of)	1990	57	3.7 (1.4–7.4)	6.5 (2.4–13)	34 (12–71)	61 (21–125)	20 (11–30)	36 (20–52)
	1995	62	3.5 (2.2–5.2)	5.6 (3.5–8.4)	35 (15–60)	57 (24–96)	22 (18–27)	36 (29–43)
	2000	67	3.8 (2.5–5.4)	5.7 (3.8–8.1)	36 (16–59)	53 (24–88)	21 (17–25)	32 (25–38)
	2005	71	3.1 (2–4.4)	4.4 (2.9–6.2)	29 (13–48)	41 (18–68)	17 (14–21)	24 (19–29)
	2006	72	2.9 (1.9–4.1)	4 (2.6–5.7)	27 (12–45)	38 (17–63)	16 (13–20)	23 (18–27)
	2007	72	2.5 (1.6–3.7)	3.5 (2.2–5.1)	25 (11–42)	34 (15–57)	15 (12–19)	21 (17–26)
	2008	73	2.1 (1.3–3.3)	2.9 (1.8–4.4)	22 (9.5–38)	31 (13–51)	15 (12–17)	20 (16–24)
	2009	74	1.8 (1–2.8)	2.4 (1.4–3.8)	20 (8.1–34)	27 (11–46)	14 (11–17)	19 (15–22)
Iraq	1990	18	0.56 (0.37–0.75)	3.1 (2–4.1)	15 (3.4–27)	85 (19–151)	12 (6.3–17)	64 (35–93)
	1995	21	0.78 (0.51–1)	3.7 (2.4–5)	21 (4.8–38)	102 (23–181)	13 (11–16)	64 (51–77)
	2000	25	0.68 (0.45–0.91)	2.7 (1.8–3.7)	19 (4.1–33)	76 (17–134)	16 (13–19)	64 (51–77)
	2005	28	3.6 (2.4–5)	13 (8.5–18)	32 (14–53)	113 (51–188)	18 (14–22)	64 (51–77)
	2006	29	4 (2.8–5.5)	14 (9.6–19)	34 (16–57)	118 (54–196)	18 (15–22)	64 (51–77)
	2007	29	4.2 (3–5.7)	14 (10–19)	35 (16–59)	120 (55–199)	19 (15–23)	64 (51–77)
	2008	30	4.2 (2.9–5.7)	14 (9.7–19)	36 (16–59)	119 (54–196)	19 (15–23)	64 (51–77)
	2009	31	4.2 (2.9–5.7)	14 (9.5–18)	36 (17–59)	117 (54–192)	20 (16–24)	64 (52–77)
Jordan	1990	3	0.06 (0.022–0.13)	1.8 (<1–4.1)	0.74 (0.23–1.5)	23 (7.1–45)	0.52 (0.44–0.76)	16 (13–23)
	1995	4	0.064 (0.033–0.11)	1.5 (<1–2.6)	0.82 (0.3–1.4)	19 (6.9–33)	0.59 (0.5–0.71)	14 (12–17)
	2000	5	0.019 (0.01–0.042)	<1 (<1–<1)	0.41 (0.1–0.73)	8.5 (2.1–15)	0.36 (0.31–0.43)	7.3 (6.3–8.8)
	2005	6	0.037 (0.019–0.065)	<1 (<1–1.2)	0.54 (0.18–0.93)	9.7 (3.2–17)	0.41 (0.37–0.49)	7.4 (6.6–8.9)
	2006	6	0.031 (0.015–0.059)	<1 (<1–1)	0.5 (0.15–0.89)	8.7 (2.7–15)	0.4 (0.36–0.48)	7 (6.2–8.3)
	2007	6	0.024 (0.012–0.049)	<1 (<1–<1)	0.45 (0.12–0.79)	7.5 (2–13)	0.37 (0.34–0.45)	6.3 (5.7–7.5)
	2008	6	0.023 (0.012–0.048)	<1 (<1–<1)	0.44 (0.12–0.78)	7.2 (1.9–13)	0.37 (0.34–0.45)	6.1 (5.5–7.3)
	2009	6	0.014 (<0.01–0.019)	<1 (<1–<1)	0.39 (0.088–0.7)	6.2 (1.4–11)	0.36 (0.3–0.41)	5.6 (4.8–6.5)
Kuwait	1990	2	<0.01 (<0.01–0.014)	<1 (<1–<1)	0.44 (0.13–0.77)	20 (6.1–36)	0.35 (0.28–0.42)	16 (13–19)
	1995	2	0.012 (<0.01–0.015)	<1 (<1–<1)	0.52 (0.19–0.87)	30 (11–51)	0.39 (0.34–0.44)	22 (19–25)
	2000	2	0.014 (0.013–0.016)	<1 (<1–<1)	0.76 (0.26–1.3)	34 (11–58)	0.59 (0.51–0.67)	26 (23–30)
	2005	3	0.015 (0.013–0.019)	<1 (<1–<1)	0.68 (0.17–1.2)	25 (6.4–44)	0.59 (0.52–0.67)	22 (19–25)
	2006	3	0.023 (0.018–0.029)	<1 (<1–1.1)	1 (0.38–1.7)	36 (14–60)	0.74 (0.64–0.84)	27 (23–30)
	2007	3	0.018 (0.016–0.024)	<1 (<1–<1)	0.85 (0.21–1.5)	30 (7.4–52)	0.74 (0.65–0.84)	26 (23–29)
	2008	3	0.02 (0.018–0.022)	<1 (<1–<1)	1.3 (0.51–2.3)	46 (17–77)	1 (0.87–1.1)	34 (30–39)
	2009	3	0.029 (0.023–0.039)	<1 (<1–1.3)	1.3 (0.44–2.2)	44 (15–75)	1 (0.93–1.2)	35 (31–41)
Lebanon	1990	3	0.069 (0.027–0.21)	2.3 (<1–7.2)	1.2 (0.28–2.4)	39 (9.3–81)	0.96 (0.53–1.4)	32 (18–47)
	1995	3	0.097 (0.052–0.17)	2.8 (1.5–4.7)	1.4 (0.49–2.4)	40 (14–69)	1.1 (0.98–1.3)	31 (28–38)
	2000	4	0.037 (0.02–0.068)	<1 (<1–1.8)	0.72 (0.21–1.3)	19 (5.6–33)	0.63 (0.57–0.76)	17 (15–20)
	2005	4	0.029 (0.016–0.052)	<1 (<1–1.3)	0.51 (0.16–0.88)	13 (4–22)	0.43 (0.39–0.52)	11 (9.6–13)
	2006	4	0.016 (0.01–0.021)	<1 (<1–<1)	0.44 (0.11–0.78)	11 (2.6–19)	0.41 (0.38–0.49)	10 (9.1–12)
	2007	4	0.04 (0.021–0.071)	<1 (<1–1.7)	0.64 (0.21–1.1)	15 (5.1–27)	0.52 (0.48–0.63)	13 (11–15)
	2008	4	0.046 (0.024–0.08)	1.1 (<1–1.9)	0.71 (0.24–1.2)	17 (5.7–29)	0.57 (0.52–0.69)	14 (12–16)
	2009	4	0.064 (0.038–0.1)	1.5 (<1–2.4)	0.85 (0.33–1.4)	20 (7.8–34)	0.64 (0.55–0.73)	15 (13–17)
Libyan Arab Jamahiriya	1990	4	0.53 (0.41–0.67)	12 (9.4–15)	3.9 (1.8–6.5)	89 (40–148)	1.7 (1.4–2.1)	40 (32–48)
	1995	5	0.23 (0.12–0.4)	4.7 (2.4–8.2)	2.8 (1–4.9)	57 (21–100)	1.9 (1.5–2.3)	40 (32–48)
	2000	5	0.3 (0.17–0.48)	5.7 (3.2–9)	3.3 (1.3–5.6)	61 (25–105)	2.1 (1.7–2.6)	40 (32–48)
	2005	6	0.24 (0.13–0.4)	4.1 (2.2–6.8)	3.2 (1.2–5.5)	55 (20–93)	2.4 (2.1–2.8)	40 (35–48)
	2006	6	0.21 (0.099–0.39)	3.4 (1.6–6.5)	3.1 (0.98–5.5)	52 (16–91)	2.4 (2–2.9)	40 (33–48)
	2007	6	0.23 (0.12–0.42)	3.8 (1.9–6.8)	3.3 (1.1–5.7)	53 (18–93)	2.5 (2.1–3)	40 (34–48)
	2008	6	0.24 (0.12–0.46)	3.9 (1.9–7.3)	3.4 (1.1–5.9)	54 (18–94)	2.5 (2–3)	40 (32–48)
	2009	6	0.26 (0.13–0.49)	4.1 (2–7.7)	3.5 (1.2–6.2)	55 (19–96)	2.6 (2.1–3.1)	40 (32–48)
Morocco	1990	25	4.4 (1.6–9.6)	18 (6.6–39)	53 (17–100)	213 (69–411)	37 (28–53)	147 (111–214)
	1995	27	5 (2.7–8.4)	19 (9.9–31)	59 (23–100)	220 (84–377)	41 (33–49)	152 (121–182)
	2000	29	2.1 (1.1–3.8)	7.2 (3.9–13)	38 (11–66)	132 (38–229)	32 (29–38)	109 (100–131)
	2005	30	2.1 (1.1–3.7)	6.9 (3.7–12)	36 (11–62)	118 (36–203)	29 (26–35)	95 (86–114)
	2006	31	2.1 (1.1–3.7)	6.8 (3.6–12)	36 (11–62)	115 (35–200)	29 (26–35)	94 (85–112)
	2007	31	2.1 (1.1–3.9)	6.8 (3.5–12)	36 (11–62)	115 (35–200)	29 (26–35)	93 (82–112)
	2008	32	2 (1.1–3.6)	6.5 (3.5–11)	36 (11–62)	113 (35–195)	29 (27–35)	93 (85–111)
	2009	32	1.9 (1–3.3)	5.8 (3.2–10)	35 (10–60)	109 (32–188)	29 (25–34)	92 (80–105)
Oman	1990	2	0.026 (0.02–0.041)	1.4 (1.1–2.2)	0.63 (0.18–1.1)	34 (9.6–62)	0.51 (0.48–0.74)	28 (26–40)
	1995	2	0.013 (0.012–0.014)	<1 (<1–<1)	0.32 (0.073–0.57)	15 (3.4–26)	0.29 (0.28–0.35)	13 (13–16)
	2000	2	0.019 (0.015–0.024)	<1 (<1–1)	0.44 (0.16–0.73)	18 (6.5–31)	0.34 (0.32–0.41)	14 (13–17)
	2005	3	0.013 (0.012–0.013)	<1 (<1–<1)	0.32 (0.076–0.56)	12 (2.9–22)	0.27 (0.26–0.33)	10 (10–13)
	2006	3	0.019 (0.015–0.025)	<1 (<1–<1)	0.45 (0.15–0.77)	17 (5.8–29)	0.36 (0.34–0.43)	13 (13–16)
	2007	3	0.015 (0.014–0.019)	<1 (<1–<1)	0.38 (0.094–0.66)	14 (3.4–24)	0.35 (0.33–0.41)	13 (12–15)
	2008	3	0.019 (0.015–0.024)	<1 (<1–<1)	0.44 (0.14–0.76)	16 (4.9–27)	0.37 (0.35–0.44)	13 (13–16)
	2009	3	0.019 (0.016–0.025)	<1 (<1–<1)	0.45 (0.13–0.77)	16 (4.6–27)	0.37 (0.33–0.43)	13 (12–15)
Pakistan	1990	116	95 (58–140)	82 (50–123)	650 (250–1200)	564 (214–1067)	270 (150–390)	231 (127–335)
	1995	130	110 (85–130)	81 (65–98)	730 (310–1200)	559 (241–926)	300 (240–360)	231 (185–278)
	2000	148	120 (96–140)	80 (65–98)	820 (360–1400)	554 (241–919)	340 (270–410)	231 (185–278)
	2005	166	95 (70–120)	57 (43–75)	760 (350–1200)	456 (212–748)	380 (310–460)	231 (185–278)
	2006	169	84 (59–110)	49 (35–67)	720 (330–1200)	423 (195–698)	390 (310–470)	231 (185–278)
	2007	173	76 (51–110)	44 (29–61)	690 (310–1100)	398 (179–662)	400 (320–480)	231 (185–278)
	2008	177	64 (39–95)	36 (22–53)	650 (280–1100)	366 (158–612)	410 (330–490)	231 (185–278)
	2009	181	60 (36–92)	33 (20–51)	640 (270–1100)	355 (148–601)	420 (340–500)	231 (188–279)

[a] Rates are per 100 000 population.

TABLE A2.1 **Estimates of the burden of disease caused by TB, 1990–2009**

			MORTALITY (EXCLUDING HIV)		PREVALENCE (INCLUDING HIV)		INCIDENCE (INCLUDING HIV)	
	YEAR	POPULATION (MILLIONS)	NUMBER (THOUSANDS)	RATE[a]	NUMBER (THOUSANDS)	RATE	NUMBER (THOUSANDS)	RATE
Qatar	1990	<1	0.023 (0.013–0.041)	5 (2.8–8.8)	0.44 (0.15–0.88)	95 (32–189)	0.28 (0.18–0.41)	60 (39–87)
	1995	<1	0.02 (0.017–0.023)	3.8 (3.3–4.3)	0.4 (0.13–0.68)	76 (25–130)	0.32 (0.3–0.38)	60 (58–72)
	2000	<1	0.03 (0.022–0.042)	4.9 (3.5–6.8)	0.58 (0.24–0.99)	95 (38–161)	0.39 (0.31–0.46)	63 (50–75)
	2005	<1	0.03 (0.021–0.043)	3.4 (2.4–4.9)	0.58 (0.22–1)	66 (25–114)	0.41 (0.33–0.49)	46 (37–55)
	2006	1	0.028 (0.021–0.041)	2.8 (2.1–4.1)	0.56 (0.18–0.99)	56 (18–99)	0.42 (0.34–0.51)	42 (34–51)
	2007	1	0.032 (0.024–0.046)	2.8 (2.1–4.1)	0.63 (0.2–1.1)	56 (17–98)	0.49 (0.4–0.59)	43 (35–52)
	2008	1	0.052 (0.038–0.073)	4.1 (2.9–5.7)	1 (0.39–1.7)	79 (31–136)	0.7 (0.57–0.84)	55 (44–66)
	2009	1	0.043 (0.035–0.057)	3 (2.5–4)	0.86 (0.27–1.5)	61 (19–105)	0.69 (0.62–0.8)	49 (44–57)
Saudi Arabia	1990	16	0.43 (0.22–0.75)	2.7 (1.4–4.6)	9.3 (3.5–19)	57 (21–117)	5 (2.8–7.3)	31 (17–45)
	1995	18	0.48 (0.36–0.63)	2.6 (2–3.4)	10 (4.8–17)	57 (26–95)	5.6 (4.5–6.8)	31 (25–37)
	2000	21	0.43 (0.31–0.58)	2 (1.5–2.8)	9.5 (4.1–16)	45 (20–77)	5.7 (4.6–6.8)	27 (22–33)
	2005	24	0.3 (0.21–0.43)	1.3 (<1–1.8)	6.8 (2.5–12)	29 (11–50)	4.7 (3.8–5.6)	20 (16–24)
	2006	24	0.29 (0.21–0.43)	1.2 (<1–1.8)	6.7 (2.4–12)	28 (9.9–49)	4.8 (3.8–5.7)	20 (16–24)
	2007	25	0.28 (0.2–0.41)	1.1 (<1–1.7)	6.5 (2.2–12)	26 (9–47)	4.8 (4–5.8)	19 (16–23)
	2008	25	0.26 (0.2–0.38)	1 (<1–1.5)	6.1 (1.9–11)	24 (7.7–42)	4.7 (4–5.6)	19 (16–22)
	2009	26	0.24 (0.19–0.33)	<1 (<1–1.3)	5.6 (1.7–9.8)	22 (6.5–38)	4.5 (4–5.3)	18 (16–20)
Somalia	1990	7	1.4 (0.93–1.9)	22 (14–29)	39 (8.9–70)	593 (134–1059)	19 (10–27)	285 (157–414)
	1995	7	5.8 (4.6–7.2)	90 (71–111)	42 (19–69)	642 (288–1057)	19 (15–22)	285 (228–342)
	2000	7	5.7 (4.4–7.3)	78 (59–99)	43 (20–71)	588 (272–966)	21 (17–25)	285 (228–342)
	2005	8	4.6 (3.1–6.4)	55 (37–76)	41 (19–67)	488 (222–806)	24 (19–29)	285 (228–342)
	2006	9	4.8 (3.3–6.6)	56 (39–77)	42 (19–69)	493 (228–811)	24 (20–29)	285 (228–342)
	2007	9	5 (3.5–6.8)	57 (40–78)	43 (20–71)	497 (229–815)	25 (20–30)	285 (228–342)
	2008	9	5.3 (3.7–7.1)	59 (42–80)	45 (21–74)	504 (234–827)	25 (20–31)	285 (228–342)
	2009	9	5.3 (3.8–7.1)	58 (41–78)	46 (21–75)	498 (231–816)	26 (21–31)	285 (232–344)
Sudan	1990	27	9 (4.8–14)	33 (18–53)	67 (27–130)	249 (100–479)	32 (18–47)	119 (65–172)
	1995	31	6.9 (4.7–9.6)	22 (15–31)	62 (28–100)	201 (92–332)	37 (29–44)	119 (95–143)
	2000	35	6.6 (4.2–9.7)	19 (12–28)	65 (29–110)	187 (82–311)	41 (33–50)	119 (95–143)
	2005	39	7.4 (4.7–11)	19 (12–28)	73 (32–120)	188 (82–312)	46 (37–55)	119 (95–143)
	2006	40	7.5 (4.7–11)	19 (12–28)	74 (33–120)	186 (82–310)	47 (38–56)	119 (95–143)
	2007	40	7.8 (5–11)	19 (12–28)	75 (34–120)	185 (84–307)	48 (38–58)	119 (95–143)
	2008	41	8.8 (5.9–12)	21 (14–30)	81 (37–130)	196 (89–324)	49 (39–59)	119 (95–143)
	2009	42	9.9 (6.9–14)	24 (16–32)	88 (40–140)	209 (95–343)	50 (41–61)	119 (97–143)
Syrian Arab Republic	1990	13	0.95 (0.33–2.2)	7.5 (2.6–17)	11 (3.5–22)	88 (28–175)	7.7 (6–11)	61 (47–88)
	1995	15	0.86 (0.46–1.4)	5.9 (3.2–9.7)	9.9 (3.8–17)	68 (26–117)	6.7 (5.4–8.1)	46 (37–55)
	2000	17	0.41 (0.2–0.82)	2.5 (1.2–4.9)	7.1 (2–13)	43 (12–76)	5.7 (5.1–6.9)	35 (31–42)
	2005	19	0.45 (0.22–0.85)	2.4 (1.1–4.5)	6.6 (2.2–12)	35 (11–61)	5 (4.3–6)	26 (23–32)
	2006	20	0.47 (0.22–0.87)	2.4 (1.1–4.4)	6.6 (2.2–12)	33 (11–59)	4.9 (3.9–5.9)	25 (20–30)
	2007	21	0.49 (0.25–0.87)	2.4 (1.2–4.3)	6.6 (2.3–12)	32 (11–56)	4.8 (4.1–5.8)	24 (20–28)
	2008	21	0.45 (0.21–0.83)	2.1 (1–3.9)	6.3 (2.1–11)	30 (9.7–52)	4.7 (3.8–5.7)	22 (18–27)
	2009	22	0.41 (0.19–0.78)	1.9 (<1–3.6)	6 (1.9–11)	27 (8.7–48)	4.6 (3.8–5.6)	21 (17–25)
Tunisia	1990	8	0.2 (0.084–0.45)	2.5 (1–5.5)	3.1 (0.9–5.7)	37 (11–69)	2.4 (2.1–3.4)	29 (25–42)
	1995	9	0.16 (0.091–0.29)	1.8 (1–3.3)	3.1 (0.89–5.4)	35 (9.9–60)	2.6 (2.4–3.1)	29 (27–35)
	2000	9	0.16 (0.087–0.29)	1.7 (<1–3.1)	2.8 (0.85–4.9)	30 (9–51)	2.3 (2–2.7)	24 (22–29)
	2005	10	0.14 (0.079–0.26)	1.5 (<1–2.6)	2.7 (0.78–4.6)	27 (7.9–47)	2.2 (2.1–2.7)	23 (21–27)
	2006	10	0.13 (0.073–0.23)	1.3 (<1–2.3)	2.7 (0.71–4.6)	27 (7.2–46)	2.3 (2.1–2.7)	23 (21–27)
	2007	10	0.16 (0.091–0.29)	1.6 (<1–2.8)	3 (0.89–5.1)	29 (8.8–51)	2.4 (2.3–2.9)	24 (23–29)
	2008	10	0.16 (0.088–0.27)	1.5 (<1–2.7)	2.9 (0.85–5)	29 (8.4–49)	2.4 (2.3–2.9)	24 (22–29)
	2009	10	0.19 (0.1–0.32)	1.8 (1–3.1)	3.1 (0.98–5.3)	30 (9.5–52)	2.5 (2.2–2.8)	24 (21–28)
United Arab Emirates	1990	2	0.011 (0.011–0.012)	<1 (<1–<1)	0.28 (0.062–0.5)	15 (3.3–27)	0.077 (0.043–0.11)	4.1 (2.3–6)
	1995	2	0.02 (0.019–0.021)	<1 (<1–<1)	0.5 (0.11–0.88)	20 (4.5–36)	0.1 (0.081–0.12)	4.1 (3.3–5)
	2000	3	<0.01 (<0.01–0.013)	<1 (<1–<1)	0.22 (0.094–0.36)	6.7 (2.9–11)	0.13 (0.12–0.16)	4.1 (3.6–5)
	2005	4	0.013 (<0.01–0.018)	<1 (<1–<1)	0.29 (0.13–0.49)	7.1 (3.2–12)	0.17 (0.14–0.2)	4.1 (3.3–5)
	2006	4	0.014 (0.01–0.018)	<1 (<1–<1)	0.3 (0.14–0.51)	7.2 (3.2–12)	0.18 (0.14–0.21)	4.1 (3.3–5)
	2007	4	0.015 (0.011–0.02)	<1 (<1–<1)	0.32 (0.15–0.53)	7.4 (3.3–12)	0.18 (0.14–0.22)	4.1 (3.3–5)
	2008	4	0.015 (0.011–0.019)	<1 (<1–<1)	0.32 (0.14–0.54)	7.2 (3.2–12)	0.19 (0.15–0.22)	4.1 (3.3–5)
	2009	5	<0.01 (<0.01–0.01)	<1 (<1–<1)	0.18 (0.066–0.3)	3.8 (1.4–6.5)	0.13 (0.12–0.15)	2.8 (2.5–3.3)
West Bank and Gaza Strip	1990	2	0.25 (0.14–0.39)	12 (6.6–18)	1.8 (0.67–3.4)	82 (31–158)	0.75 (0.41–1.1)	35 (19–50)
	1995	3	0.28 (0.22–0.35)	11 (8.6–13)	2 (0.86–3.3)	76 (33–126)	0.83 (0.67–1)	32 (25–38)
	2000	3	0.28 (0.22–0.34)	8.9 (7.1–11)	1.9 (0.85–3.2)	62 (27–103)	0.81 (0.65–0.98)	26 (21–31)
	2005	4	0.29 (0.23–0.35)	7.6 (6.1–9.2)	2 (0.83–3.3)	52 (22–87)	0.8 (0.64–0.96)	21 (17–25)
	2006	4	0.28 (0.23–0.35)	7.3 (5.9–8.9)	2 (0.83–3.3)	50 (21–84)	0.8 (0.64–0.96)	21 (16–25)
	2007	4	0.28 (0.23–0.35)	7 (5.6–8.6)	1.9 (0.83–3.2)	48 (21–81)	0.8 (0.64–0.96)	20 (16–24)
	2008	4	0.28 (0.23–0.35)	6.8 (5.5–8.4)	2 (0.84–3.2)	47 (20–78)	0.8 (0.64–0.96)	19 (15–23)
	2009	4	0.28 (0.23–0.34)	6.6 (5.3–8)	1.9 (0.83–3.2)	45 (19–75)	0.8 (0.65–0.96)	19 (15–22)
Yemen	1990	12	4.4 (2.1–7.6)	36 (17–61)	34 (13–68)	280 (110–552)	17 (9.3–24)	137 (75–199)
	1995	16	3.4 (2.1–5.2)	22 (13–33)	34 (15–58)	221 (94–374)	21 (17–26)	137 (110–164)
	2000	18	3.4 (2.1–5.2)	19 (11–28)	34 (14–57)	187 (80–315)	21 (17–25)	116 (92–139)
	2005	21	3.2 (2.1–4.6)	15 (10–22)	29 (13–49)	140 (63–233)	17 (14–20)	81 (64–97)
	2006	22	3 (2–4.3)	14 (9.2–20)	28 (13–46)	129 (58–214)	16 (13–19)	74 (59–89)
	2007	22	2.8 (1.8–4)	12 (8–18)	26 (11–43)	115 (51–192)	15 (12–18)	67 (54–80)
	2008	23	2.3 (1.4–3.5)	10 (6.3–15)	23 (9.9–38)	99 (43–166)	14 (11–17)	60 (48–72)
	2009	24	1.9 (1.1–3)	8.2 (4.9–13)	20 (8.4–34)	86 (36–146)	13 (10–15)	54 (44–66)

[a] Rates are per 100 000 population.

TABLE A2.2 **Incidence, notification and case detection rates, all forms, 1990–2009**

			INCIDENCE (INCLUDING HIV)		INCIDENCE HIV-POSITIVE		NOTIFIED NEW AND RELAPSE[a]		CASE DETECTION RATE[a]
	YEAR	POPULATION (MILLIONS)	NUMBER (THOUSANDS)	RATE[b]	NUMBER (THOUSANDS)	RATE[b]	NUMBER	RATE[b]	PERCENT
Afghanistan	1990	13	24 (13–34)	189 (104–274)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	4 332	34	18 (13–33)
	1995	18	34 (27–41)	189 (151–227)	<0.01 (<0.01–<0.01)	<1 (<1–<1)			–
	2000	21	39 (31–47)	189 (151–227)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	7 107	35	18 (15–23)
	2005	25	46 (37–56)	189 (151–227)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	21 844	89	47 (39–59)
	2006	25	48 (38–58)	189 (151–227)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	25 475	100	53 (44–66)
	2007	26	50 (40–60)	189 (151–227)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	28 769	109	58 (48–72)
	2008	27	51 (41–62)	189 (151–227)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	28 301	104	55 (46–69)
	2009	28	53 (43–64)	189 (154–228)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	26 150	93	49 (41–60)
Bahrain	1990	0	0.2 (0.12–0.28)	40 (24–58)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	117	24	60 (41–100)
	1995	1	0.23 (0.18–0.28)	40 (32–48)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	43	7	19 (16–23)
	2000	1	0.26 (0.21–0.31)	40 (32–48)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	207	32	80 (67–100)
	2005	1	0.33 (0.28–0.39)	45 (38–54)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	280	38	86 (72–100)
	2006	1	0.32 (0.28–0.39)	43 (37–52)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	278	37	86 (72–100)
	2007	1	0.34 (0.3–0.41)	45 (39–54)	<0.01 (<0.01–0.016)	1.1 (<1–2.1)	296	39	86 (72–100)
	2008	1	0.35 (0.3–0.42)	46 (39–55)	<0.01 (<0.01–0.016)	1 (<1–2.1)	304	39	86 (72–100)
	2009	1	0.37 (0.33–0.42)	46 (41–54)	0.01 (<0.01–0.018)	1.3 (<1–2.3)	326	41	89 (77–100)
Djibouti	1990	1	3.5 (2.1–5)	619 (375–898)	0.15 (0.015–0.46)	28 (2.7–82)	2 100	375	61 (42–100)
	1995	1	3.9 (3.1–4.6)	619 (495–743)	0.39 (0.18–0.68)	62 (29–109)			–
	2000	1	4.5 (4–5.4)	619 (544–743)	0.58 (0.39–0.8)	79 (54–109)	3 971	544	88 (73–100)
	2005	1	5 (4–6)	619 (495–743)	0.64 (0.45–0.87)	80 (56–108)	3 109	386	62 (52–78)
	2006	1	5.1 (4.1–6.1)	619 (495–743)	0.65 (0.46–0.88)	79 (56–107)	3 011	367	59 (49–74)
	2007	1	5.2 (4.1–6.2)	619 (495–743)	0.66 (0.47–0.89)	79 (56–107)	3 195	383	62 (52–77)
	2008	1	5.3 (4.2–6.3)	619 (495–743)	0.72 (0.51–0.96)	84 (60–113)	3 682	434	70 (58–87)
	2009	1	5.4 (4.4–6.4)	619 (504–746)	0.63 (0.49–0.79)	73 (57–92)	3 783	438	71 (59–87)
Egypt	1990	58	20 (16–23)	34 (28–40)	0.025 (<0.01–0.058)	<1 (<1–<1)	2 142	4	11 (9–13)
	1995	64	20 (17–24)	32 (26–37)	0.05 (0.019–0.097)	<1 (<1–<1)	11 145	17	55 (47–67)
	2000	70	18 (15–21)	26 (21–30)	0.09 (0.047–0.15)	<1 (<1–<1)	10 762	15	59 (51–72)
	2005	77	16 (13–19)	21 (17–25)	0.14 (0.081–0.23)	<1 (<1–<1)	11 446	15	70 (60–85)
	2006	79	16 (13–19)	20 (17–24)	0.16 (0.088–0.25)	<1 (<1–<1)	10 046	13	62 (54–76)
	2007	80	16 (13–18)	20 (16–23)	0.29 (0.2–0.39)	<1 (<1–<1)	9 841	12	62 (53–75)
	2008	82	16 (13–18)	19 (16–22)	0.18 (0.099–0.28)	<1 (<1–<1)	9 452	12	60 (52–73)
	2009	83	15 (13–18)	19 (16–22)	0.052 (0.026–0.088)	<1 (<1–<1)	9 685	12	63 (54–75)
Iran (Islamic Republic of)	1990	57	20 (11–30)	36 (20–52)	0.12 (0.056–0.2)	<1 (<1–<1)	9 255	16	45 (31–83)
	1995	62	22 (18–27)	36 (29–43)	0.18 (0.11–0.28)	<1 (<1–<1)	15 936	26	71 (60–89)
	2000	67	21 (17–25)	32 (25–38)	0.37 (0.23–0.54)	<1 (<1–<1)	11 850	18	56 (47–70)
	2005	71	17 (14–21)	24 (19–29)	0.51 (0.33–0.73)	<1 (<1–1)	9 192	13	54 (45–67)
	2006	72	16 (13–20)	23 (18–27)	0.48 (0.31–0.7)	<1 (<1–<1)	9 361	13	57 (48–72)
	2007	72	15 (12–19)	21 (17–26)	0.46 (0.3–0.66)	<1 (<1–<1)	9 316	13	60 (50–75)
	2008	73	15 (12–17)	20 (16–24)	0.43 (0.27–0.62)	<1 (<1–<1)	9 453	13	65 (54–81)
	2009	74	14 (11–17)	19 (15–22)	0.41 (0.26–0.59)	<1 (<1–<1)	10 097	14	73 (61–90)
Iraq	1990	18	12 (6.3–17)	64 (35–93)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	14 735	82	128 (88–232)
	1995	21	13 (11–16)	64 (51–77)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	9 697	46	72 (60–91)
	2000	25	16 (13–19)	64 (51–77)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	9 697	39	62 (51–77)
	2005	28	18 (14–22)	64 (51–77)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	9 454	33	52 (44–66)
	2006	29	18 (15–22)	64 (51–77)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	8 043	28	44 (36–55)
	2007	29	19 (15–23)	64 (51–77)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	7 863	27	42 (35–52)
	2008	30	19 (15–23)	64 (51–77)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	9 099	30	47 (39–59)
	2009	31	20 (16–24)	64 (52–77)	<0.01 (<0.01–0.01)	<1 (<1–<1)	9 385	31	48 (40–59)
Jordan	1990	3	0.52 (0.44–0.76)	16 (13–23)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	439	13	84 (58–100)
	1995	4	0.59 (0.5–0.71)	14 (12–17)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	498	12	84 (70–100)
	2000	5	0.36 (0.31–0.43)	7.3 (6.3–8.8)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	306	6	86 (72–100)
	2005	6	0.41 (0.37–0.49)	7.4 (6.6–8.9)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	367	7	89 (74–100)
	2006	6	0.4 (0.36–0.48)	7 (6.2–8.3)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	359	6	90 (75–100)
	2007	6	0.37 (0.34–0.45)	6.3 (5.7–7.5)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	336	6	90 (75–100)
	2008	6	0.37 (0.34–0.45)	6.1 (5.5–7.3)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	338	6	91 (76–100)
	2009	6	0.36 (0.3–0.41)	5.6 (4.8–6.5)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	367	6	103 (90–120)
Kuwait	1990	2	0.35 (0.28–0.42)	16 (13–19)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	277	13	80 (67–100)
	1995	2	0.39 (0.34–0.44)	22 (19–25)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	336	19	87 (77–100)
	2000	2	0.59 (0.51–0.67)	26 (23–30)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	513	23	87 (77–100)
	2005	3	0.59 (0.52–0.67)	22 (19–25)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	517	19	87 (77–100)
	2006	3	0.74 (0.64–0.84)	27 (23–30)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	644	23	87 (77–100)
	2007	3	0.74 (0.65–0.84)	26 (23–29)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	646	23	87 (77–100)
	2008	3	1 (0.87–1.1)	34 (30–39)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	867	30	87 (77–100)
	2009	3	1 (0.93–1.2)	35 (31–41)	0.028 (0.024–0.032)	<1 (<1–1.1)	933	31	89 (77–100)
Lebanon	1990	3	0.96 (0.53–1.4)	32 (18–47)	0.01 (<0.01–0.021)	<1 (<1–<1)			–
	1995	3	1.1 (0.98–1.3)	31 (28–38)	0.037 (0.021–0.058)	1.1 (<1–1.7)	983	28	90 (75–100)
	2000	4	0.63 (0.57–0.76)	17 (15–20)	0.035 (0.022–0.052)	<1 (<1–1.4)	571	15	91 (76–100)
	2005	4	0.43 (0.39–0.52)	11 (9.6–13)	0.024 (0.015–0.036)	<1 (<1–<1)	391	10	91 (76–100)
	2006	4	0.41 (0.38–0.49)	10 (9.1–12)	0.023 (0.014–0.034)	<1 (<1–<1)	375	9	91 (76–100)
	2007	4	0.52 (0.48–0.63)	13 (11–15)	0.028 (0.018–0.042)	<1 (<1–1)	476	11	91 (76–100)
	2008	4	0.57 (0.52–0.69)	14 (12–16)	0.03 (0.018–0.044)	<1 (<1–1.1)	523	12	91 (76–100)
	2009	4	0.64 (0.55–0.73)	15 (13–17)	0.032 (0.02–0.047)	<1 (<1–1.1)	499	12	78 (68–91)
Libyan Arab Jamahiriya	1990	4	1.7 (1.4–2.1)	40 (32–48)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	442	10	25 (21–32)
	1995	5	1.9 (1.5–2.3)	40 (32–48)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	1 440	30	75 (62–93)
	2000	5	2.1 (1.7–2.6)	40 (32–48)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	1 341	25	63 (52–79)
	2005	6	2.4 (2.1–2.8)	40 (35–48)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	2 098	35	89 (74–100)
	2006	6	2.4 (2–2.9)	40 (33–48)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	2 022	33	84 (70–100)
	2007	6	2.5 (2.1–3)	40 (34–48)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	2 119	34	86 (72–100)
	2008	6	2.5 (2–3)	40 (32–48)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	2 010	32	80 (67–100)
	2009	6	2.6 (2.1–3.1)	40 (32–48)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	2 096	33	82 (68–101)
Morocco	1990	25	37 (28–53)	147 (111–214)	0.095 (0.043–0.17)	<1 (<1–<1)	27 658	111	76 (52–100)
	1995	27	41 (33–49)	152 (121–182)	0.18 (0.1–0.29)	<1 (<1–1.1)	29 829	111	73 (61–91)
	2000	29	32 (29–38)	109 (100–131)	0.22 (0.13–0.32)	<1 (<1–1.1)	28 852	100	91 (76–100)
	2005	30	29 (26–35)	95 (86–114)	0.27 (0.17–0.4)	<1 (<1–1.3)	26 269	86	91 (76–100)
	2006	31	29 (26–35)	94 (85–112)	0.28 (0.17–0.41)	<1 (<1–1.3)	26 099	85	90 (75–100)
	2007	31	29 (26–35)	93 (82–112)	0.14 (0.1–0.19)	<1 (<1–<1)	25 562	82	88 (73–100)
	2008	32	29 (27–35)	93 (85–111)	0.31 (0.19–0.47)	<1 (<1–1.5)	26 838	85	92 (76–100)
	2009	32	29 (25–34)	92 (80–105)	0.5 (0.3–0.75)	1.6 (<1–2.4)	27 348	85	93 (81–107)
Oman	1990	2	0.51 (0.48–0.74)	28 (26–40)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	482	26	95 (66–100)
	1995	2	0.29 (0.28–0.35)	13 (13–16)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	276	13	95 (79–100)
	2000	2	0.34 (0.32–0.41)	14 (13–17)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	321	13	95 (79–100)
	2005	3	0.27 (0.26–0.33)	10 (10–13)	0.011 (<0.01–0.019)	<1 (<1–<1)	261	10	95 (79–100)
	2006	3	0.36 (0.34–0.43)	13 (13–16)	0.011 (<0.01–0.019)	<1 (<1–<1)	339	13	95 (79–100)
	2007	3	0.35 (0.33–0.41)	13 (12–15)	0.015 (<0.01–0.024)	<1 (<1–<1)	328	12	95 (79–100)
	2008	3	0.37 (0.35–0.44)	13 (13–16)	<0.01 (<0.01–0.015)	<1 (<1–<1)	350	13	95 (79–100)
	2009	3	0.37 (0.33–0.43)	13 (12–15)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	332	12	89 (77–100)
Pakistan	1990	116	270 (150–390)	231 (127–335)	0.22 (0.022–0.67)	<1 (<1–<1)	156 759	135	59 (40–106)
	1995	130	300 (240–360)	231 (185–278)	0.76 (0.32–1.4)	<1 (<1–1.1)	13 142	10	4 (4–5)
	2000	148	340 (270–410)	231 (185–278)	2.4 (1.4–3.6)	1.6 (<1–2.4)	11 050	7	3 (3–4)
	2005	166	380 (310–460)	231 (185–278)	5.1 (3.1–7.6)	3.1 (1.9–4.6)	142 211	86	37 (31–46)
	2006	169	390 (310–470)	231 (185–278)	5.5 (3.4–8.2)	3.2 (2–4.9)	176 678	104	45 (38–56)
	2007	173	400 (320–480)	231 (185–278)	5.8 (3.6–8.7)	3.4 (2.1–5)	230 468	133	58 (48–72)
	2008	177	410 (330–490)	231 (185–278)	6.1 (3.7–9.2)	3.5 (2.1–5.2)	245 635	139	60 (50–75)
	2009	181	420 (340–500)	231 (188–279)	6.4 (3.9–9.5)	3.5 (2.2–5.3)	316 864	175	76 (63–93)

[a] Where notification data from a country had not been received by 31 August, the notification rate was assumed to be the same as for 2008 (in *italics*).
[b] Rates are per 100 000 population.

Data can be downloaded from www.who.int/tb/data

TABLE A2.2 **Incidence, notification and case detection rates, all forms, 1990–2009**

			INCIDENCE (INCLUDING HIV)		INCIDENCE HIV-POSITIVE		NOTIFIED NEW AND RELAPSE[a]	CASE DETECTION RATE[a]	
	YEAR	POPULATION (MILLIONS)	NUMBER (THOUSANDS)	RATE[b]	NUMBER (THOUSANDS)	RATE[b]	NUMBER	RATE[b]	PERCENT
Qatar	1990	0	0.28 (0.18–0.41)	60 (39–87)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	184	39	66 (45–100)
	1995	1	0.32 (0.3–0.38)	60 (58–72)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	304	58	96 (80–100)
	2000	1	0.39 (0.31–0.46)	63 (50–75)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	279	45	72 (60–90)
	2005	1	0.41 (0.33–0.49)	46 (37–55)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	325	37	80 (67–100)
	2006	1	0.42 (0.34–0.51)	42 (34–51)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	339	34	80 (67–100)
	2007	1	0.49 (0.4–0.59)	43 (35–52)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	399	35	81 (67–100)
	2008	1	0.7 (0.57–0.84)	55 (44–66)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	567	44	81 (68–100)
	2009	1	0.69 (0.62–0.8)	49 (44–57)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	619	44	89 (77–100)
Saudi Arabia	1990	16	5 (2.8–7.3)	31 (17–45)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	2 415	15	48 (33–88)
	1995	18	5.6 (4.5–6.8)	31 (25–37)	<0.01 (<0.01–<0.01)	<1 (<1–<1)			–
	2000	21	5.7 (4.6–6.8)	27 (22–33)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	3 452	17	61 (50–76)
	2005	24	4.7 (3.8–5.6)	20 (16–24)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	3 539	15	75 (63–94)
	2006	24	4.8 (3.8–5.7)	20 (16–24)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	3 774	16	79 (66–99)
	2007	25	4.8 (4–5.8)	19 (16–23)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	3 955	16	82 (69–100)
	2008	25	4.7 (4–5.6)	19 (16–22)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	4 025	16	86 (72–100)
	2009	26	4.5 (4–5.3)	18 (16–20)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	4 043	16	89 (77–100)
Somalia	1990	7	19 (10–27)	285 (157–414)	0.17 (0.011–0.55)	2.6 (<1–8.4)			–
	1995	7	19 (15–22)	285 (228–342)	0.32 (0.1–0.66)	4.8 (1.5–10)	2 504	38	13 (11–17)
	2000	7	21 (17–25)	285 (228–342)	0.6 (0.28–1.1)	8.2 (3.8–14)	5 686	77	27 (22–34)
	2005	8	24 (19–29)	285 (228–342)	1.1 (0.7–1.7)	13 (8.4–20)	12 904	154	54 (45–68)
	2006	9	24 (20–29)	285 (228–342)	1.3 (0.8–1.9)	15 (9.4–22)	11 864	139	49 (41–61)
	2007	9	25 (20–30)	285 (228–342)	1.4 (0.91–2.1)	16 (10–24)	11 130	127	45 (37–56)
	2008	9	25 (20–31)	285 (228–342)	1.6 (1–2.4)	18 (11–26)	12 481	140	49 (41–61)
	2009	9	26 (21–31)	285 (232–344)	1.8 (1.1–2.7)	20 (12–30)	11 075	121	42 (35–52)
Sudan	1990	27	32 (18–47)	119 (65–172)	1 (0.52–1.7)	3.7 (1.9–6.2)	212	<1	1 (0–1)
	1995	31	37 (29–44)	119 (95–143)	1.8 (1.2–2.5)	5.7 (3.8–8.1)	14 320	46	39 (33–49)
	2000	35	41 (33–50)	119 (95–143)	2.3 (1.5–3.2)	6.5 (4.4–9.1)	24 807	71	60 (50–75)
	2005	39	46 (37–55)	119 (95–143)	2.8 (1.9–3.9)	7.3 (5–10)	27 562	71	60 (50–75)
	2006	40	47 (38–56)	119 (95–143)	2.9 (2–4.1)	7.4 (5–10)	28 937	73	62 (51–77)
	2007	40	48 (38–58)	119 (95–143)	4.9 (3.3–6.7)	12 (8.2–17)	29 270	72	61 (51–76)
	2008	41	49 (39–59)	119 (95–143)	3.2 (2.2–4.4)	7.7 (5.2–11)	24 281	59	49 (41–62)
	2009	42	50 (41–61)	119 (97–143)	1.3 (1.1–1.6)	3.2 (2.6–3.9)	26 001	62	52 (43–64)
Syrian Arab Republic	1990	13	7.7 (6–11)	61 (47–88)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	6 018	47	78 (54–100)
	1995	15	6.7 (5.4–8.1)	46 (37–55)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	4 404	30	66 (55–82)
	2000	17	5.7 (5.1–6.9)	35 (31–42)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	5 090	31	89 (74–100)
	2005	19	5 (4.3–6)	26 (23–32)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	4 310	23	86 (71–100)
	2006	20	4.9 (3.9–5.9)	25 (20–30)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	3 931	20	80 (66–100)
	2007	21	4.8 (4.1–5.8)	24 (20–28)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	4 087	20	85 (70–100)
	2008	21	4.7 (3.8–5.7)	22 (18–27)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	3 724	18	79 (66–98)
	2009	22	4.6 (3.8–5.6)	21 (17–25)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	4 050	18	88 (73–108)
Tunisia	1990	8	2.4 (2.1–3.4)	29 (25–42)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	2 054	25	87 (60–100)
	1995	9	2.6 (2.4–3.1)	29 (27–35)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	2 383	27	93 (77–100)
	2000	9	2.3 (2–2.7)	24 (22–29)	<0.01 (<0.01–0.01)	<1 (<1–<1)	2 038	22	90 (75–100)
	2005	10	2.2 (2.1–2.7)	23 (21–27)	0.011 (<0.01–0.017)	<1 (<1–<1)	2 079	21	93 (77–100)
	2006	10	2.3 (2.1–2.7)	23 (21–27)	0.012 (<0.01–0.019)	<1 (<1–<1)	2 131	21	93 (78–100)
	2007	10	2.4 (2.3–2.9)	24 (23–29)	0.015 (<0.01–0.023)	<1 (<1–<1)	2 282	23	94 (78–100)
	2008	10	2.4 (2.3–2.9)	24 (22–29)	0.016 (<0.01–0.025)	<1 (<1–<1)	2 280	22	94 (78–100)
	2009	10	2.5 (2.2–2.8)	24 (21–28)	0.018 (0.01–0.028)	<1 (<1–<1)	2 155	21	86 (76–98)
United Arab Emirates	1990	2	0.077 (0.043–0.11)	4.1 (2.3–6)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	285	15	368 (254–669)
	1995	2	0.1 (0.081–0.12)	4.1 (3.3–5)	<0.01 (<0.01–<0.01)	<1 (<1–<1)			–
	2000	3	0.13 (0.12–0.16)	4.1 (3.6–5)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	115	4	86 (71–100)
	2005	4	0.17 (0.14–0.2)	4.1 (3.3–5)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	103	3	61 (51–76)
	2006	4	0.18 (0.14–0.21)	4.1 (3.3–5)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	90	2	51 (43–64)
	2007	4	0.18 (0.14–0.22)	4.1 (3.3–5)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	97	2	54 (45–67)
	2008	4	0.19 (0.15–0.22)	4.1 (3.3–5)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	93	2	50 (42–62)
	2009	5	0.13 (0.12–0.15)	2.8 (2.5–3.3)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	116	3	89 (77–100)
West Bank and Gaza Strip	1990	2	0.75 (0.41–1.1)	35 (19–50)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	64	3	9 (6–16)
	1995	3	0.83 (0.67–1)	32 (25–38)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	77	3	9 (8–12)
	2000	3	0.81 (0.65–0.98)	26 (21–31)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	82	3	10 (8–13)
	2005	4	0.8 (0.64–0.96)	21 (17–25)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	28	<1	4 (3–4)
	2006	4	0.8 (0.64–0.96)	21 (16–25)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	42	1	5 (4–7)
	2007	4	0.8 (0.64–0.96)	20 (16–24)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	33	<1	4 (3–5)
	2008	4	0.8 (0.64–0.96)	19 (15–23)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	40	<1	5 (4–6)
	2009	4	0.8 (0.65–0.96)	19 (15–22)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	35	<1	4 (4–5)
Yemen	1990	12	17 (9.3–24)	137 (75–199)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	4 650	38	28 (19–50)
	1995	16	21 (17–26)	137 (110–164)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	14 428	93	68 (57–85)
	2000	18	21 (17–25)	116 (92–139)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	13 651	75	65 (54–81)
	2005	21	17 (14–20)	81 (64–97)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	9 063	43	53 (45–67)
	2006	22	16 (13–19)	74 (59–89)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	8 468	39	53 (44–66)
	2007	22	15 (12–18)	67 (54–80)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	8 427	38	56 (47–71)
	2008	23	14 (11–17)	60 (48–72)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	8 290	36	60 (50–75)
	2009	24	13 (10–15)	54 (44–66)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	8 562	36	67 (55–82)

[a] Where notification data from a country had not been received by 31 August, the notification rate was assumed to be the same as for 2008 (in *italics*).

[b] Rates are per 100 000 population.

TABLE A2.3 **Case notifications, 1990–2009**

	NEW AND RELAPSE NOTIFICATION RATE[a] 1990–2009	YEAR	NEW AND RELAPSE[a]	NEW CASES				RELAPSE	RE-TREAT EXCL. RELAPSE	TOTAL RETREAT	HISTORY UNKNOWN	% SMEAR-POS AMONG NEW PULM
				SMEAR-POSITIVE	SMEAR-NEGATIVE/ UNKNOWN	EXTRA-PULMONARY	OTHER					
Afghanistan		1990	4 332									–
		1995										–
		2000	7 107	2 892	2 358	1 620		237		237		55
		2005	21 844	9 949	6 085	4 954		856		856		62
		2006	25 475	12 468	6 809	5 066		1 132		1 132		65
		2007	28 769	13 213	8 251	6 227	0	1 078	0	1 078	0	62
		2008	28 301	13 136	7 903	6 127	0	1 135	0	1 135	0	62
	34 93	2009	26 150	12 497	6 108	5 730	733	1 082	208	1 290	733	67
Bahrain		1990	117									–
		1995	43	17	14	85		0		0		55
		2000	207	23	16	8						59
		2005	280	101	72	107	0	0	0	0	0	58
		2006	278	98	77	103	0	0	0	0	0	56
		2007	296	109	71	114	0	2	0	2	0	61
		2008	304	141	59	104	0	0	0	0	0	71
	24 41	2009	326	131	74	121	0	0	0	0	0	64
Djibouti		1990	2 100									–
		1995										–
		2000	3 971	1 391	518	1 875		184		184		73
		2005	3 109	1 120	739	1 058	0	192	61	253	0	60
		2006	3 011	1 153	400	1 266	0	192	84	276	0	74
		2007	3 195	1 208	329	1 492		166	62	228		79
		2008	3 682	1 375	477	1 669		161	35	196		74
	375 438	2009	3 783	1 377	507	1 710	0	189	21	210	0	73
Egypt		1990	2 142									–
		1995	11 145	4 229	9 204	4 684		753		753		31
		2000	10 762	4 606	2 693	2 843		620		620		63
		2005	11 446	5 217	2 617	3 163	0	449	289	738	0	67
		2006	10 046	4 745	2 130	2 726	0	445	354	799		69
		2007	9 841	4 887	1 703	2 869	0	382	203	585	0	74
		2008	9 452	5 102	1 190	2 676	0	484	308	792	0	81
	4 12	2009	9 685	5 201	1 238	2 850	0	396	352	748	0	81
Iran (Islamic Republic of)		1990	9 255									–
		1995	15 936	5 347	6 432	3 779		477		477		45
		2000	11 850	5 361	2 642	3 442		405		405		67
		2005	9 192	4 581	1 807	2 530		274	154	428	20	72
		2006	9 361	4 802	1 866	2 386	0	307	174	481	0	72
		2007	9 316	4 701	1 830	2 515	0	270	174	444	0	72
		2008	9 453	4 722	1 865	2 569	0	297	126	423	0	72
	16 14	2009	10 097	5 152	1 926	2 685	0	334	439	773	0	73
Iraq		1990	14 735	1 587	12 394	754						11
		1995	9 697	3 194	13 962	1 367		68		68		19
		2000	9 697	3 194	3 188	2 753		562		562		50
		2005	9 454	3 096	2 887	2 703		768		768		52
		2006	8 043	2 886	2 179	2 375		603		603		57
		2007	7 863	2 726	2 293	2 290	0	554	0	554	0	54
		2008	9 099	3 150	2 727	2 718	0	504	181	685	0	54
	82 31	2009	9 385	3 347	2 666	2 904	0	468	283	751	0	56
Jordan		1990	439									–
		1995	498	187	210	101		6		6		47
		2000	306	89	69	145		3		3		56
		2005	367	86	76	187	12	6	4	10	0	53
		2006	359	104	70	181		4	5	9	17	60
		2007	336	109	70	154	0	3	8	11	0	61
		2008	338	104	68	165	0	1	0	1	18	60
	13 6	2009	367	109	64	190	0	4	16	20	4	63
Kuwait		1990	277									–
		1995	336	175	42	115	0	4	0	4	0	81
		2000	513	180	89	244	0	0	0	0	0	67
		2005	517	187	95	234	0	1	0	1	0	66
		2006	644	284	76	284	0	0	0	0	0	79
		2007	646	274	94	277	0	1	0	1	0	74
		2008	867	345	158	363	0	1	0	1	0	69
	13 31	2009	933	386	155	391	0	1	0	1	0	71
Lebanon		1990										–
		1995	983	197	528	255		3		3		27
		2000	571	202	149	214		6		6		58
		2005	391	131	75	181	0	4	0	4	0	64
		2006	375	112	88	167	0	8	0	8	0	56
		2007	476	143	118	212	0	3	0	3	0	55
		2008	523	158	123	231	0	11	0	11	0	56
	– 12	2009	499	179	94	218	0	8	2	10	0	66
Libyan Arab Jamahiriya		1990	442									–
		1995	1 440		626	814						–
		2000	1 341	607	82	652						88
		2005	2 098	860	474	762		2	269	271		64
		2006	2 022	745	473	804			252	252		61
		2007	2 119	772	523	824		0	0	0		60
		2008	2 010	871	390	749	0					69
	10 33	2009	2 096	936	455	696	0	9	14	23	0	67
Morocco		1990	27 658									–
		1995	29 829	14 171	4 095	11 563						78
		2000	28 852	12 872	2 934	13 046						81
		2005	26 269	12 757	2 142	11 370	0					86
		2006	26 099	12 280	2 055	11 764						86
		2007	25 562	11 937	2 059	11 566	0					85
		2008	26 838	11 825	2 002	11 646	0	1 365	281	1 646	0	86
	111 85	2009	27 348	11 907	2 021	12 131	0	1 289	316	1 605	0	85
Oman		1990	482									–
		1995	276	135	60	81		0		0		69
		2000	321	164	37	112		8		8		82
		2005	261	131	37	89		4		4		78
		2006	339	184	42	108		5	0	5		81
		2007	328	187	33	102	0	6	0	6	0	85
		2008	350	171	48	129	0	2	2	4	0	78
	26 12	2009	332	164	36	127	0	5	2	7	0	82
Pakistan		1990	156 759									–
		1995	13 142	2 578	3 806	3 037		184		184		40
		2000	11 050	3 285	5 578	1 846		341		341		37
		2005	142 211	48 319	68 429	22 792	0	2 671	2 758	5 429		41
		2006	176 678	65 253	82 519	25 745	0	3 161	2 389	5 550		44
		2007	230 468	88 747	103 629	33 986	0	4 106	3 632	7 738	0	46
		2008	245 635	100 102	106 207	34 386		4 940	3 043	7 983		49
	135 175	2009	316 864	111 087	156 364	43 416		5 997	3 203	9 200		42

[a] Rates are per 100 000 population. Where notification data from a country had not been received by 31 August, the notification rate was assumed to be the same as for 2008 (in italics).

Data can be downloaded from www.who.int/tb/data

TABLE A2.3 **Case notifications, 1990–2009**

	NEW AND RELAPSE NOTIFICATION RATE[a] 1990–2009	YEAR	NEW AND RELAPSE[a]	NEW CASES				RELAPSE	RE-TREAT EXCL. RELAPSE	TOTAL RETREAT	HISTORY UNKNOWN	% SMEAR-POS AMONG NEW PULM
				SMEAR-POSITIVE	SMEAR-NEGATIVE/ UNKNOWN	EXTRA-PULMONARY	OTHER					
Qatar		1990	184									–
		1995	304	60	135	109		1		1		31
		2000	279	53	98	128		0		0		35
		2005	325	96	73	156		0	0	0		57
		2006	339	115	76	148						60
		2007	399	116	75	208	0	0	0	0		61
	39 44	2008	567	201	112	254	0	0	0	0	0	64
		2009	619	220	102	297	0	0	0	0	0	68
Saudi Arabia		1990	2 415									–
		1995										–
		2000	3 452	1 595	722	1 023		112		112		69
		2005	3 539	1 722	545	1 067	0	205		205		76
		2006	3 774	1 914	663	1 096	0	101		101		74
		2007	3 955	1 984	582	1 297		92	58	150		77
		2008	4 025	2 108	545	1 266		106	39	145		79
	15 16	2009	4 043	2 201	578	1 170		94	50	144		79
Somalia		1990										–
		1995	2 504	1 572	692	318		134		134		69
		2000	5 686	3 776	837	722		351		351		82
		2005	12 904	7 068	3 168	2 258	0	410	102	512	0	69
		2006	11 864	6 861	2 479	2 034	0	490	40	530	0	73
		2007	11 130	6 130	2 490	2 013	0	497	0	497	0	71
		2008	12 481	6 520	2 983	2 357	0	621	0	621	0	69
	– 121	2009	11 075	6 047	2 604	1 965	0	459	196	655	0	70
Sudan		1990	212									–
		1995	14 320	8 761	2 655	1 675		474		474		77
		2000	24 807	12 311	6 512	3 843		2 141		2 141		65
		2005	27 562	12 730	9 212	5 434	0	186	1 616	1 802		58
		2006	28 937	12 194	9 801	4 966	0	1 976	82	2 058	0	55
		2007	29 270	12 627	9 486	5 171	0	1 986	109	2 095	0	57
		2008	24 281	10 800	7 849	4 715	0	917	1 163	2 080	0	58
	1 62	2009	26 001	10 541	8 897	5 530	76	957	1 036	1 993		54
Syrian Arab Republic		1990	6 018									–
		1995	4 404	1 295	1 507	1 574		28		28		46
		2000	5 090	1 584	1 409	2 000		97		97		53
		2005	4 310	1 350	796	2 103	0	61	83	144		63
		2006	3 931	1 352	563	1 950	0	66	94	160	0	71
		2007	4 087	1 155	706	2 169	0	57	91	148	131	62
		2008	3 724	1 116	667	1 888	0	53	214	267	0	63
	47 18	2009	4 050	1 143	796	2 036	0	75	101	176	0	59
Tunisia		1990	2 054									–
		1995	2 383	1 243	407	733						75
		2000	2 038	1 099	179	727		61		61		86
		2005	2 079	915	239	874		51		51		79
		2006	2 131	922	261	912		36		36		78
		2007	2 282	941	305	1 009	0	27		27		76
		2008	2 280	1 005	355	882		38		38		74
	25 21	2009	2 155	931	232	950		42		42		80
United Arab Emirates		1990	285									–
		1995										–
		2000	115	73	3	41		0		0		96
		2005	103	62	12	25	0	4	2	6	0	84
		2006	90	52	18	16	0	4	0	4	0	74
		2007	97	56	20	16	0	5	0	5	0	74
		2008	93	50	17	25	0	1	0	1	0	75
	15 3	2009	116	71	15	30	0	0	0	0	0	83
West Bank and Gaza Strip		1990	64									–
		1995	77	9	58	10						13
		2000	82	37								–
		2005	28	7	6	15						54
		2006	42	16	7	19	0	0	0	0	0	70
		2007	33	13	2	18	0	0	1	1	0	87
		2008	40	16	3	21	0	0	1	1	0	84
	3 1	2009	35	10	9	15	0	1	1	2	0	53
Yemen		1990	4 650	0								–
		1995	14 428	3 681	7 390	3 082		275		275		33
		2000	13 651	5 565	4 176	3 470		440		440		57
		2005	9 063	3 379	2 780	2 553		351		351		55
		2006	8 468	3 342	2 386	2 429	0	311		311		58
		2007	8 427	3 537	2 196	2 369	0	325	0	325	0	62
		2008	8 290	3 540	2 032	2 307	0	411		411		64
	38 36	2009	8 562	3 576	2 108	2 564	0	314	0	314	0	63

[a] Rates are per 100 000 population. Where notification data from a country had not been received by 31 August, the notification rate was assumed to be the same as for 2008 (in italics).

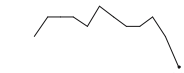
TABLE A2.4 **Treatment outcomes, new smear-positive cases, 1995–2008**

	TREATMENT SUCCESS (%)[a] 1995–2008	YEAR	NUMBER NOTIFIED	SIZE OF COHORT	COHORT AS % NOTIFIED	% OF COHORT					
						CURED	COMPLETED	DIED	FAILED	DEFAULTED	NOT EVALUATED
Afghanistan		1995			–						
		2000	2 892	3 136	108	76	9	3	3	6	2
		2005	9 949	10 013	101	83	7	2	1	2	5
		2006	12 468	12 468	100	80	5	2	1	2	10
		2007	13 213	13 213	100	82	5	2	1	2	8
–	88	2008	13 136	13 136	100	83	5	2	1	2	7
Bahrain		1995	17		–						
		2000	23	22	96	73	0	27	0	0	0
		2005	101	15	15	93	0	7	0	0	0
		2006	98	14	14	86	0	14	0	0	0
		2007	109	160	147	14	0	4	0	0	82
–	8	2008	141	142	101	8	0	1	0	0	90
Djibouti		1995		1 751	–	60	16	3	1	20	1
		2000	1 391	1 391	100	48	14	2	1	21	14
		2005	1 120	1 120	100	71	9	1	1	16	2
		2006	1 153	1 143	99	70	8	1	1	16	4
		2007	1 208	1 205	100	72	9	1	1	14	2
75	84	2008	1 375	1 375	100	78	6	1	0	13	2
Egypt		1995	4 229	2 118	50	38	24	2	3	19	14
		2000	4 606	4 611	100	75	12	3	2	5	3
		2005	5 217	5 154	99	66	13	3	2	3	13
		2006	4 745	4 745	100	71	16	3	3	3	3
		2007	4 887	4 887	100	72	16	3	2	3	3
62	89	2008	5 102	5 101	100	69	20	3	3	3	3
Iran (Islamic Republic of)		1995	5 347		–						
		2000	5 361	5 866	109	81	4	6	2	3	3
		2005	4 581	4 581	100	78	5	7	3	3	4
		2006	4 802	4 923	103	77	6	7	3	3	4
		2007	4 701	4 707	100	76	6	8	2	3	5
–	83	2008	4 722	4 824	102	78	6	8	3	2	3
Iraq		1995	3 194	11 553	362	60	20	0	5	10	5
		2000	3 194	3 194	100	86	5	3	2	3	1
		2005	3 096	3 096	100	76	10	3	2	7	3
		2006	2 886	2 886	100	77	8	2	3	9	2
		2007	2 726	2 726	100	78	8	2	2	8	2
80	88	2008	3 150	3 150	100	79	9	3	2	6	1
Jordan		1995	187	193	103	91	1	3	1	2	3
		2000	89	89	100	89	1	2	1	4	2
		2005	86	86	100	71	12	5	7	6	0
		2006	104	104	100	58	13	8	4	17	0
		2007	109	109	100	66	11	5	0	9	9
92	84	2008	104	104	100	73	11	3	1	4	9
Kuwait		1995	175	175	100	40	31	3	0	1	25
		2000	180	180	100	54	15	1	0	9	21
		2005	187	187	100	53	10	1	0	7	29
		2006	284	284	100	45	33	0	0	5	16
		2007	274	274	100	41	38	0	0	7	14
71	80	2008	345	345	100	43	37	0	0	7	12
Lebanon		1995	197	200	102	35	56	0	0	10	0
		2000	202	190	94	89	3	4	1	3	1
		2005	131	131	100	81	11	2	1	6	0
		2006	112	112	100	83	7	4	0	5	1
		2007	143	143	100	78	12	1	1	4	4
91	77	2008	158	158	100	63	13	3	1	2	18
Libyan Arab Jamahiriya		1995		626	–	65	0	1	1	33	0
		2000	607		–						
		2005	860	860	100	40	29	2	0	27	2
		2006	745	745	100	45	32	1	0	20	3
		2007	772	772	100	43	24	2	0	27	4
65	69	2008	871	872	100	52	17	3	1	24	4
Morocco		1995	14 171	14 171	100	75	14	2	1	7	1
		2000	12 872	12 872	100	82	7	3	1	7	1
		2005	12 757	12 683	99	76	5	2	1	9	7
		2006	12 280	12 280	100	80	7	2	1	9	1
		2007	11 937	11 937	100	78	8	2	1	10	1
90	85	2008	11 825	11 956	101	79	7	2	1	10	1
Oman		1995	135	93	69	84	0	9	1	1	5
		2000	164	112	68	93	0	4	3	0	0
		2005	131	104	79	90		10			0
		2006	184	118	64	86	0	12	0	0	2
		2007	187	187	100	91	0	9	0	0	0
84	98	2008	171	171	100	96	2	2	0	0	0
Pakistan		1995	2 578	802	31	51	20	4	1	20	4
		2000	3 285	4 074	124	58	16	4	1	17	4
		2005	48 319	48 205	100	71	13	3	1	9	4
		2006	65 253	65 589	101	75	13	3	1	6	2
		2007	88 747	88 502	100	77	14	2	1	4	2
70	90	2008	100 102	100 103	100	74	16	2	1	5	3
Qatar		1995	60	43	72	81	0	5	0	0	14
		2000	53	53	100	66	0	8	0	0	26
		2005	96	96	100	74	9	1	0	0	16
		2006	115	115	100	62	7	1	0	0	30
		2007	116	116	100	60	7	0	0	1	32
81	73	2008	201	201	100	60	13	1	0	0	26
Saudi Arabia		1995			–						
		2000	1 595	1 285	81	62	11	7	0	13	6
		2005	1 722	1 722	100	60	5	7	1	10	17
		2006	1 914	1 863	97	62	7	6	1	7	17
		2007	1 984	1 920	97	59	8	6	1	13	12
–	61	2008	2 108	2 104	100	54	6	6	2	8	24
Somalia		1995	1 572	1 278	81	82	4	4	5	5	0
		2000	3 776	3 776	100	81	2	4	2	3	9
		2005	7 068	7 059	100	85	4	4	1	4	2
		2006	6 861	6 861	100	86	3	3	1	4	3
		2007	6 130	6 150	100	82	4	4	2	3	5
86	81	2008	6 520	6 520	100	78	3	3	2	3	11
Sudan		1995	8 761	8 326	95	44	35	2	7	11	1
		2000	12 311	14 599	119	50	25	4	2	9	11
		2005	12 730	12 730	100	64	18	3	1	9	5
		2006	12 194	12 150	100	67	14	2	1	7	8
		2007	12 627	12 958	103	60	18	3	1	7	11
79	81	2008	10 800	10 766	100	62	20	3	1	10	5

[a] TREATMENT SUCCESS = percent cured + percent completed then rounded to the nearest digit.

Data can be downloaded from www.who.int/tb/data

TABLE A2.4 **Treatment outcomes, new smear-positive cases, 1995–2008**

	TREATMENT SUCCESS (%)[a] 1995–2008	YEAR	NUMBER NOTIFIED	SIZE OF COHORT	COHORT AS % NOTIFIED	% OF COHORT					
						CURED	COMPLETED	DIED	FAILED	DEFAULTED	NOT EVALUATED
Syrian Arab Republic	 61 86	1995	1 295	1 295	100	45	16	2	9	24	5
		2000	1 584	1 562	99	69	10	4	3	11	4
		2005	1 350	1 350	100	76	13	3	2	6	1
		2006	1 352	1 352	100	74	13	3	2	7	2
		2007	1 155	1 155	100	76	13	3	1	6	2
		2008	1 116	1 115	100	86		3	2	6	2
Tunisia	 – 86	1995	1 243		–						
		2000	1 099	1 099	100	87	4	3	2	2	2
		2005	915	910	99	83	7	2	1	2	4
		2006	922	901	98	84	7	3	1	3	2
		2007	941	941	100	74	15	3	1	2	4
		2008	1 005	967	96	76	10	3	1	2	8
United Arab Emirates	 – 68	1995			–						
		2000	73	73	100	56	18	7	4	5	10
		2005	62	62	100	42	31	6	0	15	6
		2006	52	52	100	44	35	4	2	15	0
		2007	56	59	105	20	44	12	3	20	0
		2008	50	53	106	25	43	9	0	23	0
West Bank and Gaza Strip	 100 94	1995	9	13	144	100					0
		2000	37		–						
		2005	7	12	171	58	42	0	0	0	0
		2006	16	16	100	50	44	6	0	0	0
		2007	13	14	108	50	43	0	7	0	0
		2008	16	16	100	38	56	0	0	6	0
Yemen	 52 85	1995	3 681	3 681	100	43	9	1	1	35	11
		2000	5 565	5 565	100	59	13	3	1	14	10
		2005	3 379	3 566	106	69	11	3	1	6	10
		2006	3 342	3 337	100	74	9	3	2	7	5
		2007	3 537	3 523	100	75	9	3	1	5	6
		2008	3 540	3 540	100	75	9	3	1	5	7

[a] TREATMENT SUCCESS = percent cured + percent completed then rounded to the nearest digit.

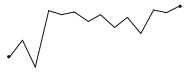
TABLE A2.5 **Treatment outcomes, retreatment cases, 1995–2008**

	TREATMENT SUCCESS (%)[a] 1995–2008	YEAR	NUMBER NOTIFIED	SIZE OF COHORT	COHORT AS % NOTIFIED	% OF COHORT					
						CURED	COMPLETED	DIED	FAILED	DEFAULTED	NOT EVALUATED
Afghanistan		1995			–						
		2000	237	304	128	73	5	4	4	11	3
		2005	856	856	100	87	2	3	1	2	5
		2006	1 132	1 132	100	74	5	3	2	2	14
		2007	1 078	1 078	100	80	3	4	2	2	9
–	–	2008	1 135		–						
Bahrain		1995	0		–						
		2000			–						
		2005	0		–						
		2006	0		–						
		2007	2	0	0	–	–	–	–	–	–
–	–	2008	0	0	–	–	–	–	–	–	–
Djibouti		1995			–						
		2000	184	268	146	27	9	0	3	22	37
		2005	253	253	100	58	10	3	2	24	2
		2006	276	276	100	59	10	4	4	20	3
		2007	228	192	84	56	11	2	3	23	5
–	76	2008	196	196	100	66	9	3	2	14	6
Egypt		1995	753		–						
		2000	620	956	154	52	11	7	12	13	5
		2005	738	738	100	41	17	10	12	8	12
		2006	799	799	100	47	22	6	12	6	6
		2007	585	585	100	49	16	8	10	8	9
–	71	2008	792	779	98	39	32	8	8	9	4
Iran (Islamic Republic of)		1995	477		–						
		2000	405	606	150	63	13	6	5	6	7
		2005	428	448	105	68	8	9	3	4	8
		2006	481	485	101	66	8	11	3	6	7
		2007	444	447	101	68	9	8	3	5	8
–	72	2008	423	692	164	57	15	8	4	5	11
Iraq		1995	68		–						
		2000	562		–						
		2005	768	953	124	60	12	4	8	12	4
		2006	603	748	124	63	12	2	5	16	2
		2007	554	797	144	58	14	4	4	17	2
–	81	2008	685	685	100	62	18	2	4	11	2
Jordan		1995	6		–						
		2000	3	6	200	83	17	0	0	0	0
		2005	10		–						
		2006	9	26	289	31	46	0	4	15	4
		2007	11	3	27	0	67	33	0	0	0
–	75	2008	1	12	1 200	8	67	0	8	17	0
Kuwait		1995	4		–						
		2000	0		–						
		2005	1	1	100	0	100	0	0	0	0
		2006	0	0	–	–	–	–	–	–	–
		2007	1	1	100	0	100	0	0	0	0
–	100	2008	1	1	100	0	100	0	0	0	0
Lebanon		1995	3		–						
		2000	6	5	83	80					20
		2005	4	4	100	75	25	0	0	0	0
		2006	8	8	100	63	38	0	0	0	0
		2007	3	3	100	67	33	0	0	0	0
–	64	2008	11	11	100	55	9	27	0	0	9
Libyan Arab Jamahiriya		1995			–						
		2000			–						
		2005	271		–						
		2006	252		–						
		2007	0	0	–	–	–	–	–	–	–
–	38	2008		32	–	6	31	0	0	63	0
Morocco		1995		1 469	–	65	12	4	4	10	7
		2000			–						
		2005		1 650	–	55	17	4	5	14	5
		2006		1 732	–	54	18	3	3	16	5
		2007		1 421	–	65	8	4	3	14	6
76	73	2008	1 646	1 535	93	65	8	4	5	18	1
Oman		1995	0		–						
		2000	8	7	88	86	0	0	14	0	0
		2005	4		–						
		2006	5	5	100	100	0	0	0	0	0
		2007	6	6	100	100	0	0	0	0	0
–	100	2008	4	4	100	50	50	0	0	0	0
Pakistan		1995	184	374	203	48	22	2	5	24	0
		2000	341	907	266	37	17	6	3	29	8
		2005	5 429	5 009	92	61	15	5	3	11	5
		2006	5 550	5 566	100	59	18	4	3	11	4
		2007	7 738	7 184	93	61	18	4	3	11	3
70	79	2008	7 983	7 685	96	62	17	5	3	10	4
Qatar		1995	1	3	300	67	0	0	0	0	33
		2000	0		–						
		2005	0		–						
		2006			–						
		2007	0	0	–	–	–	–	–	–	–
67	–	2008	0	0	–	–	–	–	–	–	–
Saudi Arabia		1995			–						
		2000	112	139	124	43	15	7	3	13	19
		2005	205	96	47	40	9	9	5	18	19
		2006	101	101	100	53	10	6	1	14	16
		2007	150	133	89	46	16	6	3	27	2
–	44	2008	145	141	97	34	10	5	4	16	31
Somalia		1995	134		–						
		2000	351	351	100	53	1	5	5	3	34
		2005	512	524	102	76	5	6	2	5	6
		2006	530	534	101	73	5	9	4	7	2
		2007	497	0	0	–	–	–	–	–	–
–	52	2008	621	621	100	48	4	5	2	3	38
Sudan		1995	474		–						
		2000	2 141		–						
		2005	1 802	1 828	101	53	29	3	1	9	6
		2006	2 058	2 043	99	52	28	1	0	7	11
		2007	2 095	1 914	91	50	30	3	0	6	11
–	75	2008	2 080	1 953	94	39	35	2	1	14	8

[a] TREATMENT SUCCESS = percent cured + percent completed then rounded to the nearest digit.

Data can be downloaded from www.who.int/tb/data

TABLE A2.5 **Treatment outcomes, retreatment cases, 1995–2008**

	TREATMENT SUCCESS (%)[a] 1995–2008	YEAR	NUMBER NOTIFIED	SIZE OF COHORT	COHORT AS % NOTIFIED	% OF COHORT					
						CURED	COMPLETED	DIED	FAILED	DEFAULTED	NOT EVALUATED
Syrian Arab Republic		1995	28		–						
		2000	97	189	195	44	10	4	20	15	7
		2005	144	144	100	53	14	5	9	19	0
		2006	160	279	174	28	43	5	4	18	2
		2007	148	279	189	25	47	5	8	13	3
	– 76	2008	267	266	100	26	51	5	5	12	3
Tunisia		1995			–						
		2000	61	42	69	74	0	5	2	10	10
		2005	51		–						
		2006	36		–						
		2007	27		–						
	– –	2008	38		–						
United Arab Emirates		1995			–						
		2000	0		–						
		2005	6	5	83	80	0	0	0	20	0
		2006	4	4	100	25	50	25	0	0	0
		2007	5	5	100	40	0	0	20	20	20
	– 100	2008	1	1	100	100	0	0	0	0	0
West Bank and Gaza Strip		1995			–						
		2000			–						
		2005		0	–	–	–	–	–	–	–
		2006	0	0	–	–	–	–	–	–	–
		2007	1	0	0	–	–	–	–	–	–
	– –	2008	1	0	0	–	–	–	–	–	–
Yemen		1995	275	14	5	29	14	21	14	14	7
		2000	440	437	99	64	8	7	6	11	4
		2005	351	351	100	48	9	2	3	7	30
		2006	311	301	97	66	7	5	3	5	13
		2007	325	324	100	64	7	4	3	7	15
	43 76	2008	411	376	91	66	9	3	3	9	10

[a] TREATMENT SUCCESS = percent cured + percent completed then rounded to the nearest digit.

TABLE A.6 **HIV testing and provision of CPT, ART and IPT, 2005–2009**

	% OF TB PATIENTS WITH KNOWN HIV STATUS 2005–2009	YEAR	% OF TB PATIENTS WITH KNOWN HIV STATUS	NUMBER OF TB PATIENTS WITH KNOWN HIV STATUS	PATIENTS NOTIFIED (NEW AND RETREAT)[a]	NUMBER OF HIV-POSITIVE TB PATIENTS	% OF TESTED TB PATIENTS HIV-POSITIVE	% OF HIV-POSITIVE TB PATIENTS ON CPT	% OF HIV-POSITIVE TB PATIENTS ON ART	NUMBER OF HIV-POSITIVE PEOPLE PROVIDED IPT
Afghanistan		2005	–		21 844		–	–	–	
		2006	–		25 475		–	–	–	
		2007	0	0	28 769	0	–	–	–	0
		2008	0	0	28 301	0	–	–	–	
	– 4	2009	4	1 175	27 091	5	0	–	100	
Bahrain		2005	46	128	280	6	5	0	0	
		2006	60	167	278	7	4	0	0	0
		2007	69	203	296	7	3	0	–	
		2008	72	218	304	7	3	0	14	0
	46 79	2009	79	256	326	9	4	0	11	
Djibouti		2005	7	224	3 170	135	60	15	15	0
		2006	–		3 095		–	–	–	0
		2007	12	396	3 257	54	14	–	–	
		2008	44	1 638	3 717	191	12	85	29	0
	7 55	2009	55	2 091	3 804	207	10	–	23	
Egypt		2005	–		11 735		–	–	–	
		2006	3	361	10 400	12	3	100	100	
		2007	5	482	10 044	9	2	100	100	0
		2008	5	521	9 760	9	2	100	100	0
	– 32	2009	32	3 204	10 037	11	0	100	100	1
Iran (Islamic Republic of)		2005	–		9 366		–	–	–	
		2006	11	1 087	9 535	210	19	4	2	
		2007	7	700	9 490	181	26	13	18	
		2008	7	670	9 579	213	32	8	13	443
	– 7	2009	7	700	10 536	223	32	13	21	418
Iraq		2005	–		9 454		–	–	–	
		2006	–		8 043		–	–	–	
		2007	0	0	7 863	0	–	–	–	0
		2008	49	4 513	9 280	1	0	100	0	45
	– 63	2009	63	6 121	9 668	1	0	100	0	0
Jordan		2005	23	86	371	0	0	–	–	
		2006	27	104	381	0	0	–	–	
		2007	32	109	344	1	1	100	100	0
		2008	29	104	356	0	0	–	–	0
	23 100	2009	100	387	387	0	0	–	–	2
Kuwait		2005	100	517	517	3	1	100	100	
		2006	100	644	644	2	0	100	100	
		2007	100	647	646	2	0	100	100	0
		2008	100	867	867	2	0	100	100	0
	100 100	2009	100	933	933	4	0	100	100	0
Lebanon		2005	1	3	391	3	100	–	–	
		2006	1	5	375	5	100	0	–	0
		2007	24	113	476	3	3	100	100	0
		2008	28	144	523	10	7	100	100	5
	1 59	2009	59	298	501	25	8	100	100	19
Libyan Arab Jamahiriya		2005	–		2 367		–	–	–	
		2006	–		2 274		–	–	–	
		2007	5	116	2 119	116	100	–	100	116
		2008	48	970	2 010	174	18	–	–	144
	– 45	2009	45	950	2 110	144	15	–	–	
Morocco		2005	–		26 269		–	–	–	
		2006	–		26 099		–	–	–	
		2007	0	0	25 562		–	–	–	
		2008	5	1 254	27 119	21	2	–	–	
	– 0	2009	0	77	27 664	0	0	–	–	0
Oman		2005	98	257	261	10	4	100	100	
		2006	99	334	339	10	3	100	100	50
		2007	100	328	328	14	4	100	100	5
		2008	100	352	352	8	2	100	100	
	98 100	2009	100	334	334	3	1	100	100	0
Pakistan		2005	0	0	144 969	0	–	–	–	
		2006	–		179 067		–	–	–	
		2007	0	0	234 100	0	–	–	–	
		2008	3	8 450	248 678	17	0	100	100	0
	0 1	2009	1	4 714	320 067	7	0	100	100	0
Qatar		2005	100	325	325		–	–	–	
		2006	100	339	339	0	0	–	–	0
		2007	100	399	399	1	0	100	100	1
		2008	100	567	567	1	0	100	100	2
	100 100	2009	100	619	619	0	0	–	–	0
Saudi Arabia		2005	–		3 539		–	–	–	
		2006	–		3 774		–	–	–	
		2007	–		4 013	28	–	100	100	
		2008	–		4 064	31	–	100	100	12
	– 47	2009	47	1 929	4 093	49	3	–	–	
Somalia		2005	3	375	13 006	21	6	38	–	
		2006	–		11 904		–	–	–	0
		2007	–		11 130		–	–	–	0
		2008	–		12 481		–	–	–	0
	3 6	2009	6	698	11 271	96	14	93	7	0
Sudan		2005	1	180	29 178	150	83	10	10	
		2006	1	189	29 019	20	11	100	–	0
		2007	2	514	29 379	98	19	60	39	0
		2008	14	3 680	25 444	471	13	32	52	0
	1 60	2009	60	16 168	27 037	692	4	43	54	
Syrian Arab Republic		2005	8	345	4 393	0	0	–	–	
		2006	7	267	4 025	0	0	–	–	0
		2007	7	285	4 309	1	0	0	100	0
		2008	5	203	3 938	0	0	–	–	0
	8 –	2009	–		4 151		–	–	–	
Tunisia		2005	6	129	2 079	2	2	100	100	
		2006	5	112	2 131	3	3	167	100	29
		2007	4	98	2 282	7	7	0	100	19
		2008	4	89	2 280	2	2	0	100	51
	6 6	2009	6	130	2 155	2	2	0	100	24
United Arab Emirates		2005	–		105		–	–	–	
		2006	–		90		–	–	–	
		2007	–		97		–	–	–	
		2008	–		93		–	–	–	
	– –	2009	–		116		–	–	–	
West Bank and Gaza Strip		2005	46	13	28	0	0	–	–	
		2006	100	42	42	0	0	–	–	0
		2007	100	34	34	0	0	–	–	
		2008	98	40	41	0	0	–	–	0
	46 97	2009	97	35	36	0	0	–	–	0
Yemen		2005	–		9 063		–	–	–	
		2006	0	6	8 468	6	100	–	–	
		2007	0	0	8 427	0	–	–	–	0
		2008	–		8 290		–	–	–	0
	– –	2009	–		8 562		–	–	–	

[a] Data presented as of 31 August 2010. Notification data for European Union countries were not available.

Data can be downloaded from www.who.int/tb/data

TABLE A2.7 **Testing for MDR-TB and number of confirmed cases of MDR-TB, 2005–2009**

			NEW CASES				PREVIOUSLY TREATED CASES			
	YEAR	TOTAL CONFIRMED CASES OF MDR-TB[a]	NOTIFIED	NUMBER OF NOTIFIED TESTED FOR MDR-TB	% OF NOTIFIED TESTED FOR MDR-TB	NUMBER OF CONFIRMED CASES OF MDR-TB	NOTIFIED	NUMBER OF NOTIFIED TESTED FOR MDR-TB	% OF NOTIFIED TESTED FOR MDR-TB	NUMBER OF CONFIRMED CASES OF MDR-TB
Afghanistan	2005		20 988		–		856		–	
	2006		24 343		–		1 132		–	
	2007	0	27 691	0	0	0	1 078	0	0	0
	2008	0	27 166	0	0	0	1 135	0	0	0
	2009		25 068		–		1 290		–	
Bahrain	2005	1	280	2	1	2	0	0	–	2
	2006	2	278	2	1	2	0	0	–	
	2007		294		–		2		–	
	2008	0	304	24	8	0	0	0	–	0
	2009	0	326	42	13	0	0	0	–	0
Djibouti	2005	39	2 917	0	0	0	253	0	0	0
	2006		2 819		–		276		–	
	2007		3 029	0	0		228	0	0	
	2008		3 521	0	0		196	0	0	
	2009		3 594		–		210		–	
Egypt	2005		10 997		–		738		–	
	2006	119	9 601	44	0	7	799	168	21	112
	2007	277	9 459	393	4	8	585	506	86	269
	2008	96	8 968	42	0	7	792	792	100	89
	2009	204	9 289	60	1	10	748	775	104	190
Iran (Islamic Republic of)	2005	27	8 918	205	2	7	428	41	10	15
	2006	28	9 054	432	5	4	481	90	19	24
	2007	43	9 046	386	4	4	444	144	32	39
	2008	19	9 156	208	2	3	423	90	21	16
	2009		9 763		–		773		–	
Iraq	2005		8 686		–		768		–	
	2006	20	7 440		–		603		–	
	2007	9	7 309	0	0	0	554	34	6	9
	2008	63	8 595	0	0	0	685	173	25	63
	2009	72	8 917	0	0	0	751	163	22	72
Jordan	2005	19	361	98	27	9	10	33	330	10
	2006	14	355	72	20	3	9	16	178	11
	2007	5	333	70	21	1	11	33	300	4
	2008	6	337	58	17	5	1	4	400	1
	2009	8	363	95	26	6	20	7	35	2
Kuwait	2005	6	516	516	100	6	1	1	100	0
	2006	10	644	644	100	10	0	0	–	0
	2007	8	645	645	100	7	1	1	100	1
	2008	8	866	866	100	8	1	1	100	0
	2009	9	932	427	46	9	1	1	100	0
Lebanon	2005	3	387	48	12	0	4	4	100	2
	2006	3	367	6	2	1	8	19	238	3
	2007	2	473	8	2	0	3	11	367	2
	2008	3	512	7	1	0	11	11	100	3
	2009	4	491	14	3	1	10	10	100	3
Libyan Arab Jamahiriya	2005	8	2 096	4	0	4	271		–	4
	2006		2 022		–		252		–	
	2007	1	2 119	1	0	1	0		–	
	2008		2 010	4	0	4		7	–	3
	2009		2 087		–		23		–	
Morocco	2005	180	26 269	180	1				–	
	2006		26 099		–				–	
	2007	59	25 562	52	0	39		24	–	9
	2008	143	25 473	140	1	9	1 646	305	19	57
	2009		26 059		–		1 605		–	
Oman	2005	5	257		–	5	4		–	
	2006	2	334	2	1	2	5	0	0	0
	2007	5	322	141	44	3	6	15	250	2
	2008	4	348	139	40	3	4	4	100	1
	2009	5	327	248	76	4	7	7	100	1
Pakistan	2005	0	139 540	0	0	0	5 429	0	0	0
	2006		173 517		–		5 550		–	
	2007	0	226 362	0	0	0	7 738	0	0	0
	2008	40	240 695	2	0	2	7 983	38	0	38
	2009	49	310 867	5	0	5	9 200	60	1	43
Qatar	2005	2	325	264	81	2	0	0	–	0
	2006	1	339	193	57	1		0	–	0
	2007		399	399	100		0		–	
	2008	5	567	440	78	5	0	0	–	0
	2009	3	619	322	52	3	0	0	–	0
Saudi Arabia	2005		3 334		–		205		–	
	2006		3 673		–		101		–	
	2007		3 863		–		150		–	
	2008	21	3 919		–		145		–	
	2009		3 949		–		144		–	
Somalia	2005		12 494		–		512		–	
	2006		11 374		–		530		–	
	2007	0	10 633	0	0	0	497	0	0	0
	2008	0	11 860	0	0	0	621	0	0	0
	2009		10 616		–		655		–	
Sudan	2005	45	27 376		–		1 802	4	0	4
	2006		26 961		–		2 058		–	
	2007	51	27 284	43	0	21	2 095	135	6	30
	2008	70	23 364	93	0	36	2 080	65	3	34
	2009	94	25 044	125	0	35	1 993	207	10	59
Syrian Arab Republic	2005	7	4 249	0	0	0	144	0	0	0
	2006	14	3 865	0	0	0	160	20	13	8
	2007	12	4 030	4	0	2	148	22	15	10
	2008	31	3 671	0	0	0	267	0	0	0
	2009	14	3 975		–		176	14	8	14
Tunisia	2005		2 028		–		51		–	
	2006	10	2 095		–	8	36		–	
	2007	12	2 255		–		27		–	
	2008	36	2 242		–	8	38		–	28
	2009	21	2 113	380	18	5	42		–	
United Arab Emirates	2005	2	99		–		6		–	4
	2006	0	86		–		4		–	
	2007	1	92		–		5		–	1
	2008	1	92		–	1	1	1	100	0
	2009		116		–		0		–	
West Bank and Gaza Strip	2005		28		–				–	
	2006	0	42	0	0	0	0	0	–	0
	2007	0	33	0	0	0	1	0	0	0
	2008	0	40	0	0	0	1	0	0	0
	2009	0	34	0	0	0	2	0	0	0
Yemen	2005	1	8 712		–		351		–	
	2006	21	8 157	510	6	15	311	53	17	6
	2007	1	8 102	74	1	1	325	13	4	1
	2008	1	7 879	66	1	1	411	56	14	1
	2009	13	8 248	42	1	2	314	30	10	11

[a] TOTAL CONFIRMED CASES OF MDR-TB includes cases with unknown previous treatment history (i.e. not included under NEW CASES or PREVIOUSLY TREATED CASES).

TABLE A2.8 **New smear-positive case notification by age and sex, 1995–2009**

		MALE								FEMALE								
	YEAR	0–14	15–24	25–34	35–44	45–54	55–64	65+	UN-KNOWN	0–14	15–24	25–34	35–44	45–54	55–64	65+	UN-KNOWN	MALE/FEMALE RATIO
Afghanistan	1995																	–
	2000	52	228	183	149	129	94	80		93	414	565	339	205	99	36		0.5
	2005	151	606	560	472	453	470	419		320	1 651	1 959	1 302	869	471	246		0.5
	2009	200	906	705	499	491	596	570		439	2 173	2 186	1 541	1 014	764	419		0.5
Bahrain	1995	0	0	1	2	3	1	3		0	1	1	2	0	1	1		1.7
	2000	0	0	3	2	5	3	4		0	1	2	0	1	1	1		2.8
	2005	0	0	0	2	3	0	4		1	1	0	3	1	0	0		1.5
	2009	0	13	37	21	13	7	1	0	0	14	18	3	2	0	2	0	2.4
Djibouti	1995																	–
	2000	17	302	347	139	67	60	42		12	147	156	47	31	17	10		2.3
	2005	18	220	252	119	62	47	29		23	123	117	66	23	13	8		2.0
	2009	18	230	295	183	90	49	24	0	18	139	154	85	52	29	11	0	1.8
Egypt	1995	223	542	665	460	408	463	160		134	288	367	274	256	160	75		1.9
	2000	21	641	827	667	476	307	158		55	457	343	257	211	112	48		2.1
	2005	25	524	606	421	414	243	123		48	431	298	205	218	132	42		1.7
	2009	17	536	599	797	885	417	271	0	10	317	369	456	210	191	126	0	2.1
Iran (Islamic Republic of)	1995	118	751	754	636	494	737	921		234	1 039	890	664	613	685	788		0.9
	2000	29	438	467	387	295	344	642		77	593	410	322	320	407	647		0.9
	2005	16	352	531	338	281	260	630		45	394	205	186	260	382	701		1.1
	2009	15	302	509	305	335	326	753	0	46	455	276	210	273	396	951	0	1.0
Iraq	1995	1 125	862	1 409	1 085	863	900	271		725	304	1 208	915	800	886	200		1.3
	2000	21	627	317	297	205	135	101		37	338	241	136	134	103	87		1.6
	2005	13	424	644	261	245	189	148		44	305	260	151	197	135	80		1.6
	2009	33	377	506	340	263	213	196	0	63	361	294	186	216	158	141	0	1.4
Jordan	1995	0	19	37	17	20	26	11		1	15	4	10	14	12	7		2.1
	2000	0	8	16	13	9	14	2		0	8	9	1	2	2	5		2.3
	2005	0	8	17	9	4	6	5		1	6	6	6	5	8	5		1.3
	2009	1	5	15	14	10	7	6	0	0	7	14	8	3	7	12	0	1.1
Kuwait	1995	0	15	51	32	17	9	0		0	8	24	9	4	4	2		2.4
	2000	0	10	44	32	21	11	5		1	11	24	12	5	3	1		2.2
	2005	0	12	45	29	26	8	3		0	13	31	11	3	1	5		1.9
	2009	0	26	72	67	36	12	8	0	1	39	86	18	10	4	7	0	1.3
Lebanon	1995	3	26	32	30	16	16	10		1	16	18	13	8	5	3		2.1
	2000	5	16	28	20	15	17	14		4	31	26	9	7	4	6		1.3
	2005	0	12	19	15	10	12	8		1	25	14	8	3	3	1		1.4
	2009	1	12	22	13	9	12	7	0	2	28	40	14	2	8	9	0	0.7
Libyan Arab Jamahiriya	1995	2	112	212	78	46	22	21		5	34	31	19	20	13	11		3.7
	2000	5	101	239	86	36	29	32		6	43	35	24	24	16	22		3.1
	2005	2	114	293	168	52	19	35		8	36	36	35	21	21	20		3.9
	2009	4	131	295	180	73	30	23	0	11	54	63	26	10	14	22	0	3.7
Morocco	1995	142	2 508	2 872	1 737	819	573	553		191	1 708	1 288	703	461	317	299		1.9
	2000	99	2 061	2 423	1 705	855	485	595		170	1 530	1 121	672	398	406	352		1.8
	2005	79	2 222	2 515	1 583	1 057	580	591		167	1 330	943	546	403	343	398		2.1
	2009	63	1 960	2 412	1 428	1 140	639	510	0	132	1 195	889	450	410	333	346	0	2.2
Oman	1995	1	7	12	7	7	10	11		2	18	13	5	5	6	3		1.1
	2000	1	8	9	11	12	9	11		2	17	5	7	5	11	6		1.2
	2005	1	21	11	24	15	19	5		2	13	5	3	4	5	3		2.7
	2009	0	28	35	23	13	10	11	0	2	11	14	4	6	1	6	0	2.7
Pakistan	1995	29	274	230	178	140	124	95		85	375	381	267	178	143	79		0.7
	2000	55	498	387	256	232	153	130		130	591	416	274	163	103	56		1.0
	2005	621	5 278	4 759	4 263	3 834	3 332	2 453		1 447	6 463	5 611	3 987	2 866	2 060	1 338		1.0
	2009	1 052	11 090	10 035	8 472	8 366	7 053	5 981		2 595	13 734	10 512	8 174	6 332	4 786	3 492		1.0
Qatar	1995	0	8	12	11	13	4	4		1	2	3	1	0	0	1		6.5
	2000	0	7	19	9	7	2	1		0	0	4	3	1	0	0		5.6
	2005		19	15	17	19	5	1			5	10	2	1	2	0		3.8
	2009	0	41	83	32	16	6	2	0	2	9	18	7	2	1	1	0	4.5
Saudi Arabia	1995																	–
	2000	0	131	268	213	158	86	107		28	172	182	79	51	50	70		1.5
	2005	8	182	276	201	175	70	107		31	205	184	98	73	51	61		1.4
	2009	15	280	386	257	200	129	105		43	260	245	112	61	55	53		1.7
Somalia	1995	46	334	730	201	127	278	109		38	158	139	97	40	25	16		3.6
	2000	113	740	724	408	254	195	142		85	354	319	219	110	72	41		2.1
	2005	125	1 343	1 114	725	458	330	319		169	752	636	436	292	212	157		1.7
	2009	175	1 118	974	585	410	314	305	0	129	560	524	396	231	185	141	0	1.8
Sudan	1995	250	604	796	634	486	362	337		359	490	613	299	403	342	305		1.2
	2000	785	1 028	1 511	1 351	1 119	638	677		817	925	1 134	905	771	327	323		1.4
	2005	425	1 358	1 990	1 541	1 151	724	493		381	1 102	1 203	978	729	411	244		1.5
	2009	288	1 279	1 757	1 281	904	606	477	0	236	806	983	800	557	334	233	0	1.7
Syrian Arab Republic	1995	13	332	255	111	70	59	50		22	158	97	53	44	37	20		2.1
	2000	8	359	289	125	86	76	55		23	195	101	53	46	38	28		2.1
	2005	9	266	237	111	112	62	63		27	182	108	59	59	32	23		1.8
	2009	10	172	212	121	97	74	47	0	17	167	82	41	44	34	25	0	1.8
Tunisia	1995																	–
	2000	16	139	208	156	109	65	101		7	68	59	43	21	21	58		2.9
	2005	5	103	172	133	115	53	81		7	66	61	39	36	16	28		2.6
	2009	6	80	175	122	134	71	81	0	7	52	55	43	42	18	45	0	2.6
United Arab Emirates	1995																	–
	2000	2	4	4	6	5	12	10		3	16	1	3	0	0	4		1.6
	2005																	–
	2009	2	8	9	8	6	4	4	1	0	8	5	2	7	0	6	0	1.5
West Bank and Gaza Strip	1995	1	2	0	0	1	0	3		0	1	0	0	1	0	0		3.5
	2000																	–
	2005		1			1	3					1		1				2.5
	2009	0	1	3	1	0	0	1	0	0	0	0	2	0	1	1	0	1.5
Yemen	1995	57	400	605	256	201	148	45		83	420	720	348	200	106	92		0.9
	2000	110	789	689	493	314	255	127		161	799	627	517	345	247	92		1.0
	2005	48	493	553	366	242	149	78		44	426	410	265	181	85	39		1.3
	2009	32	509	562	359	248	166	121		58	476	437	269	189	90	60		1.3

[a] Data presented as of 31 August 2010. Notification data for countries that are members of the European Union were not available.

Data can be downloaded from www.who.int/tb/data

TABLE A2.9 **Laboratories, NTP services, drug management, human resources and infection control, 2009**

	LABORATORIES					FREE THROUGH NTP		DRUG MANAGEMENT			% OF STAFF TRAINED BY THE NTP (IN 2009)[c]				TB NOTIFICATION RATE PER 100 000 HEALTH-CARE WORKERS
	SMEAR LABS PER 100K POPULATION	CULTURE LABS PER 5M POPULATION	DST LABS PER 10M POPULATION	SECOND-LINE DST AVAILABLE	NRL[a]	TB DIAGNOSIS	FIRST-LINE DRUGS	RIFAMPICIN USED THROUGHOUT TREATMENT	% OF PATIENTS TREATED WITH FDC[b]	PAEDIATRIC FORMULATIONS PROCURED	MEDICAL OFFICERS	NURSES	HEALTH ASSISTANTS	LABORATORY TECHNICIANS	
Afghanistan	2.1			No	Yes	Yes, all suspects	Yes	No	100	No	39	18	30	53	
Bahrain	2.3	12.6	12.6	Out of country	No	Yes, all suspects	Yes	Yes	0	Yes	0	0	0	0	
Djibouti	1.9	5.8	0	Out of country	Yes	Yes, all suspects	Yes	Yes	100	Yes					
Egypt	0.3	1.1	0.1	In country	Yes	If TB is confirmed	Yes	Yes	80	Yes	100	100	100	100	
Iran (Islamic Republic of)	0.5	2.6	0.3	In country	Yes	Yes, all suspects	Yes	Yes	0	Yes					
Iraq	0.4	0.7	0.3	In country	Yes	Yes, all suspects	Yes	Yes	65	Yes	9	0	10	8	5
Jordan	2.5	39.6	1.6	No	Yes	Yes, all suspects	Yes	Yes	80	Yes	100	90	90	100	2
Kuwait	0.4	1.7	3.4	In country	Yes	Yes, all suspects	Yes	Yes	60	Yes	70	70	70	70	12
Lebanon	3.9	3.6	2.4	Out of country	Yes	For smear-positive TB	Yes	Yes	100	Yes	100	100	0	100	0
Libyan Arab Jamahiriya	0.4	2.3	3.1	No	Yes	Yes, all suspects	Yes	Yes	0	Yes					0
Morocco	0.5	2.2	0.6	No	Yes	Yes, all suspects	Yes	Yes	50	Yes					
Oman	6.7	17.6	3.5	In country	Yes	Yes, all suspects	Yes	Yes	90	No	100	100	100	100	0
Pakistan	0.6	0.4	0.6	In country	Yes	Yes, all suspects	Yes	No	100	No	100	100	100	100	
Qatar	<0.1	3.5	7.1	In and out of cty	Yes	Yes, all suspects	Yes	Yes	100	Yes	100	100	100	100	0
Saudi Arabia	1.2	1.9	3.9	No	Yes	Yes, all suspects	Yes	Yes	0	No					
Somalia	0.6	0	0	No	No	If TB is confirmed	Yes	Yes	100	Yes	100	100	100	100	8360
Sudan	0.9	0.1	0.2	No	Yes	Yes, all suspects	Yes	Yes	46	Yes	57	67	93	93	
Syrian Arab Republic	2.5	0.2	0.5	In country	Yes	Yes, all suspects	Yes	No	100	No	56	34	67	35	0
Tunisia	0.6	3.4	4.9	In country	Yes	Yes, all suspects	Yes	Yes	50	No					8
United Arab Emirates				In country			Yes								
West Bank and Gaza Strip	0.1	1.2	0	Out of country	No	Yes, all suspects	Yes	Yes	0	No	0	0	0	0	0
Yemen	1.1	0.8	0.8	No	Yes	Yes, all suspects	Yes	Yes	100	Yes					

a NRL = national reference laboratory
b FDC = fixed-dose combination
c NURSES (Registered Nurses, Registered Midwives, Enrolled Nurses, Enrolled Midwives); HEALTH ASSISTANTS (Medical Assistants, Clinical Officers); LABORATORY TECHNICIANS (Microscopists)

European Region

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Estimates of mortality, prevalence and incidence

Estimated values are shown as best estimates followed by lower and upper bounds. The lower and upper bounds are defined as the 2.5th and 97.5th centiles of outcome distributions produced in simulations. See ANNEX 1 for further details.

Estimated numbers are shown rounded to two significant figures. Estimated rates are shown rounded to three significant figures unless the value is under 100, in which case rates are shown rounded to two significant figures.

Estimates for all years are recalculated as new information becomes available and techniques are refined, so they may differ from those published in previous reports in this series. Estimates published in previous global TB control reports should no longer be used.

Graphs

Graphs where displayed show data from all years within the range stated.

Data source

Data shown in this annex are taken from the WHO global TB database on 31 August 2010. Data shown in the main part of the report were taken from the database on 17 June 2010. As a result, data in this annex may differ slightly from those in the main part of the report.

Data can be downloaded from www.who.int/tb/data.

Country notes

EU countries

Notification data for countries that are members of the European Union were not available on 31 August 2010. These data will be provided on-line when available.

Denmark

Data for Denmark exclude Greenland.

TABLE A2.1 **Estimates of the burden of disease caused by TB, 1990–2009**

			MORTALITY (EXCLUDING HIV)		PREVALENCE (INCLUDING HIV)		INCIDENCE (INCLUDING HIV)	
	YEAR	POPULATION (MILLIONS)	NUMBER (THOUSANDS)	RATE[a]	NUMBER (THOUSANDS)	RATE	NUMBER (THOUSANDS)	RATE
Albania	1990	3	0.029 (<0.01–0.069)	<1 (<1–2.1)	1.1 (0.32–2.2)	34 (9.6–68)	0.8 (0.65–1.2)	24 (20–35)
	1995	3	0.018 (<0.01–0.036)	<1 (<1–1.2)	0.94 (0.26–1.7)	30 (8.4–53)	0.76 (0.64–0.92)	24 (20–29)
	2000	3	0.016 (<0.01–0.033)	<1 (<1–1.1)	0.85 (0.24–1.5)	28 (7.8–49)	0.69 (0.6–0.83)	23 (20–27)
	2005	3	0.016 (<0.01–0.031)	<1 (<1–1)	0.75 (0.23–1.3)	24 (7.4–42)	0.58 (0.51–0.7)	19 (16–22)
	2006	3	0.015 (<0.01–0.029)	<1 (<1–<1)	0.69 (0.21–1.2)	22 (6.8–39)	0.54 (0.47–0.65)	17 (15–21)
	2007	3	0.013 (<0.01–0.026)	<1 (<1–<1)	0.64 (0.19–1.1)	20 (6.1–36)	0.5 (0.44–0.6)	16 (14–19)
	2008	3	0.013 (<0.01–0.025)	<1 (<1–<1)	0.62 (0.19–1.1)	20 (6–35)	0.49 (0.43–0.59)	16 (14–19)
	2009	3	<0.01 (<0.01–0.018)	<1 (<1–<1)	0.55 (0.15–0.97)	17 (4.7–31)	0.46 (0.39–0.54)	15 (12–17)
Andorra	1990	<1	<0.01 (<0.01–<0.01)	3.3 (2.3–4.9)	0.04 (0.014–0.07)	75 (26–133)	0.029 (0.023–0.035)	54 (44–65)
	1995	<1	<0.01 (<0.01–<0.01)	1.4 (1.4–1.5)	0.023 (<0.01–0.041)	35 (7.8–63)	<0.01 (<0.01–<0.01)	<1 (<1–<1)
	2000	<1	<0.01 (<0.01–<0.01)	1.3 (1–1.7)	0.02 (<0.01–0.032)	29 (12–49)	0.014 (0.012–0.016)	21 (18–23)
	2005	<1	<0.01 (<0.01–<0.01)	<1 (<1–1.1)	0.015 (<0.01–0.026)	19 (6.8–32)	0.012 (0.01–0.013)	14 (13–16)
	2006	<1	<0.01 (<0.01–<0.01)	1.2 (<1–1.5)	0.022 (<0.01–0.035)	27 (12–43)	0.014 (0.012–0.016)	17 (15–19)
	2007	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–0.014)	9.3 (2.1–17)	<0.01 (<0.01–<0.01)	6.9 (6–7.8)
	2008	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–0.011)	7.4 (1.6–13)	<0.01 (<0.01–<0.01)	5.4 (4.7–6.2)
	2009	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0.014 (<0.01–0.023)	16 (7.1–27)	<0.01 (<0.01–0.01)	10 (9.4–12)
Armenia	1990	4	0.25 (0.12–0.46)	7 (3.3–13)	2 (0.7–4.1)	56 (20–115)	1.2 (0.65–1.7)	33 (18–48)
	1995	3	0.29 (0.21–0.4)	9 (6.4–13)	2.4 (1–4)	75 (32–125)	1.5 (1.2–1.8)	47 (37–56)
	2000	3	0.41 (0.29–0.58)	13 (9.3–19)	3.4 (1.5–5.8)	111 (47–188)	2.2 (1.7–2.6)	71 (57–85)
	2005	3	0.3 (0.2–0.46)	9.7 (6.7–15)	2.8 (0.92–5)	93 (30–164)	2.2 (1.8–2.6)	72 (57–86)
	2006	3	0.3 (0.21–0.47)	9.8 (6.7–15)	2.9 (0.93–5)	93 (30–164)	2.2 (1.8–2.7)	72 (58–86)
	2007	3	0.35 (0.23–0.53)	11 (7.5–17)	3.1 (1.2–5.4)	102 (38–177)	2.2 (1.8–2.7)	72 (58–87)
	2008	3	0.37 (0.25–0.55)	12 (8.2–18)	3.3 (1.3–5.6)	106 (42–182)	2.2 (1.8–2.7)	73 (58–87)
	2009	3	0.38 (0.26–0.55)	12 (8.5–18)	3.3 (1.3–5.6)	107 (44–182)	2.2 (1.8–2.7)	73 (59–88)
Austria	1990	8	0.11 (0.079–0.16)	1.4 (1–2.1)	2.7 (1–4.7)	35 (13–61)	1.9 (1.5–2.3)	25 (20–30)
	1995	8	0.096 (0.076–0.12)	1.2 (<1–1.5)	2.4 (0.92–3.9)	30 (12–49)	1.7 (1.5–1.9)	21 (19–24)
	2000	8	0.071 (0.064–0.079)	<1 (<1–<1)	1.9 (0.71–3.1)	23 (8.9–39)	1.4 (1.2–1.5)	17 (15–19)
	2005	8	0.052 (0.047–0.057)	<1 (<1–<1)	1.4 (0.51–2.3)	17 (6.1–28)	1.1 (0.93–1.2)	13 (11–15)
	2006	8	0.047 (0.043–0.052)	<1 (<1–<1)	1.2 (0.4–2.1)	15 (4.9–25)	0.98 (0.86–1.1)	12 (10–13)
	2007	8	0.043 (0.039–0.048)	<1 (<1–<1)	1.1 (0.38–2)	14 (4.6–24)	0.93 (0.81–1.1)	11 (9.8–13)
	2008	8	0.044 (0.04–0.049)	<1 (<1–<1)	1.2 (0.4–2)	14 (4.8–24)	0.94 (0.81–1.1)	11 (9.8–13)
	2009	8	0.044 (0.035–0.058)	<1 (<1–<1)	1.1 (0.36–1.9)	13 (4.3–23)	0.91 (0.82–1.1)	11 (9.8–13)
Azerbaijan	1990	7	1.2 (0.65–2)	17 (9–28)	16 (6.3–31)	222 (88–435)	7.9 (4.4–11)	110 (60–159)
	1995	8	1.4 (1.1–1.8)	18 (14–22)	18 (8.3–30)	232 (107–381)	8.5 (6.8–10)	110 (88–132)
	2000	8	1.1 (0.79–1.5)	13 (9.7–18)	15 (6.9–25)	189 (84–311)	8.9 (7.1–11)	110 (88–132)
	2005	8	1 (0.74–1.4)	12 (8.7–17)	15 (6.5–25)	178 (77–299)	9.3 (7.4–11)	110 (88–132)
	2006	9	1.1 (0.75–1.5)	12 (8.8–17)	15 (6.6–26)	179 (77–299)	9.4 (7.5–11)	110 (88–132)
	2007	9	0.43 (0.36–0.49)	5 (4.2–5.7)	15 (6.7–26)	178 (77–298)	9.5 (7.6–11)	110 (88–132)
	2008	9	1 (0.72–1.5)	12 (8.3–17)	15 (6.5–26)	174 (74–293)	9.6 (7.7–11)	110 (88–132)
	2009	9	1 (0.7–1.4)	11 (7.9–16)	15 (6.3–25)	170 (71–286)	9.7 (7.9–12)	110 (89–132)
Belarus	1990	10	2.1 (1.1–3.6)	21 (11–35)	16 (6.2–31)	155 (61–304)	8.2 (4.5–12)	80 (44–117)
	1995	10	1.7 (1.2–2.3)	17 (12–23)	14 (6–23)	133 (58–223)	8.3 (6.6–9.9)	80 (64–96)
	2000	10	0.81 (0.72–0.9)	8.1 (7.2–9)	9.5 (3.1–16)	95 (31–162)	7.5 (6.8–9)	75 (68–89)
	2005	10	0.67 (0.53–0.94)	6.8 (5.4–9.5)	6.7 (1.9–12)	68 (20–118)	5.7 (5.3–6.8)	58 (54–69)
	2006	10	0.52 (0.47–0.58)	5.4 (4.8–5.9)	5.7 (1.3–10)	59 (14–104)	5.2 (5.1–6.2)	53 (53–64)
	2007	10	0.96 (0.86–1.1)	9.8 (8.8–11)	5.6 (1.3–10)	58 (13–103)	4.7 (3.8–5.6)	48 (39–58)
	2008	10	0.52 (0.47–0.57)	5.4 (4.8–5.9)	5.6 (1.3–9.9)	58 (13–103)	4.2 (3.4–5)	43 (35–52)
	2009	10	0.51 (0.46–0.57)	5.3 (4.8–5.9)	5.6 (1.3–9.9)	58 (13–103)	3.8 (3.1–4.5)	39 (32–47)
Belgium	1990	10	0.13 (0.093–0.18)	1.3 (<1–1.9)	2.8 (1–4.8)	28 (10–48)	2 (1.6–2.4)	20 (16–24)
	1995	10	0.087 (0.071–0.12)	<1 (<1–1.1)	1.9 (0.63–3.3)	19 (6.2–33)	1.6 (1.4–1.8)	16 (14–18)
	2000	10	0.085 (0.067–0.11)	<1 (<1–1.1)	1.9 (0.68–3.2)	18 (6.7–31)	1.5 (1.3–1.7)	14 (13–16)
	2005	10	0.069 (0.054–0.092)	<1 (<1–<1)	1.5 (0.52–2.6)	15 (5–25)	1.2 (1.1–1.4)	12 (10–13)
	2006	10	0.068 (0.054–0.09)	<1 (<1–<1)	1.5 (0.54–2.5)	14 (5.1–24)	1.2 (1–1.4)	11 (10–13)
	2007	11	0.062 (0.049–0.082)	<1 (<1–<1)	1.4 (0.5–2.3)	13 (4.7–22)	1.1 (0.96–1.2)	10 (9.1–12)
	2008	11	0.048 (0.04–0.063)	<1 (<1–<1)	1.1 (0.33–1.9)	10 (3.1–18)	0.93 (0.81–1.1)	8.8 (7.7–10)
	2009	11	0.049 (0.039–0.066)	<1 (<1–<1)	1.1 (0.36–1.9)	10 (3.3–18)	0.91 (0.82–1.1)	8.6 (7.7–10)
Bosnia and Herzegovina	1990	4	0.12 (0.059–0.39)	2.7 (1.4–9.2)	4.7 (1–9.1)	108 (23–210)	4 (2.2–5.8)	94 (51–136)
	1995	3	0.21 (0.12–0.35)	6.5 (3.6–10)	4.3 (1.7–7.3)	128 (52–220)	2.8 (2.2–3.4)	84 (67–101)
	2000	4	0.058 (0.038–0.078)	1.6 (1–2.1)	2.9 (0.64–5.2)	78 (17–139)	2.3 (1.9–2.8)	63 (50–75)
	2005	4	0.046 (0.03–0.062)	1.2 (<1–1.6)	2.3 (0.51–4.1)	61 (14–107)	2 (1.6–2.4)	52 (42–63)
	2006	4	0.046 (0.03–0.062)	1.2 (<1–1.6)	2.3 (0.51–4.1)	61 (13–108)	2 (1.8–2.3)	52 (47–62)
	2007	4	0.043 (0.028–0.058)	1.1 (<1–1.5)	2.2 (0.48–3.8)	57 (13–101)	1.9 (1.5–2.3)	51 (41–61)
	2008	4	0.043 (0.028–0.057)	1.1 (<1–1.5)	2.1 (0.48–3.8)	56 (13–100)	1.9 (1.7–2.3)	51 (45–61)
	2009	4	0.074 (0.039–0.14)	2 (1–3.6)	2.3 (0.69–4)	62 (18–107)	1.9 (1.6–2.2)	50 (43–58)
Bulgaria	1990	9	0.54 (0.25–1)	6.1 (2.8–12)	6.7 (2.3–14)	76 (26–158)	4.1 (2.3–5.9)	46 (26–67)
	1995	8	0.25 (0.23–0.28)	3 (2.7–3.3)	4.2 (0.95–7.6)	51 (11–90)	3.9 (3.2–4.6)	46 (39–55)
	2000	8	0.33 (0.29–0.36)	4.1 (3.7–4.5)	4.2 (1–7.3)	52 (13–91)	3.7 (3.3–4.4)	46 (42–55)
	2005	8	0.27 (0.25–0.3)	3.5 (3.2–3.9)	4.5 (1.4–7.7)	58 (18–99)	3.5 (3.2–4.3)	46 (42–55)
	2006	8	0.26 (0.23–0.29)	3.4 (3–3.7)	4.3 (1.4–7.4)	56 (18–96)	3.4 (3.1–4.1)	45 (41–54)
	2007	8	0.27 (0.24–0.3)	3.6 (3.2–3.9)	3.6 (0.97–6.3)	48 (13–83)	3.1 (2.8–3.8)	41 (37–49)
	2008	8	0.23 (0.21–0.25)	3 (2.7–3.4)	4 (1.2–6.9)	52 (16–90)	3.2 (2.9–3.9)	43 (39–51)
	2009	8	0.23 (0.18–0.33)	3.1 (2.4–4.4)	3.7 (1–6.4)	49 (14–84)	3.1 (2.7–3.6)	41 (36–47)
Croatia	1990	5	0.41 (0.29–0.57)	9 (6.4–13)	4.7 (1.8–8.2)	105 (41–181)	3.2 (2.6–3.9)	71 (57–86)
	1995	5	0.25 (0.2–0.33)	5.3 (4.3–7.1)	3 (0.96–5.2)	65 (21–112)	2.4 (2.1–2.7)	52 (45–59)
	2000	5	0.17 (0.16–0.19)	3.9 (3.5–4.3)	2.5 (0.86–4.2)	55 (19–92)	1.9 (1.6–2.1)	42 (36–47)
	2005	4	0.11 (0.1–0.13)	2.6 (2.3–2.8)	1.5 (0.47–2.6)	34 (11–58)	1.2 (1.1–1.4)	27 (24–31)
	2006	4	0.15 (0.13–0.16)	3.3 (3–3.6)	1.5 (0.53–2.6)	35 (12–59)	1.2 (1–1.3)	27 (23–30)
	2007	4	0.1 (0.092–0.11)	2.3 (2.1–2.6)	1.3 (0.42–2.3)	30 (9.4–52)	1.1 (0.95–1.2)	25 (21–28)
	2008	4	0.1 (0.094–0.12)	2.4 (2.1–2.6)	1.5 (0.5–2.5)	33 (11–56)	1.1 (0.98–1.3)	25 (22–29)
	2009	4	0.11 (0.09–0.15)	2.5 (2–3.4)	1.4 (0.43–2.4)	31 (9.8–53)	1.1 (0.98–1.3)	25 (22–29)
Cyprus	1990	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0.041 (<0.01–0.071)	6 (1.3–10)	0.036 (0.029–0.044)	5.3 (4.3–6.4)
	1995	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0.058 (0.023–0.096)	7.9 (3.1–13)	0.041 (0.036–0.047)	5.7 (4.9–6.4)
	2000	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0.043 (<0.01–0.074)	5.4 (1.2–9.5)	0.038 (0.033–0.043)	4.8 (4.2–5.5)
	2005	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0.051 (0.018–0.087)	6.1 (2.1–10)	0.039 (0.034–0.044)	4.7 (4.1–5.3)
	2006	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0.052 (0.016–0.089)	6.1 (1.9–11)	0.041 (0.036–0.047)	4.9 (4.3–5.5)
	2007	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0.062 (0.022–0.11)	7.3 (2.6–12)	0.047 (0.041–0.053)	5.5 (4.8–6.2)
	2008	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0.06 (0.021–0.1)	7 (2.4–12)	0.048 (0.042–0.055)	5.6 (4.9–6.3)
	2009	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0.059 (0.018–0.1)	6.8 (2.1–12)	0.048 (0.042–0.055)	5.5 (4.9–6.3)
Czech Republic	1990	10	0.17 (0.12–0.25)	1.6 (1.2–2.4)	3.2 (1.1–5.7)	31 (11–56)	2.4 (1.9–2.9)	23 (19–28)
	1995	10	0.13 (0.11–0.17)	1.3 (1–1.7)	2.6 (0.78–4.4)	25 (7.5–43)	2.1 (1.8–2.4)	20 (18–23)
	2000	10	0.13 (0.11–0.14)	1.2 (1.1–1.3)	2 (0.66–3.5)	20 (6.4–34)	1.6 (1.4–1.8)	16 (14–18)
	2005	10	0.068 (0.061–0.075)	<1 (<1–<1)	1.4 (0.46–2.4)	14 (4.6–24)	1.1 (0.97–1.3)	11 (9.5–12)
	2006	10	0.06 (0.054–0.066)	<1 (<1–<1)	1.4 (0.53–2.4)	14 (5.1–24)	1.1 (0.94–1.2)	11 (9.2–12)
	2007	10	0.068 (0.062–0.075)	<1 (<1–<1)	1.1 (0.31–1.9)	11 (3–18)	0.91 (0.79–1)	8.8 (7.7–10)
	2008	10	0.052 (0.047–0.058)	<1 (<1–<1)	1.2 (0.41–2)	12 (4–20)	0.93 (0.81–1.1)	9 (7.9–10)
	2009	10	0.057 (0.046–0.076)	<1 (<1–<1)	1.1 (0.36–1.9)	11 (3.4–19)	0.91 (0.81–1.1)	8.8 (7.8–10)
Denmark	1990	5	0.022 (0.016–0.032)	<1 (<1–<1)	0.61 (0.22–1.1)	12 (4.3–21)	0.44 (0.35–0.53)	8.5 (6.8–10)
	1995	5	0.021 (0.018–0.028)	<1 (<1–<1)	0.62 (0.18–1.1)	12 (3.5–20)	0.52 (0.45–0.58)	9.9 (8.6–11)
	2000	5	0.02 (0.018–0.023)	<1 (<1–<1)	0.91 (0.34–1.5)	17 (6.3–28)	0.68 (0.59–0.76)	13 (11–14)
	2005	5	0.019 (0.017–0.021)	<1 (<1–<1)	0.62 (0.24–1)	11 (4.4–19)	0.45 (0.4–0.51)	8.4 (7.3–9.5)
	2006	5	0.015 (0.014–0.017)	<1 (<1–<1)	0.47 (0.14–0.8)	8.6 (2.5–15)	0.39 (0.34–0.44)	7.2 (6.3–8.2)
	2007	5	0.019 (0.015–0.025)	<1 (<1–<1)	0.54 (0.19–0.9)	9.9 (3.6–17)	0.41 (0.36–0.46)	7.5 (6.5–8.5)
	2008	5	0.017 (0.013–0.022)	<1 (<1–<1)	0.47 (0.15–0.81)	8.7 (2.7–15)	0.38 (0.33–0.43)	7 (6–7.9)
	2009	5	0.016 (0.013–0.021)	<1 (<1–<1)	0.46 (0.15–0.79)	8.4 (2.7–14)	0.37 (0.33–0.43)	6.8 (6–7.9)

[a] Rates are per 100 000 population.

TABLE A2.1 **Estimates of the burden of disease caused by TB, 1990–2009**

			MORTALITY (EXCLUDING HIV)		PREVALENCE (INCLUDING HIV)		INCIDENCE (INCLUDING HIV)	
	YEAR	POPULATION (MILLIONS)	NUMBER (THOUSANDS)	RATE[a]	NUMBER (THOUSANDS)	RATE	NUMBER (THOUSANDS)	RATE
Estonia	1990	2	0.23 (0.12–0.38)	15 (7.9–25)	2 (0.79–4)	128 (50–252)	1 (0.57–1.5)	66 (36–96)
	1995	1	0.16 (0.12–0.22)	11 (8.2–15)	1.5 (0.61–2.5)	103 (43–174)	0.95 (0.76–1.1)	66 (53–80)
	2000	1	0.11 (0.097–0.12)	7.9 (7.1–8.7)	1.3 (0.46–2.2)	92 (34–159)	0.94 (0.79–1.1)	69 (58–82)
	2005	1	0.05 (0.045–0.055)	3.7 (3.3–4.1)	0.66 (0.22–1.1)	49 (16–84)	0.55 (0.48–0.65)	40 (36–49)
	2006	1	0.065 (0.059–0.072)	4.8 (4.4–5.3)	0.53 (0.16–0.92)	39 (12–68)	0.48 (0.42–0.58)	36 (31–43)
	2007	1	0.061 (0.055–0.067)	4.6 (4.1–5)	0.64 (0.24–1.1)	48 (18–81)	0.52 (0.46–0.62)	39 (34–46)
	2008	1	0.047 (0.043–0.052)	3.5 (3.2–3.9)	0.52 (0.16–0.89)	39 (12–66)	0.46 (0.4–0.55)	34 (30–41)
	2009	1	0.053 (0.043–0.071)	4 (3.2–5.3)	0.53 (0.18–0.89)	39 (13–67)	0.45 (0.4–0.52)	33 (30–39)
Finland	1990	5	0.11 (0.077–0.15)	2.1 (1.5–3.1)	1.3 (0.47–2.3)	27 (9.5–47)	0.97 (0.77–1.2)	19 (15–23)
	1995	5	0.082 (0.065–0.11)	1.6 (1.3–2.1)	1 (0.39–1.7)	20 (7.6–34)	0.76 (0.66–0.86)	15 (13–17)
	2000	5	0.084 (0.076–0.093)	1.6 (1.5–1.8)	0.79 (0.27–1.3)	15 (5.3–26)	0.61 (0.53–0.69)	12 (10–13)
	2005	5	0.038 (0.034–0.042)	<1 (<1–<1)	0.53 (0.21–0.88)	10 (3.9–17)	0.39 (0.34–0.44)	7.4 (6.5–8.4)
	2006	5	0.021 (0.019–0.023)	<1 (<1–<1)	0.37 (0.099–0.65)	7.1 (1.9–12)	0.32 (0.28–0.36)	6.1 (5.3–6.9)
	2007	5	0.027 (0.024–0.03)	<1 (<1–<1)	0.43 (0.14–0.74)	8.2 (2.7–14)	0.35 (0.3–0.39)	6.5 (5.7–7.4)
	2008	5	0.027 (0.024–0.03)	<1 (<1–<1)	0.5 (0.18–0.84)	9.4 (3.4–16)	0.38 (0.33–0.43)	7.2 (6.2–8.1)
	2009	5	0.036 (0.029–0.048)	<1 (<1–<1)	0.46 (0.15–0.79)	8.6 (2.7–15)	0.37 (0.33–0.43)	7 (6.2–8.1)
France	1990	57	1.1 (0.75–1.5)	1.9 (1.3–2.7)	16 (5.8–27)	27 (10–47)	11 (9–14)	20 (16–24)
	1995	58	0.86 (0.68–1.1)	1.5 (1.2–1.9)	13 (4.6–22)	22 (8–37)	10 (8.7–11)	17 (15–20)
	2000	59	0.66 (0.6–0.73)	1.1 (1–1.2)	8.9 (3.1–15)	15 (5.3–25)	7 (6.1–8)	12 (10–13)
	2005	61	0.44 (0.4–0.49)	<1 (<1–<1)	6.9 (2.4–12)	11 (3.9–19)	5.6 (4.9–6.4)	9.2 (8–10)
	2006	61	0.42 (0.38–0.47)	<1 (<1–<1)	6.6 (2.1–11)	11 (3.5–18)	5.5 (4.8–6.3)	9 (7.8–10)
	2007	62	0.37 (0.33–0.4)	<1 (<1–<1)	8.6 (3.6–14)	14 (5.9–23)	6.1 (5.3–6.9)	9.9 (8.6–11)
	2008	62	0.27 (0.26–0.28)	<1 (<1–<1)	4.3 (1–7.6)	6.9 (1.7–12)	3.9 (3.4–4.4)	6.2 (5.4–7)
	2009	62	0.3 (0.24–0.4)	<1 (<1–<1)	4.6 (1.5–7.8)	7.3 (2.4–12)	3.8 (3.4–4.4)	6.1 (5.4–7)
Georgia	1990	5	0.78 (0.43–1.2)	14 (7.9–23)	12 (4.9–24)	227 (90–439)	5.8 (3.2–8.4)	107 (59–155)
	1995	5	0.58 (0.43–0.77)	12 (8.5–15)	9.8 (4.5–16)	194 (88–321)	5.4 (4.3–6.5)	107 (85–128)
	2000	5	0.3 (0.27–0.33)	6.3 (5.6–6.9)	6.5 (2.1–11)	137 (44–236)	5.1 (4.4–6.1)	107 (93–128)
	2005	4	0.27 (0.21–0.37)	5.9 (4.6–8.2)	5.8 (1.8–9.9)	129 (39–221)	4.8 (4.5–5.7)	107 (101–128)
	2006	4	0.24 (0.2–0.33)	5.5 (4.5–7.5)	5.5 (1.5–9.5)	124 (34–214)	4.7 (4.6–5.6)	107 (103–128)
	2007	4	0.24 (0.19–0.33)	5.4 (4.4–7.6)	5.4 (1.4–9.3)	123 (33–214)	4.6 (4.3–5.6)	107 (99–128)
	2008	4	0.22 (0.19–0.3)	5.1 (4.4–7)	5.1 (1.3–9)	119 (29–208)	4.6 (4.4–5.5)	107 (102–128)
	2009	4	0.21 (0.19–0.23)	4.8 (4.4–5.3)	5 (1.1–8.8)	116 (27–206)	4.5 (4–5.1)	107 (94–119)
Germany	1990	79	1.1 (0.75–1.5)	1.3 (<1–1.9)	26 (9.6–45)	33 (12–57)	18 (15–22)	23 (18–28)
	1995	82	0.7 (0.56–0.93)	<1 (<1–1.1)	18 (5.8–30)	22 (7.1–37)	14 (12–16)	17 (15–19)
	2000	82	0.5 (0.45–0.56)	<1 (<1–<1)	14 (5–23)	17 (6.1–28)	10 (9.1–12)	13 (11–14)
	2005	82	0.33 (0.3–0.36)	<1 (<1–<1)	8.1 (2.7–14)	9.8 (3.3–17)	6.4 (5.5–7.2)	7.7 (6.7–8.7)
	2006	82	0.34 (0.31–0.37)	<1 (<1–<1)	7.3 (2.4–12)	8.8 (2.9–15)	5.8 (5–6.5)	7 (6.1–7.9)
	2007	82	0.28 (0.22–0.36)	<1 (<1–<1)	6.9 (2.5–12)	8.4 (3.1–14)	5.3 (4.6–6)	6.4 (5.6–7.3)
	2008	82	0.19 (0.16–0.25)	<1 (<1–<1)	4.9 (1.4–8.4)	6 (1.6–10)	4.2 (3.7–4.8)	5.1 (4.5–5.8)
	2009	82	0.2 (0.16–0.27)	<1 (<1–<1)	5.1 (1.6–8.6)	6.2 (2–11)	4.1 (3.7–4.8)	5 (4.5–5.8)
Greece	1990	10	0.18 (0.13–0.25)	1.8 (1.2–2.5)	1.6 (0.61–2.7)	16 (6–27)	1.1 (0.88–1.3)	11 (8.6–13)
	1995	11	0.15 (0.12–0.2)	1.4 (1.1–1.9)	1.4 (0.46–2.3)	13 (4.3–22)	1.1 (0.94–1.2)	10 (8.8–11)
	2000	11	0.088 (0.079–0.097)	<1 (<1–<1)	1 (0.33–1.7)	9.2 (3–16)	0.81 (0.7–0.91)	7.4 (6.4–8.4)
	2005	11	0.094 (0.084–0.1)	<1 (<1–<1)	0.91 (0.31–1.6)	8.3 (2.8–14)	0.72 (0.63–0.81)	6.5 (5.7–7.4)
	2006	11	0.084 (0.075–0.093)	<1 (<1–<1)	0.82 (0.26–1.4)	7.4 (2.3–13)	0.67 (0.58–0.75)	6 (5.2–6.8)
	2007	11	0.1 (0.09–0.11)	<1 (<1–<1)	0.89 (0.32–1.5)	8 (2.9–14)	0.68 (0.59–0.77)	6.1 (5.3–6.9)
	2008	11	0.083 (0.074–0.092)	<1 (<1–<1)	0.75 (0.23–1.3)	6.7 (2.1–12)	0.62 (0.54–0.7)	5.5 (4.8–6.2)
	2009	11	0.08 (0.065–0.11)	<1 (<1–<1)	0.74 (0.23–1.3)	6.6 (2.1–11)	0.6 (0.54–0.7)	5.4 (4.8–6.2)
Hungary	1990	10	0.45 (0.32–0.65)	4.4 (3.1–6.3)	6.1 (2.1–11)	59 (20–103)	4.5 (3.6–5.4)	43 (35–52)
	1995	10	0.47 (0.37–0.62)	4.5 (3.6–6)	6.4 (2.2–11)	62 (21–105)	5 (4.3–5.6)	48 (42–55)
	2000	10	0.36 (0.33–0.4)	3.5 (3.2–3.9)	4.4 (1.4–7.5)	43 (13–73)	3.5 (3.1–4)	35 (30–39)
	2005	10	0.19 (0.17–0.21)	1.9 (1.7–2.1)	2.5 (0.73–4.3)	25 (7.3–43)	2.1 (1.8–2.4)	21 (18–23)
	2006	10	0.13 (0.12–0.14)	1.3 (1.1–1.4)	2.5 (0.84–4.2)	25 (8.3–42)	1.9 (1.7–2.2)	19 (17–22)
	2007	10	0.14 (0.13–0.16)	1.4 (1.3–1.6)	2.2 (0.74–3.8)	22 (7.4–38)	1.8 (1.5–2)	18 (15–20)
	2008	10	0.12 (0.11–0.13)	1.2 (1.1–1.3)	2 (0.65–3.5)	20 (6.4–35)	1.6 (1.4–1.9)	16 (14–19)
	2009	10	0.14 (0.12–0.19)	1.4 (1.2–1.9)	2 (0.62–3.4)	20 (6.2–34)	1.6 (1.4–1.9)	16 (14–19)
Iceland	1990	<1	<0.01 (<0.01–<0.01)	<1 (<1–1.1)	0.033 (0.013–0.056)	13 (5.1–22)	0.023 (0.018–0.027)	8.8 (7.1–11)
	1995	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0.015 (<0.01–0.026)	5.6 (1.4–9.7)	0.014 (0.012–0.016)	5.2 (4.5–5.8)
	2000	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0.02 (<0.01–0.032)	7 (2.8–11)	0.015 (0.013–0.017)	5.3 (4.6–6)
	2005	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0.012 (<0.01–0.023)	4.1 (<1–7.9)	0.012 (0.01–0.013)	3.9 (3.4–4.4)
	2006	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0.019 (<0.01–0.036)	6.2 (2.1–12)	0.015 (0.013–0.017)	5 (4.3–5.6)
	2007	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0.018 (<0.01–0.03)	5.9 (2.5–9.7)	0.014 (0.012–0.016)	4.5 (3.9–5.1)
	2008	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–0.014)	2.6 (<1–4.6)	<0.01 (<0.01–<0.01)	2.2 (1.9–2.5)
	2009	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–0.013)	2.4 (<1–4.2)	<0.01 (<0.01–<0.01)	2.1 (1.9–2.5)
Ireland	1990	4	0.052 (0.037–0.077)	1.5 (1.1–2.2)	1.1 (0.37–1.9)	30 (10–53)	0.78 (0.62–0.94)	22 (18–27)
	1995	4	0.031 (0.025–0.04)	<1 (<1–1.1)	0.64 (0.19–1.1)	18 (5.4–30)	0.53 (0.46–0.6)	15 (13–16)
	2000	4	0.036 (0.033–0.04)	<1 (<1–1)	0.53 (0.16–0.9)	14 (4.1–24)	0.44 (0.39–0.5)	12 (10–13)
	2005	4	0.016 (0.015–0.018)	<1 (<1–<1)	0.55 (0.18–0.94)	13 (4.3–22)	0.45 (0.39–0.5)	11 (9.2–12)
	2006	4	0.029 (0.023–0.039)	<1 (<1–<1)	0.61 (0.21–1)	14 (5–24)	0.48 (0.42–0.54)	11 (9.7–13)
	2007	4	0.032 (0.029–0.036)	<1 (<1–<1)	0.66 (0.25–1.1)	15 (5.8–25)	0.49 (0.43–0.55)	11 (9.8–13)
	2008	4	0.023 (0.021–0.026)	<1 (<1–<1)	0.44 (0.12–0.77)	10 (2.7–17)	0.39 (0.34–0.44)	8.7 (7.6–9.9)
	2009	5	0.022 (0.018–0.03)	<1 (<1–<1)	0.47 (0.15–0.8)	10 (3.3–18)	0.38 (0.34–0.45)	8.5 (7.6–9.9)
Israel	1990	5	0.014 (0.013–0.015)	<1 (<1–<1)	0.39 (0.09–0.7)	8.7 (2–15)	0.29 (0.23–0.35)	6.5 (5.2–7.8)
	1995	5	0.022 (0.017–0.029)	<1 (<1–<1)	0.59 (0.21–0.99)	11 (3.9–18)	0.46 (0.4–0.52)	8.5 (7.4–9.6)
	2000	6	0.036 (0.032–0.039)	<1 (<1–<1)	0.84 (0.31–1.4)	14 (5.1–23)	0.64 (0.56–0.72)	11 (9.2–12)
	2005	7	0.024 (0.021–0.026)	<1 (<1–<1)	0.54 (0.16–0.93)	8.1 (2.4–14)	0.46 (0.4–0.52)	6.9 (6–7.8)
	2006	7	0.019 (0.017–0.02)	<1 (<1–<1)	0.54 (0.18–0.92)	7.9 (2.6–13)	0.44 (0.38–0.5)	6.5 (5.6–7.3)
	2007	7	0.027 (0.024–0.029)	<1 (<1–<1)	0.57 (0.21–0.97)	8.3 (3–14)	0.45 (0.39–0.51)	6.5 (5.7–7.4)
	2008	7	0.019 (0.015–0.025)	<1 (<1–<1)	0.51 (0.16–0.87)	7.2 (2.3–12)	0.42 (0.37–0.48)	6 (5.2–6.8)
	2009	7	0.018 (0.015–0.024)	<1 (<1–<1)	0.51 (0.16–0.86)	7.1 (2.3–12)	0.42 (0.37–0.49)	5.8 (5.2–6.8)
Italy	1990	57	0.62 (0.44–0.88)	1.1 (<1–1.5)	7.5 (2.9–13)	13 (5.1–23)	5.3 (4.2–6.4)	9.3 (7.4–11)
	1995	57	0.7 (0.55–0.9)	1.2 (<1–1.6)	8.6 (3.3–14)	15 (5.9–25)	6.5 (5.6–7.3)	11 (9.8–13)
	2000	57	0.46 (0.42–0.51)	<1 (<1–<1)	4.4 (1–7.7)	7.7 (1.8–13)	4 (3.5–4.6)	7 (6.1–8)
	2005	59	0.41 (0.34–0.54)	<1 (<1–<1)	5.2 (1.7–9)	9 (2.8–15)	4.4 (3.8–5)	7.5 (6.5–8.5)
	2006	59	0.35 (0.32–0.39)	<1 (<1–<1)	6.7 (2.8–11)	11 (4.8–18)	4.8 (4.1–5.4)	8.1 (7–9.1)
	2007	59	0.33 (0.3–0.37)	<1 (<1–<1)	3.7 (0.88–6.4)	6.2 (1.5–11)	3.1 (2.7–3.5)	5.2 (4.5–5.9)
	2008	60	0.42 (0.33–0.54)	<1 (<1–<1)	5.2 (2–8.6)	8.7 (3.4–14)	3.9 (3.4–4.4)	6.6 (5.7–7.4)
	2009	60	0.37 (0.3–0.49)	<1 (<1–<1)	4.7 (1.5–7.9)	7.8 (2.5–13)	3.8 (3.4–4.5)	6.4 (5.7–7.4)
Kazakhstan	1990	17	5.5 (2.7–9.7)	33 (16–58)	42 (16–84)	255 (97–508)	23 (13–33)	139 (76–201)
	1995	16	4.9 (3.5–6.6)	31 (22–41)	38 (17–64)	242 (108–400)	22 (18–27)	139 (111–166)
	2000	15	5.3 (4.6–6)	35 (31–40)	38 (12–65)	251 (80–435)	29 (26–35)	196 (173–236)
	2005	15	4.5 (3.9–5.1)	30 (26–34)	46 (17–80)	303 (112–529)	33 (26–39)	215 (172–258)
	2006	15	3.9 (3.4–4.4)	26 (22–29)	43 (15–76)	282 (101–494)	31 (25–37)	204 (163–245)
	2007	15	3.6 (3.1–4)	23 (20–26)	40 (14–68)	258 (91–443)	29 (25–35)	190 (161–228)
	2008	16	3.4 (2.9–3.8)	22 (19–25)	35 (11–60)	224 (70–390)	27 (23–33)	175 (149–210)
	2009	16	3.1 (2.4–4.7)	20 (15–30)	31 (9–54)	198 (58–346)	26 (21–30)	163 (136–192)
Kyrgyzstan	1990	4	1.3 (0.7–2.2)	31 (16–51)	12 (4.8–24)	281 (110–552)	6.3 (3.4–9.1)	143 (78–207)
	1995	5	1.2 (0.88–1.6)	26 (19–35)	12 (5.2–19)	253 (114–418)	6.5 (5.2–7.9)	143 (114–171)
	2000	5	0.84 (0.58–1.3)	17 (12–26)	9.7 (3.1–17)	196 (62–343)	7.5 (6.2–9)	151 (125–181)
	2005	5	1.1 (0.92–1.2)	20 (18–23)	12 (4.6–21)	228 (87–394)	8.3 (6.6–9.9)	158 (127–190)
	2006	5	1.1 (0.97–1.3)	21 (18–24)	12 (4.8–21)	231 (90–398)	8.4 (6.7–10)	159 (127–191)
	2007	5	0.95 (0.82–1.1)	18 (15–20)	12 (4.8–21)	230 (89–397)	8.5 (6.8–10)	159 (127–191)
	2008	5	0.83 (0.72–0.94)	15 (13–17)	13 (5.1–22)	235 (95–400)	8.6 (6.9–10)	159 (127–191)
	2009	5	1.2 (0.83–1.8)	22 (15–32)	13 (5.2–22)	236 (94–402)	8.7 (7.1–11)	159 (129–192)

[a] Rates are per 100 000 population.

TABLE A2.1 **Estimates of the burden of disease caused by TB, 1990–2009**

			MORTALITY (EXCLUDING HIV)		PREVALENCE (INCLUDING HIV)		INCIDENCE (INCLUDING HIV)	
	YEAR	POPULATION (MILLIONS)	NUMBER (THOUSANDS)	RATE[a]	NUMBER (THOUSANDS)	RATE	NUMBER (THOUSANDS)	RATE
Latvia	1990	3	0.66 (0.34–1.1)	25 (13–41)	4.8 (1.9–9.4)	181 (71–353)	2.5 (1.4–3.6)	92 (51–134)
	1995	2	0.45 (0.31–0.63)	18 (13–25)	3.7 (1.6–6.2)	147 (63–247)	2.3 (1.8–2.8)	92 (74–111)
	2000	2	0.31 (0.28–0.35)	13 (12–15)	2.8 (0.89–4.8)	117 (38–200)	2.2 (2–2.7)	94 (83–112)
	2005	2	0.18 (0.16–0.2)	8 (7.2–8.9)	1.8 (0.55–3.2)	80 (24–138)	1.5 (1.4–1.9)	68 (61–81)
	2006	2	0.19 (0.17–0.21)	8.4 (7.4–9.3)	1.7 (0.48–2.9)	73 (21–126)	1.4 (1.3–1.7)	62 (57–74)
	2007	2	0.13 (0.12–0.15)	5.8 (5.2–6.4)	1.6 (0.52–2.8)	71 (23–122)	1.3 (1.2–1.6)	59 (54–70)
	2008	2	0.11 (0.1–0.13)	5 (4.5–5.6)	1.2 (0.31–2.1)	54 (14–93)	1.1 (1–1.3)	50 (46–60)
	2009	2	0.097 (0.087–0.11)	4.3 (3.9–4.8)	1.1 (0.28–1.9)	49 (12–85)	1 (0.88–1.2)	45 (39–51)
Lithuania	1990	4	0.94 (0.47–1.6)	25 (13–44)	6.3 (2.4–12)	170 (66–337)	3.4 (1.9–4.9)	92 (51–133)
	1995	4	0.65 (0.44–0.95)	18 (12–26)	4.9 (2–8.4)	135 (54–230)	3.3 (2.7–4)	92 (74–110)
	2000	4	0.39 (0.35–0.43)	11 (10–12)	3.6 (1.1–6.2)	102 (32–176)	3 (2.7–3.6)	85 (76–102)
	2005	3	0.38 (0.34–0.42)	11 (10–12)	2.7 (0.85–4.7)	80 (25–138)	2.4 (2.1–2.9)	70 (62–83)
	2006	3	0.38 (0.34–0.42)	11 (10–12)	3.3 (1.2–5.6)	97 (35–166)	2.7 (2.4–3.2)	78 (70–94)
	2007	3	0.36 (0.33–0.4)	11 (9.7–12)	3 (0.98–5.1)	88 (29–152)	2.5 (2.2–3)	75 (67–90)
	2008	3	0.36 (0.32–0.4)	11 (9.7–12)	2.7 (0.87–4.7)	82 (26–140)	2.4 (2.1–2.8)	71 (63–85)
	2009	3	0.27 (0.2–0.42)	8.4 (6–13)	2.5 (0.89–4.3)	77 (27–132)	2.3 (2–2.7)	71 (61–82)
Luxembourg	1990	<1	<0.01 (<0.01–<0.01)	<1 (<1–1.1)	0.083 (0.03–0.15)	22 (7.8–38)	0.06 (0.048–0.072)	16 (13–19)
	1995	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0.042 (0.011–0.073)	10 (2.7–18)	0.037 (0.032–0.042)	9 (7.8–10)
	2000	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0.072 (0.03–0.12)	17 (6.9–27)	0.051 (0.044–0.057)	12 (10–13)
	2005	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0.058 (0.023–0.095)	12 (4.9–21)	0.043 (0.037–0.048)	9.2 (8–10)
	2006	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0.043 (0.012–0.074)	9.2 (2.5–16)	0.038 (0.033–0.043)	8.1 (7–9.1)
	2007	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0.059 (0.022–0.098)	12 (4.6–21)	0.045 (0.039–0.051)	9.4 (8.2–11)
	2008	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0.057 (0.019–0.097)	12 (4–20)	0.045 (0.039–0.051)	9.4 (8.2–11)
	2009	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0.055 (0.018–0.093)	11 (3.7–19)	0.045 (0.04–0.052)	9.2 (8.2–11)
Malta	1990	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0.021 (<0.01–0.037)	5.8 (1.3–10)	0.016 (0.013–0.02)	4.5 (3.6–5.4)
	1995	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0.023 (<0.01–0.04)	6 (1.5–11)	0.013 (0.011–0.014)	3.3 (2.9–3.8)
	2000	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0.02 (<0.01–0.035)	5.1 (1.3–8.9)	0.018 (0.016–0.021)	4.7 (4.1–5.3)
	2005	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0.027 (<0.01–0.046)	6.6 (1.9–11)	0.024 (0.021–0.027)	6 (5.2–6.8)
	2006	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0.042 (0.015–0.071)	10 (3.7–18)	0.035 (0.03–0.039)	8.5 (7.4–9.6)
	2007	<1	<0.01 (<0.01–<0.01)	1 (<1–1.1)	0.052 (0.018–0.088)	13 (4.4–22)	0.044 (0.038–0.049)	11 (9.4–12)
	2008	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0.072 (0.029–0.12)	18 (7.2–29)	0.056 (0.049–0.064)	14 (12–16)
	2009	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0.062 (0.021–0.1)	15 (5.2–26)	0.054 (0.048–0.063)	13 (12–15)
Monaco	1990	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	8.3 (3.8–14)	<0.01 (<0.01–<0.01)	4.3 (3.4–5.1)
	1995	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	6.3 (2.9–10)	<0.01 (<0.01–<0.01)	3.8 (3.3–4.2)
	2000	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	3.5 (<1–6.2)	<0.01 (<0.01–<0.01)	<1 (<1–<1)
	2005	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)
	2006	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)
	2007	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)
	2008	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)
	2009	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)
Montenegro	2005	<1	<0.01 (<0.01–0.019)	1.4 (<1–3.1)	0.19 (0.046–0.34)	31 (7.4–54)	0.17 (0.16–0.2)	27 (25–32)
	2006	<1	0.015 (<0.01–0.026)	2.4 (1.3–4.2)	0.23 (0.075–0.39)	37 (12–64)	0.18 (0.17–0.22)	29 (27–35)
	2007	<1	<0.01 (<0.01–0.02)	1.5 (<1–3.2)	0.19 (0.05–0.33)	30 (8–54)	0.16 (0.15–0.19)	25 (24–31)
	2008	<1	<0.01 (<0.01–0.019)	1.5 (<1–3)	0.17 (0.046–0.3)	27 (7.4–48)	0.14 (0.13–0.17)	23 (21–27)
	2009	<1	<0.01 (<0.01–0.015)	1.4 (<1–2.5)	0.16 (0.046–0.28)	26 (7.4–44)	0.13 (0.12–0.15)	21 (18–24)
Netherlands	1990	15	0.048 (0.034–0.07)	<1 (<1–<1)	2.4 (0.85–4.1)	16 (5.7–28)	1.7 (1.4–2.1)	11 (9.2–14)
	1995	15	0.044 (0.036–0.057)	<1 (<1–<1)	2.2 (0.68–3.8)	14 (4.4–25)	1.9 (1.6–2.1)	12 (10–14)
	2000	16	0.033 (0.03–0.036)	<1 (<1–<1)	1.7 (0.47–2.9)	10 (3–18)	1.4 (1.2–1.6)	9 (7.8–10)
	2005	16	0.033 (0.029–0.036)	<1 (<1–<1)	1.6 (0.52–2.7)	9.8 (3.2–17)	1.3 (1.1–1.5)	7.9 (6.9–9)
	2006	16	0.032 (0.028–0.035)	<1 (<1–<1)	1.4 (0.47–2.4)	8.7 (2.9–15)	1.2 (1–1.3)	7 (6.1–7.9)
	2007	16	0.02 (0.018–0.022)	<1 (<1–<1)	1.3 (0.4–2.2)	7.8 (2.5–13)	1.1 (0.93–1.2)	6.5 (5.7–7.3)
	2008	17	0.026 (0.023–0.028)	<1 (<1–<1)	1.4 (0.49–2.4)	8.5 (3–14)	1.1 (0.96–1.3)	6.7 (5.8–7.6)
	2009	17	0.026 (0.021–0.035)	<1 (<1–<1)	1.3 (0.43–2.3)	8 (2.6–14)	1.1 (0.97–1.3)	6.5 (5.8–7.6)
Norway	1990	4	0.012 (<0.01–0.017)	<1 (<1–<1)	0.49 (0.17–0.85)	11 (4–20)	0.36 (0.29–0.43)	8.4 (6.7–10)
	1995	4	<0.01 (<0.01–0.011)	<1 (<1–<1)	0.35 (0.12–0.59)	8.1 (2.8–14)	0.27 (0.24–0.31)	6.2 (5.4–7)
	2000	4	0.01 (<0.01–0.011)	<1 (<1–<1)	0.3 (0.086–0.52)	6.7 (1.9–12)	0.25 (0.22–0.29)	5.7 (4.9–6.4)
	2005	5	0.01 (<0.01–0.011)	<1 (<1–<1)	0.38 (0.12–0.66)	8.3 (2.7–14)	0.31 (0.27–0.35)	6.7 (5.8–7.5)
	2006	5	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0.4 (0.13–0.69)	8.6 (2.9–15)	0.32 (0.28–0.36)	6.8 (5.9–7.7)
	2007	5	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0.43 (0.16–0.71)	9 (3.3–15)	0.32 (0.28–0.37)	6.9 (6–7.8)
	2008	5	<0.01 (<0.01–0.011)	<1 (<1–<1)	0.35 (0.11–0.6)	7.4 (2.3–13)	0.29 (0.25–0.33)	6.1 (5.3–6.9)
	2009	5	<0.01 (<0.01–0.011)	<1 (<1–<1)	0.35 (0.11–0.6)	7.3 (2.3–13)	0.28 (0.25–0.33)	5.9 (5.3–6.9)
Poland	1990	38	1.6 (0.63–3.5)	4.2 (1.7–9.1)	27 (8.2–50)	70 (21–132)	20 (16–29)	52 (42–76)
	1995	39	1.6 (0.77–2.8)	4 (2–7.4)	26 (9–46)	68 (23–119)	20 (16–23)	51 (41–61)
	2000	38	1.1 (0.97–1.2)	2.8 (2.5–3.1)	18 (6.2–32)	47 (16–83)	14 (11–16)	35 (28–42)
	2005	38	0.84 (0.75–0.92)	2.2 (2–2.4)	14 (4.7–24)	36 (12–62)	10 (8.2–12)	27 (21–32)
	2006	38	0.77 (0.69–0.85)	2 (1.8–2.2)	13 (4.6–23)	35 (12–61)	9.9 (8–12)	26 (21–31)
	2007	38	0.77 (0.69–0.85)	2 (1.8–2.2)	13 (4.5–22)	34 (12–59)	9.6 (8–12)	25 (21–30)
	2008	38	0.84 (0.75–0.93)	2.2 (2–2.4)	13 (4.3–22)	33 (11–58)	9.3 (7.5–11)	25 (20–29)
	2009	38	0.72 (0.35–1.3)	1.9 (<1–3.5)	12 (4.2–21)	32 (11–56)	9.1 (7.4–11)	24 (19–29)
Portugal	1990	10	0.52 (0.37–0.76)	5.2 (3.7–7.6)	11 (3.9–18)	106 (39–184)	7.8 (6.2–9.3)	78 (62–93)
	1995	10	0.37 (0.29–0.5)	3.7 (2.9–5)	7.8 (2.8–13)	78 (28–131)	6.4 (5.6–7.3)	64 (56–72)
	2000	10	0.28 (0.25–0.31)	2.7 (2.4–3)	5.5 (1.9–9.4)	54 (18–92)	4.9 (4.2–5.5)	48 (41–54)
	2005	11	0.19 (0.15–0.26)	1.8 (1.5–2.4)	4.3 (1.5–7.1)	40 (14–67)	3.8 (3.3–4.3)	36 (31–41)
	2006	11	0.2 (0.16–0.27)	1.9 (1.5–2.5)	4.3 (1.6–7.1)	41 (15–67)	3.7 (3.2–4.2)	35 (30–39)
	2007	11	0.18 (0.14–0.24)	1.7 (1.3–2.2)	3.8 (1.4–6.5)	36 (13–61)	3.4 (3–3.8)	32 (28–36)
	2008	11	0.17 (0.14–0.23)	1.6 (1.3–2.1)	3.7 (1.3–6.2)	35 (12–58)	3.2 (2.8–3.7)	30 (26–34)
	2009	11	0.16 (0.12–0.22)	1.5 (1.2–2.1)	3.5 (1.2–6)	33 (11–56)	3.2 (2.8–3.7)	30 (26–34)
Republic of Moldova	1990	4	1.1 (0.57–1.9)	25 (13–43)	9.6 (3.8–19)	220 (86–433)	5 (2.7–7.2)	114 (62–165)
	1995	4	0.84 (0.59–1.2)	19 (14–27)	7.9 (3.5–13)	182 (82–303)	4.9 (3.9–5.9)	114 (91–136)
	2000	4	0.83 (0.72–0.94)	20 (17–23)	8 (3.7–13)	196 (90–326)	5.6 (4.5–6.7)	136 (109–163)
	2005	4	0.79 (0.7–0.89)	21 (19–24)	8.4 (3–15)	224 (81–388)	6.2 (5.1–7.4)	164 (137–197)
	2006	4	0.75 (0.66–0.84)	20 (18–23)	8.5 (3–15)	230 (80–405)	6.2 (5–7.5)	168 (135–202)
	2007	4	0.76 (0.66–0.85)	21 (18–23)	8.8 (3.3–15)	240 (91–413)	6.3 (5–7.5)	171 (137–206)
	2008	4	0.67 (0.59–0.76)	19 (16–21)	3.4 (0.72–7.9)	95 (20–217)	6.3 (5.1–7.6)	175 (140–210)
	2009	4	0.79 (0.51–1.2)	22 (14–33)	8.2 (3.6–14)	228 (100–386)	6.4 (5.2–7.7)	178 (145–215)
Romania	1990	23	2.8 (1.4–4.9)	12 (5.9–21)	61 (23–120)	261 (98–521)	33 (18–48)	143 (79–208)
	1995	23	2 (1.4–2.9)	8.9 (6–13)	48 (20–82)	213 (86–362)	33 (26–39)	143 (115–172)
	2000	22	2.2 (1.9–2.4)	9.8 (8.8–11)	53 (21–91)	239 (94–411)	37 (30–44)	167 (134–201)
	2005	22	1.8 (1.6–2)	8.3 (7.4–9.1)	51 (20–87)	234 (92–402)	36 (28–43)	164 (131–197)
	2006	22	1.7 (1.5–1.9)	7.9 (7.1–8.7)	48 (19–82)	224 (89–383)	33 (27–40)	155 (124–186)
	2007	21	1.6 (1.4–1.8)	7.5 (6.7–8.3)	45 (18–76)	208 (82–356)	31 (25–37)	145 (116–174)
	2008	21	1.6 (1.5–1.8)	7.7 (6.9–8.5)	40 (15–69)	186 (70–322)	29 (23–34)	134 (107–161)
	2009	21	1.5 (1.4–1.7)	7.2 (6.5–7.9)	35 (12–62)	166 (57–292)	27 (22–32)	125 (101–150)
Russian Federation	1990	148	57 (30–94)	38 (20–64)	330 (130–650)	221 (87–436)	160 (87–230)	107 (59–156)
	1995	148	44 (32–59)	30 (21–40)	270 (120–450)	184 (82–304)	160 (130–190)	107 (86–129)
	2000	147	32 (29–35)	22 (19–24)	260 (100–450)	178 (69–307)	180 (150–220)	124 (99–149)
	2005	143	33 (30–36)	23 (21–25)	210 (77–360)	146 (54–253)	160 (130–190)	109 (89–131)
	2006	143	29 (26–32)	20 (18–23)	200 (65–350)	138 (46–242)	150 (120–180)	105 (87–127)
	2007	142	27 (18–41)	19 (13–29)	200 (67–340)	138 (47–241)	150 (130–180)	107 (90–128)
	2008	141	26 (18–39)	18 (13–28)	190 (66–330)	135 (47–234)	150 (130–180)	107 (91–128)
	2009	141	25 (17–38)	18 (12–27)	190 (65–320)	132 (46–229)	150 (120–180)	106 (89–125)
San Marino	1990	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	7.2 (2.5–13)	<0.01 (<0.01–<0.01)	5.2 (4.1–6.2)
	1995	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	15 (6.9–24)	<0.01 (<0.01–<0.01)	9 (7.8–10)
	2000	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	8.9 (4.2–14)	<0.01 (<0.01–<0.01)	4.3 (3.7–4.8)
	2005	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)
	2006	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)
	2007	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)
	2008	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)
	2009	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)

[a] Rates are per 100 000 population.

TABLE A2.1 **Estimates of the burden of disease caused by TB, 1990–2009**

			MORTALITY (EXCLUDING HIV)		PREVALENCE (INCLUDING HIV)		INCIDENCE (INCLUDING HIV)	
	YEAR	POPULATION (MILLIONS)	NUMBER (THOUSANDS)	RATE[a]	NUMBER (THOUSANDS)	RATE	NUMBER (THOUSANDS)	RATE
Serbia	2005	10	0.28 (0.25–0.32)	2.9 (2.5–3.2)	4 (1.1–6.8)	40 (11–69)	3.4 (3.2–4.1)	34 (33–41)
	2006	10	0.23 (0.2–0.26)	2.3 (2–2.6)	3.9 (1.1–6.8)	40 (12–69)	3.3 (3.1–4)	34 (32–40)
	2007	10	0.21 (0.18–0.23)	2.1 (1.9–2.4)	3.5 (0.93–6.1)	36 (9.4–62)	3 (2.9–3.7)	31 (29–37)
	2008	10	0.17 (0.15–0.19)	1.7 (1.5–1.9)	2.6 (0.6–4.7)	27 (6.1–47)	1.8 (1.5–2.2)	18 (15–22)
	2009	10	0.12 (0.076–0.15)	1.2 (<1–1.6)	2.4 (0.54–4.2)	24 (5.5–43)	1.5 (1.2–1.8)	15 (12–18)
Serbia & Montenegro	1990	10	0.8 (0.26–1.8)	7.8 (2.6–18)	9 (2.8–18)	89 (28–180)	6 (4.2–8.7)	59 (41–86)
	1995	11	0.99 (0.62–1.5)	9.2 (5.7–14)	9.6 (4.1–16)	88 (38–149)	5.8 (4.6–6.9)	53 (43–64)
	2000	11	0.48 (0.23–0.86)	4.4 (2.2–7.9)	6 (2.2–11)	56 (20–99)	4.3 (3.4–5.2)	40 (32–48)
Slovakia	1990	5	0.1 (0.075–0.15)	1.9 (1.4–2.8)	2.4 (0.77–4.2)	45 (15–80)	1.8 (1.4–2.2)	34 (28–41)
	1995	5	0.092 (0.075–0.12)	1.7 (1.4–2.3)	2.2 (0.67–3.8)	41 (13–70)	1.8 (1.5–2)	33 (29–37)
	2000	5	0.055 (0.049–0.06)	1 (<1–1.1)	1.5 (0.47–2.5)	27 (8.7–47)	1.2 (1–1.3)	22 (19–24)
	2005	5	0.048 (0.043–0.053)	<1 (<1–<1)	1.1 (0.39–1.8)	20 (7.2–34)	0.82 (0.71–0.92)	15 (13–17)
	2006	5	0.042 (0.034–0.056)	<1 (<1–1)	1 (0.33–1.7)	19 (6.2–32)	0.77 (0.67–0.87)	14 (12–16)
	2007	5	0.039 (0.031–0.052)	<1 (<1–<1)	0.92 (0.31–1.6)	17 (5.8–29)	0.72 (0.62–0.81)	13 (12–15)
	2008	5	0.033 (0.027–0.044)	<1 (<1–<1)	0.79 (0.24–1.4)	15 (4.5–25)	0.64 (0.56–0.73)	12 (10–13)
	2009	5	0.033 (0.027–0.044)	<1 (<1–<1)	0.78 (0.24–1.3)	14 (4.5–25)	0.63 (0.56–0.73)	12 (10–13)
Slovenia	1990	2	0.071 (0.05–0.099)	3.7 (2.6–5.1)	1.3 (0.53–2.3)	70 (28–119)	0.9 (0.72–1.1)	47 (37–56)
	1995	2	0.038 (0.031–0.051)	1.9 (1.6–2.6)	0.76 (0.24–1.3)	38 (12–66)	0.6 (0.53–0.68)	31 (27–35)
	2000	2	0.017 (0.016–0.019)	<1 (<1–<1)	0.52 (0.16–0.9)	26 (8–45)	0.42 (0.37–0.48)	21 (19–24)
	2005	2	0.017 (0.015–0.019)	<1 (<1–<1)	0.43 (0.17–0.72)	22 (8.5–36)	0.31 (0.27–0.35)	15 (13–17)
	2006	2	0.018 (0.016–0.02)	<1 (<1–1)	0.27 (0.07–0.48)	14 (3.5–24)	0.24 (0.21–0.27)	12 (10–13)
	2007	2	0.027 (0.024–0.03)	1.4 (1.2–1.5)	0.32 (0.11–0.54)	16 (5.4–27)	0.24 (0.21–0.28)	12 (11–14)
	2008	2	0.029 (0.026–0.032)	1.4 (1.3–1.6)	0.3 (0.099–0.52)	15 (4.9–26)	0.24 (0.21–0.27)	12 (10–13)
	2009	2	0.015 (0.012–0.019)	<1 (<1–<1)	0.29 (0.092–0.5)	14 (4.5–25)	0.23 (0.21–0.27)	12 (10–13)
Spain	1990	39	0.42 (0.32–0.6)	1.1 (<1–1.6)	12 (3.7–20)	30 (9.6–52)	9.5 (7.6–11)	24 (20–29)
	1995	39	0.45 (0.35–0.59)	1.1 (<1–1.5)	13 (4.6–21)	32 (12–54)	10 (8.8–11)	26 (22–29)
	2000	40	0.4 (0.36–0.45)	1 (<1–1.1)	12 (4.2–19)	29 (11–48)	9.2 (8–10)	23 (20–26)
	2005	43	0.35 (0.32–0.39)	<1 (<1–<1)	11 (3.9–18)	24 (9–41)	8.4 (7.3–9.5)	19 (17–22)
	2006	44	0.3 (0.27–0.33)	<1 (<1–<1)	11 (4.2–19)	26 (9.7–43)	9 (7.8–10)	21 (18–23)
	2007	44	0.32 (0.29–0.35)	<1 (<1–<1)	10 (3.7–17)	24 (8.4–40)	8.4 (7.3–9.6)	19 (17–22)
	2008	44	0.26 (0.23–0.29)	<1 (<1–<1)	9.2 (3–16)	21 (6.8–35)	7.8 (6.8–8.8)	17 (15–20)
	2009	45	0.32 (0.26–0.43)	<1 (<1–<1)	9.1 (3–16)	20 (6.7–35)	7.7 (6.8–8.9)	17 (15–20)
Sweden	1990	9	0.033 (0.023–0.047)	<1 (<1–<1)	0.98 (0.36–1.7)	11 (4.2–20)	0.7 (0.56–0.84)	8.1 (6.5–9.8)
	1995	9	0.028 (0.022–0.037)	<1 (<1–<1)	0.86 (0.32–1.4)	9.8 (3.6–16)	0.65 (0.56–0.73)	7.3 (6.4–8.3)
	2000	9	0.018 (0.016–0.02)	<1 (<1–<1)	0.59 (0.19–1)	6.7 (2.1–11)	0.48 (0.42–0.54)	5.4 (4.7–6.1)
	2005	9	0.015 (0.014–0.017)	<1 (<1–<1)	0.86 (0.34–1.4)	9.5 (3.8–16)	0.62 (0.54–0.7)	6.8 (5.9–7.7)
	2006	9	0.017 (0.016–0.019)	<1 (<1–<1)	0.7 (0.23–1.2)	7.7 (2.5–13)	0.56 (0.49–0.64)	6.2 (5.4–7)
	2007	9	0.024 (0.022–0.027)	<1 (<1–<1)	0.66 (0.21–1.1)	7.2 (2.3–12)	0.53 (0.46–0.6)	5.8 (5–6.5)
	2008	9	0.017 (0.016–0.019)	<1 (<1–<1)	0.66 (0.22–1.1)	7.2 (2.4–12)	0.53 (0.46–0.59)	5.7 (5–6.5)
	2009	9	0.02 (0.016–0.027)	<1 (<1–<1)	0.63 (0.2–1.1)	6.9 (2.2–12)	0.51 (0.46–0.6)	5.6 (5–6.5)
Switzerland	1990	7	0.068 (0.049–0.097)	1 (<1–1.4)	2.3 (0.88–3.9)	34 (13–58)	1.6 (1.3–1.9)	24 (19–29)
	1995	7	0.034 (0.027–0.046)	<1 (<1–<1)	1.2 (0.39–2)	17 (5.6–29)	0.95 (0.83–1.1)	14 (12–15)
	2000	7	0.034 (0.03–0.037)	<1 (<1–<1)	0.69 (0.17–1.2)	9.6 (2.4–17)	0.63 (0.54–0.71)	8.7 (7.6–9.8)
	2005	7	0.021 (0.019–0.024)	<1 (<1–<1)	0.74 (0.26–1.2)	9.9 (3.5–17)	0.58 (0.51–0.66)	7.9 (6.8–8.9)
	2006	7	0.024 (0.022–0.027)	<1 (<1–<1)	0.65 (0.22–1.1)	8.7 (2.9–15)	0.53 (0.46–0.6)	7.1 (6.2–8)
	2007	8	0.016 (0.015–0.018)	<1 (<1–<1)	0.64 (0.24–1.1)	8.5 (3.2–14)	0.49 (0.43–0.55)	6.5 (5.7–7.4)
	2008	8	0.011 (0.01–0.015)	<1 (<1–<1)	0.41 (0.11–0.71)	5.4 (1.4–9.4)	0.37 (0.32–0.41)	4.9 (4.2–5.5)
	2009	8	0.012 (0.01–0.017)	<1 (<1–<1)	0.43 (0.14–0.74)	5.7 (1.9–9.8)	0.36 (0.32–0.42)	4.7 (4.2–5.5)
Tajikistan	1990	5	1.2 (0.58–2)	22 (11–39)	9 (3.5–18)	171 (66–339)	4.9 (2.7–7.1)	92 (51–134)
	1995	6	1.5 (1.2–1.9)	26 (20–33)	11 (5.2–18)	194 (90–317)	5.3 (4.3–6.4)	92 (74–111)
	2000	6	1.8 (1.3–2.3)	29 (22–37)	14 (6.3–22)	221 (102–363)	7.2 (5.7–8.6)	116 (93–139)
	2005	7	3.3 (2.4–4.2)	50 (37–64)	25 (11–41)	378 (176–623)	13 (10–16)	198 (158–237)
	2006	7	2.9 (2.1–3.8)	43 (32–57)	22 (10–37)	335 (154–551)	12 (9.8–15)	185 (148–222)
	2007	7	3.4 (2.5–4.4)	50 (37–65)	26 (12–42)	382 (177–629)	14 (11–17)	206 (165–248)
	2008	7	3.1 (2.3–4.1)	46 (34–60)	24 (11–40)	357 (166–585)	14 (11–16)	199 (159–239)
	2009	7	3.4 (2.5–4.4)	48 (36–63)	26 (12–42)	374 (171–609)	14 (11–17)	202 (164–243)
The Former Yugoslav Republic of Macedonia	1990	2	0.084 (0.055–0.11)	4.4 (2.9–5.9)	1.7 (0.39–3.1)	91 (20–162)	1.5 (0.85–2.2)	81 (44–117)
	1995	2	0.23 (0.14–0.36)	12 (7–18)	1.8 (0.75–3)	91 (38–155)	1.1 (0.91–1.4)	58 (46–69)
	2000	2	0.11 (0.099–0.13)	5.6 (4.9–6.3)	1.2 (0.47–2.1)	61 (23–105)	0.83 (0.67–1)	41 (33–50)
	2005	2	0.033 (0.021–0.044)	1.6 (1–2.2)	0.67 (0.15–1.2)	33 (7.3–58)	0.6 (0.6–0.72)	30 (29–36)
	2006	2	0.031 (0.02–0.042)	1.5 (<1–2.1)	0.63 (0.14–1.1)	31 (6.8–54)	0.56 (0.56–0.68)	28 (28–33)
	2007	2	0.035 (0.02–0.075)	1.7 (<1–3.7)	0.6 (0.14–1.1)	30 (7–52)	0.53 (0.53–0.63)	26 (26–31)
	2008	2	0.035 (0.019–0.077)	1.7 (<1–3.8)	0.57 (0.14–1)	28 (6.7–50)	0.49 (0.45–0.59)	24 (22–29)
	2009	2	0.03 (0.017–0.06)	1.4 (<1–2.9)	0.52 (0.12–0.92)	26 (6–45)	0.46 (0.4–0.53)	23 (19–26)
Turkey	1990	56	3.9 (1.5–8.4)	7 (2.6–15)	47 (15–90)	83 (27–161)	32 (24–47)	58 (44–84)
	1995	61	6.1 (3.8–8.8)	9.9 (6.3–14)	59 (26–98)	96 (42–160)	35 (28–43)	58 (46–70)
	2000	66	5 (3.2–7.4)	7.5 (4.7–11)	50 (22–83)	75 (32–125)	31 (25–37)	46 (37–55)
	2005	71	2.5 (1.3–4.4)	3.5 (1.8–6.2)	33 (12–57)	46 (16–80)	24 (20–28)	33 (28–40)
	2006	72	2.1 (1.1–3.8)	3 (1.5–5.3)	31 (10–53)	42 (14–74)	23 (20–28)	32 (27–38)
	2007	73	2.2 (1.1–4)	3 (1.5–5.5)	30 (10–53)	42 (14–73)	23 (19–27)	31 (26–37)
	2008	74	2.4 (1.2–4.2)	3.2 (1.6–5.7)	31 (11–54)	42 (15–73)	22 (18–27)	30 (24–36)
	2009	75	2.4 (1.2–4.1)	3.2 (1.6–5.5)	30 (11–53)	41 (15–71)	22 (18–26)	29 (24–35)
Turkmenistan	1990	4	0.66 (0.56–1.1)	18 (15–30)	2.6 (0.58–4.6)	72 (16–126)	2.4 (2.3–3.4)	64 (63–93)
	1995	4	0.73 (0.54–1.1)	18 (13–27)	2.7 (0.78–4.8)	65 (19–115)	2.2 (1.9–2.6)	52 (46–63)
	2000	5	1.2 (0.99–1.9)	27 (22–41)	4.7 (1.1–8.4)	105 (25–187)	4.2 (4–5)	92 (90–111)
	2005	5	0.98 (0.81–1.5)	20 (17–32)	3.9 (0.92–6.9)	80 (19–142)	3.4 (3.2–4.1)	70 (66–84)
	2006	5	0.99 (0.81–1.5)	20 (17–31)	3.9 (0.92–6.9)	79 (19–140)	3.4 (3.2–4.1)	69 (66–83)
	2007	5	0.93 (0.84–1)	19 (17–20)	3.8 (0.84–6.8)	76 (17–136)	3.4 (2.7–4.1)	68 (55–82)
	2008	5	0.98 (0.88–1.1)	19 (18–21)	4 (0.89–7.2)	80 (18–142)	3.4 (2.7–4.1)	68 (54–81)
	2009	5	1 (0.92–1.1)	20 (18–22)	4.2 (0.92–7.4)	82 (18–146)	3.4 (2.8–4.2)	67 (54–82)
Ukraine	1990	52	6.1 (3.4–11)	12 (6.7–21)	30 (9.6–58)	58 (19–112)	21 (16–31)	41 (32–60)
	1995	51	6.7 (4.5–10)	13 (8.8–20)	34 (12–61)	67 (23–119)	26 (21–31)	51 (42–62)
	2000	49	12 (10–13)	24 (21–27)	53 (18–92)	108 (37–189)	41 (33–49)	84 (67–101)
	2005	47	12 (11–13)	26 (23–29)	61 (21–110)	129 (45–224)	48 (40–57)	102 (84–122)
	2006	47	11 (9.6–12)	23 (21–25)	60 (22–100)	130 (47–222)	47 (41–57)	102 (89–122)
	2007	46	12 (7.7–18)	25 (17–39)	60 (21–110)	131 (45–228)	47 (38–56)	102 (81–122)
	2008	46	11 (9.5–12)	23 (21–25)	62 (23–110)	134 (50–233)	47 (38–56)	102 (82–122)
	2009	46	12 (8.1–18)	27 (18–40)	62 (23–110)	135 (50–234)	46 (38–56)	102 (83–122)
United Kingdom of Great Britain and Northern Ireland	1990	57	0.4 (0.29–0.59)	<1 (<1–1)	10 (3.5–18)	17 (6.1–31)	7.4 (5.9–8.9)	13 (10–15)
	1995	58	0.35 (0.28–0.47)	<1 (<1–<1)	9 (3–15)	16 (5.1–27)	7.1 (6.2–8)	12 (11–14)
	2000	59	0.36 (0.29–0.48)	<1 (<1–<1)	9.1 (3.2–15)	16 (5.4–26)	7.2 (6.2–8.1)	12 (11–14)
	2005	60	0.39 (0.35–0.42)	<1 (<1–<1)	12 (4.6–21)	21 (7.6–35)	9.4 (8.2–11)	16 (14–18)
	2006	61	0.41 (0.37–0.45)	<1 (<1–<1)	12 (4.2–20)	20 (6.9–33)	9.4 (8.2–11)	15 (13–18)
	2007	61	0.34 (0.3–0.37)	<1 (<1–<1)	12 (4.3–20)	19 (7–32)	9 (7.9–10)	15 (13–17)
	2008	61	0.34 (0.29–0.45)	<1 (<1–<1)	8.9 (2.6–15)	15 (4.3–25)	7.6 (6.6–8.6)	12 (11–14)
	2009	62	0.35 (0.28–0.47)	<1 (<1–<1)	9.1 (2.9–16)	15 (4.8–25)	7.4 (6.6–8.6)	12 (11–14)
Uzbekistan	1990	21	4.5 (2.3–7.6)	22 (11–37)	52 (20–100)	255 (99–507)	26 (14–38)	128 (70–185)
	1995	23	4.7 (3.6–6.1)	21 (15–27)	56 (26–92)	245 (113–403)	29 (23–35)	128 (102–153)
	2000	25	4.5 (3.9–5.1)	18 (16–20)	57 (26–93)	228 (104–376)	32 (25–38)	128 (102–153)
	2005	26	3.9 (3.3–4.4)	15 (13–17)	53 (23–89)	203 (86–339)	34 (27–40)	128 (102–153)
	2006	27	4.2 (2.9–5.8)	16 (11–22)	54 (23–92)	204 (88–344)	34 (27–41)	128 (102–153)
	2007	27	4.5 (3.2–6.1)	17 (12–23)	56 (25–94)	210 (93–351)	34 (28–41)	128 (102–153)
	2008	27	4.9 (3.6–6.5)	18 (13–24)	61 (28–100)	223 (101–369)	35 (28–42)	128 (102–153)
	2009	27	5.1 (3.8–6.7)	19 (14–24)	62 (28–100)	227 (103–373)	35 (29–42)	128 (104–154)

[a] Rates are per 100 000 population.

TABLE A2.2 **Incidence, notification and case detection rates, all forms, 1990–2009**

			INCIDENCE (INCLUDING HIV)		INCIDENCE HIV-POSITIVE		NOTIFIED NEW AND RELAPSE[a]	CASE DETECTION RATE[a]	
	YEAR	POPULATION (MILLIONS)	NUMBER (THOUSANDS)	RATE[b]	NUMBER (THOUSANDS)	RATE[b]	NUMBER	RATE[b]	PERCENT
Albania	1990	3	0.8 (0.65–1.2)	24 (20–35)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	653	20	81 (56–100)
	1995	3	0.76 (0.64–0.92)	24 (20–29)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	641	20	84 (70–100)
	2000	3	0.69 (0.6–0.83)	23 (20–27)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	604	20	87 (73–100)
	2005	3	0.58 (0.51–0.7)	19 (16–22)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	506	16	87 (73–100)
	2006	3	0.54 (0.47–0.65)	17 (15–21)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	469	15	87 (73–100)
	2007	3	0.5 (0.44–0.6)	16 (14–19)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	438	14	87 (72–100)
	2008	3	0.49 (0.43–0.59)	16 (14–19)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	427	14	87 (73–100)
	2009	3	0.46 (0.39–0.54)	15 (12–17)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	435	14	94 (80–111)
Andorra	1990	0	0.029 (0.023–0.035)	54 (44–65)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	23	44	80 (67–100)
	1995	0	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)			–
	2000	0	0.014 (0.012–0.016)	21 (18–23)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	12	18	87 (77–100)
	2005	0	0.012 (0.01–0.013)	14 (13–16)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	10	13	87 (77–100)
	2006	0	0.014 (0.012–0.016)	17 (15–19)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	12	15	87 (77–100)
	2007	0	<0.01 (<0.01–<0.01)	6.9 (6–7.8)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	5	6	87 (77–100)
	2008	0	<0.01 (<0.01–<0.01)	5.4 (4.7–6.2)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	4	5	87 (77–100)
	2009	0	<0.01 (<0.01–0.01)	10 (9.4–12)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	8	9	89 (77–100)
Armenia	1990	4	1.2 (0.65–1.7)	33 (18–48)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	590	17	50 (35–91)
	1995	3	1.5 (1.2–1.8)	47 (37–56)	<0.01 (<0.01–0.013)	<1 (<1–<1)	1 157	36	77 (64–96)
	2000	3	2.2 (1.7–2.6)	71 (57–85)	0.027 (0.016–0.04)	<1 (<1–1.3)	1 333	43	61 (51–77)
	2005	3	2.2 (1.8–2.6)	72 (57–86)	0.031 (0.019–0.046)	1 (<1–1.5)	2 206	72	100 (84–125)
	2006	3	2.2 (1.8–2.7)	72 (58–86)	0.032 (0.02–0.048)	1 (<1–1.6)	1 767	58	80 (67–100)
	2007	3	2.2 (1.8–2.7)	72 (58–87)	0.034 (0.021–0.05)	1.1 (<1–1.6)	1 682	55	76 (63–95)
	2008	3	2.2 (1.8–2.7)	73 (58–87)	0.035 (0.022–0.052)	1.1 (<1–1.7)	1 655	54	74 (62–93)
	2009	3	2.2 (1.8–2.7)	73 (59–88)	0.037 (0.023–0.056)	1.2 (<1–1.8)	1 560	51	70 (58–85)
Austria	1990	8	1.9 (1.5–2.3)	25 (20–30)	<0.01 (<0.01–0.012)	<1 (<1–<1)	1 521	20	80 (67–100)
	1995	8	1.7 (1.5–1.9)	21 (19–24)	0.012 (<0.01–0.021)	<1 (<1–<1)	1 481	19	87 (77–100)
	2000	8	1.4 (1.2–1.5)	17 (15–19)	0.021 (0.012–0.031)	<1 (<1–<1)	1 185	15	87 (77–100)
	2005	8	1.1 (0.93–1.2)	13 (11–15)	0.03 (0.019–0.044)	<1 (<1–<1)	928	11	87 (77–100)
	2006	8	0.98 (0.86–1.1)	12 (10–13)	0.031 (0.02–0.044)	<1 (<1–<1)	855	10	87 (77–100)
	2007	8	0.93 (0.81–1.1)	11 (9.8–13)	0.032 (0.021–0.046)	<1 (<1–<1)	811	10	87 (77–100)
	2008	8	0.94 (0.81–1.1)	11 (9.8–13)	0.035 (0.022–0.05)	<1 (<1–<1)			–
	2009	8	0.91 (0.82–1.1)	11 (9.8–13)	0.037 (0.024–0.053)	<1 (<1–<1)			–
Azerbaijan	1990	7	7.9 (4.4–11)	110 (60–159)	0.012 (<0.01–0.03)	<1 (<1–<1)	2 620	36	33 (23–60)
	1995	8	8.5 (6.8–10)	110 (88–132)	0.023 (<0.01–0.045)	<1 (<1–<1)	1 630	21	19 (16–24)
	2000	8	8.9 (7.1–11)	110 (88–132)	0.041 (0.02–0.071)	<1 (<1–<1)	5 187	64	58 (49–73)
	2005	8	9.3 (7.4–11)	110 (88–132)	0.072 (0.041–0.11)	<1 (<1–1.3)	6 034	71	65 (54–81)
	2006	9	9.4 (7.5–11)	110 (88–132)	0.081 (0.047–0.12)	<1 (<1–1.5)	5 705	67	61 (51–76)
	2007	9	9.5 (7.6–11)	110 (88–132)	0.089 (0.051–0.14)	1 (<1–1.6)	5 521	64	58 (49–73)
	2008	9	9.6 (7.7–11)	110 (88–132)	0.099 (0.056–0.16)	1.1 (<1–1.8)	6 417	74	67 (56–84)
	2009	9	9.7 (7.9–12)	110 (89–132)	0.11 (0.062–0.18)	1.3 (<1–2)	6 114	69	63 (52–77)
Belarus	1990	10	8.2 (4.5–12)	80 (44–117)	<0.01 (<0.01–0.017)	<1 (<1–<1)	3 039	30	37 (25–67)
	1995	10	8.3 (6.6–9.9)	80 (64–96)	0.019 (<0.01–0.043)	<1 (<1–<1)	4 854	47	59 (49–74)
	2000	10	7.5 (6.8–9)	75 (68–89)	0.068 (0.041–0.1)	<1 (<1–1)	6 799	68	91 (76–100)
	2005	10	5.7 (5.3–6.8)	58 (54–69)	0.11 (0.075–0.16)	1.2 (<1–1.7)	5 308	54	93 (78–100)
	2006	10	5.2 (5.1–6.2)	53 (53–64)	0.11 (0.076–0.16)	1.2 (<1–1.6)	5 142	53	99 (82–100)
	2007	10	4.7 (3.8–5.6)	48 (39–58)	0.11 (0.07–0.16)	1.1 (<1–1.6)	5 351	55	114 (95–143)
	2008	10	4.2 (3.4–5)	43 (35–52)	0.13 (0.1–0.15)	1.3 (1.1–1.5)	5 126	53	123 (102–149)
	2009	10	3.8 (3.1–4.5)	39 (32–47)	0.097 (0.062–0.14)	1 (<1–1.5)	5 250	54	140 (116–172)
Belgium	1990	10	2 (1.6–2.4)	20 (16–24)	0.026 (0.012–0.045)	<1 (<1–<1)	1 577	16	80 (67–100)
	1995	10	1.6 (1.4–1.8)	16 (14–18)	0.052 (0.031–0.08)	<1 (<1–<1)	1 380	14	87 (77–100)
	2000	10	1.5 (1.3–1.7)	14 (13–16)	0.067 (0.043–0.098)	<1 (<1–<1)	1 278	13	87 (77–100)
	2005	10	1.2 (1.1–1.4)	12 (10–13)	0.06 (0.044–0.079)	<1 (<1–<1)	1 076	10	87 (77–100)
	2006	10	1.2 (1–1.4)	11 (10–13)	0.063 (0.046–0.083)	<1 (<1–<1)	1 043	10	87 (77–100)
	2007	11	1.1 (0.96–1.2)	10 (9.1–12)	0.06 (0.044–0.079)	<1 (<1–<1)	955	9	87 (77–100)
	2008	11	0.93 (0.81–1.1)	8.8 (7.7–10)	0.048 (0.031–0.07)	<1 (<1–<1)	811	8	87 (77–100)
	2009	11	0.91 (0.82–1.1)	8.6 (7.7–10)	0.047 (0.03–0.069)	<1 (<1–<1)	*815*	*8*	*89 (77–100)*
Bosnia and Herzegovina	1990	4	4 (2.2–5.8)	94 (51–136)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	4 073	95	101 (70–184)
	1995	3	2.8 (2.2–3.4)	84 (67–101)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	2 132	64	76 (63–95)
	2000	4	2.3 (1.9–2.8)	63 (50–75)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	2 476	67	107 (89–133)
	2005	4	2 (1.6–2.4)	52 (42–63)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	2 111	56	107 (89–134)
	2006	4	2 (1.8–2.3)	52 (47–62)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	1 778	47	91 (76–100)
	2007	4	1.9 (1.5–2.3)	51 (41–61)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	2 373	63	123 (102–154)
	2008	4	1.9 (1.7–2.3)	51 (45–61)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	1 713	45	90 (75–100)
	2009	4	1.9 (1.6–2.2)	50 (43–58)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	*1 710*	*45*	*91 (78–106)*
Bulgaria	1990	9	4.1 (2.3–5.9)	46 (26–67)	<0.01 (<0.01–0.012)	<1 (<1–<1)	2 256	26	56 (38–100)
	1995	8	3.9 (3.2–4.6)	46 (39–55)	0.01 (<0.01–0.019)	<1 (<1–<1)	3 245	39	84 (70–100)
	2000	8	3.7 (3.3–4.4)	46 (42–55)	0.022 (0.013–0.034)	<1 (<1–<1)	3 349	42	91 (76–100)
	2005	8	3.5 (3.2–4.3)	46 (42–55)	0.038 (0.023–0.057)	<1 (<1–<1)	3 225	42	91 (76–100)
	2006	8	3.4 (3.1–4.1)	45 (41–54)	0.04 (0.024–0.06)	<1 (<1–<1)	3 136	41	91 (76–100)
	2007	8	3.1 (2.8–3.8)	41 (37–49)	0.038 (0.023–0.058)	<1 (<1–<1)	2 848	37	91 (76–100)
	2008	8	3.2 (2.9–3.9)	43 (39–51)	0.042 (0.026–0.063)	<1 (<1–<1)	2 944	39	91 (76–100)
	2009	8	3.1 (2.7–3.6)	41 (36–47)	0.043 (0.025–0.065)	<1 (<1–<1)	*2 925*	*39*	*94 (82–109)*
Croatia	1990	5	3.2 (2.6–3.9)	71 (57–86)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	2 576	57	80 (67–100)
	1995	5	2.4 (2.1–2.7)	52 (45–59)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	2 114	45	87 (77–100)
	2000	5	1.9 (1.6–2.1)	42 (36–47)	<0.01 (<0.01–0.011)	<1 (<1–<1)	1 630	36	87 (77–100)
	2005	4	1.2 (1.1–1.4)	27 (24–31)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	1 050	24	87 (77–100)
	2006	4	1.2 (1–1.3)	27 (23–30)	<0.01 (<0.01–0.01)	<1 (<1–<1)	1 029	23	87 (77–100)
	2007	4	1.1 (0.95–1.2)	25 (21–28)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	951	21	87 (77–100)
	2008	4	1.1 (0.98–1.3)	25 (22–29)	<0.01 (<0.01–0.011)	<1 (<1–<1)	980	22	87 (77–100)
	2009	4	1.1 (0.98–1.3)	25 (22–29)	<0.01 (<0.01–0.011)	<1 (<1–<1)	*979*	*22*	*89 (77–100)*
Cyprus	1990	1	0.036 (0.029–0.044)	5.3 (4.3–6.4)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	29	4	80 (67–100)
	1995	1	0.041 (0.036–0.047)	5.7 (4.9–6.4)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	36	5	87 (77–100)
	2000	1	0.038 (0.033–0.043)	4.8 (4.2–5.5)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	33	4	87 (77–100)
	2005	1	0.039 (0.034–0.044)	4.7 (4.1–5.3)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	34	4	87 (77–100)
	2006	1	0.041 (0.036–0.047)	4.9 (4.3–5.5)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	36	4	87 (77–100)
	2007	1	0.047 (0.041–0.053)	5.5 (4.8–6.2)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	41	5	87 (77–100)
	2008	1	0.048 (0.042–0.055)	5.6 (4.9–6.3)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	42	5	87 (77–100)
	2009	1	0.048 (0.042–0.055)	5.5 (4.9–6.3)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	*42*	*5*	*89 (77–100)*
Czech Republic	1990	10	2.4 (1.9–2.9)	23 (19–28)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	1 937	19	80 (67–100)
	1995	10	2.1 (1.8–2.4)	20 (18–23)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	1 834	18	87 (77–100)
	2000	10	1.6 (1.4–1.8)	16 (14–18)	<0.01 (<0.01–0.01)	<1 (<1–<1)	1 414	14	87 (77–100)
	2005	10	1.1 (0.97–1.3)	11 (9.5–12)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	973	10	87 (77–100)
	2006	10	1.1 (0.94–1.2)	11 (9.2–12)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	941	9	87 (77–100)
	2007	10	0.91 (0.79–1)	8.8 (7.7–10)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	790	8	87 (77–100)
	2008	10	0.93 (0.81–1.1)	9 (7.9–10)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	807	8	87 (77–100)
	2009	10	0.91 (0.81–1.1)	8.8 (7.8–10)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	*811*	*8*	*89 (77–100)*
Denmark	1990	5	0.44 (0.35–0.53)	8.5 (6.8–10)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	350	7	80 (67–100)
	1995	5	0.52 (0.45–0.58)	9.9 (8.6–11)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	448	9	87 (77–100)
	2000	5	0.68 (0.59–0.76)	13 (11–14)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	587	11	87 (77–100)
	2005	5	0.45 (0.4–0.51)	8.4 (7.3–9.5)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	395	7	87 (77–100)
	2006	5	0.39 (0.34–0.44)	7.2 (6.3–8.2)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	341	6	87 (77–100)
	2007	5	0.41 (0.36–0.46)	7.5 (6.5–8.5)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	355	7	87 (77–100)
	2008	5	0.38 (0.33–0.43)	7 (6–7.9)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	330	6	87 (77–100)
	2009	5	0.37 (0.33–0.43)	6.8 (6–7.9)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	*331*	*6*	*89 (77–100)*

[a] Where notification data from a country had not been received by 31 August, the notification rate was assumed to be the same as for 2008 (in *italics*).
[b] Rates are per 100 000 population.

Data can be downloaded from www.who.int/tb/data

TABLE A2.2 **Incidence, notification and case detection rates, all forms, 1990–2009**

			INCIDENCE (INCLUDING HIV)		INCIDENCE HIV-POSITIVE		NOTIFIED NEW AND RELAPSE[a]		CASE DETECTION RATE[a]
	YEAR	POPULATION (MILLIONS)	NUMBER (THOUSANDS)	RATE[b]	NUMBER (THOUSANDS)	RATE[b]	NUMBER	RATE[b]	PERCENT
Estonia	1990	2	1 (0.57–1.5)	66 (36–96)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	423	27	41 (28–74)
	1995	1	0.95 (0.76–1.1)	66 (53–80)	<0.01 (<0.01–0.02)	<1 (<1–1.4)	624	43	65 (54–82)
	2000	1	0.94 (0.79–1.1)	69 (58–82)	0.04 (0.026–0.056)	2.9 (1.9–4.1)	791	58	84 (70–100)
	2005	1	0.55 (0.48–0.65)	40 (36–49)	0.038 (0.025–0.053)	2.8 (1.9–3.9)	479	36	88 (73–100)
	2006	1	0.48 (0.42–0.58)	36 (31–43)	0.047 (0.032–0.063)	3.5 (2.4–4.7)	422	31	88 (73–100)
	2007	1	0.52 (0.46–0.62)	39 (34–46)	0.059 (0.043–0.079)	4.4 (3.2–5.9)	456	34	88 (73–100)
	2008	1	0.46 (0.4–0.55)	34 (30–41)	0.045 (0.032–0.061)	3.4 (2.4–4.5)	401	30	88 (73–100)
	2009	1	0.45 (0.4–0.52)	33 (30–39)	0.043 (0.03–0.057)	3.2 (2.3–4.3)	*401*	*30*	*89 (77–100)*
Finland	1990	5	0.97 (0.77–1.2)	19 (15–23)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	772	15	80 (67–100)
	1995	5	0.76 (0.66–0.86)	15 (13–17)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	661	13	87 (77–100)
	2000	5	0.61 (0.53–0.69)	12 (10–13)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	527	10	87 (77–100)
	2005	5	0.39 (0.34–0.44)	7.4 (6.5–8.4)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	339	6	87 (77–100)
	2006	5	0.32 (0.28–0.36)	6.1 (5.3–6.9)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	280	5	87 (77–100)
	2007	5	0.35 (0.3–0.39)	6.5 (5.7–7.4)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	300	6	87 (77–100)
	2008	5	0.38 (0.33–0.43)	7.2 (6.2–8.1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	331	6	87 (77–100)
	2009	5	0.37 (0.33–0.43)	7 (6.2–8.1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	*332*	*6*	*89 (77–100)*
France	1990	57	11 (9–14)	20 (16–24)	0.43 (0.27–0.63)	<1 (<1–1.1)	9 030	16	80 (67–100)
	1995	58	10 (8.7–11)	17 (15–20)	0.36 (0.25–0.51)	<1 (<1–<1)	8 723	15	87 (77–100)
	2000	59	7 (6.1–8)	12 (10–13)	0.29 (0.2–0.41)	<1 (<1–<1)	6 122	10	87 (77–100)
	2005	61	5.6 (4.9–6.4)	9.2 (8–10)	0.26 (0.17–0.37)	<1 (<1–<1)	4 887	8	87 (77–100)
	2006	61	5.5 (4.8–6.3)	9 (7.8–10)	0.26 (0.17–0.37)	<1 (<1–<1)	4 817	8	87 (77–100)
	2007	62	6.1 (5.3–6.9)	9.9 (8.6–11)	0.3 (0.2–0.42)	<1 (<1–<1)	5 314	9	87 (77–100)
	2008	62	3.9 (3.4–4.4)	6.2 (5.4–7)	0.19 (0.13–0.27)	<1 (<1–<1)	3 355	5	87 (77–100)
	2009	62	3.8 (3.4–4.4)	6.1 (5.4–7)	0.19 (0.13–0.27)	<1 (<1–<1)	*3 372*	*5*	*89 (77–100)*
Georgia	1990	5	5.8 (3.2–8.4)	107 (59–155)	0.014 (<0.01–0.042)	<1 (<1–<1)	1 537	28	26 (18–48)
	1995	5	5.4 (4.3–6.5)	107 (85–128)	0.022 (<0.01–0.048)	<1 (<1–<1)	1 625	32	30 (25–38)
	2000	5	5.1 (4.4–6.1)	107 (93–128)	0.034 (0.015–0.063)	<1 (<1–1.3)	4 397	93	87 (72–100)
	2005	4	4.8 (4.5–5.7)	107 (101–128)	0.056 (0.033–0.086)	1.3 (<1–1.9)	4 501	101	95 (79–100)
	2006	4	4.7 (4.6–5.6)	107 (103–128)	0.064 (0.039–0.094)	1.4 (<1–2.1)	4 554	103	97 (81–100)
	2007	4	4.6 (4.3–5.6)	107 (99–128)	0.09 (0.063–0.12)	2.1 (1.5–2.8)	4 310	99	93 (77–100)
	2008	4	4.6 (4.4–5.5)	107 (102–128)	0.06 (0.035–0.091)	1.4 (<1–2.1)	4 412	102	96 (80–100)
	2009	4	4.5 (4–5.1)	107 (94–119)	0.09 (0.054–0.14)	2.1 (1.3–3.2)	4 752	112	105 (93–118)
Germany	1990	79	18 (15–22)	23 (18–28)	0.25 (0.16–0.37)	<1 (<1–<1)	14 653	18	80 (67–100)
	1995	82	14 (12–16)	17 (15–19)	0.19 (0.12–0.28)	<1 (<1–<1)	12 198	15	87 (77–100)
	2000	82	10 (9.1–12)	13 (11–14)	0.17 (0.11–0.24)	<1 (<1–<1)	9 064	11	87 (77–100)
	2005	82	6.4 (5.5–7.2)	7.7 (6.7–8.7)	0.12 (0.076–0.17)	<1 (<1–<1)	5 539	7	87 (77–100)
	2006	82	5.8 (5–6.5)	7 (6.1–7.9)	0.11 (0.071–0.16)	<1 (<1–<1)	5 021	6	87 (77–100)
	2007	82	5.3 (4.6–6)	6.4 (5.6–7.3)	0.11 (0.069–0.15)	<1 (<1–<1)	4 609	6	87 (77–100)
	2008	82	4.2 (3.7–4.8)	5.1 (4.5–5.8)	0.088 (0.056–0.13)	<1 (<1–<1)	3 664	4	87 (77–100)
	2009	82	4.1 (3.7–4.8)	5 (4.5–5.8)	0.088 (0.056–0.13)	<1 (<1–<1)	*3 660*	*4*	*89 (77–100)*
Greece	1990	10	1.1 (0.88–1.3)	11 (8.6–13)	0.019 (0.012–0.028)	<1 (<1–<1)	877	9	80 (67–100)
	1995	11	1.1 (0.94–1.2)	10 (8.8–11)	0.02 (0.013–0.028)	<1 (<1–<1)	939	9	87 (77–100)
	2000	11	0.81 (0.7–0.91)	7.4 (6.4–8.4)	0.015 (<0.01–0.022)	<1 (<1–<1)	703	6	87 (77–100)
	2005	11	0.72 (0.63–0.81)	6.5 (5.7–7.4)	0.014 (<0.01–0.021)	<1 (<1–<1)	626	6	87 (77–100)
	2006	11	0.67 (0.58–0.75)	6 (5.2–6.8)	0.013 (<0.01–0.019)	<1 (<1–<1)	580	5	87 (77–100)
	2007	11	0.68 (0.59–0.77)	6.1 (5.3–6.9)	0.014 (<0.01–0.02)	<1 (<1–<1)	593	5	87 (77–100)
	2008	11	0.62 (0.54–0.7)	5.5 (4.8–6.2)	0.012 (<0.01–0.018)	<1 (<1–<1)	535	5	87 (77–100)
	2009	11	0.6 (0.54–0.7)	5.4 (4.8–6.2)	0.012 (<0.01–0.018)	<1 (<1–<1)	*536*	*5*	*89 (77–100)*
Hungary	1990	10	4.5 (3.6–5.4)	43 (35–52)	0.061 (0.035–0.095)	<1 (<1–<1)	3 588	35	80 (67–100)
	1995	10	5 (4.3–5.6)	48 (42–55)	0.053 (0.031–0.082)	<1 (<1–<1)	4 339	42	87 (77–100)
	2000	10	3.5 (3.1–4)	35 (30–39)	0.03 (0.018–0.046)	<1 (<1–<1)	3 073	30	87 (77–100)
	2005	10	2.1 (1.8–2.4)	21 (18–23)	0.017 (<0.01–0.026)	<1 (<1–<1)	1 808	18	87 (77–100)
	2006	10	1.9 (1.7–2.2)	19 (17–22)	0.016 (<0.01–0.024)	<1 (<1–<1)	1 687	17	87 (77–100)
	2007	10	1.8 (1.5–2)	18 (15–20)	0.015 (<0.01–0.023)	<1 (<1–<1)	1 540	15	87 (77–100)
	2008	10	1.6 (1.4–1.9)	16 (14–19)	0.014 (<0.01–0.022)	<1 (<1–<1)	1 428	14	87 (77–100)
	2009	10	1.6 (1.4–1.9)	16 (14–19)	0.014 (<0.01–0.022)	<1 (<1–<1)	*1 425*	*14*	*89 (77–100)*
Iceland	1990	0	0.023 (0.018–0.027)	8.8 (7.1–11)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	18	7	80 (67–100)
	1995	0	0.014 (0.012–0.016)	5.2 (4.5–5.8)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	12	4	87 (77–100)
	2000	0	0.015 (0.013–0.017)	5.3 (4.6–6)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	13	5	87 (77–100)
	2005	0	0.012 (0.01–0.013)	3.9 (3.4–4.4)	<0.01 (<0.01–<0.01)	<1 (<1–1.6)	10	3	87 (77–100)
	2006	0	0.015 (0.013–0.017)	5 (4.3–5.6)	<0.01 (<0.01–<0.01)	<1 (<1–2.1)	13	4	87 (77–100)
	2007	0	0.014 (0.012–0.016)	4.5 (3.9–5.1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	12	4	87 (77–100)
	2008	0	<0.01 (<0.01–<0.01)	2.2 (1.9–2.5)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	6	2	87 (77–100)
	2009	0	<0.01 (<0.01–<0.01)	2.1 (1.9–2.5)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	*6*	*2*	*89 (77–100)*
Ireland	1990	4	0.78 (0.62–0.94)	22 (18–27)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	624	18	80 (67–100)
	1995	4	0.53 (0.46–0.6)	15 (13–16)	<0.01 (<0.01–0.012)	<1 (<1–<1)	458	13	87 (77–100)
	2000	4	0.44 (0.39–0.5)	12 (10–13)	0.011 (<0.01–0.017)	<1 (<1–<1)	386	10	87 (77–100)
	2005	4	0.45 (0.39–0.5)	11 (9.2–12)	0.014 (<0.01–0.02)	<1 (<1–<1)	387	9	87 (77–100)
	2006	4	0.48 (0.42–0.54)	11 (9.7–13)	0.015 (<0.01–0.022)	<1 (<1–<1)	416	10	87 (77–100)
	2007	4	0.49 (0.43–0.55)	11 (9.8–13)	0.016 (0.01–0.023)	<1 (<1–<1)	425	10	87 (77–100)
	2008	4	0.39 (0.34–0.44)	8.7 (7.6–9.9)	0.013 (<0.01–0.018)	<1 (<1–<1)	337	8	87 (77–100)
	2009	5	0.38 (0.34–0.45)	8.5 (7.6–9.9)	0.013 (<0.01–0.019)	<1 (<1–<1)	*343*	*8*	*89 (77–100)*
Israel	1990	5	0.29 (0.23–0.35)	6.5 (5.2–7.8)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	234	5	80 (67–100)
	1995	5	0.46 (0.4–0.52)	8.5 (7.4–9.6)	0.013 (<0.01–0.02)	<1 (<1–<1)	398	7	87 (77–100)
	2000	6	0.64 (0.56–0.72)	11 (9.2–12)	0.024 (0.015–0.036)	<1 (<1–<1)	557	9	87 (77–100)
	2005	7	0.46 (0.4–0.52)	6.9 (6–7.8)	0.02 (0.013–0.03)	<1 (<1–<1)	402	6	87 (77–100)
	2006	7	0.44 (0.38–0.5)	6.5 (5.6–7.3)	0.02 (0.012–0.029)	<1 (<1–<1)	384	6	87 (77–100)
	2007	7	0.45 (0.39–0.51)	6.5 (5.7–7.4)	0.021 (0.012–0.032)	<1 (<1–<1)	392	6	87 (77–100)
	2008	7	0.42 (0.37–0.48)	6 (5.2–6.8)	0.02 (0.012–0.029)	<1 (<1–<1)	367	5	87 (77–100)
	2009	7	0.42 (0.37–0.49)	5.8 (5.2–6.8)	0.02 (0.012–0.029)	<1 (<1–<1)	345	5	83 (71–92)
Italy	1990	57	5.3 (4.2–6.4)	9.3 (7.4–11)	0.22 (0.11–0.36)	<1 (<1–<1)	4 246	7	80 (67–100)
	1995	57	6.5 (5.6–7.3)	11 (9.8–13)	0.29 (0.18–0.42)	<1 (<1–<1)	5 627	10	87 (77–100)
	2000	57	4 (3.5–4.6)	7 (6.1–8)	0.19 (0.12–0.27)	<1 (<1–<1)	3 501	6	87 (77–100)
	2005	59	4.4 (3.8–5)	7.5 (6.5–8.5)	0.21 (0.14–0.3)	<1 (<1–<1)	3 828	7	87 (77–100)
	2006	59	4.8 (4.1–5.4)	8.1 (7–9.1)	0.23 (0.15–0.33)	<1 (<1–<1)	4 145	7	87 (77–100)
	2007	59	3.1 (2.7–3.5)	5.2 (4.5–5.9)	0.15 (0.1–0.22)	<1 (<1–<1)	2 695	5	87 (77–100)
	2008	60	3.9 (3.4–4.4)	6.6 (5.7–7.4)	0.2 (0.13–0.28)	<1 (<1–<1)	3 414	6	87 (77–100)
	2009	60	3.8 (3.4–4.5)	6.4 (5.7–7.4)	0.19 (0.13–0.28)	<1 (<1–<1)	*3 429*	*6*	*89 (77–100)*
Kazakhstan	1990	17	23 (13–33)	139 (76–201)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	10 969	66	48 (33–87)
	1995	16	22 (18–27)	139 (111–166)	<0.01 (<0.01–0.014)	<1 (<1–<1)	11 310	71	51 (43–64)
	2000	15	29 (26–35)	196 (173–236)	0.031 (<0.01–0.066)	<1 (<1–<1)	25 843	173	88 (73–100)
	2005	15	33 (26–39)	215 (172–258)	0.23 (0.18–0.29)	1.5 (1.2–1.9)	25 512	168	78 (65–97)
	2006	15	31 (25–37)	204 (163–245)	0.31 (0.24–0.38)	2 (1.6–2.5)	23 796	156	76 (64–95)
	2007	15	29 (25–35)	190 (161–228)	0.25 (0.2–0.31)	1.6 (1.3–2)	24 752	161	84 (70–100)
	2008	16	27 (23–33)	175 (149–210)	0.054 (0.038–0.075)	<1 (<1–<1)	23 140	149	85 (71–100)
	2009	16	26 (21–30)	163 (136–192)	0.23 (0.14–0.36)	1.5 (<1–2.3)	20 508	131	80 (68–96)
Kyrgyzstan	1990	4	6.3 (3.4–9.1)	143 (78–207)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	2 306	52	37 (25–67)
	1995	5	6.5 (5.2–7.9)	143 (114–171)	<0.01 (<0.01–0.029)	<1 (<1–<1)	3 393	74	52 (43–65)
	2000	5	7.5 (6.2–9)	151 (125–181)	0.017 (<0.01–0.08)	<1 (<1–1.6)	6 205	125	83 (69–100)
	2005	5	8.3 (6.6–9.9)	158 (127–190)	0.065 (0.026–0.12)	1.2 (<1–2.3)	6 329	121	77 (64–96)
	2006	5	8.4 (6.7–10)	159 (127–191)	0.082 (0.037–0.15)	1.6 (<1–2.8)	6 174	117	74 (61–92)
	2007	5	8.5 (6.8–10)	159 (127–191)	0.1 (0.055–0.17)	1.9 (1–3.2)	6 098	114	72 (60–90)
	2008	5	8.6 (6.9–10)	159 (127–191)	0.15 (0.11–0.2)	2.8 (2.1–3.6)	6 628	122	77 (64–96)
	2009	5	8.7 (7.1–11)	159 (129–192)	0.13 (0.099–0.17)	2.4 (1.8–3.2)	5 765	105	66 (55–81)

[a] Where notification data from a country had not been received by 31 August, the notification rate was assumed to be the same as for 2008 (in *italics*).

[b] Rates are per 100 000 population.

TABLE A2.2 **Incidence, notification and case detection rates, all forms, 1990–2009**

			INCIDENCE (INCLUDING HIV)		INCIDENCE HIV-POSITIVE		NOTIFIED NEW AND RELAPSE[a]		CASE DETECTION RATE[a]
	YEAR	POPULATION (MILLIONS)	NUMBER (THOUSANDS)	RATE[b]	NUMBER (THOUSANDS)	RATE[b]	NUMBER	RATE[b]	PERCENT
Latvia	1990	3	2.5 (1.4–3.6)	92 (51–134)	<0.01 (<0.01–0.031)	<1 (<1–1.2)	906	34	37 (25–67)
	1995	2	2.3 (1.8–2.8)	92 (74–111)	0.024 (<0.01–0.049)	<1 (<1–2)	1 541	62	67 (56–84)
	2000	2	2.2 (2–2.7)	94 (83–112)	0.062 (0.039–0.09)	2.6 (1.6–3.8)	1 982	83	89 (74–100)
	2005	2	1.5 (1.4–1.9)	68 (61–81)	0.058 (0.042–0.077)	2.5 (1.8–3.4)	1 409	61	91 (76–100)
	2006	2	1.4 (1.3–1.7)	62 (57–74)	0.051 (0.036–0.069)	2.3 (1.6–3)	1 290	57	92 (76–100)
	2007	2	1.3 (1.2–1.6)	59 (54–70)	0.061 (0.044–0.08)	2.7 (2–3.5)	1 227	54	92 (77–100)
	2008	2	1.1 (1–1.3)	50 (46–60)	0.088 (0.062–0.12)	3.9 (2.7–5.3)	1 046	46	93 (77–100)
	2009	2	1 (0.88–1.2)	45 (39–51)	0.089 (0.063–0.12)	4 (2.8–5.3)	*1 042*	*46*	*103 (91–118)*
Lithuania	1990	4	3.4 (1.9–4.9)	92 (51–133)	0.039 (<0.01–0.093)	1.1 (<1–2.5)	1 471	40	43 (30–79)
	1995	4	3.3 (2.7–4)	92 (74–110)	0.094 (0.042–0.17)	2.6 (1.2–4.6)	2 362	65	71 (59–88)
	2000	4	3 (2.7–3.6)	85 (76–102)	0.17 (0.098–0.26)	4.9 (2.8–7.6)	2 657	76	89 (74–100)
	2005	3	2.4 (2.1–2.9)	70 (62–83)	0.21 (0.12–0.32)	6.1 (3.6–9.2)	2 114	62	89 (74–100)
	2006	3	2.7 (2.4–3.2)	78 (70–94)	0.25 (0.15–0.37)	7.3 (4.3–11)	2 365	70	89 (74–100)
	2007	3	2.5 (2.2–3)	75 (67–90)	0.24 (0.14–0.37)	7.2 (4.3–11)	2 235	67	89 (74–100)
	2008	3	2.4 (2.1–2.8)	71 (63–85)	0.23 (0.14–0.35)	7.1 (4.3–11)	2 095	63	89 (74–100)
	2009	3	2.3 (2–2.7)	71 (61–82)	0.47 (0.33–0.63)	14 (9.9–19)	*2 073*	*63*	*89 (77–104)*
Luxembourg	1990	0	0.06 (0.048–0.072)	16 (13–19)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	48	13	80 (67–100)
	1995	0	0.037 (0.032–0.042)	9 (7.8–10)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	32	8	87 (77–100)
	2000	0	0.051 (0.044–0.057)	12 (10–13)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	44	10	87 (77–100)
	2005	0	0.043 (0.037–0.048)	9.2 (8–10)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	37	8	87 (77–100)
	2006	0	0.038 (0.033–0.043)	8.1 (7–9.1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	33	7	87 (77–100)
	2007	0	0.045 (0.039–0.051)	9.4 (8.2–11)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	39	8	87 (77–100)
	2008	0	0.045 (0.039–0.051)	9.4 (8.2–11)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0	<1	0 (0–0)
	2009	0	0.045 (0.04–0.052)	9.2 (8.2–11)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	*0*	*<1*	*0 (0–0)*
Malta	1990	0	0.016 (0.013–0.02)	4.5 (3.6–5.4)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	13	4	80 (67–100)
	1995	0	0.013 (0.011–0.014)	3.3 (2.9–3.8)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	11	3	87 (77–100)
	2000	0	0.018 (0.016–0.021)	4.7 (4.1–5.3)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	16	4	87 (77–100)
	2005	0	0.024 (0.021–0.027)	6 (5.2–6.8)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	21	5	87 (77–100)
	2006	0	0.035 (0.03–0.039)	8.5 (7.4–9.6)	<0.01 (<0.01–<0.01)	<1 (<1–1.2)	30	7	87 (77–100)
	2007	0	0.044 (0.038–0.049)	11 (9.4–12)	<0.01 (<0.01–<0.01)	1.1 (<1–1.6)	38	9	87 (77–100)
	2008	0	0.056 (0.049–0.064)	14 (12–16)	<0.01 (<0.01–<0.01)	1.5 (1.1–2)	48	12	85 (75–98)
	2009	0	0.054 (0.048–0.063)	13 (12–15)	<0.01 (<0.01–<0.01)	1.7 (1.2–2.3)	*48*	*12*	*89 (77–100)*
Monaco	1990	0	<0.01 (<0.01–<0.01)	4.3 (3.4–5.1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	1	3	80 (67–100)
	1995	0	<0.01 (<0.01–<0.01)	3.8 (3.3–4.2)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	1	3	87 (77–100)
	2000	0	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0	<1	–
	2005	0	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)			–
	2006	0	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)			–
	2007	0	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)			–
	2008	0	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)			–
	2009	0	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)			–
Montenegro	2005	1	0.17 (0.16–0.2)	27 (25–32)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	156	25	93 (78–100)
	2006	1	0.18 (0.17–0.22)	29 (27–35)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	167	27	93 (77–100)
	2007	1	0.16 (0.15–0.19)	25 (24–31)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	147	24	93 (78–100)
	2008	1	0.14 (0.13–0.17)	23 (21–27)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	131	21	93 (78–100)
	2009	1	0.13 (0.12–0.15)	21 (18–24)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	113	18	85 (75–98)
Netherlands	1990	15	1.7 (1.4–2.1)	11 (9.2–14)	0.025 (0.014–0.041)	<1 (<1–<1)	1 369	9	80 (67–100)
	1995	15	1.9 (1.6–2.1)	12 (10–14)	0.049 (0.029–0.075)	<1 (<1–<1)	1 619	10	87 (77–100)
	2000	16	1.4 (1.2–1.6)	9 (7.8–10)	0.046 (0.028–0.068)	<1 (<1–<1)	1 244	8	87 (77–100)
	2005	16	1.3 (1.1–1.5)	7.9 (6.9–9)	0.046 (0.029–0.068)	<1 (<1–<1)	1 127	7	87 (77–100)
	2006	16	1.2 (1–1.3)	7 (6.1–7.9)	0.042 (0.026–0.062)	<1 (<1–<1)	1 002	6	87 (77–100)
	2007	16	1.1 (0.93–1.2)	6.5 (5.7–7.3)	0.039 (0.024–0.059)	<1 (<1–<1)	930	6	87 (77–100)
	2008	17	1.1 (0.96–1.3)	6.7 (5.8–7.6)	0.041 (0.025–0.062)	<1 (<1–<1)	964	6	87 (77–100)
	2009	17	1.1 (0.97–1.3)	6.5 (5.8–7.6)	0.041 (0.025–0.063)	<1 (<1–<1)	*968*	*6*	*89 (77–100)*
Norway	1990	4	0.36 (0.29–0.43)	8.4 (6.7–10)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	285	7	80 (67–100)
	1995	4	0.27 (0.24–0.31)	6.2 (5.4–7)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	236	5	87 (77–100)
	2000	4	0.25 (0.22–0.29)	5.7 (4.9–6.4)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	221	5	87 (77–100)
	2005	5	0.31 (0.27–0.35)	6.7 (5.8–7.5)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	269	6	87 (77–100)
	2006	5	0.32 (0.28–0.36)	6.8 (5.9–7.7)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	276	6	87 (77–100)
	2007	5	0.32 (0.28–0.37)	6.9 (6–7.8)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	282	6	87 (77–100)
	2008	5	0.29 (0.25–0.33)	6.1 (5.3–6.9)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	252	5	87 (77–100)
	2009	5	0.28 (0.25–0.33)	5.9 (5.3–6.9)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	*254*	*5*	*89 (77–100)*
Poland	1990	38	20 (16–29)	52 (42–76)	0.11 (0.051–0.19)	<1 (<1–<1)	16 136	42	81 (56–100)
	1995	39	20 (16–23)	51 (41–61)	0.21 (0.12–0.32)	<1 (<1–<1)	15 958	41	82 (68–100)
	2000	38	14 (11–16)	35 (28–42)	0.19 (0.11–0.29)	<1 (<1–<1)	10 931	28	81 (67–100)
	2005	38	10 (8.2–12)	27 (21–32)	0.17 (0.1–0.26)	<1 (<1–<1)	8 203	21	81 (67–100)
	2006	38	9.9 (8–12)	26 (21–31)	0.17 (0.1–0.25)	<1 (<1–<1)	8 017	21	81 (68–100)
	2007	38	9.6 (8–12)	25 (21–30)	0.17 (0.1–0.25)	<1 (<1–<1)	8 019	21	84 (70–100)
	2008	38	9.3 (7.5–11)	25 (20–29)	0.17 (0.098–0.25)	<1 (<1–<1)	7 421	19	79 (66–99)
	2009	38	9.1 (7.4–11)	24 (19–29)	0.16 (0.097–0.25)	<1 (<1–<1)	7 922	21	87 (72–107)
Portugal	1990	10	7.8 (6.2–9.3)	78 (62–93)	0.32 (0.16–0.54)	3.2 (1.6–5.4)	6 214	62	80 (67–100)
	1995	10	6.4 (5.6–7.3)	64 (56–72)	0.62 (0.38–0.92)	6.2 (3.8–9.1)	5 577	56	87 (77–100)
	2000	10	4.9 (4.2–5.5)	48 (41–54)	0.66 (0.44–0.94)	6.5 (4.3–9.2)	4 227	41	87 (77–100)
	2005	11	3.8 (3.3–4.3)	36 (31–41)	0.66 (0.56–0.76)	6.2 (5.3–7.2)	3 303	31	87 (77–100)
	2006	11	3.7 (3.2–4.2)	35 (30–39)	0.58 (0.5–0.68)	5.5 (4.7–6.4)	3 218	30	87 (77–100)
	2007	11	3.4 (3–3.8)	32 (28–36)	0.54 (0.46–0.62)	5 (4.3–5.8)	2 952	28	87 (77–100)
	2008	11	3.2 (2.8–3.7)	30 (26–34)	0.47 (0.4–0.55)	4.4 (3.8–5.1)	2 817	26	87 (77–100)
	2009	11	3.2 (2.8–3.7)	30 (26–34)	0.54 (0.36–0.76)	5.1 (3.3–7.1)	*2 825*	*26*	*89 (77–100)*
Republic of Moldova	1990	4	5 (2.7–7.2)	114 (62–165)	0.14 (<0.01–0.52)	3.2 (<1–12)	1 728	40	35 (24–63)
	1995	4	4.9 (3.9–5.9)	114 (91–136)	0.34 (0.13–0.65)	7.7 (2.9–15)	2 925	67	59 (49–74)
	2000	4	5.6 (4.5–6.7)	136 (109–163)	1.1 (0.7–1.6)	27 (17–39)	2 935	72	53 (44–66)
	2005	4	6.2 (5.1–7.4)	164 (137–197)	0.011 (<0.01–0.02)	<1 (<1–<1)	5 141	137	83 (69–100)
	2006	4	6.2 (5–7.5)	168 (135–202)	0.025 (0.014–0.039)	<1 (<1–1.1)	4 990	135	80 (67–100)
	2007	4	6.3 (5–7.5)	171 (137–206)	0.25 (0.2–0.32)	6.8 (5.3–8.6)	4 857	132	77 (64–97)
	2008	4	6.3 (5.1–7.6)	175 (140–210)	5.3 (3.6–6.9)	147 (99–191)	4 442	122	70 (58–88)
	2009	4	6.4 (5.2–7.7)	178 (145–215)	1.4 (0.93–2)	40 (26–56)	4 337	120	68 (56–83)
Romania	1990	23	33 (18–48)	143 (79–208)	0.25 (0.097–0.51)	1.1 (<1–2.2)	16 256	70	49 (34–89)
	1995	23	33 (26–39)	143 (115–172)	0.64 (0.36–1)	2.8 (1.6–4.5)	23 271	103	72 (60–89)
	2000	22	37 (30–44)	167 (134–201)	1.1 (0.68–1.7)	5.1 (3.1–7.7)	27 470	124	74 (62–93)
	2005	22	36 (28–43)	164 (131–197)	1.2 (0.73–1.8)	5.5 (3.4–8.3)	26 104	121	73 (61–92)
	2006	22	33 (27–40)	155 (124–186)	1.1 (0.69–1.7)	5.2 (3.2–7.9)	24 295	113	73 (61–91)
	2007	21	31 (25–37)	145 (116–174)	1 (0.63–1.6)	4.8 (2.9–7.3)	22 590	105	73 (61–91)
	2008	21	29 (23–34)	134 (107–161)	0.95 (0.65–1.3)	4.4 (3–6.2)	21 724	102	76 (63–95)
	2009	21	27 (22–32)	125 (101–150)	0.87 (0.52–1.3)	4.1 (2.4–6.2)	*21 636*	*102*	*82 (68–100)*
Russian Federation	1990	148	160 (87–230)	107 (59–156)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	50 641	34	32 (22–58)
	1995	148	160 (130–190)	107 (86–129)	0.13 (0.064–0.22)	<1 (<1–<1)	84 980	57	53 (44–67)
	2000	147	180 (150–220)	124 (99–149)	2.9 (1.9–4.3)	2 (1.3–2.9)	140 677	96	77 (64–97)
	2005	143	160 (130–190)	109 (89–131)	6.8 (4.6–9.4)	4.7 (3.2–6.6)	127 930	89	82 (68–100)
	2006	143	150 (120–180)	105 (87–127)	2.4 (2–2.9)	1.7 (1.4–2)	124 689	87	83 (69–100)
	2007	142	150 (130–180)	107 (90–128)	5.8 (4.8–6.8)	4.1 (3.4–4.8)	127 338	90	84 (70–100)
	2008	141	150 (130–180)	107 (91–128)	9.1 (6.3–12)	6.4 (4.4–8.8)	128 263	91	85 (71–100)
	2009	141	150 (120–180)	106 (89–125)	12 (9.6–15)	8.5 (6.8–10)	126 227	90	84 (71–101)
San Marino	1990	0	<0.01 (<0.01–<0.01)	5.2 (4.1–6.2)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	1	4	80 (67–100)
	1995	0	<0.01 (<0.01–<0.01)	9 (7.8–10)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	2	8	87 (77–100)
	2000	0	<0.01 (<0.01–<0.01)	4.3 (3.7–4.8)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	1	4	87 (77–100)
	2005	0	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)			–
	2006	0	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)			–
	2007	0	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)			–
	2008	0	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)			–
	2009	0	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)			–

[a] Where notification data from a country had not been received by 31 August, the notification rate was assumed to be the same as for 2008 (in *italics*).
[b] Rates are per 100 000 population.

TABLE A2.2 **Incidence, notification and case detection rates, all forms, 1990–2009**

			INCIDENCE (INCLUDING HIV)		INCIDENCE HIV-POSITIVE		NOTIFIED NEW AND RELAPSE[a]		CASE DETECTION RATE[a]
	YEAR	POPULATION (MILLIONS)	NUMBER (THOUSANDS)	RATE[b]	NUMBER (THOUSANDS)	RATE[b]	NUMBER	RATE[b]	PERCENT
Serbia	2005	10	3.4 (3.2–4.1)	34 (33–41)	0.041 (0.021–0.068)	<1 (<1–<1)	3 208	33	95 (79–100)
	2006	10	3.3 (3.1–4)	34 (32–40)	0.042 (0.022–0.07)	<1 (<1–<1)	3 146	32	95 (79–100)
	2007	10	3 (2.9–3.7)	31 (29–37)	0.04 (0.021–0.067)	<1 (<1–<1)	2 891	29	95 (79–100)
	2008	10	1.8 (1.5–2.2)	18 (15–22)	0.025 (0.012–0.042)	<1 (<1–<1)	2 714	28	150 (125–187)
	2009	10	1.5 (1.2–1.8)	15 (12–18)	0.02 (0.01–0.035)	<1 (<1–<1)	1 625	16	111 (92–137)
Serbia & Montenegro	1990	10	6 (4.2–8.7)	59 (41–86)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	4 194	41	70 (48–100)
	1995	11	5.8 (4.6–6.9)	53 (43–64)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	2 798	26	48 (40–61)
	2000	11	4.3 (3.4–5.2)	40 (32–48)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	2 864	27	67 (56–83)
Slovakia	1990	5	1.8 (1.4–2.2)	34 (28–41)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	1 448	28	80 (67–100)
	1995	5	1.8 (1.5–2)	33 (29–37)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	1 540	29	87 (77–100)
	2000	5	1.2 (1–1.3)	22 (19–24)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	1 010	19	87 (77–100)
	2005	5	0.82 (0.71–0.92)	15 (13–17)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	710	13	87 (77–100)
	2006	5	0.77 (0.67–0.87)	14 (12–16)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	673	12	87 (77–100)
	2007	5	0.72 (0.62–0.81)	13 (12–15)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	622	12	87 (77–100)
	2008	5	0.64 (0.56–0.73)	12 (10–13)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	559	10	87 (77–100)
	2009	5	0.63 (0.56–0.73)	12 (10–13)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	*560*	*10*	*89 (77–100)*
Slovenia	1990	2	0.9 (0.72–1.1)	47 (37–56)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	722	37	80 (67–100)
	1995	2	0.6 (0.53–0.68)	31 (27–35)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	525	27	87 (77–100)
	2000	2	0.42 (0.37–0.48)	21 (19–24)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	368	19	87 (77–100)
	2005	2	0.31 (0.27–0.35)	15 (13–17)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	269	13	87 (77–100)
	2006	2	0.24 (0.21–0.27)	12 (10–13)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	207	10	87 (77–100)
	2007	2	0.24 (0.21–0.28)	12 (11–14)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	212	11	87 (77–100)
	2008	2	0.24 (0.21–0.27)	12 (10–13)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	208	10	87 (77–100)
	2009	2	0.23 (0.21–0.27)	12 (10–13)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	*209*	*10*	*89 (77–100)*
Spain	1990	39	9.5 (7.6–11)	24 (20–29)	0.55 (0.36–0.77)	1.4 (<1–2)	7 600	20	80 (67–100)
	1995	39	10 (8.8–11)	26 (22–29)	0.71 (0.49–0.97)	1.8 (1.3–2.5)	8 764	*22*	87 (77–100)
	2000	40	9.2 (8–10)	23 (20–26)	0.67 (0.46–0.91)	1.7 (1.2–2.3)	7 993	20	87 (77–100)
	2005	43	8.4 (7.3–9.5)	19 (17–22)	0.62 (0.43–0.84)	1.4 (1–1.9)	7 281	17	87 (77–100)
	2006	44	9 (7.8–10)	21 (18–23)	0.67 (0.47–0.9)	1.5 (1.1–2.1)	7 815	18	87 (77–100)
	2007	44	8.4 (7.3–9.6)	19 (17–22)	0.63 (0.54–0.73)	1.4 (1.2–1.7)	7 347	17	87 (77–100)
	2008	44	7.8 (6.8–8.8)	17 (15–20)	0.58 (0.41–0.79)	1.3 (<1–1.8)	6 769	15	87 (77–100)
	2009	45	7.7 (6.8–8.9)	17 (15–20)	0.58 (0.4–0.78)	1.3 (<1–1.7)	*6 832*	*15*	*89 (77–100)*
Sweden	1990	9	0.7 (0.56–0.84)	8.1 (6.5–9.8)	<0.01 (<0.01–0.011)	<1 (<1–<1)	557	7	80 (67–100)
	1995	9	0.65 (0.56–0.73)	7.3 (6.4–8.3)	0.01 (<0.01–0.015)	<1 (<1–<1)	564	6	87 (77–100)
	2000	9	0.48 (0.42–0.54)	5.4 (4.7–6.1)	<0.01 (<0.01–0.013)	<1 (<1–<1)	417	5	87 (77–100)
	2005	9	0.62 (0.54–0.7)	6.8 (5.9–7.7)	0.013 (<0.01–0.019)	<1 (<1–<1)	539	6	87 (77–100)
	2006	9	0.56 (0.49–0.64)	6.2 (5.4–7)	0.012 (<0.01–0.018)	<1 (<1–<1)	489	5	87 (77–100)
	2007	9	0.53 (0.46–0.6)	5.8 (5–6.5)	0.011 (<0.01–0.017)	<1 (<1–<1)	460	5	87 (77–100)
	2008	9	0.53 (0.46–0.59)	5.7 (5–6.5)	0.011 (<0.01–0.017)	<1 (<1–<1)	457	5	87 (77–100)
	2009	9	0.51 (0.46–0.6)	5.6 (5–6.5)	0.011 (<0.01–0.017)	<1 (<1–<1)	*459*	*5*	*89 (77–100)*
Switzerland	1990	7	1.6 (1.3–1.9)	24 (19–29)	0.044 (0.025–0.069)	<1 (<1–1)	1 278	19	80 (67–100)
	1995	7	0.95 (0.83–1.1)	14 (12–15)	0.033 (0.021–0.049)	<1 (<1–<1)	830	12	87 (77–100)
	2000	7	0.63 (0.54–0.71)	8.7 (7.6–9.8)	0.025 (0.016–0.036)	<1 (<1–<1)	544	8	87 (77–100)
	2005	7	0.58 (0.51–0.66)	7.9 (6.8–8.9)	0.027 (0.017–0.039)	<1 (<1–<1)	508	7	87 (77–100)
	2006	7	0.53 (0.46–0.6)	7.1 (6.2–8)	0.025 (0.015–0.036)	<1 (<1–<1)	461	6	87 (77–100)
	2007	8	0.49 (0.43–0.55)	6.5 (5.7–7.4)	0.024 (0.015–0.035)	<1 (<1–<1)	425	6	87 (77–100)
	2008	8	0.37 (0.32–0.41)	4.9 (4.2–5.5)	0.018 (0.011–0.027)	<1 (<1–<1)	319	4	87 (77–100)
	2009	8	0.36 (0.32–0.42)	4.7 (4.2–5.5)	0.018 (0.011–0.027)	<1 (<1–<1)	333	4	93 (80–104)
Tajikistan	1990	5	4.9 (2.7–7.1)	92 (51–134)	0.019 (<0.01–0.035)	<1 (<1–<1)	2 460	46	50 (35–91)
	1995	6	5.3 (4.3–6.4)	92 (74–111)	0.043 (0.022–0.072)	<1 (<1–1.3)	2 029	35	38 (32–47)
	2000	6	7.2 (5.7–8.6)	116 (93–139)	0.11 (0.057–0.18)	1.8 (<1–2.9)	2 779	45	39 (32–48)
	2005	7	13 (10–16)	198 (158–237)	0.28 (0.15–0.45)	4.2 (2.3–6.9)	5 460	84	42 (35–53)
	2006	7	12 (9.8–15)	185 (148–222)	0.27 (0.15–0.44)	4.1 (2.2–6.7)	5 362	81	44 (36–55)
	2007	7	14 (11–17)	206 (165–248)	0.32 (0.17–0.52)	4.8 (2.6–7.8)	6 297	94	45 (38–57)
	2008	7	14 (11–16)	199 (159–239)	0.55 (0.37–0.76)	8 (5.5–11)	6 396	94	47 (39–59)
	2009	7	14 (11–17)	202 (164–243)	0.11 (0.078–0.15)	1.6 (1.1–2.2)	6 125	88	44 (36–54)
The Former Yugoslav Republic of Macedonia	1990	2	1.5 (0.85–2.2)	81 (44–117)	<0.01 (<0.01–<0.01)	<1 (<1–<1)			–
	1995	2	1.1 (0.91–1.4)	58 (46–69)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	786	40	69 (58–86)
	2000	2	0.83 (0.67–1)	41 (33–50)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	641	*32*	77 (64–96)
	2005	2	0.6 (0.6–0.72)	30 (29–36)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	598	29	99 (83–100)
	2006	2	0.56 (0.56–0.68)	28 (28–33)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	561	28	99 (83–100)
	2007	2	0.53 (0.53–0.63)	26 (26–31)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	526	26	100 (83–100)
	2008	2	0.49 (0.45–0.59)	24 (22–29)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	450	22	91 (76–100)
	2009	2	0.46 (0.4–0.53)	23 (19–26)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	450	22	97 (84–114)
Turkey	1990	56	32 (24–47)	58 (44–84)	<0.01 (<0.01–0.012)	<1 (<1–<1)	24 468	44	75 (52–100)
	1995	61	35 (28–43)	58 (46–70)	0.017 (<0.01–0.032)	<1 (<1–<1)	22 981	38	65 (54–81)
	2000	66	31 (25–37)	46 (37–55)	0.03 (0.015–0.05)	<1 (<1–<1)	18 038	27	59 (49–74)
	2005	71	24 (20–28)	33 (28–40)	0.039 (0.021–0.063)	<1 (<1–<1)	19 744	28	83 (69–100)
	2006	72	23 (20–28)	32 (27–38)	0.041 (0.022–0.067)	<1 (<1–<1)	19 629	27	85 (71–100)
	2007	73	23 (19–27)	31 (26–37)	0.046 (0.025–0.074)	<1 (<1–<1)	18 878	26	83 (69–100)
	2008	74	22 (18–27)	30 (24–36)	0.048 (0.026–0.079)	<1 (<1–<1)	17 600	24	79 (66–99)
	2009	75	22 (18–26)	29 (24–35)	0.049 (0.026–0.081)	<1 (<1–<1)	16 757	22	77 (64–94)
Turkmenistan	1990	4	2.4 (2.3–3.4)	64 (63–93)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	2 325	63	99 (68–100)
	1995	4	2.2 (1.9–2.6)	52 (46–63)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	1 939	46	88 (74–100)
	2000	5	4.2 (4–5)	92 (90–111)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	4 038	90	97 (81–100)
	2005	5	3.4 (3.2–4.1)	70 (66–84)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	3 191	66	94 (79–100)
	2006	5	3.4 (3.2–4.1)	69 (66–83)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	3 223	66	95 (79–100)
	2007	5	3.4 (2.7–4.1)	68 (55–82)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	3 428	69	101 (84–126)
	2008	5	3.4 (2.7–4.1)	68 (54–81)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	3 757	74	110 (92–137)
	2009	5	3.4 (2.8–4.2)	67 (54–82)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	4 550	89	133 (109–164)
Ukraine	1990	52	21 (16–31)	41 (32–60)	0.21 (0.07–0.45)	<1 (<1–<1)	16 465	32	77 (53–100)
	1995	51	26 (21–31)	51 (42–62)	0.59 (0.35–0.92)	1.2 (<1–1.8)	21 459	42	82 (68–100)
	2000	49	41 (33–49)	84 (67–101)	2 (1.4–2.7)	4.1 (2.8–5.6)	32 945	67	80 (67–100)
	2005	47	48 (40–57)	102 (84–122)	2.9 (2.1–3.9)	6.2 (4.4–8.4)	39 608	84	83 (69–100)
	2006	47	47 (41–57)	102 (89–122)	2.9 (2.1–3.9)	6.3 (4.5–8.4)	41 265	89	87 (73–100)
	2007	46	47 (38–56)	102 (81–122)	2.9 (2.4–3.6)	6.3 (5.1–7.7)	37 517	81	80 (67–100)
	2008	46	47 (38–56)	102 (82–122)	2.9 (2.1–4)	6.4 (4.5–8.6)	37 832	82	81 (68–100)
	2009	46	46 (38–56)	102 (83–122)	2.9 (2–3.9)	6.3 (4.5–8.6)	36 075	79	78 (65–95)
United Kingdom of Great Britain and Northern Ireland	1990	57	7.4 (5.9–8.9)	13 (10–15)	0.08 (0.045–0.13)	<1 (<1–<1)	5 908	10	80 (67–100)
	1995	58	7.1 (6.2–8)	12 (11–14)	0.087 (0.052–0.13)	<1 (<1–<1)	6 176	11	87 (77–100)
	2000	59	7.2 (6.2–8.1)	12 (11–14)	0.13 (0.079–0.18)	<1 (<1–<1)	6 220	11	87 (77–100)
	2005	60	9.4 (8.2–11)	16 (14–18)	0.25 (0.16–0.36)	<1 (<1–<1)	8 173	14	87 (77–100)
	2006	61	9.4 (8.2–11)	15 (13–18)	0.27 (0.17–0.39)	<1 (<1–<1)	8 157	13	87 (77–100)
	2007	61	9 (7.9–10)	15 (13–17)	0.27 (0.17–0.39)	<1 (<1–<1)	7 851	13	87 (77–100)
	2008	61	7.6 (6.6–8.6)	12 (11–14)	0.24 (0.15–0.34)	<1 (<1–<1)	6 586	11	87 (77–100)
	2009	62	7.4 (6.6–8.6)	12 (11–14)	0.24 (0.15–0.35)	<1 (<1–<1)	*6 622*	*11*	*89 (77–100)*
Uzbekistan	1990	21	26 (14–38)	128 (70–185)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	9 414	46	36 (25–65)
	1995	23	29 (23–35)	128 (102–153)	<0.01 (<0.01–0.012)	<1 (<1–<1)	9 866	43	34 (28–42)
	2000	25	32 (25–38)	128 (102–153)	0.02 (<0.01–0.13)	<1 (<1–<1)	15 750	64	50 (41–62)
	2005	26	34 (27–40)	128 (102–153)	0.23 (0.18–0.29)	<1 (<1–1.1)	21 513	82	64 (53–80)
	2006	27	34 (27–41)	128 (102–153)	0.34 (0.27–0.42)	1.3 (1–1.6)	23 900	90	70 (59–88)
	2007	27	34 (28–41)	128 (102–153)	0.65 (0.51–0.8)	2.4 (1.9–3)	19 779	74	57 (48–72)
	2008	27	35 (28–42)	128 (102–153)	0.52 (0.41–0.65)	1.9 (1.5–2.4)	17 040	63	49 (41–61)
	2009	27	35 (29–42)	128 (104–154)	0.72 (0.57–0.88)	2.6 (2.1–3.2)	17 540	64	50 (41–61)

[a] Where notification data from a country had not been received by 31 August, the notification rate was assumed to be the same as for 2008 (in *italics*).

[b] Rates are per 100 000 population.

TABLE A2.3 **Case notifications, 1990–2009**

	NEW AND RELAPSE NOTIFICATION RATE[a] 1990–2009	YEAR	NEW AND RELAPSE[a]	NEW CASES				RELAPSE	RE-TREAT EXCL. RELAPSE	TOTAL RETREAT	HISTORY UNKNOWN	% SMEAR-POS AMONG NEW PULM
				SMEAR-POSITIVE	SMEAR-NEGATIVE/ UNKNOWN	EXTRA-PULMONARY	OTHER					
Albania		1990	653									–
		1995	641	139	223	226		53		53		38
		2000	604	171	188	234		11	8	19		48
		2005	506	196	134	167		9	34	43		59
		2006	469	186	106	175		2	33	35		64
		2007	438	165	105	152		16	9	25	0	61
		2008	427	170	87	145	0	25	7	32	0	66
20	14	2009	435	171	109	136		19	2	21	10	61
Andorra		1990	23									–
		1995										–
		2000	12	1	9	2		0	0	0		10
		2005	10	5	1	4		0	0	0		83
		2006	12	8	2	2			1	1		80
		2007	5	2	1	2		0	1	1	0	67
		2008	4	3	1	0	0	0	0	0	0	75
44	9	2009	8	2	4	1	0	1	1	2	0	33
Armenia		1990	590									–
		1995	1 157	436	451	75		38		38		49
		2000	1 333	621	505	153		54	22	76		55
		2005	2 206	581	1 049	365		211	116	327		36
		2006	1 767	580	694	324		169	388	557		46
		2007	1 682	497	699	337		149	447	596	0	42
		2008	1 655	487	724	296	0	148	470	618	0	40
17	51	2009	1 560	440	725	299	0	96	76	172	370	38
Austria		1990	1 521									–
		1995	1 481	467	765	249						38
		2000	1 185	324	652	209		0	30	30		33
		2005	928	234	519	175		0	26	26		31
		2006	855	213	507	135			18	18		30
		2007	811	189	486	136		0	63	63	0	28
		2008										–
20	–	2009										–
Azerbaijan		1990	2 620									–
		1995	1 630	669	620	93		47		47		52
		2000	5 187	890	3 978	245		74	0	74		18
		2005	6 034	1 561	2 508	651		1 314	1 886	3 200		38
		2006	5 705	1 454	2 278	697		1 276	1 793	3 069	0	39
		2007	5 521	1 356	2 338	750		1 077	1 826	2 903	0	37
		2008	6 417	1 409	2 728	993		1 287	2 446	3 733	1 215	34
36	69	2009	6 114	1 437	3 141	1 270		266	1 175	1 441	2 338	31
Belarus		1990	3 039									–
		1995	4 854	1 845	2 148	518		343		343		46
		2000	6 799	2 547	2 985	442		825	0	825		46
		2005	5 308	1 235	3 710	363			1 049	1 049		25
		2006	5 142	1 072	3 709	361			923	923		22
		2007	5 351	1 051	3 486	335		479	405	884	0	23
		2008	5 126	1 060	3 074	500		492	357	849		26
30	54	2009	5 250	1 201	3 002	430		617	261	878		29
Belgium		1990	1 577									–
		1995	1 380	400	534	366		80		80		43
		2000	1 278	409	454	326		89	0	89		47
		2005	1 076	380	406	290			68	68		48
		2006	1 043	343	370	330			84	84		48
		2007	955	322	367	266		0	73	73	0	47
		2008	811	311	287	213	0	0	67	67	128	52
16	8	2009	*815*									–
Bosnia and Herzegovina		1990	4 073									–
		1995	2 132	865	997	140		130		130		46
		2000	2 476	759	1 287	261		169	24	193		37
		2005	2 111	640	1 106	258		107	49	156	0	37
		2006	1 778	562	910	215		91	22	113		38
		2007	2 373	737	1 252	228		156	27	183	0	37
		2008	1 713	509	919	235	0	50	17	67	6	36
95	45	2009	*1 710*									–
Bulgaria		1990	2 256									–
		1995	3 245	1 087	1 709	449						39
		2000	3 349	2 524	0	442		383	0	383		100
		2005	3 225	1 214	1 511	376		124	77	201		45
		2006	3 136	1 307	1 377	327		125	96	221		49
		2007	2 848	1 080	1 010	653		105	204	309	0	52
		2008	2 944	1 020	1 121	687	10	106	207	313	0	48
26	39	2009	*2 925*									–
Croatia		1990	2 576									–
		1995	2 114	1 204	703	165		42		42		63
		2000	1 630	0								–
		2005	1 050	372	575	103		0	94	94		39
		2006	1 029	396	520	113			106	106		43
		2007	951	382	394	108		67	31	98	0	49
		2008	980	328	515	101		36		36		39
57	22	2009	*979*									–
Cyprus		1990	29									–
		1995	36	6	11	13		0		0		35
		2000	33	4	10	17		0		0		29
		2005	34	9	13	12		0	3	3		41
		2006	36	8	22	6			1	1		27
		2007	41	8	27	6		0	1	1	0	23
		2008	42	6	28	7	0	1	2	3	6	18
4	5	2009	*42*									–
Czech Republic		1990	1 937									–
		1995	1 834	487	1 026	300		21		21		32
		2000	1 414	420	679	290		25	0	25		38
		2005	973	308	461	204		0	34	34		40
		2006	941	257	480	204			32	32		35
		2007	790	267	407	116		0	81	81	0	40
		2008	807	249	432	126	0	0	61	61	0	37
19	8	2009	*811*									–
Denmark		1990	350									–
		1995	448	128	186	128		6		6		41
		2000	587	171	244	144		28	0	28		41
		2005	395	129	145	121		0	29	29		47
		2006	341	123	123	95			35	35	1	50
		2007	355	135	137	83		0	36	36	0	50
		2008	330	106	140	83	1	0	37	37	0	43
7	6	2009	*331*									–

[a] Rates are per 100 000 population. Where notification data from a country had not been received by 31 August, the notification rate was assumed to be the same as for 2008 (in italics).

Data can be downloaded from www.who.int/tb/data

TABLE A2.3 **Case notifications, 1990–2009**

	NEW AND RELAPSE NOTIFICATION RATE[a] 1990–2009	YEAR	NEW AND RELAPSE[a]	NEW CASES				RELAPSE	RE-TREAT EXCL. RELAPSE	TOTAL RETREAT	HISTORY UNKNOWN	% SMEAR-POS AMONG NEW PULM
				SMEAR-POSITIVE	SMEAR-NEGATIVE/ UNKNOWN	EXTRA-PULMONARY	OTHER					
Estonia		1990	423									–
		1995	624	369	124	60		71		71		75
		2000	791	255	320	67		116	0	116		44
		2005	479	162	217	46		54	40	94		43
		2006	422	147	195	31		49	33	82		43
		2007	456	168	209	32		47	31	78	0	45
		2008	401	144	180	30	0	47	43	90	0	44
27	30	2009	*401*									–
Finland		1990	772									–
		1995	661	244	193	224						56
		2000	527	205	136	157		29	0	29		60
		2005	339	130	114	95		0	22	22	0	53
		2006	280	84	110	86			19	19		43
		2007	300	85	112	102		1	13	14	0	43
		2008	331	104	104	123	0	0	19	19	0	50
15	6	2009	*332*									–
France		1990	9 030									–
		1995	8 723	3 449	2 969	2 305						54
		2000	6 122	1 815	1 364	1 665		0		0		57
		2005	4 887	1 941	1 557	1 389		0	371	371	116	55
		2006	4 817	1 911	1 626	1 280			349	349	170	54
		2007	5 314	1 921	1 856	1 289		248	137	385	137	51
		2008	3 355	1 222	1 115	967	51	0	379	379	2 078	52
16	5	2009	*3 372*									–
Georgia		1990	1 537									–
		1995	1 625	221	1 087	121		196		196		17
		2000	4 397	601	2 213	1 324		259	422	681		21
		2005	4 501	1 509	1 524	1 261		207	1 945	2 152	2	50
		2006	4 554	1 831	1 231	1 261		231	1 756	1 987	1	60
		2007	4 310	1 867	964	1 234		245	1 600	1 845	2	66
		2008	4 412	1 868	1 063	1 217	0	264	1 413	1 677	11	64
28	112	2009	4 752	1 965	1 168	1 339	0	280	320	600	986	63
Germany		1990	14 653									–
		1995	12 198	3 852	6 473	1 873						37
		2000	9 064	0								–
		2005	5 539	1 379	2 801	1 211		148	345	493	161	33
		2006	5 021	1 303	2 537	1 027		154	259	413	122	34
		2007	4 609	1 183	2 326	977		123	410	533	48	34
		2008	3 664	954	1 797	801	9	103	338	441	472	35
18	4	2009	*3 660*									–
Greece		1990	877									–
		1995	939									–
		2000	703	235	339	81		48		48		41
		2005	626	197	322	107		0	74	74	67	38
		2006	580	210	286	84			63	63	38	42
		2007	593	257	229	81		26	44	70	22	53
		2008	535	80	374	80	0	1	83	84	51	18
9	5	2009	*536*									–
Hungary		1990	3 588									–
		1995	4 339	796	3 292	251						19
		2000	3 073	412	2 361	221		79	292	371		15
		2005	1 808	423	1 137	117		131	216	347		27
		2006	1 687	422	1 067	86		112	207	319		28
		2007	1 540	381	957	86		116	212	328	0	28
		2008	1 428	346	896	79	0	107	178	285	0	28
35	14	2009	*1 425*									–
Iceland		1990	18									–
		1995	12	2	3	7		0		0		40
		2000	13	1	7	4		1	0	1		13
		2005	10	2	3	5		0	1	1		40
		2006	13	4	3	6						57
		2007	12	2	5	5		0	2	2	0	29
		2008	6	2	1	3	0	0	0	0	0	67
7	2	2009	*6*									–
Ireland		1990	624									–
		1995	458									–
		2000	386	138	150	96		2	20	22		48
		2005	387	130	156	99		2	38	40	36	45
		2006	416	133	180	99		4	17	21	25	42
		2007	425	135	171	111		8	43	51	10	44
		2008	337	123	124	81	8	1	40	41	93	50
18	8	2009	*343*									–
Israel		1990	234									–
		1995	398									–
		2000	557	17	46	25		12	82	94		27
		2005	402	98	203	98		3	4	7		33
		2006	384	72	237	74		1	2	3		23
		2007	392	143	163	80		6	5	11	0	47
		2008	367	173	99	92	0	3	2	5	0	64
5	5	2009	345	108	132	99	0	6	2	8	0	45
Italy		1990	4 246									–
		1995	5 627	1 413	2 700	1 514						34
		2000	3 501	687	891	522		269	356	625		44
		2005	3 828	1 275	1 506	1 047		0	293	293	16	46
		2006	4 145	1 377	1 473	1 295			242	242		48
		2007	2 695	979	1 100	616		0	1 772	1 772	60	47
		2008	3 414	938	1 576	900	0	0	292	292	712	37
7	6	2009	*3 429*									–
Kazakhstan		1990	10 969									–
		1995	11 310	3 022	5 966	1 002		1 320		1 320		34
		2000	25 843	8 903	11 324	2 555		3 061	2 032	5 093		44
		2005	25 512	6 911	14 472	920		3 209	11 800	15 009	3 117	32
		2006	23 796	6 205	11 029	3 640		2 922	11 937	14 859	2 823	36
		2007	24 752	6 195	12 056	3 306		3 195	10 948	14 143	1 958	34
		2008	23 140	6 193	10 737	2 754	0	3 456	5 773	9 229	0	37
66	131	2009	20 508	5 213	9 319	2 278	0	3 698	5 673	9 371	4 397	36
Kyrgyzstan		1990	2 306									–
		1995	3 393	832	1 685	749		127		127		33
		2000	6 205	1 296	2 929	1 683		297	258	555		31
		2005	6 329	1 972	2 141	1 805		411	436	847	0	48
		2006	6 174	1 833	2 132	1 761		448	482	930		46
		2007	6 098	1 720	2 220	1 727		431	609	1 040	0	44
		2008	6 628	1 712	2 036	1 585	897	398	358	756	141	46
52	105	2009	5 765	1 609	2 267	1 558		331	427	758	166	42

[a] Rates are per 100 000 population. Where notification data from a country had not been received by 31 August, the notification rate was assumed to be the same as for 2008 (in italics).

TABLE A2.3 **Case notifications, 1990–2009**

	NEW AND RELAPSE NOTIFICATION RATE[a] 1990–2009	YEAR	NEW AND RELAPSE[a]	NEW CASES				RELAPSE	RE-TREAT EXCL. RELAPSE	TOTAL RETREAT	HISTORY UNKNOWN	% SMEAR-POS AMONG NEW PULM
				SMEAR-POSITIVE	SMEAR-NEGATIVE/ UNKNOWN	EXTRA-PULMONARY	OTHER					
Latvia		1990	906									–
		1995	1 541	504	693	226		118		118		42
		2000	1 982	637	793	285		267	108	375		45
		2005	1 409	536	554	148		171	34	205		49
		2006	1 290	498	522	124		146	38	184		49
		2007	1 227	478	464	137		148	28	176	0	51
		2008	1 046	400	400	118	0	128	24	152	0	50
34	46	2009	*1 042*									–
Lithuania		1990	1 471									–
		1995	2 362	979	1 049	206		128		128		48
		2000	2 657	776	1 051	503		327	182	509		42
		2005	2 114	964	793	357		0	460	460		55
		2006	2 365	1 029	754	316		266	194	460		58
		2007	2 235	925	779	278		253	173	426	0	54
		2008	2 095	884	744	264	0	203	154	357	1	54
40	63	2009	*2 073*									–
Luxembourg		1990	48									–
		1995	32									–
		2000	44	21	19	0		4		4		53
		2005	37	14	20	3		0	0	0		41
		2006	33	22	10	1						69
		2007	39	0	35	4		0	0	0	0	0
		2008	0	0	0	0	0	0	0	0	28	–
13	0	2009	*0*									–
Malta		1990	13									–
		1995	11	5	4	2		0		0		56
		2000	16	5	9	2		0	0	0		36
		2005	21	5	10	6		0	1	1	1	33
		2006	30	4	20	6						17
		2007	38	8	18	11		1	0	1	0	31
		2008	48	15	19	12	0	2	5	7	0	44
4	12	2009	*48*									–
Monaco		1990	1									–
		1995	1									–
		2000	0	0	0	0		0	0	0		–
		2005										–
		2006										–
		2007										–
		2008										–
3	–	2009										–
Montenegro		2005	156	64	66	13		13	14	27		49
		2006	167	58	74	21		14	4	18		44
		2007	147	41	78	18		10	12	22	0	34
		2008	131	65	38	20	0	8	2	10	0	63
25	18	2009	113	53	43	12	0	5	6	11	1	55
Netherlands		1990	1 369									–
		1995	1 619	575	1 522	513						27
		2000	1 244	289	528	427		0	70	70		35
		2005	1 127	237	491	385		14	30	44		33
		2006	1 002	203	441	341		17	19	36		32
		2007	930	187	354	375		14	30	44	0	35
		2008	964	189	371	388	0	16	33	49	0	34
9	6	2009	*968*									–
Norway		1990	285									–
		1995	236	62	57	89		28		28		52
		2000	221	37	103	79		2	10	12		26
		2005	269	48	119	102		0	14	14	7	29
		2006	276	46	131	99			17	17	1	26
		2007	282	38	128	116		0	24	24	1	23
		2008	252	53	91	108	0	0	27	27	45	37
7	5	2009	*254*									–
Poland		1990	16 136									–
		1995	15 958	6 955	7 285	647		1 071		1 071		49
		2000	10 931	3 180	6 392	477		882	0	882		33
		2005	8 203	2 823	4 591	789		0	1 077	1 077		38
		2006	8 017	2 835	4 102	690		390	576	966		41
		2007	8 019	2 827	4 150	592		450	597	1 047	0	41
		2008	7 421	2 650	3 835	576	0	360	660	1 020	0	41
42	21	2009	7 922	2 658	4 047	563	0	654	314	968		40
Portugal		1990	6 214									–
		1995	5 577	2 019	1 531	1 759		268		268		57
		2000	4 227	1 863	1 005	1 178		177	304	481		65
		2005	3 303	1 302	974	905		122	228	350	5	57
		2006	3 218	1 300	959	813		146	199	345	6	58
		2007	2 952	1 173	908	735		136	171	307	4	56
		2008	2 817	1 053	953	631	66	114	178	292	0	52
62	26	2009	*2 825*									–
Republic of Moldova		1990	1 728									–
		1995	2 925	665	1 958	154		148		148		25
		2000	2 935	651	1 788	122		374	0	374		27
		2005	5 141	1 696	2 237	568		640	1 137	1 777		43
		2006	4 990	1 679	2 112	597		602	1 128	1 730	0	44
		2007	4 857	1 610	2 043	513		691	1 510	2 201	0	44
		2008	4 442	1 533	1 942	476	0	491	1 374	1 865	22	44
40	120	2009	4 337	1 318	2 015	471	0	533	1 121	1 654	122	40
Romania		1990	16 256									–
		1995	23 271	10 469	8 303	3 422		1 077		1 077		56
		2000	27 470	10 202	10 180	3 474		3 614	156	3 770		50
		2005	26 104	10 801	8 038	3 568		3 697	3 241	6 938	2	57
		2006	24 295	9 814	7 254	3 665		3 562	3 024	6 586		57
		2007	22 590	9 425	6 543	3 284		3 338	2 901	6 239	0	59
		2008	21 724	9 511	6 093	3 170	0	2 950	3 062	6 012	0	61
70	102	2009	*21 636*									–
Russian Federation		1990	50 641									–
		1995	84 980	37 512	42 241	5 227						47
		2000	140 677	27 467	102 228	5 313		5 669	12 478	18 147		21
		2005	127 930	32 605	74 301	12 320		8 704	26 449	35 153		30
		2006	124 689	32 335	73 252	12 059		7 043	27 576	34 619		31
		2007	127 338	33 103	73 560	11 704		8 971	87 586	96 557	0	31
		2008	128 263	33 949	75 775	3 769	7 342	7 428	86 642	94 070	0	31
34	90	2009	126 227	33 351	72 931	10 945	0	9 000	23 569	32 569	6 426	31

[a] Rates are per 100 000 population. Where notification data from a country had not been received by 31 August, the notification rate was assumed to be the same as for 2008 (in italics).

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TABLE A2.3 **Case notifications, 1990–2009**

	NEW AND RELAPSE NOTIFICATION RATE[a] 1990–2009	YEAR	NEW AND RELAPSE[a]	NEW CASES				RELAPSE	RE-TREAT EXCL. RELAPSE	TOTAL RETREAT	HISTORY UNKNOWN	% SMEAR-POS AMONG NEW PULM
				SMEAR-POSITIVE	SMEAR-NEGATIVE/ UNKNOWN	EXTRA-PULMONARY	OTHER					
San Marino		1990	1									–
		1995	2									–
		2000	1	1	0	0		0	0	0		100
		2005										–
		2006										–
		2007										–
		2008										–
	4 –	2009										–
Serbia		2005	3 208	1 105	1 584	479		40	260	300	0	41
		2006	3 146	1 136	1 260	543		207	126	333		47
		2007	2 891	1 146	1 015	506		224	90	314	0	53
		2008	2 714	1 172	920	434	0	188	92	280	7	56
	16	2009	1 625	801	488	197	0	139	64	203	5	62
	Serbia (without Kosovo)	2005	2 106	873	988	245			260	260		47
		2006	2 024	843	749	276			126	126		53
		2007	1 961	905	640	229			90	90	0	59
		2008	1 722	848	519	211	0	144	92	236	7	62
		2009	1 625	801	488	197	0	139	64	203	5	62
	Kosovo	2005	1 102	232	596	234						28
		2006	1 122	293	511	267						36
		2007	930	241	375	277			0	0	0	39
		2008	992	324	401	223		44		44		45
		2009										–
Serbia & Montenegro		1990	4 194									–
		1995	2 798	1 497	930	173		198		198		62
	41 34	2000	2 864	0	2 486	175		203	0	203		0
Slovakia		1990	1 448									–
		1995	1 540	788	555	177		20		20		59
		2000	1 010	236	469	203		102	18	120		33
		2005	710	162	356	134		58	50	108		31
		2006	673	160	344	122		47	57	104		32
		2007	622	176	289	120		37	60	97	0	38
		2008	559	126	285	99	0	49	49	98	25	31
	28 10	2009	*560*									–
Slovenia		1990	722									–
		1995	525	303	83	109		30		30		78
		2000	368	145	133	59		31	16	47		52
		2005	269	109	110	30		20	9	29		50
		2006	207	83	81	38		5	8	13		51
		2007	212	90	71	37		14	4	18	2	56
		2008	208	81	83	33	0	11	5	16	0	49
	37 10	2009	*209*									–
Spain		1990	7 600									–
		1995	8 764	2 605	6 159							30
		2000	7 993	3 423	4 446	124		0	0	0		43
		2005	7 281	2 511	3 880	890		0	1 078	1 078		39
		2006	7 815	2 006	4 234	1 376		199	214	413		32
		2007	7 347	2 317	3 583	1 447		0	420	420	0	39
		2008	6 769	2 333	2 855	1 581	0	0	461	461	984	45
	20 15	2009	*6 832*									–
Sweden		1990	557									–
		1995	564	102	235	216		11		11		30
		2000	417	118	147	152		0	40	40		45
		2005	539	134	208	197		0	30	30		39
		2006	489	106	203	176		4	7	11	1	34
		2007	460	96	198	165		1	31	32	0	33
		2008	457	97	161	199	0	0	37	37	58	38
	7 5	2009	*459*									–
Switzerland		1990	1 278									–
		1995	830	185	515	126		5		5		26
		2000	544	118	287	139		0	102	102		29
		2005	508	108	249	151		0	118	118		30
		2006	461	112	231	118			46	46	13	33
		2007	425	95	281	49		0	53	53	0	25
		2008	319	64	156	99	0	0	54	54	143	29
	19 4	2009	333	73	163	97					221	31
Tajikistan		1990	2 460									–
		1995	2 029	1 042	617			370		370		63
		2000	2 779	434	1 918	427						18
		2005	5 460	1 745	2 175	1 417		123	2 066	2 189		45
		2006	5 362	2 051	1 613	1 562		136	1 306	1 442	3	56
		2007	6 297	2 228	2 117	1 733		219	1 784	2 003	0	51
		2008	6 396	2 057	2 284	1 774	35	246	1 600	1 846		47
	46 88	2009	6 125	1 972	2 208	1 684		261	272	533	1 085	47
The Former Yugoslav Republic of Macedonia		1990										–
		1995	786	319	376	66		25		25		46
		2000	641	167	308	150		16	0	16		35
		2005	598	178	236	141		43	60	103		43
		2006	561	178	218	133		32	66	98		45
		2007	526	200	177	117		32	37	69	0	53
		2008	450	188	133	106	0	23	33	56	0	59
	– 22	2009	450	198	103	116	0	33	15	48	8	66
Turkey		1990	24 468									–
		1995	22 981	4 383	17 534	1 064						20
		2000	18 038	4 315	8 544	4 371		808		808		34
		2005	19 744	7 450	5 944	5 359		991	1 559	2 550		56
		2006	19 629	7 866	5 069	5 609		1 085	897	1 982		61
		2007	18 878	7 527	4 492	5 790		1 069	816	1 885	0	63
		2008	17 600	6 993	4 325	5 442	0	840	849	1 689	3	62
	44 22	2009	16 757	6 007	4 289	5 647	0	814	631	1 445	14	58
Turkmenistan		1990	2 325									–
		1995	1 939	544	1 327	1		67		67		29
		2000	4 038	1 017	2 709	241		71	1 894	1 965		27
		2005	3 191	995	1 498	656		42	100	142		40
		2006	3 223	1 155	1 339	630		99	146	245		46
		2007	3 428	1 378	1 288	681		81	270	351	0	52
		2008	3 757	1 331	1 293	611	393	129	152	281		51
	63 89	2009	4 550	1 370	2 169	1 011						39

[a] Rates are per 100 000 population. Where notification data from a country had not been received by 31 August, the notification rate was assumed to be the same as for 2008 (in italics).

TABLE A2.3 **Case notifications, 1990–2009**

	NEW AND RELAPSE NOTIFICATION RATE[a] 1990–2009	YEAR	NEW AND RELAPSE[a]	NEW CASES				RELAPSE	RE-TREAT EXCL. RELAPSE	TOTAL RETREAT	HISTORY UNKNOWN	% SMEAR-POS AMONG NEW PULM
				SMEAR-POSITIVE	SMEAR-NEGATIVE/ UNKNOWN	EXTRA-PULMONARY	OTHER					
Ukraine		1990	16 465									–
		1995	21 459	8 263	9 793	1 514		1 889		1 889		46
		2000	32 945	10 738	17 258	1 739		3 210	0	3 210		38
		2005	39 608									–
		2006	41 265	14 206	20 226	4 452		2 381		2 381		41
		2007	37 517	11 028	20 255	3 608		2 626	3 126	5 752	0	35
		2008	37 832	14 574	17 505	3 660		2 093		2 093		45
32	79	2009	36 075	13 632	15 934	3 858		2 651	2 826	5 477		46
United Kingdom of Great Britain and Northern Ireland		1990	5 908									–
		1995	6 176		4 162	2 014						–
		2000	6 220	1 204	2 037	2 478		0	0	0		37
		2005	8 173	1 821	2 752	3 600		0	460	460		40
		2006	8 157	1 767	2 832	3 558			237	237	104	38
		2007	7 851	1 639	2 707	3 505		0	436	436	130	38
		2008	6 586	1 286	2 221	3 033	46	0	413	413	1 656	37
10	*11*	2009	*6 622*									–
Uzbekistan		1990	9 414									–
		1995	9 866	2 735	5 798	1 333						32
		2000	15 750	3 825	10 142	1 760		23	324	347		27
		2005	21 513	5 695	7 857	6 324		1 637	7 378	9 015		42
		2006	23 900	7 211	10 301	5 600		788	1 410	2 198		41
		2007	19 779	6 326	7 167	5 280		1 006	3 611	4 617	0	47
		2008	17 040	5 117	6 640	4 214	0	1 069	4 018	5 087	136	44
46	64	2009	17 540	4 959	6 943	4 667		971	1 480	2 451	2 433	42

[a] Rates are per 100 000 population. Where notification data from a country had not been received by 31 August, the notification rate was assumed to be the same as for 2008 (in italics).

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TABLE A2.4 **Treatment outcomes, new smear-positive cases, 1995–2008**

	TREATMENT SUCCESS (%)[a] 1995–2008	YEAR	NUMBER NOTIFIED	SIZE OF COHORT	COHORT AS % NOTIFIED	% OF COHORT					
						CURED	COMPLETED	DIED	FAILED	DEFAULTED	NOT EVALUATED
Albania		1995	139		–						
		2000	171		–						
		2005	196	196	100	43	35	4	2	5	11
		2006	186	186	100	49	41	1	1	4	4
		2007	165	181	110	50	35	4	2	4	5
–	91	2008	170	170	100	52	39	4	1	2	4
Andorra		1995			–						
		2000	1	2	200		50			50	0
		2005	5	5	100	80	0	0	0	0	20
		2006	8	8	100	13	63				25
		2007	2	2	100	100	0	0	0	0	0
–	100	2008	3	3	100	33	67	0	0	0	0
Armenia		1995	436	507	116	52	2	8	36	1	0
		2000	621	447	72	81	6	4	3	7	0
		2005	581	581	100	59	13	3	5	14	4
		2006	580	580	100	53	16	5	10	14	2
		2007	497	490	99	55	15	6	11	12	1
55	73	2008	487	487	100	62	11	5	6	10	7
Austria		1995	467	383	82	2	81	10	0	7	1
		2000	324	298	92	0	73	9	0	6	11
		2005	234	230	98	17	58	7	0	7	11
		2006	213	206	97	16	55	8	0	9	12
		2007	189		–						
82	–	2008			–						
Azerbaijan		1995	669	538	80	58	7		12	19	4
		2000	890	890	100	89	0	1	2	3	4
		2005	1 561	1 561	100	48	11	4	4	12	22
		2006	1 454	1 454	100	50	10	2	3	12	23
		2007	1 356	1 356	100	49	8	3	2	11	27
65	57	2008	1 409	1 451	103	47	10	3	3	11	26
Belarus		1995	1 845		–						
		2000	2 547		–						
		2005	1 235		–						
		2006	1 072	1 072	100	62	8	13	8	2	8
		2007	1 051	1 987	189	67	7	9	10	2	6
–	71	2008	1 060	1 902	179	68	3	9	7	3	10
Belgium		1995	400		–						
		2000	409	358	88	25	41	10	1	17	6
		2005	380	304	80	21	45	10	0	0	24
		2006	343	280	82	24	49	8	0	1	17
		2007	322	503	156	16	52	8		9	15
–	–	2008	311		–						
Bosnia and Herzegovina		1995	865	865	100	97	1	0	1	1	1
		2000	759	756	100	77	18	1	1	2	1
		2005	640	1 035	162	93	3	1	0	0	2
		2006	562	993	177	94	3	1	1	1	1
		2007	737	1 267	172	93	4	1	1	1	1
97	–	2008	509		–						
Bulgaria		1995	1 087		–						
		2000	2 524		–						
		2005	1 214	1 342	111	82	3	4	2	7	1
		2006	1 307	1 308	100	72	7	5	3	6	6
		2007	1 080	1 233	114	77	2	7	0	8	6
–	–	2008	1 020		–						
Croatia		1995	1 204		–						
		2000	0		–						
		2005	372	391	105	40	7	7	0	1	45
		2006	396	898	227	25	4	7	0	2	61
		2007	382	637	167	49	12	13	0	1	24
–	–	2008	328		–						
Cyprus		1995	6	6	100	100	0	0	0	0	0
		2000	4		–						
		2005	9	8	89	38	25	13	0	0	25
		2006	8	8	100	63	25	0	0	0	13
		2007	8		–						
100	–	2008	6		–						
Czech Republic		1995	487	487	100	57	3	0	3	2	35
		2000	420	396	94	59	11	17	1	1	11
		2005	308	315	102	62	10	6	0	2	20
		2006	257	257	100	60	9	6	0	2	23
		2007	267	459	172	69	3	19	1	7	1
60	–	2008	249		–						
Denmark		1995	128		–						
		2000	171	110	64	37	49	5	0	0	9
		2005	129	128	99	44	39	6	1	2	8
		2006	123	31	25	35	42	3	0	0	19
		2007	135	213	158	26	53	5	1	1	13
–	–	2008	106		–						
Estonia		1995	369		–						
		2000	255	257	101	67	2	11	1	6	12
		2005	162	162	100	70	2	8	1	10	10
		2006	147	149	101	64	3	15	1	5	11
		2007	168	302	180	60	2	14	1	10	15
–	–	2008	144		–						
Finland		1995	244		–						
		2000	205		–						
		2005	130		–						
		2006	84		–						
		2007	85	181	213	43	27	19	1	1	9
–	–	2008	104		–						
France		1995	3 449		–						
		2000	1 815		–						
		2005	1 941		–						
		2006	1 911		–						
		2007	1 921		–						
–	–	2008	1 222		–						
Georgia		1995	221	221	100	41	18	8	3	29	2
		2000	601	807	134	38	25	3	9	25	0
		2005	1 509	1 489	99	60	13	3	5	13	7
		2006	1 831	1 813	99	64	11	3	6	10	6
		2007	1 867	1 975	106	60	17	2	6	9	6
58	73	2008	1 868	2 196	118	53	20	3	4	8	12

[a] TREATMENT SUCCESS = percent cured + percent completed then rounded to the nearest digit.

TABLE A2.4 **Treatment outcomes, new smear-positive cases, 1995–2008**

	TREATMENT SUCCESS (%)[a] 1995–2008	YEAR	NUMBER NOTIFIED	SIZE OF COHORT	COHORT AS % NOTIFIED	% OF COHORT					
						CURED	COMPLETED	DIED	FAILED	DEFAULTED	NOT EVALUATED
Germany		1995	3 852		–						
		2000	0	454	–	61	16	16	1	2	4
		2005	1 379	1 199	87	39	32	9	0	2	18
		2006	1 303	1 167	90	20	20	10	0	4	46
		2007	1 183	2 416	204	37	40	11	0	1	10
–	–	2008	954		–						
Greece		1995			–						
		2000	235		–						
		2005	197		–						
		2006	210		–						
		2007	257	0	0	–	–	–	–	–	–
–	–	2008	80		–						
Hungary		1995	796		–						
		2000	412	651	158	28	36	10	3	12	11
		2005	423	412	97	32	13	13	12	9	20
		2006	422	430	102	31	15	11	15	8	20
		2007	381	612	161	31	20	12	14	6	17
–	–	2008	346		–						
Iceland		1995	2	2	100	0	100	0	0	0	0
		2000	1	2	200	0	100	0	0	0	0
		2005	2	2	100	0	100	0	0	0	0
		2006	4	4	100	0	50	25	0	0	25
		2007	2	7	350	14	71	0	0	0	14
100	–	2008	2		–						
Ireland		1995			–						
		2000	138	73	53	33	51	12	0	4	0
		2005	130	107	82	3	62	9	3	1	22
		2006	133	186	140	2	64	6		2	27
		2007	135	185	137	0	70	5	0	2	23
–	–	2008	123		–						
Israel		1995			–						
		2000	17	320	1 882	67	10	11	1	3	8
		2005	98		–						
		2006	72	209	290	66	9	14	0	5	6
		2007	143	213	149	70	6	11	0	5	7
–	81	2008	173	160	92	78	4	9	1	1	8
Italy		1995	1 413	295	21	73	6	3	2	11	4
		2000	687	223	32	37	36	1	0	9	16
		2005	1 275		–						
		2006	1 377	0	0	–	–	–	–	–	–
		2007	979	0	0	–	–	–	–	–	–
80	–	2008	938		–						
Kazakhstan		1995	3 022		–						
		2000	8 903	8 781	99	76	3	5	10	3	3
		2005	6 911	6 884	100	70	1	5	12	5	8
		2006	6 205	6 113	99	71	1	4	16	5	3
		2007	6 195	6 140	99	69	0	4	20	5	3
–	64	2008	6 193	6 167	100	64	0	4	26	4	2
Kyrgyzstan		1995	832		–						
		2000	1 296	1 233	95	73	9	3	4	5	6
		2005	1 972	1 897	96	81	4	3	5	5	2
		2006	1 833	1 833	100	80	3	5	5	5	2
		2007	1 720	1 718	100	81	4	3	4	6	2
–	84	2008	1 712	1 640	96	80	5	3	6	5	2
Latvia		1995	504	475	94	61	0	9	3	21	7
		2000	637	637	100	68	4	12	3	7	7
		2005	536	536	100	72	1	11	1	7	8
		2006	498	498	100	72	1	11	1	6	9
		2007	478	772	162	80	2	7	0	4	7
61	–	2008	400		–						
Lithuania		1995	979		–						
		2000	776	776	100	73		10	4	12	2
		2005	964	958	99	70	0	11	3	11	6
		2006	1 029	1 028	100	74	0	12	2	10	3
		2007	925	1 209	131	70	0	12	1	7	10
–	–	2008	884		–						
Luxembourg		1995		37	–	100	0	0	0	0	0
		2000	21		–						
		2005	14	0	0	–	–	–	–	–	–
		2006	22		–						
		2007	0		–						
100	–	2008	0		–						
Malta		1995	5	5	100	80	20	0	0	0	0
		2000	5	4	80	0	100	0	0	0	0
		2005	5	5	100	0	100	0	0	0	0
		2006	4	4	100	0	100	0	0	0	0
		2007	8	12	150	0	75	0	0	8	17
100	–	2008	15		–						
Monaco		1995			–						
		2000	0		–						
		2005			–						
		2006			–						
		2007			–						
–	–	2008			–						
Montenegro		2005	64	63	98	10	21				70
		2006	58	58	100	7	26	5	0	3	59
		2007	41	76	185	17	62	3	0	0	18
30	85	2008	65	65	100	52	32	5	0	2	9
Netherlands		1995	575	715	124	17	55	8		5	15
		2000	289	301	104	23	53	6	0	3	15
		2005	237	208	88	9	75	7	0	1	8
		2006	203		–						
		2007	187	411	220	17	62	5	0	2	14
72	–	2008	189		–						
Norway		1995	62	87	140	43	34	14	1	8	0
		2000	37	37	100	49	22	14	3	3	11
		2005	48	47	98	62	30	2	0	4	2
		2006	46	41	89	68	24	0	0	0	7
		2007	38	122	321	54	25	2	0	0	19
77	–	2008	53		–						

[a] TREATMENT SUCCESS = percent cured + percent completed then rounded to the nearest digit.

TABLE A2.4 **Treatment outcomes, new smear-positive cases, 1995–2008**

	TREATMENT SUCCESS (%)[a] 1995–2008	YEAR	NUMBER NOTIFIED	SIZE OF COHORT	COHORT AS % NOTIFIED	% OF COHORT					
						CURED	COMPLETED	DIED	FAILED	DEFAULTED	NOT EVALUATED
Poland		1995	6 955		–						
		2000	3 180	214	7	50	22	11	6	6	5
		2005	2 823	2 823	100	65	12	5	1	9	8
		2006	2 835	2 819	99	63	12	7	1	9	8
		2007	2 827	4 510	160	62	14	6	0	10	7
–	74	2008	2 650	4 228	160	53	20	7	0	10	10
Portugal		1995	2 019	1 240	61	45	23	4	4	4	19
		2000	1 863	1 924	103	9	71	6	0	5	9
		2005	1 302	1 393	107	13	76	6	0	4	2
		2006	1 300	1 372	106	14	73	4	0	4	5
		2007	1 173	1 694	144	12	75	5	0	3	5
69	–	2008	1 053		–						
Republic of Moldova		1995	665		–						
		2000	651	651	100	1	62	0	0	0	37
		2005	1 696	1 690	100	60	2	9	11	11	7
		2006	1 679	1 671	100	59	4	11	11	12	5
		2007	1 610	1 599	99	54	8	10	16	11	0
–	57	2008	1 533	1 533	100	51	5	10	7	12	14
Romania		1995	10 469	11 597	111	38	13	6	7	6	31
		2000	10 202	10 158	100	28	42	4	8	8	9
		2005	10 801	10 929	101	71	11	5	4	6	4
		2006	9 814	10 075	103	69	13	6	3	4	4
		2007	9 425	11 245	119	72	13	4	4	5	3
51	–	2008	9 511		–						
Russian Federation		1995	37 512	54	0	54	11	15	6	11	4
		2000	27 467	3 616	13	64	4	6	13	9	4
		2005	32 605	25 692	79	55	3	13	14	11	4
		2006	32 335	30 745	95	56	3	12	15	10	5
		2007	33 103	31 857	96	55	3	12	16	10	5
65	57	2008	33 949	32 356	95	54	3	12	18	9	4
San Marino		1995			–						
		2000	1	1	100	0	0	100	0	0	0
		2005			–						
		2006			–						
		2007			–						
–	–	2008			–						
Serbia		2005	1 105	1 154	104	72	13	5	1	5	4
		2006	1 136	1 157	102	72	12	6	2	4	4
		2007	1 146	1 145	100	77	7	6	2	4	3
85	85	2008	1 172	1 111	95	81	4	7	2	5	1
Serbia & Montenegro		1995	1 497	1 956	131	34	18	2	3	10	33
52	–	2000	0	267	–	82	7	4	0	6	1
Slovakia		1995	788	807	102	64		16		4	16
		2000	236	238	101	81	0	14	1	2	1
		2005	162	158	98	66	26	6	0	1	1
		2006	160	149	93	78	3	9	6	1	3
		2007	176	304	173	86	0	12	0	2	1
64	–	2008	126		–						
Slovenia		1995	303	270	89	64	26	4	2	1	3
		2000	145	145	100	33	51	8	0	5	3
		2005	109	109	100	47	38	12	0	1	3
		2006	83	83	100	35	57	4	0	5	0
		2007	90	148	164	27	55	11	0	3	5
90	–	2008	81		–						
Spain		1995	2 605		–						
		2000	3 423		–						
		2005	2 511		–						
		2006	2 006		–						
		2007	2 317	0	0	–	–	–	–	–	–
–	–	2008	2 333		–						
Sweden		1995	102		–						
		2000	118	112	95	0	79	11	0	2	8
		2005	134	133	99	0	74	6	1	1	18
		2006	106	265	250	0	63	7	1	0	28
		2007	96	237	247	0	66	7	0	1	26
–	–	2008	97		–						
Switzerland		1995	185		–						
		2000	118		–						
		2005	108		–						
		2006	112		–						
		2007	95		–						
–	–	2008	64		–						
Tajikistan		1995	1 042	348	33	69	18	7	3	2	0
		2000	434	665	153	74	3	15	8	0	0
		2005	1 745	1 729	99	74	9	4	6	7	0
		2006	2 051	1 932	94	80	5	5	5	4	1
		2007	2 228	2 073	93	78	5	5	6	5	2
88	82	2008	2 057	2 044	99	76	7	4	7	5	1
The Former Yugoslav Republic of Macedonia		1995	319	222	70	61	9	13	9	9	0
		2000	167	152	91	51	35	4	2	7	1
		2005	178	179	101	62	22	2	0	14	0
		2006	178	178	100	71	16	5	1	7	0
		2007	200	197	99	74	13	10	2	1	0
70	89	2008	188	188	100	81	7	7	1	2	1
Turkey		1995	4 383		–						
		2000	4 315	3 461	80	0	73	3	0	6	19
		2005	7 450	7 450	100	45	44	2	0	5	3
		2006	7 866	7 865	100	58	32	3	1	4	2
		2007	7 527	7 510	100	60	32	3	1	3	2
–	92	2008	6 993	6 993	100	59	33	3	1	3	2
Turkmenistan		1995	544	544	100	55	18	11	7	2	7
		2000	1 017	1 017	100	79	2	9	6	3	1
		2005	995	995	100	70	14	6	4	5	1
		2006	1 155	1 155	100	84	2	6	4	3	1
		2007	1 378	1 288	93	79	5	5	6	5	1
73	83	2008	1 331	1 331	100	83	1	6	6	5	1
Ukraine		1995	8 263	9 564	116	83		6	7		4
		2000	10 738		–						
		2005			–						
		2006	14 206	10 351	73	54	5	12	12	9	8
		2007	11 028	11 068	100	54	5	14	12	10	5
83	62	2008	14 574	14 407	99	56	6	12	12	9	5

[a] TREATMENT SUCCESS = percent cured + percent completed then rounded to the nearest digit.

TABLE A2.4 **Treatment outcomes, new smear-positive cases, 1995–2008**

	TREATMENT SUCCESS (%)[a] 1995–2008	YEAR	NUMBER NOTIFIED	SIZE OF COHORT	COHORT AS % NOTIFIED	% OF COHORT					
						CURED	COMPLETED	DIED	FAILED	DEFAULTED	NOT EVALUATED
United Kingdom of Great Britain and Northern Ireland	 – –	1995			–						
		2000	1 204		–						
		2005	1 821	1 348	74	0	68	7	0	1	24
		2006	1 767	1 350	76		72	7	0	1	19
		2007	1 639	2 266	138	0	77	7	0	1	16
		2008	1 286		–						
Uzbekistan	 78 81	1995	2 735	2 598	95	78	0	9	7	4	3
		2000	3 825	1 030	27	27	53	3	6	5	6
		2005	5 695	5 336	94	72	9	6	6	7	1
		2006	7 211	5 642	78	73	8	6	6	6	1
		2007	6 326	6 326	100	72	7	7	6	6	2
		2008	5 117	5 117	100	75	6	6	6	4	3

[a] TREATMENT SUCCESS = percent cured + percent completed then rounded to the nearest digit.

TABLE A2.5 **Treatment outcomes, retreatment cases, 1995–2008**

	TREATMENT SUCCESS (%)[a] 1995–2008	YEAR	NUMBER NOTIFIED	SIZE OF COHORT	COHORT AS % NOTIFIED	% OF COHORT					
						CURED	COMPLETED	DIED	FAILED	DEFAULTED	NOT EVALUATED
Albania		1995	53		–						
		2000	19		–						
		2005	43	30	70	37	37	3	0	10	13
		2006	35	29	83	28	59	7	0	7	0
		2007	25	25	100	24	60	4	8	4	0
–	75	2008	32	28	88	39	36	14	4	4	4
Andorra		1995			–						
		2000	0		–						
		2005	0		–						
		2006	1	3	300	33	33			33	0
		2007	1	1	100	0	100	0	0	0	0
–	–	2008	0	0	–	–	–	–	–	–	–
Armenia		1995	38	6	16	50	0	0	17	33	0
		2000	76	54	71	52	15	7	7	19	0
		2005	327	327	100	13	28	7	12	37	4
		2006	557	502	90	16	27	7	12	33	5
		2007	596	590	99	12	34	11	12	30	2
50	51	2008	618	534	86	15	36	8	15	21	5
Austria		1995			–						
		2000	30	10	33	0	80	0	0	0	20
		2005	26	27	104	11	56	11	0	11	11
		2006	18	44	244	11	61	7	0	11	9
		2007	63		–						
–	–	2008			–						
Azerbaijan		1995	47		–						
		2000	74	74	100	59	7	5	11	14	4
		2005	3 200	1 314	41	28	9	6	6	13	38
		2006	3 069	1 272	41	34	12	6	7	16	25
		2007	2 903	1 081	37	32	12	5	6	15	29
–	54	2008	3 733	2 562	69	13	41	3	5	25	14
Belarus		1995	343		–						
		2000	825		–						
		2005	1 049		–						
		2006	923	898	97	29	35	11	11	2	12
		2007	884	862	98	30	32	9	18	5	6
–	59	2008	849	815	96	29	30	9	8	3	20
Belgium		1995	80		–						
		2000	89	55	62	16	45	13	0	15	11
		2005	68	47	69	17	21	19	0	0	43
		2006	84	62	74	15	27	10	0	2	47
		2007	73	72	99	15	19	8		6	51
–	–	2008	67		–						
Bosnia and Herzegovina		1995	130		–						
		2000	193	122	63	79	15	3	1	2	0
		2005	156	106	68	85	8	4	1	2	1
		2006	113	93	82	89	5	2	0	1	2
		2007	183	156	85	85	7	3	2	2	1
–	–	2008	67		–						
Bulgaria		1995			–						
		2000	383		–						
		2005	201	198	99	57	10	7	11	14	2
		2006	221	221	100	63	9	11	4	13	1
		2007	309	301	97	22	37	16	1	12	12
–	–	2008	313		–						
Croatia		1995	42		–						
		2000			–						
		2005	94	92	98	20	13	9	1	1	57
		2006	106	82	77	61	1	18	0	2	17
		2007	98		–						
–	–	2008	36		–						
Cyprus		1995	0		–						
		2000	0		–						
		2005	3	2	67	0	100	0	0	0	0
		2006	1	1	100	0	100	0	0	0	0
		2007	1		–						
–	–	2008	3		–						
Czech Republic		1995	21		–						
		2000	25	38	152	53	11	8	3	0	26
		2005	34	31	91	16	39	3	0	3	39
		2006	32	27	84	15	48	0	0	0	37
		2007	81	76	94	39	37	12		7	5
–	–	2008	61		–						
Denmark		1995	6		–						
		2000	28	15	54	27	60	7	0	0	7
		2005	29	22	76	27	64	5	0	5	0
		2006	35	28	80	29	39	7	0	4	21
		2007	36	36	100	11	39	17		3	31
–	–	2008	37		–						
Estonia		1995	71		–						
		2000	116	59	51	54	2	3	0	3	37
		2005	94	89	95	21	20	3	4	26	25
		2006	82	38	46	50	3	16	3	18	11
		2007	78	79	101	37	15	8	4	18	19
–	–	2008	90		–						
Finland		1995			–						
		2000	29		–						
		2005	22		–						
		2006	19		–						
		2007	14	15	107	33	13	7	0	0	47
–	–	2008	19		–						
France		1995			–						
		2000	0		–						
		2005	371		–						
		2006	349		–						
		2007	385		–						
–	–	2008	379		–						
Georgia		1995	196	298	152	8	24	12	9	45	2
		2000	681	470	69	23	31	10	8	29	0
		2005	2 152	2 037	95	19	35	7	10	23	6
		2006	1 987	1 873	94	23	33	7	12	17	7
		2007	1 845	1 847	100	23	33	9	11	15	9
32	49	2008	1 677	1 502	90	21	28	6	8	14	23

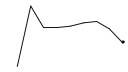
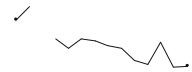
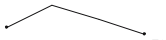
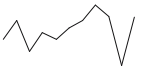
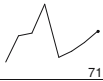
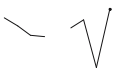
[a] TREATMENT SUCCESS = percent cured + percent completed then rounded to the nearest digit.

TABLE A2.5 **Treatment outcomes, retreatment cases, 1995–2008**

	TREATMENT SUCCESS (%)[a] 1995–2008	YEAR	NUMBER NOTIFIED	SIZE OF COHORT	COHORT AS % NOTIFIED	% OF COHORT					
						CURED	COMPLETED	DIED	FAILED	DEFAULTED	NOT EVALUATED
Germany		1995			–						
		2000		63	–	51	21	16	3	5	5
		2005	493	432	88	30	36	9	0	7	18
		2006	413	275	67	15	24	10	0	5	45
		2007	533	489	92	27	41	13	1	5	13
–	–	2008	441		–						
Greece		1995			–						
		2000	48		–						
		2005	74		–						
		2006	63		–						
		2007	70	0	0	–	–	–	–	–	–
–	–	2008	84		–						
Hungary		1995			–						
		2000	371	122	33	16	20	15	9	11	30
		2005	347	333	96	12	37	13	8	11	18
		2006	319	107	34	20	21	12	20	6	21
		2007	328	319	97	11	39	15	10	8	17
–	–	2008	285		–						
Iceland		1995	0		–						
		2000	1	1	100	0	100	0	0	0	0
		2005	1		–						
		2006			–						
		2007	2	2	100	0	50	0	0	0	50
–	–	2008	0		–						
Ireland		1995			–						
		2000	22	10	45	40	0	10	10	40	0
		2005	40	14	35	7	57	7	0	0	29
		2006	21	26	124	0	42	4	0	4	50
		2007	51	50	98	0	62	16	0	2	20
–	–	2008	41		–						
Israel		1995			–						
		2000	94		–						
		2005	7		–						
		2006	3	4	133	100	0	0	0	0	0
		2007	11	13	118	62	0	0	0	8	31
–	–	2008	5	0	0	–	–	–	–	–	–
Italy		1995		31	–	42	6	26	10	13	3
		2000	625	26	4	31	15	4	12	8	31
		2005	293		–						
		2006	242	0	0	–	–	–	–	–	–
		2007	1 772	0	0	–	–	–	–	–	–
48	–	2008	292		–						
Kazakhstan		1995	1 320		–						
		2000	5 093	2 901	57	62	4	10	14	5	5
		2005	15 009	4 085	27	46	1	13	14	6	19
		2006	14 859	21 242	143	15	22	15	14	7	27
		2007	14 143	18 722	132	24	29	9	25	9	4
–	42	2008	9 229	8 662	94	24	18	10	32	7	8
Kyrgyzstan		1995	127		–						
		2000	555	278	50	59	15	8	8	6	4
		2005	847	845	100	40	31	8	9	11	1
		2006	930	933	100	41	30	8	9	8	4
		2007	1 040	1 035	100	34	34	8	8	13	4
–	70	2008	756	897	119	36	34	6	10	9	4
Latvia		1995	118		–						
		2000	375	205	55	39	2	19	3	8	29
		2005	205	205	100	50	1	10	1	9	29
		2006	184	133	72	43	2	18	2	10	26
		2007	176	176	100	54	4	9	1	11	22
–	–	2008	152		–						
Lithuania		1995	128		–						
		2000	509	282	55	45	0	21	8	22	5
		2005	460	455	99	27	2	25	4	22	19
		2006	460	350	76	36	0	27	4	18	15
		2007	426	426	100	30	0	28	5	21	17
–	–	2008	357		–						
Luxembourg		1995			–						
		2000	4		–						
		2005	0		–						
		2006			–						
		2007	0		–						
–	–	2008	0		–						
Malta		1995	0		–						
		2000	0	1	–	0	100	0	0	0	0
		2005	1	1	100	0	100	0	0	0	0
		2006			–						
		2007	1	0	0	–	–	–	–	–	–
–	–	2008	7		–						
Monaco		1995			–						
		2000	0		–						
		2005			–						
		2006			–						
		2007			–						
–	–	2008			–						
Montenegro		2005	27	10	37		20	20			60
		2006	18	19	106	5	26	11	0	5	53
		2007	22	23	105	4	52	13	0	0	30
20	80	2008	10	10	100	70	10	10	0	10	0
Netherlands		1995			–						
		2000	70	18	26	28	22	6	0	6	39
		2005	44	28	64	11	68	4	0	7	11
		2006	36		–						
		2007	44	55	125	5	67	4	4	0	20
–	–	2008	49		–						
Norway		1995	28		–						
		2000	12	3	25	33	0	67	0	0	0
		2005	14	9	64	44	33	22	0	0	0
		2006	17	11	65	36	18	18	0	0	27
		2007	24	25	104	28	28	8	0	0	36
–	–	2008	27		–						

[a] TREATMENT SUCCESS = percent cured + percent completed then rounded to the nearest digit.

TABLE A2.5 **Treatment outcomes, retreatment cases, 1995–2008**

	TREATMENT SUCCESS (%)[a] 1995–2008	YEAR	NUMBER NOTIFIED	SIZE OF COHORT	COHORT AS % NOTIFIED	% OF COHORT					
						CURED	COMPLETED	DIED	FAILED	DEFAULTED	NOT EVALUATED
Poland		1995	1 071		–						
		2000	882	56	6	64	13	14	0	4	5
		2005	1 077	985	91	22	31	6	0	32	9
		2006	966	629	65	35	16	7	1	30	10
		2007	1 047	1 038	99	35	31	7	0	18	8
–	65	2008	1 020	1 003	98	32	34	6	0	16	13
Portugal		1995	268	133	50	38	17	6	6	9	24
		2000	481	209	43	10	66	4	0	7	14
		2005	350	293	84	8	66	10	1	9	6
		2006	345	181	52	14	62	9	1	7	7
		2007	307	305	99	8	64	7	0	9	12
55	–	2008	292		–						
Republic of Moldova		1995	148		–						
		2000	374	1	0	0	0	0	100	0	0
		2005	1 777	1 713	96	22	19	13	16	17	13
		2006	1 730	1 715	99	20	23	16	16	16	10
		2007	2 201	2 167	98	18	18	14	29	20	1
–	23	2008	1 865	1 383	74	20	2	19	13	20	25
Romania		1995	1 077		–						
		2000	3 770	2 605	69	24	20	9	20	17	11
		2005	6 938	6 737	97	39	13	10	10	14	14
		2006	6 586	4 993	76	42	9	11	11	13	14
		2007	6 239	5 930	95	36	16	11	12	15	11
–	–	2008	6 012		–						
Russian Federation		1995		12	–	42	17	25	8	8	0
		2000	18 147	1 694	9	25	24	10	21	9	11
		2005	35 153	10 855	31	33	4	16	26	16	5
		2006	34 619	28 419	82	20	27	11	22	13	8
		2007	96 557	18 527	19	33	3	14	28	15	7
58	36	2008	94 070	18 070	19	33	3	13	29	14	7
San Marino		1995			–						
		2000	0		–						
		2005			–						
		2006			–						
		2007			–						
–	–	2008			–						
Serbia		2005	300	284	95	46	26	10	2	12	3
		2006	333	322	97	51	23	9	1	12	4
		2007	314	355	113	46	27	8	2	15	3
73	73	2008	280	237	85	52	20	12	0	8	6
Serbia & Montenegro		1995	198		–						
–	–	2000	203	21	10	67	10	10	0	14	0
Slovakia		1995	20		–						
		2000	120	46	38	78	0	11	2	4	4
		2005	108	101	94	50	38	7	0	3	3
		2006	104	45	43	56	4	29	2	2	7
		2007	97	96	99	40	47	4	1	3	5
–	–	2008	98		–						
Slovenia		1995	30		–						
		2000	47	24	51	29	46	4	0	13	8
		2005	29	27	93	44	41	4	0	4	7
		2006	13	4	31	0	75	25	0	0	0
		2007	18	18	100	44	39	17	0	0	0
–	–	2008	16		–						
Spain		1995			–						
		2000	0		–						
		2005	1 078		–						
		2006	413		–						
		2007	420	0	0	–	–	–	–	–	–
–	–	2008	461		–						
Sweden		1995	11		–						
		2000	40	9	23	0	78	0	0	11	11
		2005	30	16	53	0	75	0	0	0	25
		2006	11		–						
		2007	32	36	113	0	67	6	0	3	25
–	–	2008	37		–						
Switzerland		1995	5		–						
		2000	102		–						
		2005	118		–						
		2006	46		–						
		2007	53		–						
–	–	2008	54		–						
Tajikistan		1995	370		–						
		2000			–						
		2005	2 189	1 762	80	29	47	9	8	6	1
		2006	1 442	1 715	119	38	35	9	8	6	4
		2007	2 003	1 995	100	33	42	9	7	8	1
–	76	2008	1 846	1 881	102	32	43	9	8	6	2
The Former Yugoslav Republic of Macedonia		1995	25		–						
		2000	16		–						
		2005	103	97	94	24	33	7	2	32	2
		2006	98	72	73	18	42	15	3	17	6
		2007	69	71	103	27	38	17	4	7	7
–	71	2008	56	56	100	34	38	11	2	13	4
Turkey		1995			–						
		2000	808		–						
		2005	2 550	1 593	62	24	46	5	2	12	11
		2006	1 982	1 951	98	29	47	5	1	10	8
		2007	1 885	1 885	100	34	42	6	2	10	6
–	75	2008	1 689	1 692	100	30	44	4	2	9	10
Turkmenistan		1995	67		–						
		2000	1 965	495	25	66	9	7	11	6	1
		2005	142	142	100	42	26	13	10	9	0
		2006	245	240	98	48	25	11	6	9	1
		2007	351	116	33	41	1	17	16	23	3
–	81	2008	281	737	262	63	18	7	7	5	0
Ukraine		1995	1 889		–						
		2000	3 210		–						
		2005			–						
		2006	2 381	9 380	394	27	16	14	20	15	8
		2007	5 752	5 240	91	20	35	13	14	11	7
–	41	2008	2 093	7 152	342	31	10	16	21	13	8

[a] TREATMENT SUCCESS = percent cured + percent completed then rounded to the nearest digit.

TABLE A2.5 **Treatment outcomes, retreatment cases, 1995–2008**

	TREATMENT SUCCESS (%)[a] 1995–2008	YEAR	NUMBER NOTIFIED	SIZE OF COHORT	COHORT AS % NOTIFIED	% OF COHORT					
						CURED	COMPLETED	DIED	FAILED	DEFAULTED	NOT EVALUATED
United Kingdom of Great Britain and Northern Ireland		1995			–						
		2000	0		–						
		2005	460	147	32	0	57	4	0	3	36
		2006	237	276	116	0	65	8	0	3	24
		2007	436	433	99	0	71	8	0	2	19
–	–	2008	413		–						
Uzbekistan		1995			–						
		2000	347	764	220	20	55	8	8	9	0
		2005	9 015	3 999	44	28	41	9	7	14	1
		2006	2 198	5 248	239	17	61	7	4	11	1
		2007	4 617	4 617	100	18	57	8	4	9	3
–	72	2008	5 087	5 046	99	24	48	10	7	9	3

[a] TREATMENT SUCCESS = percent cured + percent completed then rounded to the nearest digit.

TABLE A.6 **HIV testing and provision of CPT, ART and IPT, 2005–2009**

	% OF TB PATIENTS WITH KNOWN HIV STATUS 2005–2009	YEAR	% OF TB PATIENTS WITH KNOWN HIV STATUS	NUMBER OF TB PATIENTS WITH KNOWN HIV STATUS	PATIENTS NOTIFIED (NEW AND RETREAT)[a]	NUMBER OF HIV-POSITIVE TB PATIENTS	% OF TESTED TB PATIENTS HIV-POSITIVE	% OF HIV-POSITIVE TB PATIENTS ON CPT	% OF HIV-POSITIVE TB PATIENTS ON ART	NUMBER OF HIV-POSITIVE PEOPLE PROVIDED IPT
Albania		2005	15	81	540	1	1	–	–	
		2006	10	51	502	3	6	–	100	
		2007	8	37	447	1	3	0	100	1
		2008	41	177	434	4	2	100	100	2
	15 47	2009	47	211	447	6	3	67	100	3
Andorra		2005	–		10		–	–	–	
		2006	–		13		–	–	–	
		2007	–		6		–	–	–	
		2008	0	0	4	0	–	–	–	0
	– 0	2009	0	0	9	0	–	–	–	0
Armenia		2005	12	270	2 322	6	2	83	33	
		2006	15	332	2 155	25	8	60	44	8
		2007	16	335	2 129	8	2	63	50	1
		2008	16	335	2 125	12	4	67	8	1
	12 26	2009	26	521	2 006	17	3	47	35	0
Austria		2005	–		954		–	–	–	
		2006	–		873		–	–	–	
		2007	–		874		–	–	–	
		2008	–				–	–	–	
	– –	2009	–				–	–	–	
Azerbaijan		2005	–		7 920		–	–	–	
		2006	–		7 498		–	–	–	
		2007	–		7 347	31	–	–	–	
		2008	59	5 945	10 078		–	–	–	
	– –	2009	–		9 627		–	–	–	
Belarus		2005	–		6 357	139	–	–	–	
		2006	–		6 065		–	–	–	
		2007	100	5 756	5 756	152	3	–	–	
		2008	95	5 227	5 483	156	3	–	–	
	– –	2009	–		5 511	190	–	–	–	
Belgium		2005	82	937	1 144	52	6	–	–	
		2006	82	927	1 127	55	6	–	–	
		2007	85	871	1 028	52	6	–	–	
		2008	91	913	1 006	56	6	–	–	
	82 –	2009	–				–	–	–	
Bosnia and Herzegovina		2005	–		2 160		–	–	–	
		2006	–		1 800		–	–	–	
		2007	0	0	2 400		–	–	–	
		2008	–		1 736	1	–	0	100	0
	– –	2009	–				–	–	–	
Bulgaria		2005	1	23	3 302		–	–	–	
		2006	8	247	3 232	6	2	–	–	
		2007	7	199	3 052	6	3	0	0	54
		2008	17	520	3 151	0	0	–	–	
	1 –	2009	–	1 151		1	0	0	0	9
Croatia		2005	–		1 144		–	–	–	
		2006	–		1 135		–	–	–	
		2007	–		982	3	–	–	–	
		2008	–		980	0	–	–	–	
	– –	2009	–				–	–	–	
Cyprus		2005	0	0	37		–	–	–	
		2006	0	0	37	0	–	–	–	1
		2007	100	42	42	0	0	–	–	0
		2008	72	36	50	2	6	50	50	0
	0 –	2009	–				–	–	–	
Czech Republic		2005	19	189	1 007	2	1	–	–	
		2006	17	163	973	4	2	–	–	
		2007	18	161	871	7	4	–	–	
		2008	20	174	868	7	4	–	–	
	19 –	2009	–				–	–	–	
Denmark		2005	–		424	8	–	–	–	
		2006	3	11	377	11	100	–	–	
		2007	40	158	391	13	8	0	0	
		2008	–		367		–	–	–	
	– –	2009	–				–	–	–	
Estonia		2005	94	490	519	33	7	–	–	
		2006	91	414	455	41	10	–	–	
		2007	92	450	487	52	12	–	–	0
		2008	90	401	444	42	10	–	33	0
	94 –	2009	–	380		39	10	–	54	0
Finland		2005	1	3	361	3	100	–	–	
		2006	2	6	299	6	100	–	–	
		2007	3	8	313	10	125	–	–	
		2008	1	5	350	6	120	–	–	
	1 –	2009	–			6	–	–	–	
France		2005	–		5 374		–	–	–	
		2006	–		5 336		–	–	–	
		2007	–		5 588		–	–	–	
		2008	–		5 812		–	–	–	
	– –	2009	–				–	–	–	
Georgia		2005	10	674	6 448	13	2	54	100	
		2006	10	649	6 311	17	3	59	53	
		2007	14	842	5 912	32	4	66	66	235
		2008	25	1 482	5 836	20	1	90	85	301
	10 –	2009	–		6 058		–	–	–	
Germany		2005	–		6 045		–	–	–	
		2006	–		5 402		–	–	–	
		2007	–		5 067		–	–	–	
		2008	–		4 474		–	–	–	
	– –	2009	–				–	–	–	
Greece		2005	–		767		–	–	–	
		2006	–		681		–	–	–	
		2007	–		659		–	–	–	
		2008	–		669		–	–	–	
	– –	2009	–				–	–	–	
Hungary		2005	–		2 024		–	–	–	
		2006	–		1 894		–	–	–	
		2007	–		1 752		–	–	–	
		2008	–		1 606		–	–	–	0
	– –	2009	–				–	–	–	

[a] Data presented as of 31 August 2010. Notification data for European Union countries were not available.

TABLE A.6 **HIV testing and provision of CPT, ART and IPT, 2005–2009**

	% OF TB PATIENTS WITH KNOWN HIV STATUS 2005–2009		YEAR	% OF TB PATIENTS WITH KNOWN HIV STATUS	NUMBER OF TB PATIENTS WITH KNOWN HIV STATUS	PATIENTS NOTIFIED (NEW AND RETREAT)[a]	NUMBER OF HIV-POSITIVE TB PATIENTS	% OF TESTED TB PATIENTS HIV-POSITIVE	% OF HIV-POSITIVE TB PATIENTS ON CPT	% OF HIV-POSITIVE TB PATIENTS ON ART	NUMBER OF HIV-POSITIVE PEOPLE PROVIDED IPT
Iceland			2005	91	10	11	1	10	100	100	
			2006	77	10	13	2	20	0	50	
			2007	–		14		–	–	–	
			2008	83	5	6	1	20	–	–	
	91	–	2009	–	7		0	0	–	–	0
Ireland			2005	6	28	461	11	39	–	–	
			2006	10	45	458	13	29	–	–	
			2007	11	51	478	16	31	–	–	
			2008	19	89	470	18	20	–	–	
	6	–	2009	–	52		6	12	–	–	
Israel			2005	–		406	22	–	–	–	
			2006	–		386	15	–	–	–	
			2007	100	397	397	18	5	–	–	
			2008	5	17	369	17	100	–	71	
	–	6	2009	6	22	347	22	100	–	36	
Italy			2005	–		4 137		–	–	–	
			2006	–		4 387		–	–	–	
			2007	–		4 527		–	–	–	
			2008	–		4 418		–	–	–	
	–	–	2009	–				–	–	–	
Kazakhstan			2005	77	31 187	40 429	183	1	41	8	
			2006	112	43 204	38 556	234	1	38	16	13
			2007	65	24 532	37 658	213	1	12	10	206
			2008	98	28 237	28 913	238	1	15	12	656
	77	97	2009	97	29 597	30 578	325	1	11	7	1 027
Kyrgyzstan			2005	–		6 765		–	–	–	
			2006	–		6 656		–	–	–	
			2007	–		6 707		–	–	–	
			2008	91	6 508	7 127	117	2	–	–	
	–	104	2009	104	6 615	6 358	88	1	–	14	58
Latvia			2005	85	1 226	1 443	53	4	–	55	
			2006	85	1 128	1 328	47	4	–	77	0
			2007	85	1 066	1 255	56	5	–	54	0
			2008	85	910	1 070	72	8	–	29	0
	85	–	2009	–	830		73	9	–	60	0
Lithuania			2005	–		2 574	7	–	–	–	
			2006	–		2 559	13	–	–	–	11
			2007	–		2 408	21	–	–	–	
			2008	–		2 250	21	–	–	–	
	–	–	2009	–			14	–	–	–	
Luxembourg			2005	–		37		–	–	–	
			2006	–		33		–	–	–	
			2007	–		39		–	–	–	
			2008	–		28		–	–	–	
	–	–	2009	–				–	–	–	
Malta			2005	4	1	23		–	–	–	
			2006	3	1	30	2	200	50	50	0
			2007	71	27	38	2	7	50	100	0
			2008	85	45	53	5	11	60	100	0
	4	–	2009	–	37		4	11	–	–	
Monaco			2005	–				–	–	–	
			2006	–				–	–	–	
			2007	–				–	–	–	
			2008	–				–	–	–	
	–	–	2009	–				–	–	–	
Montenegro			2005	5	8	170	0	0	–	–	
			2006	10	17	171	1	6	0	100	
			2007	20	32	159	0	0	–	–	0
			2008	55	73	133	0	0	–	–	0
	5	76	2009	76	91	120	0	0	–	–	0
Netherlands			2005	22	252	1 157	61	24	–	–	
			2006	20	201	1 021	43	21	–	–	
			2007	21	205	960	32	16	78	241	
			2008	26	261	997	37	14	57	262	90
	22	–	2009	–				–	–	–	
Norway			2005	–		290		–	–	–	
			2006	0	0	294		–	–	–	
			2007	0	0	307		–	–	–	
			2008	–		324		–	–	–	
	–	–	2009	–				–	–	–	
Poland			2005	–		9 280		–	–	–	
			2006	–		8 593		–	–	–	
			2007	0	33	8 616	15	45	–	–	
			2008	0	35	8 081		–	–	–	
	–	0	2009	0	27	8 236		–	–	–	
Portugal			2005	70	2 485	3 536	571	23	–	–	
			2006	78	2 677	3 423	508	19	–	–	
			2007	85	2 664	3 127	467	18	100	100	0
			2008	78	2 350	2 995	438	19	100	100	
	70	–	2009	–				–	–	–	
Republic of Moldova			2005	103	6 469	6 278	9	0	–	–	
			2006	41	2 523	6 118	20	1	20	80	
			2007	80	5 123	6 367	194	4	3	25	
			2008	84	4 921	5 838	258	5	–	28	
	103	–	2009	–		5 580		–	–	–	
Romania			2005	37	10 860	29 347	160	1	–	–	
			2006	31	8 402	27 319	60	1	–	–	
			2007	25	6 367	25 491	178	3	–	–	
			2008	25	6 123	24 786	202	3	–	80	188
	37	–	2009	–	5 755		209	4	–	81	188
Russian Federation			2005	55	85 537	154 379	3 533	4	–	–	
			2006	57	87 041	152 265	1 979	2	–	52	
			2007	102	218 866	214 924	4 828	2	–	23	5 768
			2008	103	221 889	214 905	6 083	3	–	23	6 933
	55	131	2009	131	204 624	156 222	7 442	4	–	19	10 451
San Marino			2005	–				–	–	–	
			2006	–				–	–	–	
			2007	–				–	–	–	
			2008	–				–	–	–	
	–	–	2009	–				–	–	–	

[a] Data presented as of 31 August 2010. Notification data for European Union countries were not available.

Data can be downloaded from www.who.int/tb/data

TABLE A.6 **HIV testing and provision of CPT, ART and IPT, 2005–2009**

	% OF TB PATIENTS WITH KNOWN HIV STATUS 2005–2009	YEAR	% OF TB PATIENTS WITH KNOWN HIV STATUS	NUMBER OF TB PATIENTS WITH KNOWN HIV STATUS	PATIENTS NOTIFIED (NEW AND RETREAT)[a]	NUMBER OF HIV-POSITIVE TB PATIENTS	% OF TESTED TB PATIENTS HIV-POSITIVE	% OF HIV-POSITIVE TB PATIENTS ON CPT	% OF HIV-POSITIVE TB PATIENTS ON ART	NUMBER OF HIV-POSITIVE PEOPLE PROVIDED IPT
Serbia		2005	0	3	3 468	3	100	433	400	
		2006	0	5	3 272	5	100	0	100	0
		2007	0	9	2 981	9	100	–	100	0
		2008	0	5	2 813	5	100	–	100	0
	0 –	2009	–		1 694		–	–	–	
Slovakia		2005	95	720	760	1	0	0	100	
		2006	97	708	730	0	0	–	–	
		2007	100	682	682	0	0	–	–	0
		2008	85	537	633	0	0	–	–	0
	95 –	2009	–	490		1	0	0	100	0
Slovenia		2005	38	107	278	0	0	–	–	
		2006	33	70	215	1	1	100	100	0
		2007	45	98	218	0	0	–	–	0
		2008	62	131	213	0	0	–	–	
	38 –	2009	–	134		0	0	–	–	
Spain		2005	–		8 359		–	–	–	
		2006	44	3 566	8 029		–	–	–	
		2007	51	3 969	7 767	548	14	–	–	
		2008	49	3 991	8 214	508	13	–	–	
	– –	2009	–	3 599		425	12	–	–	
Sweden		2005	–		569		–	–	–	
		2006	0	0	497		–	–	–	
		2007	0	0	491		–	–	–	
		2008	–		552		–	–	–	
	– –	2009	–				–	–	–	
Switzerland		2005	–		626		–	–	–	
		2006	–		520		–	–	–	
		2007	0	0	478		–	–	–	
		2008	–		516		–	–	–	
	– –	2009	–		554		–	–	–	
Tajikistan		2005	9	670	7 526	1	0	0	0	
		2006	25	1 639	6 671	3	0	0	0	0
		2007	34	2 763	8 081	43	2	0	28	75
		2008	49	3 949	7 996	48	1	–	35	23
	9 50	2009	50	3 714	7 482	49	1	0	45	0
The Former Yugoslav Republic of Macedonia		2005	0	2	658	2	100	0	100	
		2006	15	96	627	0	0	–	–	0
		2007	17	97	563	1	1	0	0	0
		2008	20	99	483	2	2	0	100	0
	0 9	2009	9	43	473	0	0	–	–	0
Turkey		2005	–		21 303		–	–	–	
		2006	0	0	20 526	0	–	–	–	
		2007	0	0	19 694		–	–	–	15
		2008	0	0	18 452		–	–	–	
	– 0	2009	0	1	17 402	1	100	–	–	
Turkmenistan		2005	–		3 291		–	–	–	
		2006	–		3 369		–	–	–	
		2007	0	0	3 698	0	–	–	–	0
		2008	–		3 909	0	–	–	–	
	– –	2009	–		4 550		–	–	–	
Ukraine		2005	–		39 608	1 526	–	–	–	
		2006	–		41 265	1 987	–	–	–	
		2007	84	34 300	40 643	2 345	7	–	–	
		2008	200	75 493	37 832	3 726	5	58	32	2 763
	– –	2009	–		38 901		–	–	–	4 980
United Kingdom of Great Britain and Northern Ireland		2005	–		8 633		–	–	–	
		2006	–		8 498		–	–	–	
		2007	–		8 417		–	–	–	
		2008	–		8 655		–	–	–	
	– –	2009	–				–	–	–	
Uzbekistan		2005	124	35 801	28 891	147	0	0	0	
		2006	148	37 565	25 310	238	1	65	4	1 314
		2007	135	31 682	23 390	371	1	94	4	1 098
		2008	100	21 194	21 194	256	1	35	30	1 046
	124 100	2009	100	21 453	21 453	357	2	25	10	1 056

[a] Data presented as of 31 August 2010. Notification data for European Union countries were not available.

TABLE A2.7 **Testing for MDR-TB and number of confirmed cases of MDR-TB, 2005–2009**

		TOTAL CONFIRMED CASES OF MDR-TB[a]	NEW CASES				PREVIOUSLY TREATED CASES			
	YEAR		NOTIFIED	NUMBER OF NOTIFIED TESTED FOR MDR-TB	% OF NOTIFIED TESTED FOR MDR-TB	NUMBER OF CONFIRMED CASES OF MDR-TB	NOTIFIED	NUMBER OF NOTIFIED TESTED FOR MDR-TB	% OF NOTIFIED TESTED FOR MDR-TB	NUMBER OF CONFIRMED CASES OF MDR-TB
Albania	2005	1	497	161	32	0	43	12	28	1
	2006	1	467	140	30	1	35	5	14	0
	2007	3	422	168	40	1	25	18	72	2
	2008	2	402	192	48	1	32	22	69	1
	2009	0	416	119	29	0	21	9	43	0
Andorra	2005	0	10	9	90	0	0	0	–	0
	2006	0	12	8	67	0	1	0	0	0
	2007	0	5	3	60	0	1	0	0	0
	2008	0	4	3	75	0	0	0	–	0
	2009	0	7	2	29	0	2	1	50	0
Armenia	2005	162	1 995	576	29	86	327	182	56	76
	2006	215	1 598	524	33	65	557	346	62	150
	2007	125	1 533	429	28	50	596	213	36	75
	2008	128	1 507	417	28	60	618	190	31	68
	2009	156	1 464	4	0	80	172	6	3	76
Austria	2005	13	928	557	60	11	26	14	54	2
	2006	10	855	500	58	8	18	11	61	2
	2007	9	811	481	59	8	63	31	49	1
	2008				–				–	
	2009				–				–	
Azerbaijan	2005	800	4 720	453	10	270	3 200	366	11	58
	2006	398	4 429	404	9	97	3 069	369	12	301
	2007	196	4 444	213	5	13	2 903	257	9	183
	2008		5 130		–		3 733		–	
	2009		5 848		–		1 441		–	
Belarus	2005		5 308		–		1 049		–	
	2006	651	5 142	1 920	37	224	923	1 194	129	427
	2007	870	4 872	1 874	38	302	884	1 243	141	455
	2008	923	4 634	1 802	39	301	849	1 230	145	516
	2009		4 633		–		878		–	
Belgium	2005	10	1 076	596	55	7	68	41	60	3
	2006		1 043		–		84		–	
	2007	14	955	707	74	10	73	52	71	4
	2008	22	811	630	78	15	67	48	72	6
	2009				–				–	
Bosnia and Herzegovina	2005	5	2 004	1 036	52	4	156	105	67	1
	2006	7	1 687	993	59	3	113	93	82	4
	2007	8	2 217	1 267	57	3	183	156	85	3
	2008	20	1 663	757	46	3	67	77	115	9
	2009				–				–	
Bulgaria	2005	47	3 101	482	16	22	201	691	344	25
	2006	53	3 011	1 108	37	24	221	221	100	29
	2007	82	2 743	883	32	36	309	121	39	46
	2008	32	2 838	833	29	14	313	105	34	18
	2009				–				–	
Croatia	2005	7	1 050	581	55	4	94	59	63	3
	2006	3	1 029	614	60	1	106	82	77	2
	2007	7	884	5	1	5	98	2	2	2
	2008	4	944		–	4	36		–	
	2009				–				–	
Cyprus	2005	1	34	16	47	1	3	0	0	0
	2006		36		–		1		–	
	2007	3	41	28	68	2	1	1	100	1
	2008	1	41	29	71	0	3	3	100	1
	2009				–				–	
Czech Republic	2005	10	973	466	48	5	34	17	50	5
	2006	9	941	552	59	6	32	15	47	3
	2007	11	790	487	62	8	81	45	56	3
	2008	11	807	483	60	10	61	37	61	1
	2009				–				–	
Denmark	2005	5	395	308	78	5	29	18	62	0
	2006	3	341	286	84	3	35	22	63	0
	2007	2	355	269	76	2	36	21	58	0
	2008	0	330	253	77	0	37	28	76	0
	2009				–				–	
Estonia	2005	79	425	316	74	42	94	71	76	37
	2006	52	373	279	75	36	82	68	83	16
	2007	80	409	316	77	52	78	65	83	28
	2008	74	354	272	77	42	90	75	83	32
	2009				–				–	
Finland	2005	3	339	198	58	2	22	22	100	1
	2006	2	280	250	89	1	19	15	79	1
	2007	2	299	216	72	2	14	8	57	0
	2008	1	331	238	72	1	19	9	47	0
	2009				–				–	
France	2005		4 887		–		371		–	
	2006	30	4 817	1 368	28	19	349	110	32	11
	2007	20	5 066	1 255	25	12	385	102	26	7
	2008	27	3 355	1 313	39	16	379	104	27	10
	2009				–				–	
Georgia	2005	195	4 294	799	19	54	2 152	515	24	141
	2006	266	4 323	1 297	30	111	1 987	587	30	155
	2007	269	4 065	1 366	34	87	1 845	556	30	182
	2008	481	4 148	1 685	41	190	1 677	720	43	290
	2009		4 472		–		600		–	
Germany	2005	84	5 391	2 991	55	55	493	245	50	29
	2006	78	4 867	3 258	67	65	413	243	59	13
	2007	66	4 486	2 998	67	44	533	244	46	22
	2008	45	3 561	2 360	66	16	441	219	50	24
	2009				–				–	
Greece	2005	12	626	497	79	12	74	0	0	0
	2006	13	580	507	87	13	63	0	0	0
	2007	14	567	488	86	13	70	43	61	0
	2008		534		–		84		–	
	2009				–				–	
Hungary	2005	26	1 677	442	26	13	347	88	25	13
	2006	14	1 575	478	30	11	319	77	24	3
	2007	11	1 424	456	32	8	328	84	26	3
	2008	16	1 321	509	39	8	285	102	36	8
	2009				–				–	

[a] TOTAL CONFIRMED CASES OF MDR-TB includes cases with unknown previous treatment history (i.e. not included under NEW CASES or PREVIOUSLY TREATED CASES).

TABLE A2.7 **Testing for MDR-TB and number of confirmed cases of MDR-TB, 2005–2009**

			NEW CASES				PREVIOUSLY TREATED CASES			
	YEAR	TOTAL CONFIRMED CASES OF MDR-TB[a]	NOTIFIED	NUMBER OF NOTIFIED TESTED FOR MDR-TB	% OF NOTIFIED TESTED FOR MDR-TB	NUMBER OF CONFIRMED CASES OF MDR-TB	NOTIFIED	NUMBER OF NOTIFIED TESTED FOR MDR-TB	% OF NOTIFIED TESTED FOR MDR-TB	NUMBER OF CONFIRMED CASES OF MDR-TB
Iceland	2005	0	10	7	70	0	1	1	100	0
	2006	0	13	12	92	0		0	–	0
	2007	1	12	10	83	0	2	1	50	1
	2008	1	6	5	83	1	0	0	–	0
	2009				–				–	
Ireland	2005	2	385	101	26	1	40	18	45	1
	2006	3	412	145	35	2	21	6	29	1
	2007	5	417	127	30	3	51	15	29	2
	2008	3	336	114	34	2	41	8	20	0
	2009				–				–	
Israel	2005		399		–		7		–	
	2006	19	383	264	69	18	3	2	67	1
	2007	18	386	257	67	14	11	11	100	4
	2008	9	364	222	61	8	5	3	60	1
	2009	7	339	259	76	5	8	6	75	2
Italy	2005		3 828		–		293		–	
	2006	28	4 145	847	20	28	242		–	
	2007	56	2 695	653	24	16	1 772	79	4	21
	2008	71	3 414	1 018	30	27	292	165	57	24
	2009				–				–	
Kazakhstan	2005		22 303		–		15 009		–	
	2006	4 117	20 874	7 835	38	1 028	14 859	7 898	53	3 089
	2007	5 568	21 557	7 997	37	1 596	14 143	7 509	53	3 972
	2008	3 676	19 684	5 605	28	1 384	9 229	4 474	48	1 950
	2009	3 644	16 810	4 140	25	981	9 371	4 413	47	2 329
Kyrgyzstan	2005	989	5 918	837	14	169	847	152	18	96
	2006	336	5 726	962	17	248	930	155	17	88
	2007	322	5 667	1 018	18	168	1 040	200	19	154
	2008	269	6 230	484	8	97	756	325	43	172
	2009	785	5 434	5	0	225	758	1	0	161
Latvia	2005	156	1 238	860	69	91	205	182	89	65
	2006	143	1 144	796	70	85	184	171	93	57
	2007	98	1 079	810	75	58	176	165	94	40
	2008	129	918	684	75	83	152	144	95	46
	2009				–				–	
Lithuania	2005	336	2 114	1 294	61	127	460	439	95	209
	2006	332	2 099	1 346	64	128	460	440	96	204
	2007	314	1 982	1 257	63	126	426	425	100	188
	2008	276	1 892	1 259	67	113	357	356	100	162
	2009				–				–	
Luxembourg	2005	0	37	36	97	0	0	0	–	0
	2006	0	33	33	100	0			–	
	2007	1	39	32	82	1	0	0	–	0
	2008		0		–		0		–	
	2009				–				–	
Malta	2005	0	21	10	48	0	1	0	0	0
	2006	2	30	14	47	2		0	–	0
	2007	1	37	18	49	1	1	0	0	0
	2008	0	46	22	48	0	7	3	43	0
	2009				–				–	
Monaco	2005				–				–	
	2006				–				–	
	2007				–				–	
	2008				–				–	
	2009				–				–	
Montenegro	2005	1	143	82	57	0	27	14	52	2
	2006	2	153	90	59	0	18	15	83	2
	2007	2	137	76	55	0	22	11	50	2
	2008	0	123	75	61	0	10	9	90	0
	2009	1	108	80	74	0	11	9	82	1
Netherlands	2005	3	1 113	644	58	3	44	27	61	0
	2006	5	985	645	65	3	36	76	211	2
	2007	6	916	553	60	3	44		–	
	2008	13	948	696	73	11	49	32	65	2
	2009				–				–	
Norway	2005	3	269	193	72	3	14	8	57	0
	2006	3	276	216	78	1	17	9	53	2
	2007	3	282	225	80	2	24	17	71	1
	2008	4	252	180	71	1	27	14	52	2
	2009				–				–	
Poland	2005	72	8 203	5 409	66		1 077		–	
	2006		7 627		–		966		–	
	2007	51	7 569	2 716	36	8	1 047	522	50	43
	2008		7 061		–		1 020		–	
	2009	20	7 268	3 224	44	10	968	488	50	10
Portugal	2005	23	3 181	998	31	12	350	102	29	11
	2006	17	3 072	1 120	36	14	345	97	28	3
	2007	34	2 816	1 446	51	21	307	144	47	13
	2008	28	2 703	1 496	55	19	292	145	50	9
	2009				–				–	
Republic of Moldova	2005	338	4 501	536	12	68	1 777	652	37	270
	2006	1 040	4 388	1 051	24	242	1 730	1 655	96	798
	2007	896	4 166	1 311	31	311	2 201	934	42	585
	2008	1 048	3 951	1 212	31	300	1 865	1 227	66	748
	2009	924	3 804	1 199	32	263	1 654	981	59	661
Romania	2005	530	22 407	1 594	7	95	6 938	1 300	19	435
	2006		20 733		–	33	6 586		–	106
	2007	754	19 252	2 355	12	99	6 239	2 311	37	655
	2008	816	18 774	3 025	16	130	6 012	2 522	42	686
	2009				–				–	
Russian Federation	2005	6 581	119 226		–		35 153		–	
	2006	3 949	117 646	25 804	22	2 942	34 619	4 396	13	1 007
	2007	5 297	118 367	30 370	26	3 959	96 557	4 828	5	1 338
	2008	6 960	120 835	36 249	30	5 061	94 070	6 404	7	1 899
	2009	14 686	117 227	36 888	31	5 816	32 569	6 798	21	2 314
San Marino	2005				–				–	
	2006				–				–	
	2007				–				–	
	2008				–				–	
	2009				–				–	

[a] TOTAL CONFIRMED CASES OF MDR-TB includes cases with unknown previous treatment history (i.e. not included under NEW CASES or PREVIOUSLY TREATED CASES).

TABLE A2.7 **Testing for MDR-TB and number of confirmed cases of MDR-TB, 2005–2009**

	YEAR	TOTAL CONFIRMED CASES OF MDR-TB[a]	NEW CASES				PREVIOUSLY TREATED CASES			
			NOTIFIED	NUMBER OF NOTIFIED TESTED FOR MDR-TB	% OF NOTIFIED TESTED FOR MDR-TB	NUMBER OF CONFIRMED CASES OF MDR-TB	NOTIFIED	NUMBER OF NOTIFIED TESTED FOR MDR-TB	% OF NOTIFIED TESTED FOR MDR-TB	NUMBER OF CONFIRMED CASES OF MDR-TB
Serbia	2005	10	3 168	1 111	35	5	300	123	41	5
	2006	10	2 939	990	34	0	333	140	42	10
	2007	25	2 667	1 130	42	7	314	185	59	18
	2008	20	2 526	1 095	43	6	280	165	59	14
	2009		1 486		–		203		–	
Slovakia	2005	8	652	248	38	4	108	56	52	4
	2006	7	626	340	54	3	104	61	59	4
	2007	7	585	343	59	3	97	53	55	4
	2008	4	510	300	59	1	98	62	63	2
	2009				–				–	
Slovenia	2005	1	249	217	87	0	29	28	97	1
	2006	1	202	176	87	1	13	8	62	0
	2007	0	198	174	88	0	18	15	83	0
	2008	2	197	182	92	1	16	13	81	1
	2009				–				–	
Spain	2005		7 281		–		1 078		–	
	2006	50	7 616	1 265	17	36	413	54	13	14
	2007		7 347		–		420		–	
	2008	76	6 769	1 080	16	31	461	174	38	23
	2009	56		1 147	–	6		383	–	45
Sweden	2005	4	539	427	79	2	30	17	57	2
	2006	3	485	377	78	2	11	23	209	1
	2007	15	459	346	75	12	32	19	59	3
	2008	12	457	349	76	7	37	30	81	4
	2009				–				–	
Switzerland	2005	4	508	326	64	2	118	43	36	2
	2006	4	461	382	83	4	46	41	89	0
	2007	8	425	264	62	5	53	37	70	3
	2008	5	319	258	81	3	54	34	63	1
	2009		333	269	81			41	–	
Tajikistan	2005		5 337		–		2 189		–	
	2006	0	5 226	0	0	0	1 442	0	0	0
	2007		6 078		–		2 003		–	
	2008	0	6 150		–	0	1 846		–	0
	2009	319	5 864	833	14	62	533	580	109	257
The Former Yugoslav Republic of Macedonia	2005	4	555	106	19	0	103	19	18	4
	2006	6	529	133	25	0	98	29	30	6
	2007	9	494	167	34	0	69	26	38	9
	2008	2	427	130	30	0	56	17	30	2
	2009	1	417	191	46	0	48	28	58	1
Turkey	2005	191	18 753	3 237	17	101	2 550	508	20	90
	2006	249	18 544	4 112	22	133	1 982	700	35	116
	2007	240	17 809	4 142	23	120	1 885	775	41	120
	2008	263	16 760	4 212	25	125	1 689	740	44	138
	2009	222	15 943	3 714	23	99	1 445	599	41	123
Turkmenistan	2005		3 149		–		142		–	
	2006	16	3 124	0	0	0	245	103	42	16
	2007	0	3 347	0	0	0	351	0	0	0
	2008		3 628		–		281		–	
	2009	39	4 550	164	4	21		111	–	18
Ukraine	2005				–				–	
	2006		38 884		–		2 381		–	
	2007		34 891		–		5 752		–	
	2008		35 739		–		2 093		–	
	2009	808	33 424	350	1	337	5 477	442	8	471
United Kingdom of Great Britain and Northern Ireland	2005	26	8 173	3 379	41	23	460	112	24	3
	2006	52	8 157	4 677	57	39	237	255	108	13
	2007	55	7 851	4 510	57	41	436	221	51	14
	2008	53	6 586	3 749	57	38	413	186	45	7
	2009				–				–	
Uzbekistan	2005	86	19 876	0	0	0	9 015	435	5	86
	2006	83	23 112	206	1	29	2 198	89	4	54
	2007	484	18 773	385	2	119	4 617	463	10	365
	2008	342	15 971	274	2	52	5 087	470	9	290
	2009	654	16 569	571	3	115	2 451	732	30	539

[a] TOTAL CONFIRMED CASES OF MDR-TB includes cases with unknown previous treatment history (i.e. not included under NEW CASES or PREVIOUSLY TREATED CASES).

TABLE A2.8 **New smear-positive case notification by age and sex, 1995–2009**

		MALE								FEMALE								
	YEAR	0–14	15–24	25–34	35–44	45–54	55–64	65+	UN-KNOWN	0–14	15–24	25–34	35–44	45–54	55–64	65+	UN-KNOWN	MALE/FEMALE RATIO
Albania	1995	0	0	0	0	19	40	30		0	1	0	0	13	20	16		1.8
	2000	2	19	21	14	24	19	16		3	11	10	8	8	5	11		2.1
	2005	0	26	21	16	31	20	37	0	0	3	9	5	5	5	18	0	3.4
	2009	0	22	21	12	24	15	22	0	2	15	7	6	9	4	12	0	2.1
Andorra	1995																	–
	2000	0	0	1	0	0	0	0										–
	2005	0	0	1	1	0	0	0	0	0	1	1	1	0	0	0	0	0.7
	2009	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	1.0
Armenia	1995	1	18	16	11	10	8	1		1	1	7	2	1	1			5.0
	2000	2	152	130	131	63	26	21		1	24	27	24	8	8	4		5.5
	2005	3	170	104	83	84	30	24	0	3	27	21	10	11	4	7	0	6.0
	2009	1	52	76	59	102	36	16		2	33	29	7	9	9	9		3.5
Austria	1995	4	37	95	82	89	71	73		6	22	52	32	21	18	59		2.1
	2000	1	17	30	59	42	23	41		1	11	22	12	11	6	22		2.5
	2005	1	32	23	22	41	24	30	0	0	13	11	8	3	5	10	0	3.5
	2009																	–
Azerbaijan	1995	0	13	29	14	6	4	1		0	5	18	0	0	0	0		2.9
	2000	0	9	24	33	42	30	0		0	3	3	6	3	0	0		9.2
	2005	77	109	297	215	209	187	88	0	90	64	98	47	32	24	24	0	3.1
	2009	5	229	190	165	151	63	30		11	108	92	37	41	14	19		2.6
Belarus	1995																	–
	2000																	–
	2005		71	180	273	287	118	62			25	53	50	43	11	62		4.1
	2009	0	66	173	208	287	134	54		0	41	52	52	41	25	68		3.3
Belgium	1995	3	23	49	63	52	54	102		3	12	24	32	17	10	34		2.6
	2000	3	20	57	39	55	32	56		6	15	15	19	4	13	27		2.6
	2005	1	26	50	32	27	15	47	0	2	27	31	15	12	4	23	0	1.7
	2009																	–
Bosnia and Herzegovina	1995	0	15	61	90	140	139	100		0	40	67	64	49	77	23		1.7
	2000	4	56	82	99	66	58	77		4	30	46	29	29	48	124		1.4
	2005	1	22	58	61	78	44	80	1	2	35	39	33	28	28	130	0	1.2
	2009																	–
Bulgaria	1995																	–
	2000	0	13	16	20	3	9	10		0	11	14	7	3	4	6		1.6
	2005	9	98	150	195	195	150	136	0	9	90	111	59	29	37	70	0	2.3
	2009																	–
Croatia	1995	6	38	97	210	132	178	141		10	50	57	57	38	60	130		2.0
	2000																	–
	2005	1	24	27	48	72	47	34	0	1	12	18	15	11	6	56	0	2.1
	2009																	–
Cyprus	1995	0	1	1	0	1	1	2		0	1	1	1	2	0	1		1.0
	2000																	–
	2005	0	3	1	1	1	0	1	0	0	1	0	0	0	0	0	0	7.0
	2009																	–
Czech Republic	1995	2	10	22	83	88	53	90		0	9	11	20	13	19	88		2.2
	2000	0	7	31	52	89	61	59		0	15	13	9	10	7	57		2.7
	2005	0	8	24	57	55	45	46	0	0	3	14	16	7	5	28	0	3.2
	2009																	–
Denmark	1995	0	7	16	28	18	9	11		2	7	13	8	4	3	2		2.3
	2000	5	10	20	24	16	11	14		5	16	15	14	6	7	8		1.4
	2005	0	12	12	18	23	9	7	0	2	11	5	13	9	3	5	0	1.7
	2009																	–
Estonia	1995																	–
	2000	0	6	31	53	56	35	15		0	9	11	14	11	4	10		3.3
	2005	0	9	25	19	40	12	7	0	0	6	11	8	11	6	8	0	2.2
	2009																	–
Finland	1995	1	1	10	25	28	24	61		1	1	6	7	4	10	65		1.6
	2000	0	3	8	22	19	28	53		0	1	5	3	4	6	49		2.0
	2005	1	5	4	3	14	11	25	0	0	3	4	1	0	6	20	0	1.9
	2009																	–
France	1995	30	156	431	502	414	297	496		36	138	226	176	90	92	365		2.1
	2000	10	136	248	247	211	125	244		18	108	127	89	46	43	155		2.1
	2005	12	127	212	222	196	134	205	0	16	104	134	82	56	38	180	0	1.8
	2009																	–
Georgia	1995	2	20	30	25	40	18	12		2	8	17	17	18	7	5		2.0
	2000	4	76	111	113	63	45	28		1	49	37	33	17	10	5		2.9
	2005	0	226	272	268	207	76	60		4	109	105	58	46	17	47		2.9
	2009																	–
Germany	1995	14	179	453	539	460	442	625		17	115	251	167	89	104	397		2.4
	2000																	–
	2005	6	59	113	171	167	92	167	0	4	51	104	73	43	37	103	0	1.9
	2009																	–
Greece	1995																	–
	2000	1	10	22	32	24	19	46		0	2	9	10	5	6	25		2.7
	2005	1	14	25	22	14	12	23	5	0	13	18	8	7	2	17	0	1.8
	2009																	–
Hungary	1995																	–
	2000	0	8	24	85	104	58	27		1	7	17	19	22	10	30		2.9
	2005	0	6	24	67	117	67	39	0	1	5	13	11	22	15	33	0	3.2
	2009																	–
Iceland	1995	0	0	0	0	0	0	1		0	0	0	0	0	0	1		1.0
	2000									0		1						0.0
	2005	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	–
	2009																	–
Ireland	1995																	–
	2000	0	10	7	7	6	4	12		0	13	8	13	6	7	15		0.7
	2005	1	6	10	21	10	7	6	0	0	9	10	3	3	0	8	0	1.8
	2009																	–
Israel	1995																	–
	2000	0	16	28	17	24	10	31		2	11	15	7	3	7	25		1.8
	2005	0	5	10	12	12	5	14	0	1	3	9	8	6	1	9	0	1.6
	2009	2	6	17	16	8	0	14	0	0	2	12	10	6	2	13	0	1.4
Italy	1995	9	59	202	157	94	124	289		7	52	93	57	40	51	168		2.0
	2000	12	63	96	75	58	54	112		6	38	58	33	13	19	39		2.3
	2005	8	93	191	137	101	61	115	24	3	80	145	56	25	19	70	9	1.8
	2009																	–
Kazakhstan	1995																	–
	2000	36	1 057	1 409	1 379	923	439	218		84	999	1 079	599	275	202	204		1.6
	2005	31	917	1 142	983	795	274	175	0	46	751	767	436	286	121	187	0	1.7
	2009	6	765	812	676	573	252	116	0	37	662	519	337	200	122	135	0	1.6
Kyrgyzstan	1995	3	109	171	165	65	38	30		1	70	94	34	18	15	19		2.3
	2000	4	128	227	205	115	52	46		6	128	146	100	41	30	29		1.6
	2005	1	247	303	269	194	66	84	0	15	215	236	141	70	33	98	0	1.4
	2009	7	251	252	185	168	54	41		14	214	186	97	60	29	51		1.5

[a] Data presented as of 31 August 2010. Notification data for countries that are members of the European Union were not available.

TABLE A2.8 **New smear-positive case notification by age and sex, 1995–2009**

		MALE								FEMALE								
	YEAR	0–14	15–24	25–34	35–44	45–54	55–64	65+	UN-KNOWN	0–14	15–24	25–34	35–44	45–54	55–64	65+	UN-KNOWN	MALE/FEMALE RATIO
Latvia	1995	0	20	44	71	70	40	30		0	22	49	55	47	27	29		1.2
	2000	0	53	106	124	111	64	34		2	25	41	27	28	7	15		3.4
	2005	1	22	71	104	117	55	34	0	0	17	31	31	23	18	12	0	3.1
	2009																	–
Lithuania	1995	4	46	132	225	176	90	77		5	6	53	45	32	16	42		3.8
	2000	1	38	97	145	155	74	68		0	20	37	39	32	22	48		2.9
	2005	0	42	118	186	187	108	67	0	1	25	41	57	49	23	54	0	2.8
	2009																	–
Luxembourg	1995																	–
	2000																	–
	2005	0	0	2	2	1	1	2	0	0	0	2	1	1	1	0	0	1.6
	2009																	–
Malta	1995	0	0	0	1	0	0	0		0	0	1	0	0	1	2		0.3
	2000	0	1	0	1	1	0	1										–
	2005	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	–
	2009																	–
Monaco	1995																	–
	2000																	–
	2005																	–
	2009																	–
Montenegro	2005	0	3	5	7	15	4	8	0	0	0	7	3	4	0	8	0	1.9
	2009	0	1	5	6	10	5	9	0	1	1	5	3	2	2	3	0	2.1
Netherlands	1995	22	79	119	75	28	9	10		24	56	50	13	10	8	7		2.0
	2000	0	34	63	41	25	10	21		4	29	22	16	9	5	10		2.0
	2005	0	23	42	23	26	14	19	0	3	14	19	11	9	1	4	0	2.4
	2009																	–
Norway	1995	0	4	8	6	3	5	12		0	4	7	2	0	3	8		1.6
	2000	0	1	9	3	6	2	4		1	3	1			2	5		2.1
	2005	0	9	4	6	4	4	3	0	0	4	7	2	1	0	3	0	1.8
	2009																	–
Poland	1995	3	122	295	795	565	369	377		4	129	163	225	111	107	414		2.2
	2000	1	99	303	812	782	361	434		1	99	158	211	170	82	421		2.4
	2005	3	109	199	389	639	292	310	0	3	95	142	112	151	63	316	0	2.2
	2009	2	84	207	340	594	410	256	0	5	60	129	86	136	76	273	0	2.5
Portugal	1995	11	215	363	328	200	173	164		7	139	172	87	33	42	85		2.6
	2000	8	147	375	349	208	140	140		5	114	154	87	41	25	64		2.8
	2005	5	85	227	284	181	90	93	5	7	67	109	66	29	11	42	1	2.9
	2009																	–
Republic of Moldova	1995	0	55	115	166	95	65	15		2	42	38	31	19	10	12		3.3
	2000	2	52	31	36	13	13	6		1	16	32	45	23	14	6		1.1
	2005	2	211	337	345	313	106	31	0	3	97	92	57	61	23	18	0	3.8
	2009	3	155	220	255	256	91	30	0	2	69	85	61	54	22	15	0	3.3
Romania	1995	387	1 662	2 322	3 608	2 587	1 751	784		355	1 352	1 240	871	479	396	417		2.6
	2000	46	832	1 508	1 799	1 684	916	533		53	701	766	484	341	207	321		2.5
	2005	36	752	1 511	1 786	1 999	952	638	4	55	758	780	493	374	219	442	2	2.5
	2009																	–
Russian Federation	1995																	–
	2000	1	295	526	596	402	151	54		1	43	73	74	38	31	44		6.7
	2005																	–
	2009	22	2 510	6 544	5 722	5 952	2 822	1 014		33	1 464	2 602	1 739	1 390	713	824		2.8
San Marino	1995																	–
	2000							1										–
	2005																	–
	2009																	–
Serbia	2005	3	62	96	118	156	112	132	0	6	69	76	55	49	22	149	0	1.6
	2009	0	33	52	81	106	89	123	0	3	25	34	45	30	36	144	0	1.5
Serbia & Montenegro	1995	10	108	204	317	296	350	386		11	127	167	133	83	158	275		1.8
	2000																	–
Slovakia	1995	4	18	44	123	108	63	152		5	16	17	22	24	33	159		1.9
	2000	2	6	15	31	50	16	32		0	5	9	7	5	4	54		1.8
	2005	0	3	13	16	25	25	20	0	0	1	8	9	5	6	27	0	1.8
	2009																	–
Slovenia	1995	1	13	39	63	36	26	27		0	7	24	11	9	5	42		2.1
	2000	0	3	11	36	22	14	17		0	3	9	3	4	3	20		2.5
	2005	0	4	10	16	15	11	14	0	0	4	4	6	5	4	16	0	1.8
	2009																	–
Spain	1995	22	132	337	242	150	112	228		23	90	129	64	39	34	98		2.6
	2000																	–
	2005	13	166	394	367	230	140	230	2	10	142	252	151	63	24	108	2	2.1
	2009																	–
Sweden	1995	1	5	12	8	5	4	27		0	10	13	5	5	4	14		1.2
	2000	0	9	10	12	11	4	25		1	9	8	10	2	2	15		1.5
	2005	0	7	21	16	10	5	16	0	1	10	15	12	5	3	13	0	1.3
	2009																	–
Switzerland	1995	0	12	23	26	23	13	27		1	13	20	9	1	2	15		2.0
	2000	0	5	18	10	7	5	8		1	9	12	8	2	1	6		1.4
	2005	1	10	9	13	12	2	7	0	0	6	11	8	3	2	4	0	1.6
	2009		11	10	12	7	2	4		1	1	9	8	5	1	2		1.7
Tajikistan	1995																	–
	2000																	–
	2005	8	308	279	164	104	54	48	0	26	225	185	151	89	43	53	0	1.3
	2009	4	407	322	173	107	78	58	0	12	253	223	111	92	60	72	0	1.4
The Former Yugoslav Republic of Macedonia	1995	2	15	42	45	33	29	24		2	32	30	20	11	17	17		1.5
	2000	5	8	14	20	19	20	14		1	15	14	17	5	5	10		1.5
	2005	2	14	20	23	20	18	13	1	2	17	13	10	7	5	13	0	1.7
	2009	1	28	24	30	23	13	14	0	2	14	16	10	4	5	14	0	2.0
Turkey	1995																	–
	2000																	–
	2005	33	1 148	1 295	1 028	963	534	429	0	50	699	474	243	175	166	213	0	2.7
	2009	34	817	986	729	865	500	432	0	36	479	469	171	137	127	225	0	2.7
Turkmenistan	1995	1	11	188	0	79	30	0		2	15	146	0	47	25	0		1.3
	2000	16	103	185	144	127	31	21		19	73	140	76	31	34	17		1.6
	2005	2	148	181	146	97	51	13	0	3	100	101	72	46	27	8	0	1.8
	2009	0	178	223	221	155	59	32		5	146	119	90	65	47	30		1.7
Ukraine	1995	10	385	1 076	2 064	1 515	1 087	437		21	314	380	327	182	185	280		3.9
	2000	21	693	1 552	2 385	2 007	1 062	532		41	487	590	447	298	218	405		3.3
	2005																	–
	2009	15	953	2 506	2 656	2 384	1 073	570		15	531	986	717	470	254	502		2.9
United Kingdom of Great Britain and Northern Ireland	1995																	–
	2000	8	86	130	96	87	75	138		9	95	114	60	31	31	67		1.5
	2005	9	135	200	166	95	95	124	0	14	115	163	80	39	28	83	1	1.6
	2009																	–
Uzbekistan	1995																	–
	2000	6	351	749	510	346	213	107		11	261	547	288	213	112	111		1.5
	2005	25	596	831	723	522	263	313		40	538	597	375	288	217	367		1.4
	2009	12	541	615	566	513	294	319		23	429	501	296	227	241	382		1.4

[a] Data presented as of 31 August 2010. Notification data for countries that are members of the European Union were not available.

TABLE A2.9 **Laboratories, NTP services, drug management, human resources and infection control, 2009**

	LABORATORIES					FREE THROUGH NTP		DRUG MANAGEMENT			% OF STAFF TRAINED BY THE NTP (IN 2009)[c]				TB NOTIFICATION RATE PER 100 000 HEALTH-CARE WORKERS
	SMEAR LABS PER 100K POPULATION	CULTURE LABS PER 5M POPULATION	DST LABS PER 10M POPULATION	SECOND-LINE DST AVAILABLE	NRL[a]	TB DIAGNOSIS	FIRST-LINE DRUGS	RIFAMPICIN USED THROUGHOUT TREATMENT	% OF PATIENTS TREATED WITH FDC[b]	PAEDIATRIC FORMULATIONS PROCURED	MEDICAL OFFICERS	NURSES	HEALTH ASSISTANTS	LABORATORY TECHNICIANS	
Albania				No	Yes	Yes, all suspects	Yes	Yes	100	No					
Andorra				In country	Yes	If TB is confirmed	Yes	Yes	100	Yes					
Armenia	1.8	1.6	3.2	No	Yes	Yes, all suspects	Yes	Yes	75	No					0
Austria															
Azerbaijan															
Belarus															
Belgium															
Bosnia and Herzegovina															
Bulgaria	0.5	21.9	29.2	Out of country	Yes		Yes	Yes		No					
Croatia															
Cyprus															
Czech Republic				In country		Yes, all suspects	Yes			No					
Denmark															
Estonia	0.6	7.5	14.9	In country	Yes	Yes, all suspects	Yes	Yes	0	No				0	22
Finland				In country	Yes	Yes, all suspects	Yes	Yes		Yes					
France							Yes	Yes		No					
Georgia															
Germany				In country	Yes	Yes, all suspects	Yes	Yes		Yes					
Greece															
Hungary															
Iceland				Out of country	Yes	If TB is confirmed	Yes			No					
Ireland				Out of country	Yes	Yes, all suspects	Yes	Yes	95	Yes					
Israel				In country	Yes	Yes, all suspects	Yes	Yes	90	Yes					
Italy															
Kazakhstan	2.9	28.5	14.1	In country	Yes	Yes, all suspects	Yes	Yes	50	Yes	20	21			982
Kyrgyzstan	2.2	10.0	5.5	In country	Yes	Yes, all suspects	Yes	Yes	80	Yes					
Latvia	1.2	11.1	4.4	In country	Yes	Yes, all suspects	Yes	Yes	0	No					
Lithuania	0.4	6.1	12.2	In country	Yes	If TB is confirmed	Yes	Yes	10	No	100			0	
Luxembourg															
Malta				Out of country	No	Yes, all suspects	Yes	Yes		No					
Monaco															
Montenegro	0.2	8.0	0	Out of country	No	If TB is confirmed	Yes	Yes	0	Yes					
Netherlands															
Norway															
Poland	0.2	11.2	12.3	In country	Yes	Yes, all suspects	Yes	Yes		Yes					
Portugal															
Republic of Moldova				In country	Yes	Yes, all suspects				No					
Romania	0.6	23.3	20.2	In country	Yes	Yes, all suspects	Yes	Yes	70	Yes	21	20	0	16	54
Russian Federation	2.8	14.1	19.3	In country	No	Yes, all suspects	Yes	Yes		No					
San Marino															
Serbia															
Slovakia				In country	Yes	Yes, all suspects	Yes	Yes	0	No					
Slovenia				In country	Yes	If TB is confirmed	Yes	Yes		Yes					
Spain				In country	Yes	Yes (other criteria)	Don't know								
Sweden															
Switzerland				In country	Yes	Yes, all suspects	No	Yes	100	Yes					
Tajikistan	1.4	0.7	1.4	Out of country	Yes	If TB is confirmed	Yes	Yes	100	Yes	2	1			1483
The Former Yugoslav Republic of Macedonia	0.5	7.3	4.9	No	Yes	If TB is confirmed	Yes	Yes	95	Yes					
Turkey	0.2	2.5	3.1	In country	Yes	Yes, all suspects	Yes	Yes	0	Yes	21	0	0	0	
Turkmenistan	1.2	1.0	2.0	In country	Yes		Yes	Yes	95	Yes	15	9		49	
Ukraine	2.2	11.3	10.1	In country	Yes	Yes, all suspects	Yes	Yes	40	Yes	26				84
United Kingdom of Great Britain and Northern Ireland															
Uzbekistan	1.2	0.4	0.7	In country	Yes	Yes, all suspects	Yes	Yes	100	No	3	1		0	13

a NRL = national reference laboratory
b FDC = fixed-dose combination
c NURSES (Registered Nurses, Registered Midwives, Enrolled Nurses, Enrolled Midwives); HEALTH ASSISTANTS (Medical Assistants, Clinical Officers); LABORATORY TECHNICIANS (Microscopists)

South-East Asia Region

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Estimates of mortality, prevalence and incidence

Estimated values are shown as best estimates followed by lower and upper bounds. The lower and upper bounds are defined as the 2.5th and 97.5th centiles of outcome distributions produced in simulations. See ANNEX 1 for further details.

Estimated numbers are shown rounded to two significant figures. Estimated rates are shown rounded to three significant figures unless the value is under 100, in which case rates are shown rounded to two significant figures.

Estimates for all years are recalculated as new information becomes available and techniques are refined, so they may differ from those published in previous reports in this series. Estimates published in previous global TB control reports should no longer be used.

Graphs

Graphs where displayed show data from all years within the range stated.

Data source

Data shown in this annex are taken from the WHO global TB database on 31 August 2010. Data shown in the main part of the report were taken from the database on 17 June 2010. As a result, data in this annex may differ slightly from those in the main part of the report.

Data can be downloaded from www.who.int/tb/data.

Country notes

Bangladesh

TABLE A2.2: the population estimate used by the NTP (148 million) is lower than that of the United Nations Population Division (162 million). Using the smaller population estimate gives a notification rate of 109 per 100 000 population (all forms of TB) and 74 per 100 000 population (smear-positive TB).

Bangladesh completed a survey of the prevalence of TB disease in 2009. A reassessment of the epidemiological burden of TB, using data from the survey combined with an in-depth analysis of surveillance and programmatic data, will be undertaken in 2011.

India

TABLE A2.2: the population estimate used by the NTP (1164 million) is lower than that of the United Nations Population Division (1198 million). Using the smaller population estimate gives a notification rate of new smear-positive cases of 116 per 100 000 population. The incidence of smear-positive TB has been estimated at 75 per 100 000 population using data from surveys of the annual risk of infection. Using the notification rate for smear-positive TB of 54 per 100 000 population (using national estimates of population size) and a smear-positive incidence rate of 75 per 100 000 population gives an estimated case detection rate of 72%.

Myanmar

Myanmar completed a survey of the prevalence of TB disease in 2010. A reassessment of the epidemiological burden of TB will be undertaken following finalization and dissemination of survey results.

TABLE A2.1 **Estimates of the burden of disease caused by TB, 1990–2009**

			MORTALITY (EXCLUDING HIV)		PREVALENCE (INCLUDING HIV)		INCIDENCE (INCLUDING HIV)	
	YEAR	POPULATION (MILLIONS)	NUMBER (THOUSANDS)	RATE[a]	NUMBER (THOUSANDS)	RATE	NUMBER (THOUSANDS)	RATE
Bangladesh	1990	116	79 (43–130)	68 (37–109)	580 (230–1100)	499 (195–965)	260 (140–380)	225 (124–326)
	1995	128	88 (69–110)	69 (54–86)	640 (290–1100)	501 (227–826)	290 (230–350)	225 (180–270)
	2000	141	92 (71–120)	65 (50–82)	680 (310–1100)	486 (222–799)	320 (250–380)	225 (180–270)
	2005	153	87 (64–110)	57 (42–74)	690 (320–1100)	450 (208–738)	340 (280–410)	225 (180–270)
	2006	155	84 (61–110)	54 (39–71)	680 (310–1100)	437 (202–717)	350 (280–420)	225 (180–270)
	2007	158	82 (59–110)	52 (37–70)	680 (310–1100)	430 (199–711)	350 (280–430)	225 (180–270)
	2008	160	82 (59–110)	51 (37–68)	680 (310–1100)	426 (195–701)	360 (290–430)	225 (180–270)
	2009	162	83 (60–110)	51 (37–67)	690 (320–1100)	426 (198–696)	360 (300–440)	225 (183–270)
Bhutan	1990	<1	0.27 (0.1–0.54)	49 (19–99)	2.7 (0.95–5.3)	492 (174–963)	1.7 (1.2–2.4)	308 (210–446)
	1995	<1	0.17 (0.089–0.29)	34 (18–58)	2.2 (0.78–3.8)	427 (153–742)	1.6 (1.3–1.9)	308 (255–369)
	2000	<1	0.16 (0.079–0.27)	28 (14–49)	2 (0.72–3.5)	354 (129–619)	1.4 (1.1–1.7)	253 (203–304)
	2005	<1	0.13 (0.065–0.22)	20 (10–34)	1.7 (0.6–2.9)	256 (92–445)	1.2 (1–1.5)	187 (155–225)
	2006	<1	0.12 (0.055–0.22)	17 (8.3–32)	1.6 (0.54–2.8)	239 (81–422)	1.2 (0.95–1.4)	179 (143–215)
	2007	<1	0.11 (0.057–0.19)	16 (8.4–29)	1.5 (0.54–2.6)	227 (80–392)	1.2 (1–1.4)	172 (148–206)
	2008	<1	0.077 (0.039–0.15)	11 (5.7–21)	1.4 (0.4–2.4)	198 (58–346)	1.1 (0.96–1.4)	165 (140–198)
	2009	<1	0.058 (0.032–0.12)	8.4 (4.6–17)	1.3 (0.33–2.2)	179 (47–315)	1.1 (0.92–1.3)	158 (132–186)
Democratic People's Republic of Korea	1990	20	7.1 (2.3–18)	35 (12–90)	95 (26–190)	470 (128–968)	69 (38–100)	344 (189–499)
	1995	22	7.6 (3.7–14)	35 (17–65)	100 (35–180)	468 (162–830)	75 (60–90)	344 (276–413)
	2000	23	21 (16–27)	91 (68–117)	160 (75–260)	706 (327–1156)	79 (63–94)	344 (276–413)
	2005	24	15 (10–22)	65 (44–92)	140 (63–230)	598 (269–992)	81 (65–97)	344 (276–413)
	2006	24	14 (9–20)	59 (38–86)	130 (59–230)	571 (250–955)	81 (65–98)	344 (276–413)
	2007	24	11 (6.1–17)	46 (26–74)	120 (49–210)	515 (206–879)	82 (65–98)	344 (276–413)
	2008	24	7.5 (3.9–13)	31 (16–54)	110 (37–190)	454 (154–779)	82 (73–98)	344 (305–413)
	2009	24	5.9 (3.1–11)	25 (13–44)	100 (30–180)	423 (126–736)	82 (70–96)	345 (293–400)
India	1990	862	370 (180–630)	43 (21–73)	2900 (1200–5700)	338 (135–659)	1400 (800–2100)	168 (92–243)
	1995	953	180 (97–310)	19 (10–33)	2200 (870–3800)	234 (91–400)	1600 (1300–1900)	168 (134–201)
	2000	1 043	250 (150–380)	24 (14–37)	2600 (1100–4400)	248 (108–418)	1700 (1400–2100)	168 (134–201)
	2005	1 131	290 (180–430)	26 (16–38)	2900 (1300–4900)	258 (114–431)	1900 (1500–2300)	168 (134–201)
	2006	1 148	290 (170–430)	25 (15–38)	2900 (1300–4900)	254 (110–427)	1900 (1500–2300)	168 (134–201)
	2007	1 165	280 (170–420)	24 (14–36)	2900 (1300–4900)	250 (108–420)	2000 (1600–2300)	168 (134–201)
	2008	1 181	280 (160–430)	23 (14–36)	2900 (1200–5000)	248 (105–419)	2000 (1600–2400)	168 (134–201)
	2009	1 198	280 (170–430)	23 (14–36)	3000 (1300–5000)	249 (107–417)	2000 (1600–2400)	168 (137–202)
Indonesia	1990	177	100 (55–160)	58 (31–93)	740 (290–1400)	419 (164–811)	340 (180–490)	189 (104–274)
	1995	192	120 (97–150)	64 (51–78)	860 (380–1400)	446 (197–736)	360 (290–430)	189 (151–227)
	2000	205	120 (91–150)	57 (44–71)	860 (390–1400)	417 (191–687)	390 (310–470)	189 (151–227)
	2005	219	71 (45–100)	32 (21–47)	680 (300–1100)	310 (136–517)	410 (330–500)	189 (151–227)
	2006	222	65 (40–98)	29 (18–44)	660 (280–1100)	298 (126–502)	420 (340–500)	189 (151–227)
	2007	225	62 (37–95)	28 (16–42)	650 (280–1100)	291 (123–493)	420 (340–510)	189 (151–227)
	2008	227	62 (37–96)	27 (16–42)	660 (280–1100)	290 (122–489)	430 (340–520)	189 (151–227)
	2009	230	61 (36–95)	27 (16–41)	660 (270–1100)	285 (119–482)	430 (350–520)	189 (153–228)
Maldives	1990	<1	0.074 (0.034–0.13)	34 (16–61)	0.62 (0.24–1.2)	286 (111–564)	0.32 (0.18–0.47)	150 (82–217)
	1995	<1	0.02 (0.011–0.036)	8.1 (4.3–15)	0.33 (0.1–0.57)	132 (41–229)	0.26 (0.23–0.31)	105 (93–126)
	2000	<1	0.027 (0.016–0.044)	10 (5.7–16)	0.3 (0.12–0.52)	111 (45–190)	0.2 (0.16–0.24)	74 (59–89)
	2005	<1	0.018 (<0.01–0.031)	6.3 (3.4–10)	0.22 (0.084–0.38)	75 (29–128)	0.15 (0.12–0.18)	52 (42–62)
	2006	<1	0.015 (<0.01–0.026)	4.9 (2.4–8.9)	0.19 (0.067–0.34)	65 (23–115)	0.14 (0.11–0.17)	48 (39–58)
	2007	<1	0.012 (<0.01–0.019)	4 (2.3–6.4)	0.18 (0.061–0.3)	59 (20–99)	0.14 (0.13–0.16)	45 (42–54)
	2008	<1	<0.01 (<0.01–0.015)	2.9 (1.6–5.1)	0.16 (0.048–0.27)	51 (16–88)	0.13 (0.12–0.15)	42 (39–50)
	2009	<1	<0.01 (<0.01–0.014)	2.6 (1.4–4.6)	0.15 (0.042–0.25)	47 (14–81)	0.12 (0.1–0.14)	39 (33–45)
Myanmar	1990	41	54 (32–82)	133 (79–200)	380 (150–720)	922 (359–1755)	160 (91–240)	404 (222–585)
	1995	44	54 (43–66)	123 (98–151)	380 (170–630)	865 (382–1429)	180 (140–210)	404 (323–484)
	2000	47	52 (41–65)	112 (88–140)	380 (170–620)	811 (368–1338)	190 (150–230)	404 (323–484)
	2005	48	32 (21–46)	67 (44–95)	300 (140–500)	628 (288–1039)	200 (160–230)	404 (323–484)
	2006	49	30 (19–44)	61 (38–89)	290 (130–490)	603 (267–1004)	200 (160–240)	404 (323–484)
	2007	49	29 (18–43)	58 (36–88)	290 (130–490)	596 (261–993)	200 (160–240)	404 (323–484)
	2008	50	29 (18–43)	58 (35–86)	290 (130–490)	593 (261–987)	200 (160–240)	404 (323–484)
	2009	50	29 (18–44)	59 (36–87)	300 (130–500)	595 (262–994)	200 (160–240)	404 (329–486)
Nepal	1990	19	8.3 (4.3–14)	44 (23–72)	64 (26–120)	335 (134–650)	31 (17–45)	163 (90–237)
	1995	22	6.5 (4.3–9.2)	30 (20–43)	60 (27–100)	278 (124–461)	35 (28–42)	163 (131–196)
	2000	24	5.1 (2.8–8.3)	21 (12–34)	58 (23–99)	239 (95–407)	40 (32–48)	163 (131–196)
	2005	27	5.5 (3–9.1)	20 (11–33)	64 (25–110)	235 (93–402)	44 (36–53)	163 (131–196)
	2006	28	5.7 (3.2–9.3)	21 (11–34)	66 (26–110)	237 (94–405)	45 (36–54)	163 (131–196)
	2007	28	6.1 (3.4–9.7)	21 (12–34)	68 (28–120)	240 (98–410)	46 (37–55)	163 (131–196)
	2008	29	6.2 (3.5–9.9)	21 (12–34)	69 (28–120)	241 (98–408)	47 (38–56)	163 (131–196)
	2009	29	6.3 (3.6–10)	21 (12–34)	71 (29–120)	241 (97–408)	48 (39–58)	163 (133–197)
Sri Lanka	1990	17	2.1 (0.84–4.2)	12 (4.9–24)	20 (7.1–40)	114 (41–230)	11 (6.7–17)	66 (39–96)
	1995	18	2.5 (1.8–3.5)	14 (9.7–19)	22 (10–36)	121 (55–199)	12 (9.7–14)	66 (53–79)
	2000	19	2.1 (1.3–3.1)	11 (6.8–16)	20 (8.7–34)	108 (46–182)	12 (9.9–15)	66 (53–79)
	2005	20	1.9 (1.1–2.9)	9.7 (5.7–15)	20 (8.3–34)	103 (42–174)	13 (10–16)	66 (53–79)
	2006	20	1.9 (1.1–2.9)	9.7 (5.7–15)	20 (8.4–34)	102 (42–173)	13 (10–16)	66 (53–79)
	2007	20	1.9 (1.2–3)	9.8 (5.8–15)	20 (8.5–35)	103 (43–175)	13 (11–16)	66 (53–79)
	2008	20	1.9 (1.1–3)	9.5 (5.6–15)	20 (8.4–34)	101 (42–172)	13 (11–16)	66 (53–79)
	2009	20	1.9 (1.1–2.9)	9.2 (5.4–14)	20 (8.4–34)	101 (41–170)	13 (11–16)	66 (54–80)
Thailand	1990	57	12 (4.5–25)	21 (7.9–43)	120 (44–240)	208 (78–416)	77 (47–110)	137 (82–198)
	1995	60	12 (7.8–18)	21 (13–30)	120 (54–190)	194 (90–324)	82 (66–99)	137 (109–164)
	2000	62	15 (10–21)	25 (17–34)	130 (62–220)	212 (99–352)	85 (68–100)	137 (109–164)
	2005	66	12 (7.2–18)	18 (11–28)	130 (56–210)	190 (85–320)	90 (72–110)	137 (109–164)
	2006	67	12 (7.4–19)	19 (11–29)	130 (57–210)	191 (85–321)	91 (73–110)	137 (109–164)
	2007	67	13 (7.9–19)	19 (12–29)	130 (59–220)	196 (89–325)	92 (73–110)	137 (109–164)
	2008	67	12 (7.4–19)	18 (11–28)	130 (58–210)	190 (86–318)	92 (74–110)	137 (109–164)
	2009	68	12 (7.2–19)	18 (11–27)	130 (57–210)	189 (83–317)	93 (75–110)	137 (111–165)
Timor-Leste	1990	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	3.7 (2–5.3)	498 (274–723)
	1995	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	4.2 (3.4–5.1)	498 (399–598)
	2000	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	4.1 (3.3–4.9)	498 (399–598)
	2005	<1	0.61 (0.31–1)	61 (32–104)	7.2 (2.7–12)	724 (272–1256)	4.9 (4–5.9)	498 (399–598)
	2006	1	0.73 (0.4–1.2)	70 (39–112)	7.8 (3.2–13)	763 (310–1309)	5.1 (4.1–6.2)	498 (399–598)
	2007	1	0.85 (0.51–1.3)	80 (48–120)	8.5 (3.6–14)	802 (342–1352)	5.3 (4.2–6.4)	498 (399–598)
	2008	1	0.79 (0.45–1.2)	72 (41–113)	8.4 (3.4–14)	769 (314–1315)	5.5 (4.4–6.6)	498 (399–598)
	2009	1	0.75 (0.41–1.2)	66 (37–106)	8.4 (3.3–14)	743 (295–1274)	5.6 (4.6–6.8)	498 (406–600)

[a] Rates are per 100 000 population.

TABLE A2.2 **Incidence, notification and case detection rates, all forms, 1990–2009**

			INCIDENCE (INCLUDING HIV)		INCIDENCE HIV-POSITIVE		NOTIFIED NEW AND RELAPSE[a]		CASE DETECTION RATE[a]
	YEAR	POPULATION (MILLIONS)	NUMBER (THOUSANDS)	RATE[b]	NUMBER (THOUSANDS)	RATE[b]	NUMBER	RATE[b]	PERCENT
Bangladesh	1990	116	260 (140–380)	225 (124–326)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	48 673	42	19 (13–34)
	1995	128	290 (230–350)	225 (180–270)	0.031 (<0.01–0.2)	<1 (<1–<1)	56 437	44	20 (16–25)
	2000	141	320 (250–380)	225 (180–270)	0.11 (0.026–0.25)	<1 (<1–<1)	75 557	54	24 (20–30)
	2005	153	340 (280–410)	225 (180–270)	0.29 (0.13–0.51)	<1 (<1–<1)	123 118	80	36 (30–45)
	2006	155	350 (280–420)	225 (180–270)	0.34 (0.17–0.57)	<1 (<1–<1)	145 186	93	42 (35–52)
	2007	158	350 (280–430)	225 (180–270)	0.41 (0.22–0.67)	<1 (<1–<1)	147 342	93	42 (35–52)
	2008	160	360 (290–430)	225 (180–270)	0.49 (0.27–0.79)	<1 (<1–<1)	151 062	94	42 (35–53)
	2009	162	360 (300–440)	225 (183–270)	0.58 (0.32–0.95)	<1 (<1–<1)	160 875	99	44 (37–54)
Bhutan	1990	1	1.7 (1.2–2.4)	308 (210–446)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	1 154	210	68 (47–100)
	1995	1	1.6 (1.3–1.9)	308 (255–369)	<0.01 (<0.01–0.01)	<1 (<1–2)	1 299	255	83 (69–100)
	2000	1	1.4 (1.1–1.7)	253 (203–304)	<0.01 (<0.01–0.023)	<1 (<1–4.1)	1 140	203	80 (67–100)
	2005	1	1.2 (1–1.5)	187 (155–225)	0.018 (<0.01–0.032)	2.8 (1.2–4.9)	1 007	155	83 (69–100)
	2006	1	1.2 (0.95–1.4)	179 (143–215)	0.022 (0.012–0.036)	3.3 (1.7–5.4)	917	138	77 (64–96)
	2007	1	1.2 (1–1.4)	172 (148–206)	0.026 (0.015–0.041)	3.9 (2.3–6)	999	148	86 (72–100)
	2008	1	1.1 (0.96–1.4)	165 (140–198)	0.031 (0.019–0.047)	4.5 (2.7–6.9)	961	140	85 (71–100)
	2009	1	1.1 (0.92–1.3)	158 (132–186)	0.036 (0.02–0.057)	5.1 (2.9–8.1)	1 125	161	102 (87–123)
Democratic People's Republic of Korea	1990	20	69 (38–100)	344 (189–499)	0.024 (<0.01–0.049)	<1 (<1–<1)			–
	1995	22	75 (60–90)	344 (276–413)	0.11 (0.052–0.18)	<1 (<1–<1)			–
	2000	23	79 (63–94)	344 (276–413)	0.16 (0.085–0.26)	<1 (<1–1.1)	34 131	149	43 (36–54)
	2005	24	81 (65–97)	344 (276–413)	0.19 (0.1–0.3)	<1 (<1–1.3)	42 722	182	53 (44–66)
	2006	24	81 (65–98)	344 (276–413)	0.19 (0.1–0.31)	<1 (<1–1.3)	44 558	189	55 (46–68)
	2007	24	82 (65–98)	344 (276–413)	0.2 (0.11–0.32)	<1 (<1–1.3)	58 802	248	72 (60–90)
	2008	24	82 (73–98)	344 (305–413)	0.2 (0.11–0.32)	<1 (<1–1.3)	72 541	305	88 (74–100)
	2009	24	82 (70–96)	345 (293–400)	0.2 (0.11–0.32)	<1 (<1–1.4)	76 336	319	93 (80–109)
India	1990	862	1400 (800–2100)	168 (92–243)	8.4 (2.1–20)	<1 (<1–2.3)	1 519 182	176	105 (72–191)
	1995	953	1600 (1300–1900)	168 (134–201)	80 (41–130)	8.4 (4.3–14)	1 218 183	128	76 (63–95)
	2000	1 043	1700 (1400–2100)	168 (134–201)	150 (92–230)	15 (8.8–22)	1 115 718	107	64 (53–80)
	2005	1 131	1900 (1500–2300)	168 (134–201)	140 (85–220)	13 (7.5–19)	1 156 248	102	61 (51–76)
	2006	1 148	1900 (1500–2300)	168 (134–201)	140 (83–220)	12 (7.2–19)	1 228 827	107	64 (53–80)
	2007	1 165	2000 (1600–2300)	168 (134–201)	140 (94–190)	12 (8–16)	1 295 943	111	66 (55–83)
	2008	1 181	2000 (1600–2400)	168 (134–201)	130 (78–200)	11 (6.6–17)	1 332 267	113	67 (56–84)
	2009	1 198	2000 (1600–2400)	168 (137–202)	130 (74–200)	11 (6.2–17)	1 351 913	113	67 (56–83)
Indonesia	1990	177	340 (180–490)	189 (104–274)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	74 470	42	22 (15–40)
	1995	192	360 (290–430)	189 (151–227)	0.025 (<0.01–0.16)	<1 (<1–<1)	35 529	19	10 (8–12)
	2000	205	390 (310–470)	189 (151–227)	0.35 (<0.01–2.2)	<1 (<1–1.1)	84 591	41	22 (18–27)
	2005	219	410 (330–500)	189 (151–227)	6.6 (3.6–11)	3 (1.6–4.9)	254 601	116	61 (51–77)
	2006	222	420 (340–500)	189 (151–227)	8.2 (4.6–13)	3.7 (2.1–5.8)	277 589	125	66 (55–83)
	2007	225	420 (340–510)	189 (151–227)	9.6 (5.6–15)	4.3 (2.5–6.6)	275 193	122	65 (54–81)
	2008	227	430 (340–520)	189 (151–227)	11 (6.3–17)	4.8 (2.8–7.6)	296 514	130	69 (57–86)
	2009	230	430 (350–520)	189 (153–228)	12 (7.2–19)	5.4 (3.1–8.4)	292 753	127	67 (56–83)
Maldives	1990	0	0.32 (0.18–0.47)	150 (82–217)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	152	71	47 (32–86)
	1995	0	0.26 (0.23–0.31)	105 (93–126)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	231	93	89 (74–100)
	2000	0	0.2 (0.16–0.24)	74 (59–89)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	132	48	66 (55–82)
	2005	0	0.15 (0.12–0.18)	52 (42–62)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	122	42	81 (67–100)
	2006	0	0.14 (0.11–0.17)	48 (39–58)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	99	33	69 (58–87)
	2007	0	0.14 (0.13–0.16)	45 (42–54)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	127	42	94 (78–100)
	2008	0	0.13 (0.12–0.15)	42 (39–50)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	120	39	94 (78–100)
	2009	0	0.12 (0.1–0.14)	39 (33–45)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	100	32	83 (72–97)
Myanmar	1990	41	160 (91–240)	404 (222–585)	6.9 (3.6–11)	17 (8.9–28)	12 416	30	8 (5–14)
	1995	44	180 (140–210)	404 (323–484)	16 (10–23)	37 (24–52)	18 229	42	10 (9–13)
	2000	47	190 (150–230)	404 (323–484)	22 (15–31)	48 (32–67)	30 840	66	16 (14–20)
	2005	48	200 (160–230)	404 (323–484)	22 (15–31)	46 (31–65)	107 009	221	55 (46–69)
	2006	49	200 (160–240)	404 (323–484)	22 (15–31)	46 (31–64)	122 472	251	62 (52–78)
	2007	49	200 (160–240)	404 (323–484)	22 (15–30)	44 (30–61)	129 081	263	65 (54–81)
	2008	50	200 (160–240)	404 (323–484)	22 (15–31)	44 (30–62)	124 037	250	62 (52–77)
	2009	50	200 (160–240)	404 (329–486)	22 (15–31)	44 (30–62)	128 343	257	64 (53–78)
Nepal	1990	19	31 (17–45)	163 (90–237)	0.39 (0.2–0.67)	2.1 (1.1–3.5)	10 142	53	33 (22–59)
	1995	22	35 (28–42)	163 (131–196)	0.72 (0.47–1)	3.3 (2.2–4.8)	19 804	92	56 (47–70)
	2000	24	40 (32–48)	163 (131–196)	0.98 (0.65–1.4)	4 (2.7–5.7)	29 519	121	74 (62–93)
	2005	27	44 (36–53)	163 (131–196)	1.1 (0.72–1.6)	4 (2.7–5.8)	33 448	123	75 (63–94)
	2006	28	45 (36–54)	163 (131–196)	1.1 (0.73–1.6)	4 (2.6–5.7)	32 670	118	72 (60–90)
	2007	28	46 (37–55)	163 (131–196)	1.1 (0.76–1.5)	3.9 (2.7–5.4)	32 940	116	71 (59–89)
	2008	29	47 (38–56)	163 (131–196)	1.1 (0.72–1.6)	3.8 (2.5–5.5)	32 909	114	70 (58–88)
	2009	29	48 (39–58)	163 (133–197)	1.1 (0.72–1.6)	3.8 (2.4–5.4)	34 888	119	73 (60–90)
Sri Lanka	1990	17	11 (6.7–17)	66 (39–96)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	6 666	39	58 (40–100)
	1995	18	12 (9.7–14)	66 (53–79)	<0.01 (<0.01–0.01)	<1 (<1–<1)	5 956	33	49 (41–62)
	2000	19	12 (9.9–15)	66 (53–79)	0.011 (<0.01–0.02)	<1 (<1–<1)	8 413	45	68 (56–85)
	2005	20	13 (10–16)	66 (53–79)	0.021 (0.012–0.033)	<1 (<1–<1)	9 249	47	72 (60–89)
	2006	20	13 (10–16)	66 (53–79)	0.024 (0.013–0.037)	<1 (<1–<1)	8 510	43	65 (54–82)
	2007	20	13 (11–16)	66 (53–79)	0.026 (0.018–0.037)	<1 (<1–<1)	8 718	44	66 (55–83)
	2008	20	13 (11–16)	66 (53–79)	0.029 (0.016–0.046)	<1 (<1–<1)	9 290	46	70 (58–88)
	2009	20	13 (11–16)	66 (54–80)	0.032 (0.018–0.052)	<1 (<1–<1)	9 314	46	69 (58–85)
Thailand	1990	57	77 (47–110)	137 (82–198)	9.2 (4.9–15)	16 (8.6–27)	46 510	82	60 (41–100)
	1995	60	82 (66–99)	137 (109–164)	18 (11–25)	29 (19–42)	45 428	76	55 (46–69)
	2000	62	85 (68–100)	137 (109–164)	17 (10–25)	27 (17–40)	34 187	55	40 (33–50)
	2005	66	90 (72–110)	137 (109–164)	16 (10–23)	24 (15–35)	57 895	88	64 (54–80)
	2006	67	91 (73–110)	137 (109–164)	16 (10–23)	24 (15–35)	56 230	85	62 (52–77)
	2007	67	92 (73–110)	137 (109–164)	16 (11–22)	23 (16–32)	54 793	82	60 (50–75)
	2008	67	92 (74–110)	137 (109–164)	16 (11–22)	23 (16–32)	55 252	82	60 (50–75)
	2009	68	93 (75–110)	137 (111–165)	16 (11–22)	23 (16–32)	63 975	94	69 (57–85)
Timor-Leste	1990	1	3.7 (2–5.3)	498 (274–723)	<0.01 (<0.01–<0.01)	<1 (<1–<1)			–
	1995	1	4.2 (3.4–5.1)	498 (399–598)	<0.01 (<0.01–<0.01)	<1 (<1–<1)			–
	2000	1	4.1 (3.3–4.9)	498 (399–598)	<0.01 (<0.01–<0.01)	<1 (<1–<1)			–
	2005	1	4.9 (4–5.9)	498 (399–598)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	3 767	380	76 (64–95)
	2006	1	5.1 (4.1–6.2)	498 (399–598)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	3 586	349	70 (58–87)
	2007	1	5.3 (4.2–6.4)	498 (399–598)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	3 255	306	61 (51–77)
	2008	1	5.5 (4.4–6.6)	498 (399–598)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	3 285	299	60 (50–75)
	2009	1	5.6 (4.6–6.8)	498 (406–600)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	4 748	419	84 (70–103)

[a] Where notification data from a country had not been received by 31 August, the notification rate was assumed to be the same as for 2008 (in *italics*).

[b] Rates are per 100 000 population.

TABLE A2.3 **Case notifications, 1990–2009**

	NEW AND RELAPSE NOTIFICATION RATE[a] 1990–2009	YEAR	NEW AND RELAPSE[a]	NEW CASES				RELAPSE	RE-TREAT EXCL. RELAPSE	TOTAL RETREAT	HISTORY UNKNOWN	% SMEAR-POS AMONG NEW PULM
				SMEAR-POSITIVE	SMEAR-NEGATIVE/ UNKNOWN	EXTRA-PULMONARY	OTHER					
Bangladesh		1990	48 673									–
		1995	56 437	20 524	19 297	2 060		729		729		52
		2000	75 557	38 484	29 396	5 914		1 763		1 763		57
		2005	123 118	84 848	23 076	11 318		3 876		3 876		79
		2006	145 186	101 967	24 565	14 436	0	4 218		4 218		81
		2007	147 342	104 296	23 152	16 106	0	3 788		3 788		82
	42 99	2008	151 062	106 373	22 192	18 359	0	4 138	2 853	6 991	0	83
		2009	160 875	109 402	25 375	21 999		4 099		4 099		81
Bhutan		1990	1 154									–
		1995	1 299	367	657	265		10		10		36
		2000	1 140	347	430	363		36		36		45
		2005	1 007	308	272	387		40	11	51		53
		2006	917	312	238	326	0	41	17	58	0	57
		2007	999	328	253	373		45	9	54		56
	210 161	2008	961	351	146	418	0	46	24	70	0	71
		2009	1 125	434	285	355	0	51	25	76	0	60
Democratic People's Republic of Korea		1990										–
		1995										–
		2000	34 131	16 440	13 801	3 787		103		103		54
		2005	42 722	17 796	18 123	5 381	58	1 364	7 752	9 116		50
		2006	44 558	18 435	19 610	5 012		1 501	7 319	8 820		48
		2007	58 802	23 575	25 789	7 579		1 859	9 375	11 234		48
		2008	72 541	28 026	31 444	10 914	0	2 157	12 013	14 170	0	47
	– 319	2009	76 336	29 366	32 491	12 232	0	2 247	12 329	14 576		47
India		1990	1 519 182									–
		1995	1 218 183	264 515	880 589	68 979		690		690		23
		2000	1 115 718	349 374	650 345	98 006		17 993	80 072	98 065		35
		2005	1 156 248	508 890	399 066	171 838	1 381	75 073	148 580	223 653	0	56
		2006	1 228 827	553 851	400 680	183 203	1 188	89 905	169 138	259 043	0	58
		2007	1 295 943	592 587	398 862	206 840	798	96 856	179 686	276 542	0	60
	176 113	2008	1 332 267	615 977	390 356	219 946	1 774	104 214	185 071	289 285	0	61
		2009	1 351 913	624 617	384 113	233 026	1 796	108 361	181 395	289 756		62
Indonesia		1990	74 470									–
		1995	35 529	31 768	34	0		106		106		100
		2000	84 591	52 338	15 035	833		1 448		1 448		78
		2005	254 601	158 640	85 373	6 142		4 446		4 446		65
		2006	277 589	175 320	91 029	7 013	0	4 227		4 227		66
		2007	275 193	160 617	102 613	8 048		3 915	467	4 382		61
	42 127	2008	296 514	166 376	116 850	9 673		3 615	1 815	5 430		59
		2009	292 753	169 213	108 616	11 215		3 709	1 978	5 687		61
Maldives		1990	152									–
		1995	231	114	89	18		10		10		56
		2000	132	65	31	32		4	0	4		68
		2005	122	66	23	29	0	4	1	5	0	74
		2006	99	53	16	26	0	4	1	5	0	77
		2007	127	59	37	30	0	1	2	3	0	61
	71 32	2008	120	53	32	35	0	0	2	2	0	62
		2009	100	45	13	41		1	4	5		78
Myanmar		1990	12 416									–
		1995	18 229	8 681	7 058	653		1 837		1 837		55
		2000	30 840	17 254	8 659	2 304		2 623		2 623		67
		2005	107 009	36 541	35 601	30 252		4 615	982	5 597		51
		2006	122 472	40 241	42 741	34 495		4 995	3 973	8 968		48
		2007	129 081	42 588	41 826	40 002		4 665	4 466	9 131		50
	30 257	2008	124 037	41 248	44 034	34 447		4 308	4 701	9 009		48
		2009	128 343	41 357	50 919	31 509		4 558	5 159	9 717		45
Nepal		1990	10 142									–
		1995	19 804	8 591	7 938	2 489		786		786		52
		2000	29 519	13 683	9 074	4 955		1 807		1 807		60
		2005	33 448	14 617	9 474	7 013	0	2 344	629	2 973		61
		2006	32 670	14 028	9 170	7 089	0	2 383	537	2 920	0	60
		2007	32 940	14 355	9 350	6 986	0	2 249	499	2 748	0	61
	53 119	2008	32 909	14 640	9 298	6 527		2 444	510	2 954		61
		2009	34 888	15 442	9 794	7 054		2 598	519	3 117		61
Sri Lanka		1990	6 666	2 769	3 241	656						46
		1995	5 956	3 049	1 677	982		248		248		65
		2000	8 413	4 314	2 261	1 561		277	372	649		66
		2005	9 249	4 868	2 198	1 917	0	266	244	510	202	69
		2006	8 510	4 442	1 905	1 936		227	208	435	228	70
		2007	8 718	4 528	1 985	1 984	0	221	217	438	220	70
	39 46	2008	9 290	4 683	2 146	2 167	92	202	192	394	132	69
		2009	9 314	4 764	1 996	2 358		196	213	409	261	70
Thailand		1990	46 510									–
		1995	45 428	20 273	22 606	1 419		1 130		1 130		47
		2000	34 187	17 754	12 439	2 953		1 041		1 041		59
		2005	57 895	29 762	18 837	7 501		1 795		1 795		61
		2006	56 230	29 081	17 607	7 800		1 742	1 437	3 179	1 161	62
		2007	54 793	28 487	17 156	7 485		1 665		1 665		62
	82 94	2008	55 252	28 788	16 933	7 815		1 716	2 240	3 956		63
		2009	63 975	32 810	20 058	9 143		1 964	1 965	3 929		62
Timor-Leste		1990										–
		1995										–
		2000										–
		2005	3 767	1 035	2 142	554		36	16	52		33
		2006	3 586	907	2 144	503		32	10	42		30
		2007	3 255	1 021	1 772	433	0	29	15	44	0	37
	– 419	2008	3 285	867	1 996	399	0	23	12	35	0	30
		2009	4 748	1 206	3 095	406	0	41	11	52	0	28

[a] Rates are per 100 000 population. Where notification data from a country had not been received by 31 August, the notification rate was assumed to be the same as for 2008 (in italics).

Data can be downloaded from www.who.int/tb/data

TABLE A2.4 **Treatment outcomes, new smear-positive cases, 1995–2008**

	TREATMENT SUCCESS (%)[a] 1995–2008	YEAR	NUMBER NOTIFIED	SIZE OF COHORT	COHORT AS % NOTIFIED	% OF COHORT					
						CURED	COMPLETED	DIED	FAILED	DEFAULTED	NOT EVALUATED
Bangladesh		1995	20 524	10 867	53	66	5	5	2	10	12
		2000	38 484	38 484	100	77	4	4	1	9	5
		2005	84 848	84 848	100	91	1	4	1	2	2
		2006	101 967	101 761	100	91	1	3	1	2	2
		2007	104 296	104 296	100	91	1	3	1	2	3
	71 91	2008	106 373	106 089	100	90	2	4	1	2	2
Bhutan		1995	367	433	118	78	20	0	0	1	1
		2000	347	347	100	75	15	4	3	3	0
		2005	308	340	110	84	7	5	3	1	0
		2006	312	320	103	80	9	5	1	1	5
		2007	328	331	101	91	2	3	3	0	1
	97 91	2008	351	354	101	89	2	3	3	0	3
Democratic People's Republic of Korea		1995			–						
		2000	16 440	14 571	89	73	9	3	7	5	3
		2005	17 796	17 796	100	84	5	2	4	2	2
		2006	18 435	18 435	100	82	4	3	4	4	3
		2007	23 575	23 575	100	82	5	3	4	3	3
	– 89	2008	28 026	28 026	100	83	6	2	4	2	2
India		1995	264 515	264 722	100	1	25	0	0	0	75
		2000	349 374	349 328	100	31	4	1	1	7	57
		2005	508 890	507 204	100	83	2	5	2	7	1
		2006	553 851	553 302	100	84	2	5	2	6	1
		2007	592 587	592 414	100	84	2	5	2	6	1
	25 87	2008	615 977	615 977	100	85	2	4	2	6	1
Indonesia		1995	31 768	3 018	10	73	18	2	0	6	1
		2000	52 338	52 338	100	70	17	2	1	4	5
		2005	158 640	158 640	100	83	8	2	1	4	2
		2006	175 320	175 320	100	83	9	2	1	5	2
		2007	160 617	160 617	100	82	9	2	1	4	2
	91 91	2008	166 376	166 376	100	83	8	2	1	4	2
Maldives		1995	114	114	100	96	2	3	0	0	0
		2000	65	59	91	97	0	2	0	0	2
		2005	66	70	106	86	0	6	0	3	6
		2006	53	53	100	91	0	0	2	4	4
		2007	59	60	102	68	0	3	0	10	18
	97 45	2008	53	53	100	45		4		11	40
Myanmar		1995	8 681	7 872	91	53	14	4	4	18	7
		2000	17 254	16 792	97	73	9	5	2	9	2
		2005	36 541	36 652	100	77	7	6	3	5	2
		2006	40 241	40 350	100	77	7	6	3	5	2
		2007	42 588	42 773	100	77	8	5	3	5	2
	67 85	2008	41 248	41 247	100	78	8	6	3	5	2
Nepal		1995	8 591	8 053	94	56	17	3	2	18	6
		2000	13 683	12 992	95	79	5	5	1	7	2
		2005	14 617	14 617	100	87	1	5	1	3	2
		2006	14 028	14 028	100	86	2	5	1	3	3
		2007	14 355	14 355	100	86	2	5	1	3	3
	73 89	2008	14 640	14 640	100	86	3	4	1	3	3
Sri Lanka		1995	3 049	3 058	100	75	4	3	0	13	4
		2000	4 314	4 314	100	75	4	4	1	15	2
		2005	4 868	4 841	99	83	3	5	1	6	1
		2006	4 442	4 431	100	83	4	5	1	7	0
		2007	4 528	4 477	99	84	3	5	1	7	1
	79 85	2008	4 683	4 646	99	81	4	6	2	7	1
Thailand		1995	20 273	20 273	100	36	28	2	0	9	24
		2000	17 754	23 061	130	65	3	8	2	7	15
		2005	29 762	29 919	101	70	5	8	2	7	9
		2006	29 081	28 856	99	71	6	8	2	6	7
		2007	28 487	29 588	104	77	6	9	2	5	2
	64 82	2008	28 788	33 078	115	76	7	7	2	4	4
Timor-Leste		1995			–						
		2000			–						
		2005	1 035	1 035	100	61	21	5	1	11	2
		2006	907	908	100	69	10	5	0	12	3
		2007	1 021	1 021	100	69	15	4	0	8	4
	– 85	2008	867	867	100	73	12	5	0	7	3

[a] TREATMENT SUCCESS = percent cured + percent completed then rounded to the nearest digit.

TABLE A2.5 **Treatment outcomes, retreatment cases, 1995–2008**

	TREATMENT SUCCESS (%)[a] 1995–2008	YEAR	NUMBER NOTIFIED	SIZE OF COHORT	COHORT AS % NOTIFIED	% OF COHORT					
						CURED	COMPLETED	DIED	FAILED	DEFAULTED	NOT EVALUATED
Bangladesh		1995	729	1 179	162	71	3	5	8	11	2
		2000	1 763	1 815	103	70	2	4	2	7	14
		2005	3 876	3 876	100	73	6	4	2	5	9
		2006	4 218	4 211	100	70	7	5	2	4	12
		2007	3 788	3 788	100	74	5	4	2	5	10
	75 –	2008	6 991		–						
Bhutan		1995	10	22	220	50	9	0	23	14	5
		2000	36		–						
		2005	51	52	102	65	10	6	8	2	10
		2006	58	61	105	62	13	2	7	0	16
		2007	54	46	85	80	11	4	2	0	2
	59 79	2008	70	70	100	76	3	3	16	1	1
Democratic People's Republic of Korea		1995			–						
		2000	103	1 285	1 248	75	11	2	4	2	5
		2005	9 116	9 116	100	70	6	3	12	5	4
		2006	8 820	8 820	100	68	8	4	13	4	3
		2007	11 234	11 234	100	69	8	4	13	3	3
	– 82	2008	14 170	14 170	100	75	8	3	10	3	2
India		1995	690	551	80	64	6	4	3	13	9
		2000	98 065	48 133	49	55	15	7	5	16	2
		2005	223 653	224 143	100	47	24	7	4	16	1
		2006	259 043	259 130	100	45	26	7	4	15	2
		2007	276 542	193 364	70	63	2	8	5	15	7
	70 74	2008	289 285	289 285	100	45	29	7	4	13	2
Indonesia		1995	106	76	72	22	9	0	0	1	67
		2000	1 448	2 530	175	50	22	3	3	7	15
		2005	4 446	4 812	108	63	15	3	4	8	7
		2006	4 227	4 227	100	61	16	5	2	11	5
		2007	4 382	4 382	100	60	17	4	3	11	5
	32 72	2008	5 430	5 430	100	50	21	4	3	14	7
Maldives		1995	10		–						
		2000	4	5	125	100					0
		2005	5	5	100	80	20	0	0	0	0
		2006	5	5	100	60	20	20	0	0	0
		2007	3	0	0	–	–	–	–	–	–
	– –	2008	2		–						
Myanmar		1995	1 837	1 443	79	55	8	4	4	19	9
		2000	2 623	3 001	114	65	9	7	4	12	3
		2005	5 597	6 556	117	58	14	10	6	7	5
		2006	8 968	8 866	99	50	20	12	7	7	4
		2007	9 131	9 167	100	44	9	8	4	5	30
	64 73	2008	9 009	8 631	96	46	27	12	5	7	3
Nepal		1995	786		–						
		2000	1 807	2 047	113	73	3	4	8	7	4
		2005	2 973	2 973	100	81	2	4	6	4	3
		2006	2 920	2 920	100	82	1	6	4	3	3
		2007	2 748	2 748	100	80	2	5	3	3	7
	– 76	2008	2 954	1 954	66	71	4	10	5	5	5
Sri Lanka		1995	248		–						
		2000	649	521	80	44	20	6	1	26	3
		2005	510	504	99	67	5	5	2	18	3
		2006	435	435	100	66	5	6	3	17	4
		2007	438	432	99	68	5	7	2	16	2
	– 70	2008	394	393	100	64	7	8	2	15	5
Thailand		1995	1 130		–						
		2000	1 041		–						
		2005	1 795	2 285	127	52	6	12	5	7	18
		2006	3 179	2 191	69	53	9	13	6	7	12
		2007	1 665	2 562	154	61	9	11	6	9	3
	– 66	2008	3 956	3 468	88	54	12	9	4	7	14
Timor-Leste		1995			–						
		2000			–						
		2005	52	56	108	96	0	2	0	2	0
		2006	42	44	105	73	7	5	0	16	0
		2007	44	44	100	59	16	2	7	9	7
	– 71	2008	35	35	100	57	14	11	6	11	0

[a] TREATMENT SUCCESS = percent cured + percent completed then rounded to the nearest digit.

Data can be downloaded from www.who.int/tb/data

TABLE A.6 **HIV testing and provision of CPT, ART and IPT, 2005–2009**

	% OF TB PATIENTS WITH KNOWN HIV STATUS 2005–2009		YEAR	% OF TB PATIENTS WITH KNOWN HIV STATUS	NUMBER OF TB PATIENTS WITH KNOWN HIV STATUS	PATIENTS NOTIFIED (NEW AND RETREAT)[a]	NUMBER OF HIV-POSITIVE TB PATIENTS	% OF TESTED TB PATIENTS HIV-POSITIVE	% OF HIV-POSITIVE TB PATIENTS ON CPT	% OF HIV-POSITIVE TB PATIENTS ON ART	NUMBER OF HIV-POSITIVE PEOPLE PROVIDED IPT
Bangladesh			2005	0	0	123 118		–	–	–	
			2006	–		145 186		–	–	–	
			2007	–		147 342		–	–	–	
			2008	0	37	153 915	37	100	57	59	
	0	0	2009	0	662	160 875	36	5	97	100	
Bhutan			2005	25	250	1 018	1	0	0	0	
			2006	0	0	934		–	–	–	
			2007	0	0	1 008	0	–	–	–	0
			2008	0	0	985	0	–	–	–	0
	25	–	2009	–		1 150		–	–	–	
Democratic People's Republic of Korea			2005	–		50 474		–	–	–	
			2006	–		51 877		–	–	–	
			2007	–		68 177		–	–	–	
			2008	0	0	84 554	0	–	–	–	0
	–	0	2009	0	0	88 665	0	–	–	–	0
India			2005	2	29 488	1 304 828	6 411	22	–	–	
			2006	4	59 654	1 397 965	8 785	15	–	–	
			2007	5	80 425	1 475 629	9 324	12	8	2	
			2008	2	34 225	1 517 338	6 039	18	68	41	0
	2	17	2009	17	258 037	1 533 308	31 058	12	–	–	
Indonesia			2005	–		254 601		–	–	–	
			2006	0	243	277 589	151	62	–	–	
			2007	0	288	275 660	146	51	–	–	0
			2008	0	367	298 329	107	29	–	–	
	–	1	2009	1	2 782	294 731	479	17	–	42	0
Maldives			2005	–		123		–	–	–	
			2006	–		100		–	–	–	
			2007	–		129		–	–	–	
			2008	–		122		–	–	–	
	–	–	2009	–		104		–	–	–	
Myanmar			2005	2	2 109	107 991	611	29	50	31	0
			2006	2	2 626	126 445	5 552	211	12	5	
			2007	2	2 825	133 547	5 502	195	15	12	
			2008	3	4 292	128 738	4 200	98	26	28	
	2	3	2009	3	4 174	133 502	1 015	24	97	67	333
Nepal			2005	–		34 077		–	–	–	
			2006	0	0	33 207		–	–	–	0
			2007	0	0	33 439	0	–	–	–	0
			2008	–		33 419		–	–	–	
	–	–	2009	–		35 407		–	–	–	
Sri Lanka			2005	–		9 695	2	–	0	0	
			2006	4	343	8 946	1	0	500	500	
			2007	6	590	9 155	2	0	400	400	1
			2008	1	123	9 614		–	–	–	2
	–	19	2009	19	1 897	9 788	0	0	–	–	5
Thailand			2005	–		57 895		–	–	–	
			2006	45	26 552	58 828	7 141	27	64	32	444
			2007	101	55 190	54 793	7 615	14	67	32	
			2008	78	45 000	57 492	8 215	18	69	39	206
	–	76	2009	76	49 955	65 940	8 202	16	72	51	127
Timor-Leste			2005	0	0	3 783		–	–	–	
			2006	–		3 596		–	–	–	0
			2007	–		3 270	4	–	100	–	
			2008	0	1	3 297	1	100	100	100	0
	0	2	2009	2	108	4 759	0	0	–	–	2

[a] Data presented as of 31 August 2010. Notification data for European Union countries were not available.

TABLE A2.7 **Testing for MDR-TB and number of confirmed cases of MDR-TB, 2005–2009**

			NEW CASES				PREVIOUSLY TREATED CASES			
	YEAR	TOTAL CONFIRMED CASES OF MDR-TB[a]	NOTIFIED	NUMBER OF NOTIFIED TESTED FOR MDR-TB	% OF NOTIFIED TESTED FOR MDR-TB	NUMBER OF CONFIRMED CASES OF MDR-TB	NOTIFIED	NUMBER OF NOTIFIED TESTED FOR MDR-TB	% OF NOTIFIED TESTED FOR MDR-TB	NUMBER OF CONFIRMED CASES OF MDR-TB
Bangladesh	2005		119 242	0	0		3 876	0	0	0
	2006		140 968		–		4 218		–	
	2007		143 554		–		3 788		–	
	2008	147	146 924	0	0	0	6 991	510	7	147
	2009		156 776		–		4 099		–	
Bhutan	2005	2	967	2	0	2	51	3	6	0
	2006	0	876	0	0	0	58	0	0	0
	2007	0	954	0	0	0	54	0	0	0
	2008	7	915	7	1	7	70	0	0	0
	2009	8	1 074	7	1	3	76	8	11	4
Democratic People's Republic of Korea	2005		41 358		–		9 116		–	
	2006		43 057		–		8 820		–	
	2007		56 943		–		11 234		–	
	2008	0	70 384	0	0	0	14 170	0	0	0
	2009		74 089		–		14 576		–	
India	2005	34	1 081 175		–		223 653		–	
	2006	33	1 138 922		–		259 043		–	33
	2007	146	1 199 087	0	0	0	276 542	414	0	146
	2008	308	1 228 053	0	0	0	289 285	1 511	1	308
	2009	1 660	1 243 552		–		289 756	3 454	1	1 660
Indonesia	2005		250 155		–		4 446		–	
	2006	59	273 362		–		4 227		–	
	2007		271 278		–		4 382		–	
	2008	446	292 899		–		5 430		–	
	2009		289 044		–		5 687		–	
Maldives	2005	0	118	0	0	0	5	0	0	0
	2006	1	95	1	1	1	5	4	80	4
	2007	1	126	2	2	1	3	0	0	0
	2008	3	120		–		2		–	
	2009		99		–		5		–	
Myanmar	2005		102 394	0	0	0	5 597		–	
	2006	666	117 477		–		8 968	844	9	652
	2007	600	124 416		–		9 131		–	
	2008	508	119 729		–		9 009	680	8	508
	2009	815	123 785		–		9 717	962	10	815
Nepal	2005		31 104		–		2 973		–	
	2006	0	30 287	0	0	0	2 920	0	0	0
	2007	163	30 691	721	2	29	2 748	473	17	134
	2008	76	30 465	136	0	12	2 954	300	10	54
	2009	69	32 290	130	0	7	3 117	220	7	51
Sri Lanka	2005	32	8 983	659	7	7	510	417	82	25
	2006	16	8 283	613	7	3	435	336	77	13
	2007	8	8 497	926	11	1	438	388	89	7
	2008	8	9 088	759	8	3	394	323	82	5
	2009	4	9 118	813	9	0	409	419	102	4
Thailand	2005		56 100		–		1 795		–	
	2006		54 488		–		3 179		–	
	2007		53 128		–		1 665		–	
	2008	358	53 536		–		3 956		–	
	2009		62 011		–		3 929		–	
Timor-Leste	2005	0	3 731	0	0	0	52	0	0	0
	2006		3 554		–		42		–	
	2007		3 226		–		44		–	
	2008	3	3 262	0	0	0	35	9	26	0
	2009	4	4 707	0	0	0	52	6	12	4

[a] TOTAL CONFIRMED CASES OF MDR-TB includes cases with unknown previous treatment history (i.e. not included under NEW CASES or PREVIOUSLY TREATED CASES).

Data can be downloaded from www.who.int/tb/data

TABLE A2.8 **New smear-positive case notification by age and sex, 1995–2009**

		MALE								FEMALE								
	YEAR	0–14	15–24	25–34	35–44	45–54	55–64	65+	UN-KNOWN	0–14	15–24	25–34	35–44	45–54	55–64	65+	UN-KNOWN	MALE/FEMALE RATIO
Bangladesh	1995	29	505	983	1 001	748	648	424		64	309	546	360	236	132	38		2.6
	2000	256	3 640	5 643	5 750	4 718	3 667	2 837		495	3 029	3 238	2 247	1 315	778	370		2.3
	2005	524	8 170	10 443	11 423	11 038	8 476	7 453		751	6 776	6 785	5 538	3 960	2 281	1 230		2.1
	2009																	–
Bhutan	1995	2	42	65	36	35	24	11		12	43	44	25	12	9	8		1.4
	2000	6	65	41	30	24	12	2		7	57	34	31	23	3	2		1.1
	2005	1	47	58	26	23	14	12		9	45	38	13	11	9	2		1.4
	2009	10	74	53	19	19	21	24	0	22	92	44	27	12	9	8	0	1.0
Democratic	1995																	–
People's Republic	2000	293	928	1 508	2 927	2 519	1 167	651		167	683	1 121	2 004	1 524	591	357		1.6
of Korea	2005	167	1 409	2 422	2 688	2 040	1 185	485		166	1 127	1 756	1 890	1 381	764	336		1.4
	2009	364	2 359	3 607	4 211	3 927	2 879	1 061		474	1 408	2 067	2 660	2 370	1 479	500		1.7
India	1995	16	334	391	287	216	123	68		32	179	169	80	49	30	11		2.6
	2000	1 588	20 963	31 090	30 829	24 230	15 308	8 534		2 250	14 495	17 287	11 768	7 516	4 594	2 697		2.2
	2005	3 185	62 620	74 678	76 870	64 843	43 038	24 726		6 292	45 136	45 629	28 577	17 042	10 513	5 408		2.2
	2009	5 001	78 177	84 003	90 830	80 097	59 163	37 419		8 576	51 945	49 747	33 754	22 032	14 929	8 944		2.3
Indonesia	1995	6	203	297	306	302	228	109		16	160	244	282	192	90	33		1.4
	2000																	–
	2005	846	15 215	20 906	18 401	17 847	13 509	6 390		946	13 916	16 393	13 022	10 927	7 539	2 783		1.4
	2009	811	15 721	23 011	19 523	19 026	15 091	6 755		1 054	14 039	16 914	13 481	12 087	8 558	3 142		1.4
Maldives	1995	1	28	11	10	8	10	6		1	13	8	4	6	6	2		1.9
	2000	0	9	10	2	5	5	3		0	11	4	5	4	5	2		1.1
	2005	0	9	8	5	6	6	5		1	10	7	1	2	2	4		1.4
	2009		16	5	1	4		5			4	4	2	2	2			2.2
Myanmar	1995	42	713	1 423	1 401	977	677	298		58	535	729	729	450	343	154		1.8
	2000	88	1 459	2 636	2 781	2 161	1 235	836		72	1 040	1 592	1 397	987	592	378		1.8
	2005	132	3 401	5 877	5 888	4 585	2 557	1 764		147	2 376	3 047	2 563	2 101	1 218	885		2.0
	2009	127	3 259	6 371	6 633	5 319	3 435	2 248		165	2 559	3 298	2 745	2 463	1 679	1 100		2.0
Nepal	1995																	–
	2000	170	1 904	1 763	1 713	1 491	1 294	772		176	1 267	1 078	833	575	419	228		2.0
	2005	148	1 946	1 685	1 722	1 806	1 759	820		195	1 208	1 111	797	658	532	230		2.1
	2009	149	1 991	1 864	1 761	1 897	1 871	1 067		181	1 223	1 022	845	675	579	317		2.2
Sri Lanka	1995	10	163	361	519	521	365	261		15	207	206	142	122	81	56		2.7
	2000	25	266	459	695	793	484	360		23	312	264	176	202	144	113		2.5
	2005	9	341	520	724	918	657	424		19	295	261	189	200	154	130		2.9
	2009	10	328	576	703	860	689	414		24	244	241	172	186	163	144		3.0
Thailand	1995	59	1 191	2 936	2 948	2 434	2 607	2 346		52	741	888	782	936	1 175	1 178		2.5
	2000	27	859	2 570	2 380	2 117	1 908	2 213		32	624	1 035	780	873	1 016	1 321		2.1
	2005	44	1 344	3 814	4 393	4 003	2 831	3 407		57	907	1 662	1 334	1 367	1 259	1 938		2.3
	2009	43	1 348	3 484	4 692	4 921	3 597	4 282		80	1 137	2 032	1 781	1 633	1 493	2 287		2.1
Timor-Leste	1995																	–
	2000																	–
	2005	8	136	149	116	119	52	47		8	127	90	76	60	18	29		1.5
	2009	8	158	120	94	88	75	106	0	9	124	127	105	69	63	60	0	1.2

[a] Data presented as of 31 August 2010. Notification data for countries that are members of the European Union were not available.

TABLE A2.9 **Laboratories, NTP services, drug management, human resources and infection control, 2009**

	LABORATORIES					FREE THROUGH NTP		DRUG MANAGEMENT			% OF STAFF TRAINED BY THE NTP (IN 2009)[c]				TB NOTIFICATION RATE PER 100 000 HEALTH-CARE WORKERS
	SMEAR LABS PER 100K POPULATION	CULTURE LABS PER 5M POPULATION	DST LABS PER 10M POPULATION	SECOND-LINE DST AVAILABLE	NRL[a]	TB DIAGNOSIS	FIRST-LINE DRUGS	RIFAMPICIN USED THROUGHOUT TREATMENT	% OF PATIENTS TREATED WITH FDC[b]	PAEDIATRIC FORMULATIONS PROCURED	MEDICAL OFFICERS	NURSES	HEALTH ASSISTANTS	LABORATORY TECHNICIANS	
Bangladesh	0.6	<0.1	<0.1	No	Yes	Yes, all suspects	Yes	Yes	100	Yes	85	90	90	90	30
Bhutan				In and out of cty	Yes	If TB is confirmed	Yes	No	0	No	50	0	0	0	
Democratic People's Republic of Korea	1.2			No	Yes	Yes, all suspects	Yes	Yes	100	Yes					
India	1.1	<0.1	0.1	In country	Yes	Yes, all suspects	Yes	Yes	0	Yes	7		5	5	
Indonesia	4.2	0.9	0.2	In country	No	No	Yes	Yes	100	Yes	24	46		48	
Maldives	22.6	16.2	0	Out of country	Yes	If TB is confirmed	Yes	Yes	99	No	0	0	0	0	
Myanmar	0.8	0.2	0.4	No	Yes	Yes, all suspects	Yes	Yes	100	Yes	76	89	91	79	
Nepal	1.6	0.3	0.7	In country	Yes	Yes, all suspects	Yes	Yes	100	Yes	16	4	24	26	
Sri Lanka	0.8	0.2	0.5	Out of country	Yes	Yes, all suspects	Yes	Yes		Yes					
Thailand	1.6	4.7	2.2	In and out of cty	Yes	Yes, all suspects	Yes	Yes		No					
Timor-Leste	1.7	0	0	Out of country	Yes	Yes, all suspects	Yes	No	100	No	72	66	66	97	

a NRL = national reference laboratory
b FDC = fixed-dose combination
c NURSES (Registered Nurses, Registered Midwives, Enrolled Nurses, Enrolled Midwives); HEALTH ASSISTANTS (Medical Assistants, Clinical Officers); LABORATORY TECHNICIANS (Microscopists)

Western Pacific Region

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Estimates of mortality, prevalence and incidence

Estimated values are shown as best estimates followed by lower and upper bounds. The lower and upper bounds are defined as the 2.5th and 97.5th centiles of outcome distributions produced in simulations. See ANNEX 1 for further details.

Estimated numbers are shown rounded to two significant figures. Estimated rates are shown rounded to three significant figures unless the value is under 100, in which case rates are shown rounded to two significant figures.

Estimates for all years are recalculated as new information becomes available and techniques are refined, so they may differ from those published in previous reports in this series. Estimates published in previous global TB control reports should no longer be used.

Graphs

Graphs where displayed show data from all years within the range stated.

Data source

Data shown in this annex are taken from the WHO global TB database on 31 August 2010. Data shown in the main part of the report were taken from the database on 17 June 2010. As a result, data in this annex may differ slightly from those in the main part of the report.

Data can be downloaded from www.who.int/tb/data.

Country notes

China

China completed a survey of the prevalence of TB disease in 2010. A reassessment of the epidemiological burden of TB will be undertaken following finalization and dissemination of survey results.

Papua New Guinea

Estimates of incidence, prevalence and mortality as well as the case detection rate are provisional, pending an in-depth and up-to-date analysis of surveillance and programmatic data with the NTP.

TABLE A2.1 **Estimates of the burden of disease caused by TB, 1990–2009**

			MORTALITY (EXCLUDING HIV)		PREVALENCE (INCLUDING HIV)		INCIDENCE (INCLUDING HIV)	
	YEAR	POPULATION (MILLIONS)	NUMBER (THOUSANDS)	RATE[a]	NUMBER (THOUSANDS)	RATE	NUMBER (THOUSANDS)	RATE
American Samoa	1990	<1	<0.01 (<0.01–<0.01)	3.7 (1.9–6.2)	0.017 (<0.01–0.03)	35 (14–63)	0.01 (<0.01–0.015)	21 (19–31)
	1995	<1	<0.01 (<0.01–<0.01)	2.8 (2–3.7)	0.012 (<0.01–0.019)	22 (10–36)	<0.01 (<0.01–<0.01)	11 (8.8–13)
	2000	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	6.5 (1.4–11)	<0.01 (<0.01–<0.01)	5.8 (5.2–7)
	2005	<1	<0.01 (<0.01–<0.01)	1.2 (<1–1.8)	<0.01 (<0.01–0.016)	15 (5.9–25)	<0.01 (<0.01–<0.01)	10 (9.6–12)
	2006	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	7.5 (1.7–13)	<0.01 (<0.01–<0.01)	6.8 (6.3–8.1)
	2007	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	5.6 (1.3–10)	<0.01 (<0.01–<0.01)	5 (4.6–6)
	2008	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	3.3 (2.6–3.9)
	2009	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	5.8 (1.3–10)	<0.01 (<0.01–<0.01)	2 (1.6–2.5)
Australia	1990	17	0.045 (0.032–0.065)	<1 (<1–<1)	1.8 (0.67–3.1)	10 (3.9–18)	1.3 (1–1.5)	7.4 (5.9–8.9)
	1995	18	0.039 (0.031–0.052)	<1 (<1–<1)	1.6 (0.53–2.7)	8.7 (2.9–15)	1.2 (1.1–1.4)	6.8 (5.9–7.7)
	2000	19	0.035 (0.032–0.039)	<1 (<1–<1)	1.5 (0.53–2.6)	8 (2.8–14)	1.2 (1–1.4)	6.3 (5.4–7.1)
	2005	20	0.036 (0.029–0.047)	<1 (<1–<1)	1.5 (0.46–2.5)	7.2 (2.2–12)	1.2 (1–1.4)	5.9 (5.1–6.7)
	2006	21	0.047 (0.043–0.052)	<1 (<1–<1)	1.8 (0.65–2.9)	8.5 (3.1–14)	1.3 (1.2–1.5)	6.5 (5.6–7.3)
	2007	21	0.038 (0.031–0.05)	<1 (<1–<1)	1.6 (0.48–2.7)	7.5 (2.3–13)	1.3 (1.1–1.4)	6.1 (5.3–7)
	2008	21	0.045 (0.035–0.059)	<1 (<1–<1)	1.8 (0.64–3.1)	8.6 (3–15)	1.4 (1.2–1.6)	6.6 (5.8–7.5)
	2009	21	0.041 (0.033–0.054)	<1 (<1–<1)	1.7 (0.53–2.9)	7.9 (2.5–14)	1.4 (1.2–1.6)	6.4 (5.7–7.4)
Brunei Darussalam	1990	<1	<0.01 (<0.01–<0.01)	2.1 (1.6–3)	0.22 (0.067–0.4)	87 (26–154)	0.18 (0.14–0.21)	70 (56–83)
	1995	<1	<0.01 (<0.01–<0.01)	1.2 (1.1–1.2)	0.15 (0.033–0.27)	51 (11–90)	<0.01 (<0.01–<0.01)	<1 (<1–<1)
	2000	<1	0.016 (0.014–0.017)	4.7 (4.2–5.2)	0.51 (0.21–0.84)	152 (62–252)	0.35 (0.31–0.4)	106 (92–120)
	2005	<1	<0.01 (<0.01–<0.01)	1.4 (1.2–1.8)	0.22 (0.055–0.37)	58 (15–101)	0.19 (0.16–0.21)	51 (44–57)
	2006	<1	<0.01 (<0.01–0.01)	2 (1.6–2.7)	0.31 (0.12–0.53)	83 (31–140)	0.23 (0.2–0.26)	62 (54–70)
	2007	<1	<0.01 (<0.01–<0.01)	1.9 (1.5–2.5)	0.3 (0.095–0.52)	78 (25–134)	0.24 (0.21–0.27)	62 (54–70)
	2008	<1	<0.01 (<0.01–0.011)	2.1 (1.6–2.8)	0.33 (0.11–0.57)	85 (29–145)	0.26 (0.22–0.29)	65 (57–74)
	2009	<1	<0.01 (<0.01–0.01)	1.9 (1.5–2.6)	0.32 (0.098–0.55)	80 (25–138)	0.25 (0.23–0.3)	64 (57–74)
Cambodia	1990	10	17 (11–24)	175 (116–245)	120 (51–220)	1252 (531–2229)	56 (38–76)	574 (395–783)
	1995	11	15 (11–21)	136 (98–181)	120 (53–200)	1023 (465–1728)	60 (46–76)	529 (407–666)
	2000	13	15 (12–19)	118 (91–148)	120 (55–190)	911 (431–1478)	63 (52–74)	492 (408–583)
	2005	14	11 (8.6–15)	83 (62–106)	100 (49–170)	752 (351–1198)	64 (55–73)	461 (397–530)
	2006	14	11 (8.3–14)	79 (59–102)	100 (48–160)	732 (342–1164)	64 (55–74)	456 (393–524)
	2007	14	11 (8–14)	76 (56–101)	100 (48–160)	719 (332–1147)	65 (55–74)	451 (387–519)
	2008	15	11 (7.6–14)	72 (52–96)	100 (47–160)	697 (324–1112)	65 (56–75)	446 (383–515)
	2009	15	10 (7.4–14)	71 (50–95)	100 (47–170)	693 (314–1115)	65 (56–76)	442 (376–511)
China	1990	1 142	430 (310–570)	38 (27–50)	3200 (1400–5400)	280 (126–476)	1500 (1100–1900)	130 (98–165)
	1995	1 211	370 (270–490)	30 (22–40)	2900 (1300–4800)	237 (109–393)	1400 (1100–1700)	117 (92–144)
	2000	1 267	350 (260–440)	27 (21–35)	2700 (1300–4400)	214 (99–351)	1300 (1100–1600)	107 (87–128)
	2005	1 312	190 (130–270)	15 (9.7–21)	2000 (880–3300)	154 (67–252)	1300 (1100–1500)	99 (84–116)
	2006	1 321	170 (110–250)	13 (8.1–19)	1900 (800–3200)	145 (60–240)	1300 (1100–1500)	98 (84–114)
	2007	1 329	160 (100–230)	12 (7.6–18)	1900 (770–3100)	141 (58–232)	1300 (1100–1500)	98 (84–112)
	2008	1 337	160 (100–230)	12 (7.5–17)	1900 (750–3100)	139 (56–228)	1300 (1100–1500)	97 (84–111)
	2009	1 346	150 (100–220)	11 (7.4–17)	1800 (750–3000)	137 (56–225)	1300 (1100–1500)	96 (83–109)
China, Hong Kong SAR	1990	6	0.5 (0.35–0.73)	8.8 (6.2–13)	11 (4.1–20)	201 (72–354)	8.1 (6.5–9.8)	143 (114–171)
	1995	6	0.38 (0.31–0.51)	6.1 (4.9–8.2)	9 (2.8–15)	144 (46–248)	7.1 (6.2–8.1)	115 (100–130)
	2000	7	0.37 (0.3–0.49)	5.5 (4.5–7.4)	8.7 (2.8–15)	131 (42–224)	6.9 (6–7.8)	104 (90–117)
	2005	7	0.36 (0.28–0.47)	5.2 (4.1–6.9)	8.4 (2.8–14)	122 (41–207)	6.5 (5.7–7.4)	95 (82–107)
	2006	7	0.35 (0.28–0.47)	5 (4–6.7)	8.1 (2.7–14)	118 (40–201)	6.4 (5.5–7.2)	92 (80–104)
	2007	7	0.33 (0.26–0.44)	4.7 (3.8–6.3)	7.7 (2.4–13)	111 (35–190)	6.2 (5.4–7)	89 (77–100)
	2008	7	0.36 (0.29–0.47)	5.2 (4.1–6.8)	8.4 (3–14)	121 (43–204)	6.4 (5.5–7.2)	91 (79–103)
	2009	7	0.29 (0.24–0.38)	4.1 (3.5–5.4)	6.9 (2–12)	98 (28–169)	5.8 (5.2–6.7)	82 (73–96)
China, Macao SAR	1990	<1	0.027 (0.019–0.039)	7.1 (5–10)	0.61 (0.22–1.1)	163 (59–287)	0.43 (0.34–0.51)	115 (92–138)
	1995	<1	0.022 (0.021–0.023)	5.3 (5–5.5)	0.53 (0.12–0.94)	129 (29–229)	0.46 (0.4–0.52)	112 (98–127)
	2000	<1	0.028 (0.022–0.037)	6.3 (5.1–8.5)	0.66 (0.21–1.1)	149 (49–256)	0.52 (0.45–0.58)	117 (102–132)
	2005	<1	0.023 (0.018–0.03)	4.7 (3.7–6.2)	0.54 (0.19–0.91)	110 (39–186)	0.41 (0.36–0.46)	84 (73–95)
	2006	<1	0.025 (0.019–0.032)	4.9 (3.9–6.4)	0.57 (0.21–0.96)	114 (41–191)	0.43 (0.37–0.49)	86 (75–97)
	2007	<1	0.02 (0.017–0.026)	3.9 (3.2–5.1)	0.48 (0.15–0.82)	94 (28–160)	0.39 (0.34–0.44)	77 (67–87)
	2008	<1	0.024 (0.019–0.031)	4.6 (3.6–5.9)	0.56 (0.21–0.93)	106 (40–177)	0.41 (0.36–0.47)	78 (68–89)
	2009	<1	0.016 (0.015–0.021)	3 (2.7–3.9)	0.39 (0.092–0.68)	72 (17–126)	0.34 (0.31–0.4)	64 (57–74)
Cook Islands	1990	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	3.1 (<1–5.5)	<0.01 (<0.01–<0.01)	<1 (<1–<1)
	1995	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	14 (3.1–25)	<0.01 (<0.01–<0.01)	12 (11–15)
	2000	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	13 (2.8–22)	<0.01 (<0.01–<0.01)	7 (5.7–8.3)
	2005	<1	<0.01 (<0.01–<0.01)	1.2 (<1–1.9)	<0.01 (<0.01–<0.01)	13 (5.2–21)	<0.01 (<0.01–<0.01)	7.9 (6.4–9.5)
	2006	<1	<0.01 (<0.01–<0.01)	1.3 (<1–2)	<0.01 (<0.01–<0.01)	13 (5.6–22)	<0.01 (<0.01–<0.01)	8.1 (6.5–9.8)
	2007	<1	<0.01 (<0.01–<0.01)	3.2 (2.1–4.4)	<0.01 (<0.01–<0.01)	28 (12–46)	<0.01 (<0.01–<0.01)	15 (12–18)
	2008	<1	<0.01 (<0.01–<0.01)	3.4 (2.2–4.6)	0.019 (<0.01–0.033)	95 (21–168)	<0.01 (<0.01–<0.01)	20 (16–24)
	2009	<1	<0.01 (<0.01–<0.01)	3.4 (2.2–4.6)	0.019 (<0.01–0.033)	94 (21–168)	<0.01 (<0.01–<0.01)	27 (22–33)
Fiji	1990	<1	0.058 (0.02–0.12)	8 (2.7–17)	0.58 (0.2–1.2)	81 (27–163)	0.37 (0.23–0.53)	51 (31–73)
	1995	<1	0.041 (0.023–0.065)	5.4 (3–8.5)	0.45 (0.18–0.77)	59 (24–100)	0.3 (0.24–0.36)	39 (31–47)
	2000	<1	0.031 (0.017–0.051)	3.9 (2.2–6.4)	0.36 (0.14–0.61)	44 (17–76)	0.24 (0.19–0.29)	30 (24–36)
	2005	<1	0.028 (0.017–0.044)	3.4 (2–5.3)	0.3 (0.12–0.5)	36 (15–61)	0.19 (0.15–0.23)	23 (18–28)
	2006	<1	0.029 (0.018–0.043)	3.5 (2.2–5.2)	0.29 (0.13–0.49)	35 (15–59)	0.18 (0.15–0.22)	22 (17–26)
	2007	<1	0.029 (0.019–0.043)	3.5 (2.2–5.1)	0.28 (0.12–0.47)	34 (15–57)	0.17 (0.14–0.21)	21 (17–25)
	2008	<1	0.023 (0.013–0.036)	2.7 (1.6–4.3)	0.25 (0.1–0.42)	30 (12–50)	0.17 (0.13–0.2)	20 (16–24)
	2009	<1	0.017 (<0.01–0.03)	2 (1–3.6)	0.22 (0.079–0.38)	26 (9.3–45)	0.16 (0.13–0.19)	19 (15–22)
French Polynesia	1990	<1	<0.01 (<0.01–<0.01)	2.5 (1.7–3.5)	0.11 (0.043–0.19)	56 (22–97)	0.074 (0.059–0.089)	38 (30–45)
	1995	<1	<0.01 (<0.01–<0.01)	1.8 (1.7–1.9)	0.096 (0.021–0.17)	44 (9.9–79)	<0.01 (<0.01–<0.01)	<1 (<1–<1)
	2000	<1	<0.01 (<0.01–<0.01)	1.4 (1.3–1.4)	0.08 (0.018–0.14)	34 (7.5–60)	0.071 (0.062–0.081)	30 (26–34)
	2005	<1	<0.01 (<0.01–<0.01)	1.5 (1.2–2)	0.092 (0.029–0.16)	36 (12–62)	0.072 (0.063–0.082)	28 (25–32)
	2006	<1	<0.01 (<0.01–<0.01)	1.8 (1.4–2.3)	0.11 (0.039–0.18)	41 (15–69)	0.079 (0.069–0.09)	31 (27–35)
	2007	<1	<0.01 (<0.01–<0.01)	1.6 (1.3–2.1)	0.098 (0.036–0.17)	38 (14–63)	0.074 (0.064–0.083)	28 (24–32)
	2008	<1	<0.01 (<0.01–<0.01)	1 (<1–1.3)	0.066 (0.016–0.11)	25 (6.1–43)	0.058 (0.05–0.065)	22 (19–24)
	2009	<1	<0.01 (<0.01–<0.01)	1.2 (<1–1.6)	0.076 (0.024–0.13)	28 (9.1–48)	0.059 (0.053–0.069)	22 (20–26)
Guam	1990	<1	<0.01 (<0.01–<0.01)	3.4 (3.2–3.5)	0.11 (0.025–0.2)	82 (18–147)	<0.01 (<0.01–<0.01)	<1 (<1–<1)
	1995	<1	<0.01 (<0.01–<0.01)	3.1 (2.9–3.2)	0.11 (0.024–0.19)	75 (17–133)	<0.01 (<0.01–<0.01)	<1 (<1–<1)
	2000	<1	<0.01 (<0.01–<0.01)	2 (1.7–2.7)	0.075 (0.021–0.13)	48 (14–83)	0.062 (0.054–0.07)	40 (35–45)
	2005	<1	<0.01 (<0.01–<0.01)	2.8 (2.2–3.6)	0.11 (0.045–0.18)	64 (27–104)	0.072 (0.063–0.082)	43 (37–49)
	2006	<1	<0.01 (<0.01–<0.01)	1.4 (1.3–1.5)	0.059 (0.013–0.1)	34 (7.6–61)	0.051 (0.044–0.057)	30 (26–33)
	2007	<1	<0.01 (<0.01–<0.01)	1.6 (1.5–1.7)	0.068 (0.015–0.12)	39 (8.7–70)	0.061 (0.053–0.069)	35 (31–40)
	2008	<1	<0.01 (<0.01–<0.01)	3.4 (2.7–4.5)	0.14 (0.054–0.23)	80 (31–132)	0.1 (0.089–0.12)	58 (51–66)
	2009	<1	<0.01 (<0.01–<0.01)	3.7 (2.8–4.9)	0.15 (0.053–0.26)	85 (30–144)	0.11 (0.1–0.13)	64 (57–75)
Japan	1990	123	5 (3.5–7.3)	4.1 (2.9–5.9)	90 (32–160)	73 (26–129)	65 (52–78)	53 (42–63)
	1995	125	3.4 (2.7–4.5)	2.7 (2.2–3.6)	63 (21–110)	50 (17–86)	50 (43–56)	39 (34–45)
	2000	127	2.8 (2.5–3.1)	2.2 (2–2.4)	59 (21–100)	47 (16–79)	45 (39–51)	36 (31–40)
	2005	127	2.3 (2.1–2.6)	1.8 (1.6–2)	40 (13–68)	31 (10–54)	31 (27–35)	25 (21–28)
	2006	127	2.3 (2.1–2.5)	1.8 (1.6–2)	37 (12–63)	29 (9.2–49)	29 (25–33)	23 (20–26)
	2007	127	2.2 (2–2.5)	1.8 (1.6–1.9)	37 (12–62)	29 (9.5–49)	28 (25–32)	22 (19–25)
	2008	127	2.3 (2–2.5)	1.8 (1.6–2)	35 (12–60)	28 (9.2–47)	28 (24–31)	22 (19–25)
	2009	127	1.8 (1.5–2.4)	1.4 (1.2–1.9)	34 (11–58)	27 (8.3–46)	27 (24–31)	21 (19–25)
Kiribati	1990	<1	0.11 (0.058–0.18)	153 (81–249)	0.81 (0.32–1.6)	1131 (442–2196)	0.37 (0.2–0.53)	513 (282–744)
	1995	<1	0.037 (0.018–0.069)	48 (23–90)	0.49 (0.17–0.87)	638 (220–1129)	0.36 (0.29–0.43)	464 (371–557)
	2000	<1	0.054 (0.032–0.083)	64 (38–99)	0.56 (0.23–0.95)	663 (279–1128)	0.35 (0.28–0.42)	420 (336–504)
	2005	<1	0.017 (<0.01–0.04)	19 (10–43)	0.4 (0.094–0.7)	434 (103–765)	0.35 (0.33–0.42)	380 (361–456)
	2006	<1	0.014 (<0.01–0.019)	15 (9.8–20)	0.38 (0.085–0.68)	410 (91–728)	0.35 (0.28–0.42)	372 (298–447)
	2007	<1	0.014 (<0.01–0.019)	15 (9.7–20)	0.38 (0.085–0.68)	405 (90–718)	0.35 (0.33–0.42)	365 (351–438)
	2008	<1	0.024 (0.013–0.043)	24 (13–44)	0.42 (0.12–0.73)	438 (128–755)	0.35 (0.34–0.41)	358 (347–429)
	2009	<1	0.012 (<0.01–0.037)	12 (4.2–37)	0.28 (0.094–0.53)	289 (96–538)	0.34 (0.31–0.38)	351 (312–391)

[a] Rates are per 100 000 population.

TABLE A2.1 **Estimates of the burden of disease caused by TB, 1990–2009**

			MORTALITY (EXCLUDING HIV)		PREVALENCE (INCLUDING HIV)		INCIDENCE (INCLUDING HIV)	
	YEAR	POPULATION (MILLIONS)	NUMBER (THOUSANDS)	RATE[a]	NUMBER (THOUSANDS)	RATE	NUMBER (THOUSANDS)	RATE
Lao People's Democratic Republic	1990	4	0.75 (0.4–1.2)	18 (9.6–29)	6.6 (2.8–12)	158 (66–286)	3.7 (2.6–5)	88 (62–118)
	1995	5	1.2 (0.79–1.6)	24 (16–33)	8.7 (3.9–15)	181 (81–313)	4.1 (3.1–5.3)	86 (64–111)
	2000	5	0.93 (0.59–1.4)	17 (11–25)	8.2 (3.6–14)	152 (67–259)	4.6 (3.6–5.8)	85 (66–107)
	2005	6	0.68 (0.37–1.1)	12 (6.4–19)	7.6 (3–13)	129 (51–222)	5.1 (4.1–6.2)	87 (69–106)
	2006	6	0.63 (0.34–1.1)	11 (5.6–18)	7.5 (2.9–13)	126 (48–218)	5.2 (4.2–6.3)	87 (70–106)
	2007	6	0.65 (0.35–1.1)	11 (5.7–18)	7.7 (3–13)	126 (49–217)	5.3 (4.3–6.5)	88 (71–106)
	2008	6	0.71 (0.4–1.1)	11 (6.5–18)	8 (3.3–14)	129 (53–220)	5.5 (4.4–6.6)	88 (72–107)
	2009	6	0.74 (0.42–1.2)	12 (6.7–19)	8.3 (3.4–14)	131 (54–221)	5.6 (4.6–6.8)	89 (72–107)
Malaysia	1990	18	4.7 (3.8–5.8)	26 (21–32)	41 (19–65)	227 (107–356)	23 (20–26)	127 (112–142)
	1995	21	4 (3.2–4.9)	19 (16–24)	37 (17–58)	179 (84–280)	22 (20–25)	108 (97–120)
	2000	23	3 (2.3–3.8)	13 (9.7–16)	32 (14–50)	137 (62–216)	22 (20–24)	95 (86–104)
	2005	26	2.8 (2.1–3.5)	11 (8.4–14)	31 (14–49)	121 (55–190)	22 (20–24)	86 (78–94)
	2006	26	2.7 (2.1–3.4)	10 (8–13)	31 (14–49)	118 (52–187)	22 (20–24)	85 (77–93)
	2007	27	2.5 (1.9–3.2)	9.6 (7.3–12)	30 (13–48)	114 (50–180)	22 (20–24)	84 (77–92)
	2008	27	2.5 (1.8–3.2)	9.1 (6.8–12)	30 (13–47)	111 (48–176)	22 (21–25)	83 (76–91)
	2009	27	2.4 (1.8–3.1)	8.8 (6.5–11)	30 (13–48)	110 (47–175)	23 (21–25)	83 (75–90)
Marshall Islands	1990	<1	0.053 (0.032–0.079)	111 (67–167)	0.36 (0.13–0.68)	755 (275–1445)	0.14 (0.079–0.21)	302 (166–438)
	1995	<1	0.031 (0.022–0.043)	61 (43–84)	0.26 (0.12–0.43)	515 (235–851)	0.14 (0.11–0.17)	274 (219–328)
	2000	<1	0.033 (0.025–0.044)	64 (47–84)	0.26 (0.12–0.43)	501 (231–828)	0.13 (0.1–0.15)	248 (198–297)
	2005	<1	<0.01 (<0.01–0.015)	12 (6.4–26)	0.15 (0.036–0.26)	259 (63–460)	0.13 (0.11–0.15)	224 (196–269)
	2006	<1	<0.01 (<0.01–<0.01)	9.3 (6.1–12)	0.15 (0.033–0.26)	256 (57–456)	0.13 (0.1–0.15)	220 (176–263)
	2007	<1	<0.01 (<0.01–<0.01)	9.5 (6.2–13)	0.15 (0.034–0.27)	259 (58–463)	0.13 (0.1–0.15)	215 (172–258)
	2008	<1	<0.01 (<0.01–<0.01)	9.2 (6.1–12)	0.15 (0.034–0.27)	254 (56–450)	0.13 (0.13–0.15)	211 (206–253)
	2009	<1	<0.01 (<0.01–<0.01)	8.4 (5.5–11)	0.14 (0.033–0.25)	233 (53–410)	0.13 (0.11–0.14)	207 (184–230)
Micronesia (Federated States of)	1990	<1	0.014 (<0.01–0.019)	15 (9.7–20)	0.39 (0.087–0.69)	405 (90–719)	0.18 (0.1–0.26)	188 (104–273)
	1995	<1	<0.01 (<0.01–0.02)	8.9 (4.7–19)	0.19 (0.049–0.35)	182 (46–324)	0.17 (0.13–0.2)	155 (124–186)
	2000	<1	0.018 (0.01–0.03)	17 (9.4–28)	0.21 (0.082–0.35)	192 (76–330)	0.14 (0.11–0.16)	128 (102–153)
	2005	<1	<0.01 (<0.01–0.015)	6.7 (3.4–14)	0.14 (0.037–0.24)	126 (34–223)	0.11 (0.098–0.14)	105 (90–126)
	2006	<1	<0.01 (<0.01–<0.01)	4.1 (2.7–5.5)	0.12 (0.028–0.22)	113 (25–201)	0.11 (0.1–0.13)	101 (95–121)
	2007	<1	<0.01 (<0.01–<0.01)	4.9 (3.2–6.6)	0.15 (0.033–0.26)	135 (30–240)	0.11 (0.086–0.13)	97 (78–117)
	2008	<1	<0.01 (<0.01–<0.01)	5.4 (3.6–7.3)	0.16 (0.037–0.29)	149 (34–265)	0.1 (0.082–0.12)	93 (75–112)
	2009	<1	<0.01 (<0.01–<0.01)	5.6 (3.7–7.6)	0.17 (0.038–0.31)	155 (35–276)	0.099 (0.081–0.12)	90 (73–108)
Mongolia	1990	2	0.62 (0.51–0.75)	28 (23–34)	20 (9.2–33)	907 (415–1469)	9 (7.6–10)	405 (342–473)
	1995	2	0.38 (0.31–0.46)	17 (13–20)	14 (6.5–22)	608 (287–959)	7.1 (6.2–8.1)	314 (272–358)
	2000	2	0.26 (0.21–0.31)	11 (8.6–13)	10 (4.9–16)	439 (203–688)	6.1 (5.4–6.7)	254 (227–282)
	2005	3	0.12 (0.088–0.17)	4.9 (3.5–6.6)	7.7 (2.9–13)	301 (115–492)	5.7 (5.3–6.2)	225 (206–244)
	2006	3	0.12 (0.088–0.17)	4.8 (3.4–6.4)	7.7 (3–13)	297 (115–485)	5.7 (5.3–6.2)	222 (205–241)
	2007	3	0.13 (0.094–0.17)	5 (3.6–6.6)	7.8 (3.1–13)	300 (118–487)	5.8 (5.3–6.3)	222 (205–239)
	2008	3	0.15 (0.11–0.19)	5.7 (4.3–7.2)	8.3 (3.4–13)	314 (129–503)	5.9 (5.4–6.3)	222 (206–239)
	2009	3	0.16 (0.12–0.2)	6 (4.7–7.6)	8.6 (3.6–14)	323 (136–514)	6 (5.5–6.4)	224 (207–241)
Nauru	1990	<1	<0.01 (<0.01–<0.01)	6.1 (2.4–19)	<0.01 (<0.01–0.02)	105 (25–215)	<0.01 (<0.01–0.011)	85 (77–123)
	1995	<1	<0.01 (<0.01–<0.01)	41 (32–51)	0.029 (0.013–0.049)	296 (133–488)	0.013 (0.011–0.016)	132 (105–158)
	2000	<1	<0.01 (<0.01–<0.01)	6.5 (4.3–9.3)	<0.01 (<0.01–0.011)	69 (29–113)	<0.01 (<0.01–<0.01)	44 (40–53)
	2005	<1	<0.01 (<0.01–<0.01)	14 (8.1–21)	0.017 (<0.01–0.029)	171 (66–288)	0.012 (0.011–0.015)	121 (109–145)
	2006	<1	<0.01 (<0.01–<0.01)	20 (14–28)	0.021 (<0.01–0.035)	210 (92–342)	0.013 (0.012–0.016)	132 (118–158)
	2007	<1	<0.01 (<0.01–<0.01)	2.6 (1.7–3.5)	<0.01 (<0.01–0.013)	72 (16–128)	<0.01 (<0.01–<0.01)	33 (30–39)
	2008	<1	<0.01 (<0.01–<0.01)	1 (<1–1.4)	<0.01 (<0.01–<0.01)	29 (6.4–51)	<0.01 (<0.01–<0.01)	12 (9.3–14)
	2009	<1	<0.01 (<0.01–<0.01)	<1 (<1–1.3)	<0.01 (<0.01–<0.01)	27 (6–48)	<0.01 (<0.01–<0.01)	1.8 (1.2–2.6)
New Caledonia	1990	<1	0.011 (<0.01–0.016)	6.4 (4.5–9.4)	0.25 (0.09–0.44)	147 (53–260)	0.18 (0.14–0.21)	104 (84–125)
	1995	<1	<0.01 (<0.01–<0.01)	2.5 (2.2–3.2)	0.12 (0.03–0.2)	60 (15–104)	0.1 (0.087–0.11)	52 (45–59)
	2000	<1	<0.01 (<0.01–<0.01)	3.3 (2.6–4.2)	0.16 (0.068–0.26)	75 (32–123)	0.11 (0.094–0.12)	50 (44–57)
	2005	<1	<0.01 (<0.01–<0.01)	1.1 (<1–1.4)	0.062 (0.016–0.11)	26 (6.7–46)	0.054 (0.047–0.061)	23 (20–26)
	2006	<1	<0.01 (<0.01–<0.01)	1.3 (1–1.7)	0.072 (0.024–0.12)	30 (10–51)	0.055 (0.048–0.062)	23 (20–26)
	2007	<1	<0.01 (<0.01–<0.01)	1.2 (<1–1.7)	0.07 (0.024–0.12)	29 (9.9–49)	0.054 (0.047–0.061)	22 (19–25)
	2008	<1	<0.01 (<0.01–<0.01)	<1 (<1–1.3)	0.059 (0.015–0.1)	24 (6.2–42)	0.051 (0.044–0.057)	21 (18–23)
	2009	<1	<0.01 (<0.01–<0.01)	1.4 (1.1–1.9)	0.082 (0.03–0.14)	33 (12–55)	0.06 (0.054–0.07)	24 (22–28)
New Zealand	1990	3	0.011 (<0.01–0.016)	<1 (<1–<1)	0.61 (0.22–1.1)	18 (6.5–31)	0.44 (0.35–0.52)	13 (10–15)
	1995	4	0.011 (<0.01–0.014)	<1 (<1–<1)	0.61 (0.23–1)	17 (6.3–28)	0.45 (0.39–0.51)	12 (11–14)
	2000	4	0.012 (0.011–0.013)	<1 (<1–<1)	0.44 (0.1–0.77)	11 (2.7–20)	0.4 (0.34–0.45)	10 (8.9–12)
	2005	4	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0.46 (0.14–0.79)	11 (3.4–19)	0.38 (0.33–0.43)	9.3 (8.1–10)
	2006	4	0.011 (<0.01–0.012)	<1 (<1–<1)	0.54 (0.21–0.89)	13 (5–22)	0.4 (0.34–0.45)	9.5 (8.3–11)
	2007	4	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0.36 (0.092–0.63)	8.6 (2.2–15)	0.32 (0.27–0.36)	7.5 (6.5–8.5)
	2008	4	<0.01 (<0.01–0.01)	<1 (<1–<1)	0.43 (0.15–0.73)	10 (3.6–17)	0.34 (0.29–0.38)	7.9 (6.9–9)
	2009	4	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0.42 (0.13–0.71)	9.8 (3.1–17)	0.33 (0.3–0.39)	7.8 (7–9.1)
Niue	1990	<1	<0.01 (<0.01–<0.01)	22 (13–32)	<0.01 (<0.01–<0.01)	147 (54–282)	<0.01 (<0.01–<0.01)	59 (32–85)
	1995	<1	<0.01 (<0.01–<0.01)	2.5 (1.7–3.4)	<0.01 (<0.01–<0.01)	69 (16–123)	<0.01 (<0.01–<0.01)	53 (43–64)
	2000	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	19 (4.2–34)	<0.01 (<0.01–<0.01)	<1 (<1–<1)
	2005	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)
	2006	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)
	2007	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)
	2008	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)
	2009	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)
Northern Mariana Islands	1990	<1	<0.01 (<0.01–<0.01)	4.8 (3.4–7.1)	0.048 (0.017–0.086)	111 (38–196)	0.035 (0.028–0.042)	80 (64–96)
	1995	<1	<0.01 (<0.01–<0.01)	5.2 (4.1–7)	0.07 (0.023–0.12)	122 (40–209)	0.055 (0.048–0.062)	96 (83–108)
	2000	<1	<0.01 (<0.01–<0.01)	7.8 (6.1–10)	0.12 (0.049–0.2)	177 (70–293)	0.086 (0.075–0.098)	125 (109–141)
	2005	<1	<0.01 (<0.01–<0.01)	4.8 (3.7–6.2)	0.089 (0.033–0.15)	111 (41–185)	0.066 (0.057–0.074)	82 (71–92)
	2006	<1	<0.01 (<0.01–<0.01)	3.9 (3.1–5.3)	0.075 (0.025–0.13)	92 (31–157)	0.059 (0.051–0.066)	71 (62–81)
	2007	<1	<0.01 (<0.01–<0.01)	3.6 (2.8–4.6)	0.069 (0.026–0.12)	82 (31–138)	0.051 (0.044–0.057)	60 (53–68)
	2008	<1	<0.01 (<0.01–<0.01)	1.9 (1.9–2)	0.04 (<0.01–0.072)	47 (11–84)	0.032 (0.028–0.036)	38 (33–43)
	2009	<1	<0.01 (<0.01–<0.01)	3 (2.3–3.9)	0.06 (0.023–0.1)	69 (27–115)	0.043 (0.038–0.049)	49 (44–57)
Palau	1990	<1	<0.01 (<0.01–<0.01)	8.1 (5.4–11)	0.034 (<0.01–0.06)	225 (50–399)	<0.01 (<0.01–0.014)	64 (35–92)
	1995	<1	<0.01 (<0.01–<0.01)	5.2 (3.4–6.9)	0.024 (<0.01–0.043)	142 (32–252)	0.021 (0.019–0.025)	124 (111–149)
	2000	<1	<0.01 (<0.01–<0.01)	5.4 (3.5–7.2)	0.029 (<0.01–0.051)	148 (33–263)	0.01 (<0.01–0.012)	52 (42–63)
	2005	<1	<0.01 (<0.01–<0.01)	5.7 (3.2–9.3)	0.015 (<0.01–0.026)	76 (28–128)	0.011 (0.01–0.013)	55 (50–66)
	2006	<1	<0.01 (<0.01–<0.01)	6.4 (3.5–11)	0.018 (<0.01–0.031)	89 (32–152)	0.013 (0.012–0.016)	66 (59–79)
	2007	<1	<0.01 (<0.01–<0.01)	9.8 (6.8–13)	0.02 (<0.01–0.032)	97 (43–159)	0.012 (0.011–0.015)	60 (54–72)
	2008	<1	<0.01 (<0.01–<0.01)	7.1 (3.5–13)	0.018 (<0.01–0.031)	88 (32–155)	0.013 (0.01–0.015)	63 (50–75)
	2009	<1	<0.01 (<0.01–<0.01)	8.6 (4.6–14)	0.02 (<0.01–0.034)	96 (38–166)	0.013 (0.011–0.016)	65 (52–78)
Papua New Guinea	1990	4	2.9 (1.5–4.7)	69 (36–113)	22 (8.7–42)	524 (210–1009)	10 (5.7–15)	250 (137–362)
	1995	5	2.5 (1.7–3.4)	53 (37–72)	21 (9.8–35)	456 (207–752)	12 (9.4–14)	250 (200–299)
	2000	5	0.97 (0.48–1.9)	18 (8.8–36)	16 (4.9–29)	306 (91–539)	13 (11–16)	250 (200–299)
	2005	6	1.4 (0.69–2.7)	23 (11–43)	20 (6.9–35)	326 (112–569)	15 (13–18)	250 (205–299)
	2006	6	1.3 (0.64–2.5)	21 (10–40)	20 (6.6–35)	317 (105–557)	16 (13–19)	250 (201–299)
	2007	6	1.3 (0.72–2.2)	20 (11–34)	20 (6.8–34)	313 (107–533)	16 (15–19)	250 (234–299)
	2008	7	1.5 (0.73–2.6)	22 (11–40)	21 (7.2–37)	321 (109–556)	16 (14–20)	250 (213–299)
	2009	7	1.8 (0.97–2.9)	26 (14–43)	23 (8.6–39)	337 (127–574)	17 (14–20)	250 (209–294)
Philippines	1990	62	28 (14–43)	45 (23–68)	630 (480–800)	1003 (762–1280)	250 (140–360)	393 (216–570)
	1995	70	32 (20–43)	45 (29–62)	630 (480–800)	904 (687–1148)	250 (200–300)	360 (288–432)
	2000	78	33 (29–37)	43 (38–48)	600 (480–740)	775 (613–953)	260 (200–310)	329 (263–395)
	2005	85	33 (22–46)	38 (26–54)	540 (460–630)	633 (541–731)	260 (210–310)	301 (240–361)
	2006	87	32 (21–45)	37 (25–52)	530 (460–600)	605 (527–687)	260 (210–310)	295 (236–354)
	2007	89	32 (21–45)	36 (24–51)	510 (460–570)	576 (514–641)	260 (210–310)	290 (232–348)
	2008	90	32 (21–45)	36 (24–50)	490 (450–540)	548 (499–597)	260 (210–310)	285 (228–342)
	2009	92	32 (21–45)	34 (23–49)	480 (450–510)	520 (486–555)	260 (210–310)	280 (227–337)

[a] Rates are per 100 000 population.

TABLE A2.1 **Estimates of the burden of disease caused by TB, 1990–2009**

			MORTALITY (EXCLUDING HIV)		PREVALENCE (INCLUDING HIV)		INCIDENCE (INCLUDING HIV)	
	YEAR	POPULATION (MILLIONS)	NUMBER (THOUSANDS)	RATE[a]	NUMBER (THOUSANDS)	RATE	NUMBER (THOUSANDS)	RATE
Republic of Korea	1990	43	8.6 (6.1–12)	20 (14–29)	110 (43–200)	267 (101–463)	80 (64–96)	186 (149–223)
	1995	45	4.8 (3.8–6.2)	11 (8.5–14)	65 (24–110)	147 (54–245)	48 (42–55)	108 (94–123)
	2000	46	4.1 (3.6–4.7)	8.9 (7.8–10)	33 (7.5–59)	72 (16–128)	25 (22–28)	54 (47–61)
	2005	48	3.4 (3–3.8)	7.2 (6.3–8)	58 (21–98)	123 (44–206)	44 (38–50)	93 (80–105)
	2006	48	3.2 (2.8–3.6)	6.7 (5.9–7.5)	56 (18–95)	116 (39–198)	44 (38–49)	91 (79–103)
	2007	48	4 (3.2–5.4)	8.4 (6.7–11)	55 (19–94)	116 (39–197)	43 (38–49)	90 (78–102)
	2008	48	3.8 (3.1–5.1)	8 (6.4–11)	53 (17–91)	110 (35–189)	42 (37–48)	88 (77–99)
	2009	48	4 (3.2–5.4)	8.3 (6.6–11)	56 (18–95)	115 (38–197)	43 (39–50)	90 (80–104)
Samoa	1990	<1	<0.01 (<0.01–0.012)	2.8 (1–7.5)	0.067 (0.017–0.13)	41 (11–84)	0.051 (0.044–0.074)	32 (27–46)
	1995	<1	<0.01 (<0.01–<0.01)	2.2 (1.3–3.5)	0.058 (0.019–0.098)	35 (11–58)	0.046 (0.045–0.055)	27 (27–33)
	2000	<1	<0.01 (<0.01–<0.01)	2.7 (1.3–4.7)	0.058 (0.021–0.1)	33 (12–58)	0.041 (0.033–0.049)	23 (19–28)
	2005	<1	<0.01 (<0.01–<0.01)	2.3 (1.1–4.1)	0.051 (0.018–0.089)	28 (10–50)	0.036 (0.029–0.043)	20 (16–24)
	2006	<1	<0.01 (<0.01–<0.01)	2.7 (1.5–4.3)	0.053 (0.021–0.09)	29 (12–50)	0.035 (0.028–0.042)	19 (16–23)
	2007	<1	<0.01 (<0.01–<0.01)	3.5 (2.3–5.1)	0.058 (0.026–0.097)	33 (14–54)	0.034 (0.027–0.04)	19 (15–23)
	2008	<1	<0.01 (<0.01–0.01)	4.2 (2.9–5.6)	0.062 (0.029–0.1)	35 (16–57)	0.033 (0.026–0.039)	18 (15–22)
	2009	<1	<0.01 (<0.01–<0.01)	4 (2.8–5.4)	0.06 (0.027–0.098)	33 (15–55)	0.032 (0.026–0.038)	18 (14–21)
Singapore	1990	3	0.14 (0.1–0.21)	4.7 (3.5–6.8)	2.6 (0.84–4.6)	86 (28–152)	2 (1.6–2.4)	66 (53–79)
	1995	3	0.15 (0.12–0.2)	4.4 (3.5–5.8)	2.8 (1–4.8)	81 (29–137)	2.2 (1.9–2.5)	62 (54–71)
	2000	4	0.13 (0.11–0.14)	3.2 (2.7–3.6)	2.5 (0.9–4.3)	63 (22–107)	2 (1.7–2.2)	49 (43–56)
	2005	4	0.084 (0.073–0.095)	2 (1.7–2.2)	1.9 (0.66–3.3)	46 (15–78)	1.6 (1.4–1.8)	37 (32–41)
	2006	4	0.08 (0.069–0.09)	1.8 (1.6–2.1)	1.9 (0.6–3.2)	42 (14–72)	1.5 (1.3–1.7)	35 (30–39)
	2007	4	0.1 (0.082–0.13)	2.2 (1.8–3)	1.9 (0.6–3.2)	42 (13–72)	1.6 (1.4–1.8)	35 (30–39)
	2008	5	0.13 (0.099–0.16)	2.7 (2.1–3.5)	2.3 (0.87–3.9)	51 (19–85)	1.8 (1.5–2)	39 (34–44)
	2009	5	0.11 (0.089–0.14)	2.3 (1.9–3)	2 (0.63–3.5)	43 (13–74)	1.7 (1.5–2)	36 (32–42)
Solomon Islands	1990	<1	0.25 (0.12–0.43)	79 (37–139)	2 (0.77–3.9)	630 (244–1256)	0.98 (0.54–1.4)	312 (172–453)
	1995	<1	0.21 (0.16–0.28)	59 (43–78)	1.7 (0.79–2.8)	473 (219–779)	0.87 (0.7–1)	240 (192–288)
	2000	<1	0.19 (0.13–0.25)	45 (32–60)	1.5 (0.69–2.5)	362 (167–599)	0.77 (0.61–0.92)	185 (148–222)
	2005	<1	0.13 (0.083–0.18)	27 (18–38)	1.2 (0.52–1.9)	246 (110–410)	0.67 (0.54–0.81)	142 (114–170)
	2006	<1	0.11 (0.072–0.17)	23 (15–34)	1.1 (0.48–1.8)	225 (98–377)	0.65 (0.52–0.79)	135 (108–162)
	2007	<1	0.11 (0.067–0.16)	22 (14–32)	1.1 (0.45–1.8)	211 (91–356)	0.64 (0.51–0.76)	128 (102–153)
	2008	<1	0.1 (0.063–0.15)	20 (12–30)	1 (0.44–1.7)	197 (86–332)	0.62 (0.49–0.74)	121 (97–145)
	2009	<1	0.096 (0.058–0.14)	18 (11–28)	0.97 (0.41–1.6)	185 (79–313)	0.6 (0.49–0.72)	115 (93–138)
Tokelau	1990	<1	<0.01 (<0.01–<0.01)	5 (2–15)	<0.01 (<0.01–<0.01)	86 (20–175)	<0.01 (<0.01–<0.01)	69 (62–101)
	1995	<1	<0.01 (<0.01–<0.01)	41 (33–50)	<0.01 (<0.01–<0.01)	313 (147–504)	<0.01 (<0.01–<0.01)	150 (133–180)
	2000	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)
	2005	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)
	2006	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)
	2007	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)
	2008	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)
	2009	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)
Tonga	1990	<1	<0.01 (<0.01–<0.01)	5 (1.8–10)	0.05 (0.017–0.099)	53 (18–104)	0.032 (0.023–0.046)	34 (24–49)
	1995	<1	<0.01 (<0.01–<0.01)	4 (2.1–6.6)	0.044 (0.017–0.076)	45 (18–78)	0.03 (0.024–0.036)	31 (24–37)
	2000	<1	<0.01 (<0.01–<0.01)	3.7 (2.3–5.6)	0.041 (0.017–0.068)	42 (17–69)	0.027 (0.024–0.033)	28 (24–33)
	2005	<1	<0.01 (<0.01–<0.01)	4.1 (2.5–6.1)	0.041 (0.018–0.07)	41 (17–68)	0.025 (0.02–0.031)	25 (20–30)
	2006	<1	<0.01 (<0.01–<0.01)	2.7 (1.3–4.9)	0.035 (0.013–0.062)	35 (12–61)	0.025 (0.02–0.03)	25 (20–29)
	2007	<1	<0.01 (<0.01–<0.01)	3.1 (2.1–4.5)	0.037 (0.015–0.06)	36 (15–58)	0.025 (0.023–0.03)	24 (22–29)
	2008	<1	<0.01 (<0.01–<0.01)	4 (2.5–6)	0.04 (0.018–0.068)	39 (17–66)	0.024 (0.02–0.029)	24 (19–28)
	2009	<1	<0.01 (<0.01–<0.01)	5.2 (3.7–7)	0.045 (0.021–0.075)	44 (20–72)	0.024 (0.02–0.029)	23 (19–28)
Tuvalu	1990	<1	<0.01 (<0.01–<0.01)	12 (7.8–16)	0.029 (<0.01–0.052)	327 (73–580)	0.026 (0.023–0.038)	296 (258–430)
	1995	<1	<0.01 (<0.01–<0.01)	14 (9–19)	0.035 (<0.01–0.062)	380 (85–675)	0.023 (0.018–0.028)	250 (200–300)
	2000	<1	<0.01 (<0.01–<0.01)	25 (13–43)	0.029 (0.011–0.05)	302 (111–529)	0.02 (0.016–0.024)	211 (169–253)
	2005	<1	<0.01 (<0.01–<0.01)	12 (6–24)	0.021 (<0.01–0.038)	216 (60–384)	0.017 (0.014–0.021)	178 (142–214)
	2006	<1	<0.01 (<0.01–<0.01)	20 (10–35)	0.024 (<0.01–0.042)	245 (90–429)	0.017 (0.013–0.02)	172 (138–206)
	2007	<1	<0.01 (<0.01–<0.01)	12 (6.1–25)	0.02 (<0.01–0.036)	207 (60–367)	0.016 (0.013–0.02)	166 (133–200)
	2008	<1	<0.01 (<0.01–<0.01)	7.1 (4.7–9.7)	0.019 (<0.01–0.035)	196 (44–349)	0.016 (0.013–0.019)	161 (129–193)
	2009	<1	<0.01 (<0.01–<0.01)	7.1 (4.6–9.5)	0.019 (<0.01–0.034)	194 (43–345)	0.015 (0.013–0.019)	155 (126–187)
Vanuatu	1990	<1	0.017 (<0.01–0.047)	11 (4.2–32)	0.26 (0.067–0.54)	177 (45–360)	0.21 (0.14–0.3)	139 (94–201)
	1995	<1	0.035 (0.022–0.052)	20 (13–30)	0.34 (0.15–0.56)	195 (86–326)	0.2 (0.16–0.24)	117 (93–140)
	2000	<1	0.02 (<0.01–0.036)	11 (5.2–19)	0.26 (0.091–0.45)	136 (48–238)	0.19 (0.15–0.22)	98 (80–118)
	2005	<1	0.031 (0.02–0.046)	14 (9.1–21)	0.3 (0.13–0.5)	138 (60–233)	0.18 (0.14–0.21)	83 (66–99)
	2006	<1	0.03 (0.019–0.044)	14 (8.4–20)	0.29 (0.13–0.49)	132 (57–222)	0.18 (0.14–0.21)	80 (64–96)
	2007	<1	0.026 (0.015–0.041)	12 (6.8–18)	0.28 (0.11–0.47)	121 (50–206)	0.18 (0.14–0.21)	77 (62–92)
	2008	<1	0.025 (0.014–0.039)	11 (6.1–17)	0.27 (0.11–0.46)	114 (46–195)	0.17 (0.14–0.21)	74 (60–89)
	2009	<1	0.024 (0.014–0.038)	10 (5.8–16)	0.26 (0.11–0.45)	110 (44–187)	0.17 (0.14–0.21)	72 (58–87)
Viet Nam	1990	66	32 (21–46)	48 (31–70)	260 (120–450)	396 (177–682)	140 (110–180)	204 (168–279)
	1995	73	35 (22–50)	48 (30–69)	290 (130–490)	392 (176–673)	150 (120–200)	204 (168–279)
	2000	79	29 (16–46)	37 (21–59)	270 (120–480)	344 (147–605)	160 (130–220)	204 (168–278)
	2005	84	30 (17–47)	35 (20–56)	280 (120–490)	332 (140–582)	170 (140–230)	202 (166–275)
	2006	85	31 (18–49)	37 (21–58)	290 (120–510)	340 (145–597)	170 (140–240)	204 (168–279)
	2007	86	31 (17–49)	36 (20–57)	290 (120–500)	333 (144–582)	170 (140–240)	202 (166–276)
	2008	87	32 (18–50)	36 (20–57)	290 (120–510)	334 (143–587)	170 (140–240)	200 (165–274)
	2009	88	32 (18–50)	36 (21–56)	290 (130–510)	333 (143–577)	180 (130–230)	200 (150–256)
Wallis and Futuna Islands	1990	<1	<0.01 (<0.01–<0.01)	17 (11–23)	0.066 (0.015–0.12)	478 (105–848)	<0.01 (<0.01–0.013)	63 (35–91)
	1995	<1	<0.01 (<0.01–<0.01)	2.3 (1.5–3.1)	<0.01 (<0.01–0.016)	64 (14–114)	<0.01 (<0.01–<0.01)	47 (42–56)
	2000	<1	<0.01 (<0.01–<0.01)	19 (15–23)	0.019 (<0.01–0.032)	129 (54–215)	<0.01 (<0.01–<0.01)	52 (41–62)
	2005	<1	<0.01 (<0.01–<0.01)	3.4 (1.7–7)	<0.01 (<0.01–0.016)	62 (17–110)	<0.01 (<0.01–<0.01)	52 (47–62)
	2006	<1	<0.01 (<0.01–<0.01)	6.7 (3.9–10)	0.011 (<0.01–0.018)	71 (29–121)	<0.01 (<0.01–<0.01)	46 (37–55)
	2007	<1	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	17 (3.7–30)	<0.01 (<0.01–<0.01)	15 (13–17)
	2008	<1	<0.01 (<0.01–<0.01)	<1 (<1–1.3)	<0.01 (<0.01–<0.01)	26 (5.9–47)	<0.01 (<0.01–<0.01)	5.5 (4.4–6.6)
	2009	<1	<0.01 (<0.01–<0.01)	1.2 (<1–1.6)	<0.01 (<0.01–<0.01)	32 (7.2–57)	<0.01 (<0.01–<0.01)	1.2 (<1–1.5)

[a] Rates are per 100 000 population.

TABLE A2.2 **Incidence, notification and case detection rates, all forms, 1990–2009**

			INCIDENCE (INCLUDING HIV)		INCIDENCE HIV-POSITIVE		NOTIFIED NEW AND RELAPSE[a]	CASE DETECTION RATE[a]	
	YEAR	POPULATION (MILLIONS)	NUMBER (THOUSANDS)	RATE[b]	NUMBER (THOUSANDS)	RATE[b]	NUMBER	RATE[b]	PERCENT
American Samoa	1990	0	0.01 (<0.01–0.015)	21 (19–31)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	9	19	90 (62–100)
	1995	0	<0.01 (<0.01–<0.01)	11 (8.8–13)	<0.01 (<0.01–<0.01)	<1 (<1–<1)			–
	2000	0	<0.01 (<0.01–<0.01)	5.8 (5.2–7)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	3	5	89 (74–100)
	2005	0	<0.01 (<0.01–<0.01)	10 (9.6–12)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	6	10	92 (77–100)
	2006	0	<0.01 (<0.01–<0.01)	6.8 (6.3–8.1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	4	6	92 (77–100)
	2007	0	<0.01 (<0.01–<0.01)	5 (4.6–6)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	3	5	92 (77–100)
	2008	0	<0.01 (<0.01–<0.01)	3.3 (2.6–3.9)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	3	5	138 (115–173)
	2009	0	<0.01 (<0.01–<0.01)	2 (1.6–2.5)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	4	6	291 (238–364)
Australia	1990	17	1.3 (1–1.5)	7.4 (5.9–8.9)	0.018 (0.01–0.028)	<1 (<1–<1)	1 016	6	80 (67–100)
	1995	18	1.2 (1.1–1.4)	6.8 (5.9–7.7)	0.015 (<0.01–0.023)	<1 (<1–<1)	1 073	6	87 (77–100)
	2000	19	1.2 (1–1.4)	6.3 (5.4–7.1)	0.016 (0.01–0.024)	<1 (<1–<1)	1 043	5	87 (77–100)
	2005	20	1.2 (1–1.4)	5.9 (5.1–6.7)	0.02 (0.012–0.03)	<1 (<1–<1)	1 046	5	87 (77–100)
	2006	21	1.3 (1.2–1.5)	6.5 (5.6–7.3)	0.023 (0.014–0.034)	<1 (<1–<1)	1 159	6	87 (77–100)
	2007	21	1.3 (1.1–1.4)	6.1 (5.3–7)	0.023 (0.014–0.035)	<1 (<1–<1)	1 115	5	87 (77–100)
	2008	21	1.4 (1.2–1.6)	6.6 (5.8–7.5)	0.026 (0.016–0.039)	<1 (<1–<1)	1 213	6	87 (77–100)
	2009	21	1.4 (1.2–1.6)	6.4 (5.7–7.4)	0.026 (0.016–0.039)	<1 (<1–<1)	1 217	6	89 (77–100)
Brunei Darussalam	1990	0	0.18 (0.14–0.21)	70 (56–83)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	143	56	80 (67–100)
	1995	0	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)			–
	2000	0	0.35 (0.31–0.4)	106 (92–120)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	307	92	87 (77–100)
	2005	0	0.19 (0.16–0.21)	51 (44–57)	<0.01 (<0.01–<0.01)	<1 (<1–2.1)	163	44	87 (77–100)
	2006	0	0.23 (0.2–0.26)	62 (54–70)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	202	54	87 (77–100)
	2007	0	0.24 (0.21–0.27)	62 (54–70)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	207	54	87 (77–100)
	2008	0	0.26 (0.22–0.29)	65 (57–74)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	223	57	87 (77–100)
	2009	0	0.25 (0.23–0.3)	64 (57–74)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	213	53	84 (72–94)
Cambodia	1990	10	56 (38–76)	574 (395–783)	2.5 (0.98–4.9)	26 (10–51)	6 501	67	12 (9–17)
	1995	11	60 (46–76)	529 (407–666)	6.5 (3.9–9.8)	57 (34–86)	14 603	128	24 (19–32)
	2000	13	63 (52–74)	492 (408–583)	7 (4.6–10)	55 (36–78)	18 891	148	30 (25–36)
	2005	14	64 (55–73)	461 (397–530)	5.6 (3.6–8.1)	40 (26–58)	35 535	256	56 (48–65)
	2006	14	64 (55–74)	456 (393–524)	5.3 (3.4–7.8)	38 (24–55)	34 660	246	54 (47–63)
	2007	14	65 (55–74)	451 (387–519)	5.2 (3.6–7)	36 (25–49)	35 601	249	55 (48–64)
	2008	15	65 (56–75)	446 (383–515)	5.5 (4.7–6.4)	38 (32–44)	38 927	267	60 (52–70)
	2009	15	65 (56–76)	442 (376–511)	4.2 (2.9–5.7)	28 (20–38)	39 202	265	60 (52–70)
China	1990	1 142	1500 (1100–1900)	130 (98–165)	1.4 (0.41–3.1)	<1 (<1–<1)	375 481	33	25 (20–33)
	1995	1 211	1400 (1100–1700)	117 (92–144)	7.3 (3.2–13)	<1 (<1–1.1)	515 764	43	37 (30–46)
	2000	1 267	1300 (1100–1600)	107 (87–128)	14 (7.8–21)	1.1 (<1–1.7)	454 372	36	34 (28–41)
	2005	1 312	1300 (1100–1500)	99 (84–116)	17 (10–26)	1.3 (<1–2)	894 428	68	69 (59–81)
	2006	1 321	1300 (1100–1500)	98 (84–114)	18 (11–27)	1.4 (<1–2)	940 889	71	72 (62–85)
	2007	1 329	1300 (1100–1500)	98 (84–112)	18 (11–28)	1.4 (<1–2.1)	979 502	74	76 (66–88)
	2008	1 337	1300 (1100–1500)	97 (84–111)	19 (11–28)	1.4 (<1–2.1)	975 821	73	75 (66–87)
	2009	1 346	1300 (1100–1500)	96 (83–109)	19 (12–29)	1.4 (<1–2.1)	965 257	72	75 (66–86)
China, Hong Kong SAR	1990	6	8.1 (6.5–9.8)	143 (114–171)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	6 510	114	80 (67–100)
	1995	6	7.1 (6.2–8.1)	115 (100–130)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	6 212	100	87 (77–100)
	2000	7	6.9 (6–7.8)	104 (90–117)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	6 015	90	87 (77–100)
	2005	7	6.5 (5.7–7.4)	95 (82–107)	0.04 (0.027–0.056)	<1 (<1–<1)	5 660	82	87 (77–100)
	2006	7	6.4 (5.5–7.2)	92 (80–104)	0.038 (0.025–0.054)	<1 (<1–<1)	5 536	80	87 (77–100)
	2007	7	6.2 (5.4–7)	89 (77–100)	0.036 (0.026–0.049)	<1 (<1–<1)	5 363	77	87 (77–100)
	2008	7	6.4 (5.5–7.2)	91 (79–103)	0.032 (<0.01–0.077)	<1 (<1–1.1)	5 544	79	87 (77–100)
	2009	7	5.8 (5.2–6.7)	82 (73–96)	0.045 (0.031–0.062)	<1 (<1–<1)	5 160	73	89 (77–100)
China, Macao SAR	1990	0	0.43 (0.34–0.51)	115 (92–138)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	343	92	80 (67–100)
	1995	0	0.46 (0.4–0.52)	112 (98–127)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	402	98	87 (77–100)
	2000	0	0.52 (0.45–0.58)	117 (102–132)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	449	102	87 (77–100)
	2005	0	0.41 (0.36–0.46)	84 (73–95)	<0.01 (<0.01–<0.01)	<1 (<1–1.2)	355	73	87 (77–100)
	2006	0	0.43 (0.37–0.49)	86 (75–97)	<0.01 (<0.01–0.011)	<1 (<1–2.2)	374	75	87 (77–100)
	2007	1	0.39 (0.34–0.44)	77 (67–87)	<0.01 (<0.01–0.011)	<1 (<1–2.1)	342	67	87 (77–100)
	2008	1	0.41 (0.36–0.47)	78 (68–89)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	359	68	87 (77–100)
	2009	1	0.34 (0.31–0.4)	64 (57–74)	<0.01 (<0.01–<0.01)	<1 (<1–1)	308	57	89 (77–100)
Cook Islands	1990	0	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0	<1	–
	1995	0	<0.01 (<0.01–<0.01)	12 (11–15)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	2	11	88 (73–100)
	2000	0	<0.01 (<0.01–<0.01)	7 (5.7–8.3)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	1	6	82 (68–100)
	2005	0	<0.01 (<0.01–<0.01)	7.9 (6.4–9.5)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	1	5	66 (55–82)
	2006	0	<0.01 (<0.01–<0.01)	8.1 (6.5–9.8)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	1	5	63 (53–79)
	2007	0	<0.01 (<0.01–<0.01)	15 (12–18)	<0.01 (<0.01–<0.01)	<1 (<1–<1)			–
	2008	0	<0.01 (<0.01–<0.01)	20 (16–24)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	2	10	50 (42–63)
	2009	0	<0.01 (<0.01–<0.01)	27 (22–33)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	1	5	19 (15–23)
Fiji	1990	1	0.37 (0.23–0.53)	51 (31–73)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	226	31	62 (43–100)
	1995	1	0.3 (0.24–0.36)	39 (31–47)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	203	26	68 (57–85)
	2000	1	0.24 (0.19–0.29)	30 (24–36)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	144	18	60 (50–75)
	2005	1	0.19 (0.15–0.23)	23 (18–28)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	132	16	69 (58–87)
	2006	1	0.18 (0.15–0.22)	22 (17–26)	<0.01 (<0.01–0.013)	<1 (<1–1.5)	114	14	63 (52–78)
	2007	1	0.17 (0.14–0.21)	21 (17–25)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	94	11	54 (45–68)
	2008	1	0.17 (0.13–0.2)	20 (16–24)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	106	13	64 (53–80)
	2009	1	0.16 (0.13–0.19)	19 (15–22)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	144	17	91 (76–112)
French Polynesia	1990	0	0.074 (0.059–0.089)	38 (30–45)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	59	30	80 (67–100)
	1995	0	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)			–
	2000	0	0.071 (0.062–0.081)	30 (26–34)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	62	26	87 (77–100)
	2005	0	0.072 (0.063–0.082)	28 (25–32)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	63	25	87 (77–100)
	2006	0	0.079 (0.069–0.09)	31 (27–35)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	69	27	87 (77–100)
	2007	0	0.074 (0.064–0.083)	28 (24–32)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	64	24	87 (77–100)
	2008	0	0.058 (0.05–0.065)	22 (19–24)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	50	19	87 (77–100)
	2009	0	0.059 (0.053–0.069)	22 (20–26)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	53	20	89 (77–100)
Guam	1990	0	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)			–
	1995	0	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)			–
	2000	0	0.062 (0.054–0.07)	40 (35–45)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	54	35	87 (77–100)
	2005	0	0.072 (0.063–0.082)	43 (37–49)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	63	37	87 (77–100)
	2006	0	0.051 (0.044–0.057)	30 (26–33)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	44	26	87 (77–100)
	2007	0	0.061 (0.053–0.069)	35 (31–40)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	53	31	87 (77–100)
	2008	0	0.1 (0.089–0.12)	58 (51–66)	<0.01 (<0.01–<0.01)	1.3 (<1–4.2)	89	51	87 (77–100)
	2009	0	0.11 (0.1–0.13)	64 (57–75)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	102	57	89 (77–100)
Japan	1990	123	65 (52–78)	53 (42–63)	0.18 (0.097–0.29)	<1 (<1–<1)	51 821	42	80 (67–100)
	1995	125	50 (43–56)	39 (34–45)	0.14 (0.078–0.23)	<1 (<1–<1)	43 078	34	87 (77–100)
	2000	127	45 (39–51)	36 (31–40)	0.14 (0.077–0.21)	<1 (<1–<1)	39 384	31	87 (77–100)
	2005	127	31 (27–35)	25 (21–28)	0.11 (0.06–0.16)	<1 (<1–<1)	27 194	21	87 (77–100)
	2006	127	29 (25–33)	23 (20–26)	0.1 (0.057–0.16)	<1 (<1–<1)	25 304	20	87 (77–100)
	2007	127	28 (25–32)	22 (19–25)	0.066 (0.048–0.086)	<1 (<1–<1)	24 779	19	87 (77–100)
	2008	127	28 (24–31)	22 (19–25)	0.14 (0.096–0.18)	<1 (<1–<1)	24 181	19	87 (77–100)
	2009	127	27 (24–31)	21 (19–25)	0.1 (0.057–0.16)	<1 (<1–<1)	23 631	19	87 (75–98)
Kiribati	1990	0	0.37 (0.2–0.53)	513 (282–744)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	68	95	18 (13–34)
	1995	0	0.36 (0.29–0.43)	464 (371–557)	<0.01 (<0.01–<0.01)	<1 (<1–<1)			–
	2000	0	0.35 (0.28–0.42)	420 (336–504)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	252	300	71 (60–89)
	2005	0	0.35 (0.33–0.42)	380 (361–456)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	332	361	95 (79–100)
	2006	0	0.35 (0.28–0.42)	372 (298–447)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	378	404	108 (90–136)
	2007	0	0.35 (0.33–0.42)	365 (351–438)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	334	351	96 (80–100)
	2008	0	0.35 (0.34–0.41)	358 (347–429)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	335	347	97 (81–100)
	2009	0	0.34 (0.31–0.38)	351 (312–391)	0.18 (0.13–0.24)	187 (130–247)	278	284	81 (72–91)

[a] Where notification data from a country had not been received by 31 August, the notification rate was assumed to be the same as for 2008 (in *italics*).

[b] Rates are per 100 000 population.

TABLE A2.2 **Incidence, notification and case detection rates, all forms, 1990–2009**

			INCIDENCE (INCLUDING HIV)		INCIDENCE HIV-POSITIVE		NOTIFIED NEW AND RELAPSE[a]	CASE DETECTION RATE[a]	
	YEAR	POPULATION (MILLIONS)	NUMBER (THOUSANDS)	RATE[b]	NUMBER (THOUSANDS)	RATE[b]	NUMBER	RATE[b]	PERCENT
Lao People's Democratic Republic	1990	4	3.7 (2.6–5)	88 (62–118)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	1 826	43	49 (37–70)
	1995	5	4.1 (3.1–5.3)	86 (64–111)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	830	17	20 (16–27)
	2000	5	4.6 (3.6–5.8)	85 (66–107)	0.018 (<0.01–0.042)	<1 (<1–<1)	2 227	41	48 (39–62)
	2005	6	5.1 (4.1–6.2)	87 (69–106)	0.077 (0.039–0.13)	1.3 (<1–2.2)	3 777	64	74 (61–92)
	2006	6	5.2 (4.2–6.3)	87 (70–106)	0.099 (0.055–0.16)	1.6 (<1–2.6)	3 958	66	76 (62–94)
	2007	6	5.3 (4.3–6.5)	88 (71–106)	0.12 (0.074–0.19)	2 (1.2–3.1)	3 905	64	73 (60–90)
	2008	6	5.5 (4.4–6.6)	88 (72–107)	0.15 (0.088–0.23)	2.4 (1.4–3.7)	4 048	65	74 (61–91)
	2009	6	5.6 (4.6–6.8)	89 (72–107)	0.18 (0.1–0.27)	2.8 (1.6–4.3)	3 848	61	68 (57–84)
Malaysia	1990	18	23 (20–26)	127 (112–142)	0.34 (0.15–0.6)	1.9 (<1–3.3)	11 702	65	51 (45–58)
	1995	21	22 (20–25)	108 (97–120)	1.3 (0.86–1.8)	6.3 (4.2–8.9)	11 778	57	53 (48–59)
	2000	23	22 (20–24)	95 (86–104)	1.7 (1.2–2.4)	7.5 (5.2–10)	15 057	65	68 (62–76)
	2005	26	22 (20–24)	86 (78–94)	2.1 (1.9–2.3)	8.2 (7.4–9.1)	15 342	60	70 (64–76)
	2006	26	22 (20–24)	85 (77–93)	2 (1.8–2.2)	7.6 (6.9–8.4)	16 051	62	72 (66–79)
	2007	27	22 (20–24)	84 (77–92)	2.3 (2–2.5)	8.5 (7.7–9.3)	16 129	61	72 (66–79)
	2008	27	22 (21–25)	83 (76–91)	2.4 (2.2–2.6)	8.8 (8–9.7)	17 144	63	76 (70–84)
	2009	27	23 (21–25)	83 (75–90)	2.2 (1.9–2.4)	7.8 (7.1–8.6)	17 341	63	76 (70–84)
Marshall Islands	1990	0	0.14 (0.079–0.21)	302 (166–438)	<0.01 (<0.01–<0.01)	<1 (<1–<1)			–
	1995	0	0.14 (0.11–0.17)	274 (219–328)	<0.01 (<0.01–<0.01)	<1 (<1–<1)			–
	2000	0	0.13 (0.1–0.15)	248 (198–297)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	34	65	26 (22–33)
	2005	0	0.13 (0.11–0.15)	224 (196–269)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	111	196	87 (73–100)
	2006	0	0.13 (0.1–0.15)	220 (176–263)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	138	238	108 (90–136)
	2007	0	0.13 (0.1–0.15)	215 (172–258)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	158	267	124 (103–155)
	2008	0	0.13 (0.13–0.15)	211 (206–253)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	125	206	98 (81–100)
	2009	0	0.13 (0.11–0.14)	207 (184–230)	<0.01 (<0.01–<0.01)	3 (<1–9.9)	135	218	105 (95–118)
Micronesia (Federated States of)	1990	0	0.18 (0.1–0.26)	188 (104–273)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	367	381	202 (139–368)
	1995	0	0.17 (0.13–0.2)	155 (124–186)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	172	160	103 (86–129)
	2000	0	0.14 (0.11–0.16)	128 (102–153)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	91	85	67 (55–83)
	2005	0	0.11 (0.098–0.14)	105 (90–126)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	98	90	85 (71–100)
	2006	0	0.11 (0.1–0.13)	101 (95–121)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	104	95	94 (78–100)
	2007	0	0.11 (0.086–0.13)	97 (78–117)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	137	124	128 (107–160)
	2008	0	0.1 (0.082–0.12)	93 (75–112)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	164	149	159 (133–199)
	2009	0	0.099 (0.081–0.12)	90 (73–108)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	148	134	149 (123–183)
Mongolia	1990	2	9 (7.6–10)	405 (342–473)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	1 659	75	18 (16–22)
	1995	2	7.1 (6.2–8.1)	314 (272–358)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	2 780	122	39 (34–45)
	2000	2	6.1 (5.4–6.7)	254 (227–282)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	3 109	130	51 (46–57)
	2005	3	5.7 (5.3–6.2)	225 (206–244)	<0.01 (<0.01–0.01)	<1 (<1–<1)	4 601	180	80 (74–88)
	2006	3	5.7 (5.3–6.2)	222 (205–241)	<0.01 (<0.01–0.011)	<1 (<1–<1)	5 049	196	88 (81–95)
	2007	3	5.8 (5.3–6.3)	222 (205–239)	<0.01 (<0.01–0.012)	<1 (<1–<1)	4 654	178	80 (74–87)
	2008	3	5.9 (5.4–6.3)	222 (206–239)	<0.01 (<0.01–0.021)	<1 (<1–<1)	4 490	170	77 (71–83)
	2009	3	6 (5.5–6.4)	224 (207–241)	0.011 (<0.01–0.018)	<1 (<1–<1)	4 481	168	75 (70–81)
Nauru	1990	0	<0.01 (<0.01–0.011)	85 (77–123)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	7	77	90 (62–100)
	1995	0	0.013 (0.011–0.016)	132 (105–158)	<0.01 (<0.01–<0.01)	<1 (<1–<1)			–
	2000	0	<0.01 (<0.01–<0.01)	44 (40–53)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	4	40	90 (75–100)
	2005	0	0.012 (0.011–0.015)	121 (109–145)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	11	109	90 (75–100)
	2006	0	0.013 (0.012–0.016)	132 (118–158)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	12	118	90 (75–100)
	2007	0	<0.01 (<0.01–<0.01)	33 (30–39)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	3	30	90 (75–100)
	2008	0	<0.01 (<0.01–<0.01)	12 (9.3–14)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	5	49	423 (352–529)
	2009	0	<0.01 (<0.01–<0.01)	1.8 (1.2–2.6)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	*5*	*49*	*2670 (1923–4073)*
New Caledonia	1990	0	0.18 (0.14–0.21)	104 (84–125)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	143	84	80 (67–100)
	1995	0	0.1 (0.087–0.11)	52 (45–59)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	87	45	87 (77–100)
	2000	0	0.11 (0.094–0.12)	50 (44–57)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	94	44	87 (77–100)
	2005	0	0.054 (0.047–0.061)	23 (20–26)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	47	20	87 (77–100)
	2006	0	0.055 (0.048–0.062)	23 (20–26)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	48	20	87 (77–100)
	2007	0	0.054 (0.047–0.061)	22 (19–25)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	47	19	87 (77–100)
	2008	0	0.051 (0.044–0.057)	21 (18–23)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	44	18	87 (77–100)
	2009	0	0.06 (0.054–0.07)	24 (22–28)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	54	22	89 (77–100)
New Zealand	1990	3	0.44 (0.35–0.52)	13 (10–15)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	348	10	80 (67–100)
	1995	4	0.45 (0.39–0.51)	12 (11–14)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	391	11	87 (77–100)
	2000	4	0.4 (0.34–0.45)	10 (8.9–12)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	344	9	87 (77–100)
	2005	4	0.38 (0.33–0.43)	9.3 (8.1–10)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	332	8	87 (77–100)
	2006	4	0.4 (0.34–0.45)	9.5 (8.3–11)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	344	8	87 (77–100)
	2007	4	0.32 (0.27–0.36)	7.5 (6.5–8.5)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	274	7	87 (77–100)
	2008	4	0.34 (0.29–0.38)	7.9 (6.9–9)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	292	7	87 (77–100)
	2009	4	0.33 (0.3–0.39)	7.8 (7–9.1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	298	7	89 (77–100)
Niue	1990	0	<0.01 (<0.01–<0.01)	59 (32–85)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0	<1	0 (0–0)
	1995	0	<0.01 (<0.01–<0.01)	53 (43–64)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0	<1	0 (0–0)
	2000	0	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0	<1	–
	2005	0	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0	<1	–
	2006	0	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0	<1	–
	2007	0	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0	<1	–
	2008	0	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0	<1	–
	2009	0	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0	<1	–
Northern Mariana Islands	1990	0	0.035 (0.028–0.042)	80 (64–96)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	28	64	80 (67–100)
	1995	0	0.055 (0.048–0.062)	96 (83–108)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	48	83	87 (77–100)
	2000	0	0.086 (0.075–0.098)	125 (109–141)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	75	109	87 (77–100)
	2005	0	0.066 (0.057–0.074)	82 (71–92)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	57	71	87 (77–100)
	2006	0	0.059 (0.051–0.066)	71 (62–81)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	51	62	87 (77–100)
	2007	0	0.051 (0.044–0.057)	60 (53–68)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	44	53	87 (77–100)
	2008	0	0.032 (0.028–0.036)	38 (33–43)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	28	33	87 (77–100)
	2009	0	0.043 (0.038–0.049)	49 (44–57)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	38	44	89 (77–100)
Palau	1990	0	<0.01 (<0.01–0.014)	64 (35–92)	<0.01 (<0.01–<0.01)	<1 (<1–<1)			–
	1995	0	0.021 (0.019–0.025)	124 (111–149)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	19	111	90 (75–100)
	2000	0	0.01 (<0.01–0.012)	52 (42–63)	<0.01 (<0.01–<0.01)	<1 (<1–<1)			–
	2005	0	0.011 (0.01–0.013)	55 (50–66)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	10	50	90 (75–100)
	2006	0	0.013 (0.012–0.016)	66 (59–79)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	12	59	90 (75–100)
	2007	0	0.012 (0.011–0.015)	60 (54–72)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	11	54	90 (75–100)
	2008	0	0.013 (0.01–0.015)	63 (50–75)	<0.01 (<0.01–<0.01)	<1 (<1–<1)			–
	2009	0	0.013 (0.011–0.016)	65 (52–78)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	19	93	144 (119–178)
Papua New Guinea	1990	4	10 (5.7–15)	250 (137–362)	0.025 (<0.01–0.06)	<1 (<1–1.5)	2 497	60	24 (17–44)
	1995	5	12 (9.4–14)	250 (200–299)	0.068 (0.015–0.16)	1.5 (<1–3.4)	8 041	171	68 (57–86)
	2000	5	13 (11–16)	250 (200–299)	0.25 (0.14–0.4)	4.6 (2.6–7.4)	10 520	195	78 (65–98)
	2005	6	15 (13–18)	250 (205–299)	0.53 (0.36–0.73)	8.6 (5.9–12)	12 564	205	82 (69–100)
	2006	6	16 (13–19)	250 (201–299)	0.56 (0.39–0.78)	9 (6.2–12)	12 620	201	81 (67–100)
	2007	6	16 (15–19)	250 (234–299)	0.59 (0.43–0.8)	9.3 (6.6–12)	15 002	234	94 (78–100)
	2008	7	16 (14–20)	250 (213–299)	0.62 (0.43–0.86)	9.5 (6.6–13)	13 984	213	85 (71–100)
	2009	7	17 (14–20)	250 (209–294)	0.65 (0.46–0.89)	9.7 (6.8–13)	12 306	183	73 (62–88)
Philippines	1990	62	250 (140–360)	393 (216–570)	0.075 (<0.01–0.48)	<1 (<1–<1)	317 008	508	129 (89–235)
	1995	70	250 (200–300)	360 (288–432)	0.17 (<0.01–0.67)	<1 (<1–<1)	119 186	170	47 (39–59)
	2000	78	260 (200–310)	329 (263–395)	0.35 (0.13–0.7)	<1 (<1–<1)	119 914	154	47 (39–59)
	2005	85	260 (210–310)	301 (240–361)	0.67 (0.3–1.2)	<1 (<1–1.4)	137 100	160	53 (44–67)
	2006	87	260 (210–310)	295 (236–354)	0.78 (0.38–1.4)	<1 (<1–1.6)	147 305	169	57 (48–72)
	2007	89	260 (210–310)	290 (232–348)	0.9 (0.48–1.5)	1 (<1–1.6)	140 588	158	55 (46–68)
	2008	90	260 (210–310)	285 (228–342)	1 (0.57–1.7)	1.2 (<1–1.9)	139 603	155	54 (45–68)
	2009	92	260 (210–310)	280 (227–337)	1.2 (0.65–2)	1.4 (<1–2.2)	145 075	158	56 (47–69)

[a] Where notification data from a country had not been received by 31 August, the notification rate was assumed to be the same as for 2008 (in *italics*).
[b] Rates are per 100 000 population.

Data can be downloaded from www.who.int/tb/data

TABLE A2.2 **Incidence, notification and case detection rates, all forms, 1990–2009**

			INCIDENCE (INCLUDING HIV)		INCIDENCE HIV-POSITIVE		NOTIFIED NEW AND RELAPSE[a]	CASE DETECTION RATE[a]	
	YEAR	POPULATION (MILLIONS)	NUMBER (THOUSANDS)	RATE[b]	NUMBER (THOUSANDS)	RATE[b]	NUMBER	RATE[b]	PERCENT
Republic of Korea	1990	43	80 (64–96)	186 (149–223)	0.15 (0.048–0.3)	<1 (<1–<1)	63 904	149	80 (67–100)
	1995	45	48 (42–55)	108 (94–123)	0.11 (0.04–0.2)	<1 (<1–<1)	42 117	94	87 (77–100)
	2000	46	25 (22–28)	54 (47–61)	0.081 (0.045–0.13)	<1 (<1–<1)	21 782	47	87 (77–100)
	2005	48	44 (38–50)	93 (80–105)	0.25 (0.14–0.38)	<1 (<1–<1)	38 290	80	87 (77–100)
	2006	48	44 (38–49)	91 (79–103)	0.26 (0.15–0.4)	<1 (<1–<1)	37 861	79	87 (77–100)
	2007	48	43 (38–49)	90 (78–102)	0.26 (0.15–0.41)	<1 (<1–<1)	37 554	78	87 (77–100)
	2008	48	42 (37–48)	88 (77–99)	0.26 (0.15–0.4)	<1 (<1–<1)	36 847	77	87 (77–100)
	2009	48	43 (39–50)	90 (80–104)	0.27 (0.15–0.42)	<1 (<1–<1)	38 741	80	89 (77–100)
Samoa	1990	0	0.051 (0.044–0.074)	32 (27–46)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	44	27	86 (59–100)
	1995	0	0.046 (0.045–0.055)	27 (27–33)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	45	27	98 (82–100)
	2000	0	0.041 (0.033–0.049)	23 (19–28)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	43	24	104 (87–130)
	2005	0	0.036 (0.029–0.043)	20 (16–24)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	24	13	67 (56–84)
	2006	0	0.035 (0.028–0.042)	19 (16–23)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	25	14	72 (60–90)
	2007	0	0.034 (0.027–0.04)	19 (15–23)	<0.01 (<0.01–<0.01)	<1 (<1–<1)			–
	2008	0	0.033 (0.026–0.039)	18 (15–22)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	12	7	37 (31–46)
	2009	0	0.032 (0.026–0.038)	18 (14–21)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	16	9	51 (42–62)
Singapore	1990	3	2 (1.6–2.4)	66 (53–79)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	1 591	53	80 (67–100)
	1995	3	2.2 (1.9–2.5)	62 (54–71)	0.022 (<0.01–0.039)	<1 (<1–1.1)	1 889	54	87 (77–100)
	2000	4	2 (1.7–2.2)	49 (43–56)	0.063 (0.035–0.1)	1.6 (<1–2.5)	1 728	43	87 (77–100)
	2005	4	1.6 (1.4–1.8)	37 (32–41)	0.054 (0.033–0.079)	1.3 (<1–1.8)	1 356	32	87 (77–100)
	2006	4	1.5 (1.3–1.7)	35 (30–39)	0.052 (0.032–0.076)	1.2 (<1–1.7)	1 313	30	87 (77–100)
	2007	4	1.6 (1.4–1.8)	35 (30–39)	0.053 (0.033–0.078)	1.2 (<1–1.7)	1 359	30	87 (77–100)
	2008	5	1.8 (1.5–2)	39 (34–44)	0.061 (0.038–0.089)	1.3 (<1–1.9)	1 548	34	87 (77–100)
	2009	5	1.7 (1.5–2)	36 (32–42)	0.058 (0.042–0.077)	1.2 (<1–1.6)	1 525	32	89 (77–100)
Solomon Islands	1990	0	0.98 (0.54–1.4)	312 (172–453)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	382	122	39 (27–71)
	1995	0	0.87 (0.7–1)	240 (192–288)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	352	97	40 (34–51)
	2000	0	0.77 (0.61–0.92)	185 (148–222)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	302	73	39 (33–49)
	2005	0	0.67 (0.54–0.81)	142 (114–170)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	397	84	59 (49–74)
	2006	0	0.65 (0.52–0.79)	135 (108–162)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	371	76	57 (47–71)
	2007	0	0.64 (0.51–0.76)	128 (102–153)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	397	80	62 (52–78)
	2008	1	0.62 (0.49–0.74)	121 (97–145)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	387	76	63 (52–78)
	2009	1	0.6 (0.49–0.72)	115 (93–138)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	366	70	61 (51–75)
Tokelau	1990	0	<0.01 (<0.01–<0.01)	69 (62–101)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	1	62	90 (62–100)
	1995	0	<0.01 (<0.01–<0.01)	150 (133–180)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	2	133	89 (74–100)
	2000	0	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0	<1	–
	2005	0	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0	<1	–
	2006	0	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0	<1	–
	2007	0	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0	<1	–
	2008	0	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0	<1	–
	2009	0	<0.01 (<0.01–<0.01)	<1 (<1–<1)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	0	<1	–
Tonga	1990	0	0.032 (0.023–0.046)	34 (24–49)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	23	24	72 (50–100)
	1995	0	0.03 (0.024–0.036)	31 (24–37)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	20	21	67 (56–84)
	2000	0	0.027 (0.024–0.033)	28 (24–33)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	24	24	88 (73–100)
	2005	0	0.025 (0.02–0.031)	25 (20–30)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	18	18	71 (59–88)
	2006	0	0.025 (0.02–0.03)	25 (20–29)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	18	18	72 (60–90)
	2007	0	0.025 (0.023–0.03)	24 (22–29)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	23	22	93 (77–100)
	2008	0	0.024 (0.02–0.029)	24 (19–28)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	13	13	53 (44–67)
	2009	0	0.024 (0.02–0.029)	23 (19–28)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	8	8	33 (28–41)
Tuvalu	1990	0	0.026 (0.023–0.038)	296 (258–430)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	23	258	87 (60–100)
	1995	0	0.023 (0.018–0.028)	250 (200–300)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	36	390	156 (130–195)
	2000	0	0.02 (0.016–0.024)	211 (169–253)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	16	168	79 (66–99)
	2005	0	0.017 (0.014–0.021)	178 (142–214)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	12	123	69 (58–86)
	2006	0	0.017 (0.013–0.02)	172 (138–206)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	9	92	53 (44–67)
	2007	0	0.016 (0.013–0.02)	166 (133–200)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	18	183	110 (92–137)
	2008	0	0.016 (0.013–0.019)	161 (129–193)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	17	172	107 (89–134)
	2009	0	0.015 (0.013–0.019)	155 (126–187)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	18	181	117 (97–144)
Vanuatu	1990	0	0.21 (0.14–0.3)	139 (94–201)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	140	94	67 (47–100)
	1995	0	0.2 (0.16–0.24)	117 (93–140)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	79	46	39 (33–49)
	2000	0	0.19 (0.15–0.22)	98 (80–118)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	152	80	82 (68–100)
	2005	0	0.18 (0.14–0.21)	83 (66–99)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	76	35	43 (35–53)
	2006	0	0.18 (0.14–0.21)	80 (64–96)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	126	57	71 (59–89)
	2007	0	0.18 (0.14–0.21)	77 (62–92)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	122	54	69 (58–87)
	2008	0	0.17 (0.14–0.21)	74 (60–89)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	103	44	59 (49–74)
	2009	0	0.17 (0.14–0.21)	72 (58–87)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	134	56	78 (65–96)
Viet Nam	1990	66	140 (110–180)	204 (168–279)	0.52 (0.19–1)	<1 (<1–1.6)	50 203	76	37 (27–45)
	1995	73	150 (120–200)	204 (168–279)	1.5 (0.84–2.5)	2.1 (1.1–3.4)	55 739	76	37 (27–45)
	2000	79	160 (130–220)	204 (168–278)	3.5 (2.1–5.3)	4.4 (2.7–6.7)	89 792	114	56 (41–68)
	2005	84	170 (140–230)	202 (166–275)	6.4 (4–9.4)	7.6 (4.8–11)	94 916	113	56 (41–68)
	2006	85	170 (140–240)	204 (168–279)	6.8 (4.3–10)	8 (5.1–12)	97 363	114	56 (41–68)
	2007	86	170 (140–240)	202 (166–276)	7.7 (5–11)	8.9 (5.8–13)	97 400	113	56 (41–68)
	2008	87	170 (140–240)	200 (165–274)	6.5 (4.3–9.5)	7.5 (4.9–11)	97 772	112	56 (41–68)
	2009	88	180 (130–230)	200 (150–256)	7.4 (4.7–11)	8.4 (5.3–12)	95 036	108	54 (42–72)
Wallis and Futuna Islands	1990	0	<0.01 (<0.01–0.013)	63 (35–91)	<0.01 (<0.01–<0.01)	<1 (<1–<1)			–
	1995	0	<0.01 (<0.01–<0.01)	47 (42–56)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	6	42	90 (75–100)
	2000	0	<0.01 (<0.01–<0.01)	52 (41–62)	<0.01 (<0.01–<0.01)	<1 (<1–<1)			–
	2005	0	<0.01 (<0.01–<0.01)	52 (47–62)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	7	47	91 (76–100)
	2006	0	<0.01 (<0.01–<0.01)	46 (37–55)	<0.01 (<0.01–<0.01)	<1 (<1–<1)			–
	2007	0	<0.01 (<0.01–<0.01)	15 (13–17)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	2	13	91 (76–100)
	2008	0	<0.01 (<0.01–<0.01)	5.5 (4.4–6.6)	<0.01 (<0.01–<0.01)	<1 (<1–<1)			–
	2009	0	<0.01 (<0.01–<0.01)	1.2 (<1–1.5)	<0.01 (<0.01–<0.01)	<1 (<1–<1)	9	59	4907 (3883–6371)

[a] Where notification data from a country had not been received by 31 August, the notification rate was assumed to be the same as for 2008 (in *italics*).

[b] Rates are per 100 000 population.

TABLE A2.3 **Case notifications, 1990–2009**

	NEW AND RELAPSE NOTIFICATION RATE[a] 1990–2009	YEAR	NEW AND RELAPSE[a]	NEW CASES				RELAPSE	RE-TREAT EXCL. RELAPSE	TOTAL RETREAT	HISTORY UNKNOWN	% SMEAR-POS AMONG NEW PULM
				SMEAR-POSITIVE	SMEAR-NEGATIVE/ UNKNOWN	EXTRA-PULMONARY	OTHER					
American Samoa		1990	9									–
		1995										–
		2000	3	2	0	1		0		0		100
		2005	6	3	2	0	0	1	0	1	0	60
		2006	4	3		1						–
		2007	3	0	3	0	0	0	0	0	0	0
		2008	3	0	3	0	0	0	0	0	0	0
	19 6	2009	4	0	2	2	0	0	0	0	0	0
Australia		1990	1 016									–
		1995	1 073									–
		2000	1 043	251	362	369		17		17		41
		2005	1 046	241	339	450		16	27	43		42
		2006	1 159	269	405	451	2	32	40	72	4	40
		2007	1 115	281	372	428	0	34	13	47	5	43
		2008	1 213	299	409	473	1	31	12	43	2	42
	6 6	2009	1 217	267	391	511	7	41	20	61	77	41
Brunei Darussalam		1990	143									–
		1995										–
		2000	307	84	166	42		15		15		34
		2005	163	101	30	27		5	0	5	0	77
		2006	202	128	15	35	12	12		12		90
		2007	207	136	8	51	0	12	0	12	2	94
		2008	223	132	28	43	8	12	0	12	0	83
	56 53	2009	213	140	18	49	6	0	0	0	0	89
Cambodia		1990	6 501									–
		1995	14 603	11 101	1 465	1 428		605		605		88
		2000	18 891	14 822	1 108	2 147		814		814		93
		2005	35 535	21 001	7 057	6 759		718	588	1 306		75
		2006	34 660	19 294	6 875	7 800		691	806	1 497		74
		2007	35 601	19 421	7 120	8 412		648	894	1 542		73
		2008	38 927	19 860	7 847	10 678	0	542	893	1 435	0	72
	67 265	2009	39 202	17 863	8 378	12 529	0	432	997	1 429	0	68
China		1990	375 481									–
		1995	515 764	134 488	203 088	1 560		18 693		18 693		40
		2000	454 372	204 765	229 943			19 664	53 480	73 144		47
		2005	894 428	472 719	329 157	42 845		49 707	90 780	140 487	5 301	59
		2006	940 889	468 291	382 492	38 294		47 526	70 499	118 025	4 286	55
		2007	979 502	465 877	430 634	36 612	0	46 379	66 437	112 816	0	52
		2008	975 821	462 596	431 115	35 546	2 863	43 701	58 378	102 079	0	52
	33 72	2009	965 257	449 152	439 399	34 169	0	42 537	17 046	59 583	0	51
China, Hong Kong SAR		1990	6 510									–
		1995	6 212	0								–
		2000	6 015	1 940	3 115	772		188	594	782		38
		2005	5 660	1 561	3 179	701	0	219	500	719	0	33
		2006	5 536	1 537	2 908	697	0	394	230	624	0	35
		2007	5 363	1 501	2 779	693	0	390	182	572	0	35
		2008	5 544	1 459	2 981	728	0	376	185	561	0	33
	114 73	2009	5 160	1 444	2 673	722	0	321	188	509	0	35
China, Macao SAR		1990	343									–
		1995	402	141	94	70		49		49		60
		2000	449	160	180	50		12		12		47
		2005	355	136	162	43	0	14	17	31	43	46
		2006	374	144	174	45	0	11	24	35	39	45
		2007	342	138	147	29	0	28	18	46	41	48
		2008	359	139	150	49	0	21	17	38	35	48
	92 57	2009	308	116	130	45	0	17	28	45	35	47
Cook Islands		1990	0	0	0	0	0	0	0	0	0	–
		1995	2	2	0	0	0	0	0	0	0	100
		2000	1	0	1	0	0	0	0	0	0	0
		2005	1	1	0	0	0	0	0	0	0	100
		2006	1	0	0	1	0	0	0	0	0	–
		2007										–
		2008	2	2	0	0	0	0	0	0		100
	0 5	2009	1	1	0	0	0	0	0	0	0	100
Fiji		1990	226	84	105	37						44
		1995	203	68	99	34		2	0	2		41
		2000	144	62	42	40		0	0	0		60
		2005	132	63	29	40						68
		2006	114	73	22	18	0	1	0	1	0	77
		2007	94	52	7	34	0	1	0	1	0	88
		2008	106	78	5	19	0	4	0	4	0	94
	31 17	2009	144	83	21	38	0	2	0	2	0	80
French Polynesia		1990	59									–
		1995										–
		2000	62	29	19	10		1		1		60
		2005	63	21	25	14		3	0	3	0	46
		2006	69	24	28	15	0	2	0	2	0	46
		2007	64	19	32	11	0	2	0	2	0	37
		2008	50	20	18	10	0	2	0	2	0	53
	30 20	2009	53	17	17	14	0	5	0	5	0	50
Guam		1990										–
		1995										–
		2000	54	43	5	6		1		1		90
		2005	63	27	26	9	0	1	1	2	0	51
		2006	44	21	15	8	0	0	0	0	0	58
		2007	53	5	43	4	0	1	1	2	0	10
		2008	89	31	50	8	0	0	1	1	0	38
	– 57	2009	102	31	60	10	0	1	0	1	0	34
Japan		1990	51 821									–
		1995	43 078	14 367	25 172	2 803		736		736		36
		2000	39 384	11 853	19 118	7 046		1 367		1 367		38
		2005	27 194	10 931	10 056	5 340		867	1 125	1 992		52
		2006	25 304	10 159	9 098	5 203		844	1 080	1 924		53
		2007	24 779	9 433	9 051	5 142	0	1 153	532	1 685	0	51
		2008	24 181	8 995	8 856	5 073	0	1 257	579	1 836	0	50
	42 19	2009	23 631	8 853	8 591	4 975		1 212	539	1 751		51
Kiribati		1990	68									–
		1995										–
		2000	252	54	47	106		3		3		53
		2005	332	124	79	126		3	7	10		61
		2006	378	129	121	124		4	1	5	0	52
		2007	334	103	78	147	0	6	18	24	0	57
		2008	335	147	71	107	0	10	7	17	0	67
	95 284	2009	278	145	70	59	0	4	0	4	0	67

[a] Rates are per 100 000 population. Where notification data from a country had not been received by 31 August, the notification rate was assumed to be the same as for 2008 (in italics).

Data can be downloaded from www.who.int/tb/data

TABLE A2.3 **Case notifications, 1990–2009**

	NEW AND RELAPSE NOTIFICATION RATE[a] 1990–2009	YEAR	NEW AND RELAPSE[a]	NEW CASES				RELAPSE	RE-TREAT EXCL. RELAPSE	TOTAL RETREAT	HISTORY UNKNOWN	% SMEAR-POS AMONG NEW PULM
				SMEAR-POSITIVE	SMEAR-NEGATIVE/ UNKNOWN	EXTRA-PULMONARY	OTHER					
Lao People's Democratic Republic		1990	1 826									–
		1995	830	478	404	95		2		2		54
		2000	2 227	1 526	457	180		64		64		77
		2005	3 777	2 806	485	277	65	144	41	185	65	85
		2006	3 958	3 041	457	325	0	135	36	171		87
		2007	3 905	3 080	437	266	0	122	29	151	76	88
		2008	4 048	3 079	519	298	0	152	28	180	76	86
	43 61	2009	3 848	3 034	368	292	0	154	30	184	52	89
Malaysia		1990	11 702									–
		1995	11 778	6 688	4 021	1 069		210		210		62
		2000	15 057	8 156	5 517	1 384		0		0		60
		2005	15 342	8 446	4 862	1 702	0	332	651	983	73	63
		2006	16 051	9 414	4 336	1 920	0	381	614	995		68
		2007	16 129	9 578	4 086	2 107	0	358	789	1 147	0	70
		2008	17 144	10 441	3 814	2 197	0	692	362	1 054	0	73
	65 63	2009	17 341	9 981	4 596	2 344	0	420	761	1 181	0	68
Marshall Islands		1990										–
		1995										–
		2000	34	11	25	9		0		0		31
		2005	111	48	31	28		4	1	5	0	61
		2006	138	45	43	41		9	9	18	1	51
		2007	158	19	97	36	0	6	5	11	0	16
		2008	125	28	62	30	0	5	2	7	0	31
	– 218	2009	135	52	71	12	0	0	2	2	6	42
Micronesia (Federated States of)		1990	367									–
		1995	172	9	79	18		2		2		10
		2000	91	15	69	4		3		3		18
		2005	98	32	35	19	5	7	14	21		48
		2006	104	41	37	23	0	3	9	12	0	53
		2007	137	47	62	28	0	0	5	5	3	43
		2008	164	38	89	30	4	3	2	5	0	30
	381 134	2009	148	61	47	38	0	2	7	9	0	56
Mongolia		1990	1 659	0								–
		1995	2 780	455	1 330	976		82		82		25
		2000	3 109	1 389	732	862		126		126		65
		2005	4 601	1 868	897	1 620	0	216	125	341	0	68
		2006	5 049	2 129	724	1 922	0	274	167	441	0	75
		2007	4 654	1 856	673	1 832	0	293	316	609	0	73
		2008	4 490	1 838	640	1 745	0	267	277	544	0	74
	75 168	2009	4 481	1 809	726	1 683	0	263	306	569	0	71
Nauru		1990	7									–
		1995										–
		2000	4	4	0	0		0		0		100
		2005	11	0	11							0
		2006	12	2	4	4	2	0	0	0	0	33
		2007	3	3	0	0	0	0	1	1	0	100
		2008	5	2	2	0	0	1	2	3	0	50
	77 *49*	2009	*5*									–
New Caledonia		1990	143									–
		1995	87	21	81	9		4		4		21
		2000	94	20	15	29		4		4		57
		2005	47	16	15	15		1	6	7	0	52
		2006	48	9	22	10	0	7	0	7	2	29
		2007	47	12	15	16	0	4	0	4	0	44
		2008	44	9	22	10	0	3	1	4	6	29
	84 22	2009	54	15	26	13	0	0	9	9	0	37
New Zealand		1990	348									–
		1995	391	78	222	34		4		4		26
		2000	344	74	133	130		7	0	7		36
		2005	332	83	114	95	29	11	8	19		42
		2006	344	97	103	105	30	9	11	20	0	49
		2007	274	81	108	75	6	4	13	17	0	43
		2008	292	101	91	92	2	6	5	11		53
	10 7	2009	298	90	90	102	11	5	4	9		50
Niue		1990	0									–
		1995	0	0	1			0		0		0
		2000	0	0	0							–
		2005	0	0								–
		2006	0	0	0	0	0	0	0	0	0	–
		2007	0	0	0	0	0	0	0	0	0	–
		2008	0	0	0	0	0	0	0	0	0	–
	0 0	2009	0	0	0	0						–
Northern Mariana Islands		1990	28									–
		1995	48	14	26	8		0		0		35
		2000	75	27	37	11		0		0		42
		2005	57	15	35	7	0	0	0	0	0	30
		2006	51	15	32	4	0	0	0	0	0	32
		2007	44	14	28	2	0	0	0	0	0	33
		2008	28	13	12	3	0	0	2	2	0	52
	64 44	2009	38	16	16	6	0	0	0	0	0	50
Palau		1990										–
		1995	19	9	6	4		0		0		60
		2000										–
		2005	10	3	6	1		0	0	0		33
		2006	12	6	2	4	0	0	0	0	0	75
		2007	11	5	3	3	0	0	0	0	0	63
		2008										–
	– 93	2009	19	6	9	4	0	0	0	0	0	40
Papua New Guinea		1990	2 497									–
		1995	8 041	1 652	3 767	2 349		273		273		30
		2000	10 520	1 933	4 405	3 227		955		955		30
		2005	12 564	1 805	5 105	4 198		1 456		1 456		26
		2006	12 620	1 948	5 969	4 575		128	912	1 040		25
		2007	15 002	2 087	5 731	7 088	0	96	1 181	1 277		27
		2008	13 984	2 323	5 340	4 522		1 799		1 799	0	30
	60 183	2009	12 306	2 238	4 768	4 826		474	914	1 388		32
Philippines		1990	317 008									–
		1995	119 186	94 768	140 712	8		8		8		40
		2000	119 914	67 056	52 858							56
		2005	137 100	81 647	50 347	1 149	0	3 957		3 957		62
		2006	147 305	85 740	55 964	1 445	0	4 156	912	5 068	0	61
		2007	140 588	86 566	49 422	1 513	0	3 087	1 988	5 075	0	64
		2008	139 603	85 025	49 916	2 085	0	2 577	6 289	8 866	0	63
	508 158	2009	145 075	87 726	51 653	2 723	0	2 973	6 581	9 554	0	63

[a] Rates are per 100 000 population. Where notification data from a country had not been received by 31 August, the notification rate was assumed to be the same as for 2008 (in italics).

TABLE A2.3 **Case notifications, 1990–2009**

	NEW AND RELAPSE NOTIFICATION RATE[a] 1990–2009	YEAR	NEW AND RELAPSE[a]	NEW CASES				RELAPSE	RE-TREAT EXCL. RELAPSE	TOTAL RETREAT	HISTORY UNKNOWN	% SMEAR-POS AMONG NEW PULM
				SMEAR-POSITIVE	SMEAR-NEGATIVE/ UNKNOWN	EXTRA-PULMONARY	OTHER					
Republic of Korea		1990	63 904									–
		1995	42 117	11 754	19 360			2 082		2 082		38
		2000	21 782	8 216	11 304			2 262		2 262		42
		2005	38 290	11 638	18 460	5 171	0	3 021	4 077	7 098	4 602	39
		2006	37 861	11 513	18 804	5 044		2 500	4 202	6 702	4 221	38
		2007	37 554	10 927	18 778	5 005	0	2 844	3 739	6 583	4 304	37
		2008	36 847	11 048	17 292	5 813	0	2 694	3 616	6 310	3 707	39
149	80	2009	38 741	11 285	17 634	6 923	0	2 899	3 981	6 880	4 577	39
Samoa		1990	44									–
		1995	45	15	30	6		0		0		33
		2000	43	13	18	12		0		0		42
		2005	24	11	8	5	0	0	0	0	0	58
		2006	25	13	8	2	0	2	1	3	0	62
		2007										–
		2008	12	6	5	1	0	0	0	0	0	55
27	9	2009	16	8	5	3	0	0	0	0	0	62
Singapore		1990	1 591									–
		1995	1 889	455	1 187	127		120		120		28
		2000	1 728	248	869	165		55		55		22
		2005	1 356	552	570	174	0	60	93	153	20	49
		2006	1 313	537	525	183	0	68	96	164	10	51
		2007	1 359	504	564	181	0	110	39	149	7	47
		2008	1 548	525	672	240	0	111	40	151	13	44
53	32	2009	1 525	552	655	235	0	83	49	132	0	46
Solomon Islands		1990	382									–
		1995	352	109	133	97		13		13		45
		2000	302	109	128	65		0		0		46
		2005	397	169	161	62	0	5	0	5	0	51
		2006	371	124	168	74	0	5	0	5	0	42
		2007	397	142	147	99	0	9	0	9	0	49
		2008	387	140	136	97	0	14	0	14	0	51
122	70	2009	366	138	86	140	0	2	0	2	0	62
Tokelau		1990	1									–
		1995	2	1	1	0		0		0		50
		2000	0	0	0	0		0		0		–
		2005	0	0	0	0	0	0	0	0	0	–
		2006	0	0	0	0	0	0	0	0	0	–
		2007	0	0	0	0	0	0	0	0	0	–
		2008	0	0	0	0	0	0	0	0	0	–
62	0	2009	0	0	0	0	0	0	0	0	0	–
Tonga		1990	23									–
		1995	20	9	2	9		0		0		82
		2000	24	15	5	3		1		1		75
		2005	18	11	3	4						79
		2006	18	14	3	1	0	0	0	0	0	82
		2007	23	14	5	4	0	0	0	0	0	74
		2008	13	11	0	2	0	0	0	0	0	100
24	8	2009	8	6	1	1	0	0	0	0	0	86
Tuvalu		1990	23									–
		1995	36	6	13	16		1		1		32
		2000	16	0	7	7						0
		2005	12	5	3	4			3	3		63
		2006	9	4	3	2	0	0	0	0	0	57
		2007	18	12	1	2	2	1	0	1	0	92
		2008	17	9	5	3	0	0	2	2	0	64
258	181	2009	18	8	0	10	0	0	0	0	0	100
Vanuatu		1990	140									–
		1995	79	30	27	21		1		1		53
		2000	152	63	56	28		5		5		53
		2005	76	35	21	17	0	3	5	8	0	63
		2006	126	42	37	47	0	0	2	2	4	53
		2007	122	41	38	43	0	0	0	0	0	52
		2008	103	45	19	39	0	0	1	1	0	70
94	56	2009	134	47	24	62	0	1	2	3	0	66
Viet Nam		1990	50 203									–
		1995	55 739	37 550	8 379	6 194		3 616		3 616		82
		2000	89 792	53 169	17 993	13 137		5 493		5 493		75
		2005	94 916	55 492	16 429	16 670	0	6 325	976	7 301	0	77
		2006	97 363	56 437	16 645	17 711		6 570	921	7 491		77
		2007	97 400	54 457	17 554	18 675		6 714	944	7 658		76
		2008	97 772	53 484	19 056	18 610	0	6 622	912	7 534	0	74
76	108	2009	95 036	51 291	18 612	18 333	0	6 800	1 331	8 131	1 825	73
Wallis and Futuna Islands		1990										–
		1995	6	3	2	0		1		1		60
		2000										–
		2005	7	1	6							14
		2006										–
		2007	2	1	1	0	0	0	0	0	0	50
		2008										–
–	59	2009	9	2	7	0	0	0	0	0	0	22

[a] Rates are per 100 000 population. Where notification data from a country had not been received by 31 August, the notification rate was assumed to be the same as for 2008 (in italics).

Data can be downloaded from www.who.int/tb/data

TABLE A2.4 **Treatment outcomes, new smear-positive cases, 1995–2008**

	TREATMENT SUCCESS (%)[a] 1995–2008	YEAR	NUMBER NOTIFIED	SIZE OF COHORT	COHORT AS % NOTIFIED	% OF COHORT					
						CURED	COMPLETED	DIED	FAILED	DEFAULTED	NOT EVALUATED
American Samoa		1995		4	–	100	0	0	0	0	0
		2000	2	2	100	0	100	0	0	0	0
		2005	3	4	133	75					25
		2006	3	0	0	–	–	–	–	–	–
		2007	0	0	–	–	–	–	–	–	–
	100 –	2008	0	0	–	–	–	–	–	–	–
Australia		1995			–						
		2000	251	238	95	27	45	9	0	3	16
		2005	241	241	100	12	68	10		2	8
		2006	269	370	138	13	72	6	0	1	8
		2007	281	498	177	7	77	6	0	2	7
	– 80	2008	299	587	196	7	73	6	1	1	12
Brunei Darussalam		1995			–						
		2000	84	84	100	42	21	17	0	4	17
		2005	101	101	100	66	5	7	0	2	20
		2006	128	153	120	84	0	5	0	0	11
		2007	136	136	100	63	13	4	0	2	18
	– 84	2008	132	140	106	72	11	9	0	0	7
Cambodia		1995	11 101	4 363	39	83	8	2	1	4	2
		2000	14 822	14 775	100	88	4	4	0	4	1
		2005	21 001	21 001	100	89	4	3	0	2	2
		2006	19 294	19 349	100	90	3	3	0	2	2
		2007	19 421	19 429	100	91	3	3	0	1	2
	91 95	2008	19 860	19 811	100	92	3	2	0	1	2
China		1995	134 488	131 413	98	72	22	2	1	1	3
		2000	204 765	213 766	104	93		1	2	1	3
		2005	472 719	472 719	100	92	2	2	1	1	3
		2006	468 291	470 436	100	92	2	1	1	1	3
		2007	465 877	465 877	100	93	2	1	1	1	3
	93 94	2008	462 596	464 151	100	92	2	1	1	1	3
China, Hong Kong SAR		1995	0		–						
		2000	1 940	1 940	100	55	5	5	6	4	24
		2005	1 561	1 561	100	60	3	5	9	3	20
		2006	1 537	1 537	100	59	5	4	9	3	20
		2007	1 501	1 481	99	59	7	11	14	6	3
	– 68	2008	1 459	1 448	99	58	10	17	0	4	11
China, Macao SAR		1995	141		–						
		2000	160	160	100	81	8	6	0	4	1
		2005	136	136	100	93	0	4	0	1	3
		2006	144	144	100	88	0	4	0	3	5
		2007	138	251	182	49	42	6	0	1	2
	– 89	2008	139	246	177	89	0	5	0	1	4
Cook Islands		1995	2	2	100	100	0	0	0	0	0
		2000	0		–						
		2005	1	1	100	100	0	0	0	0	0
		2006	0		–						
		2007		2	–		100				0
	100 50	2008	2	2	100	50	0	0	0	50	0
Fiji		1995	68	73	107	78	8	7	0	3	4
		2000	62	62	100	81	5	5	0	8	2
		2005	63	68	108	71	0	10	0	10	9
		2006	73	73	100	66		4		30	0
		2007	52	78	150	81		5		10	4
	86 90	2008	78	82	105	82	9	6	0	1	2
French Polynesia		1995		33	–	67	0	3	0	21	9
		2000	29	62	214	0	97	2	2	0	0
		2005	21	18	86		89	11	0	0	0
		2006	24	26	108	85	0	12	0	4	0
		2007	19	26	137	85		12	0	4	0
	67 96	2008	20	28	140		96	4	0	0	0
Guam		1995			–						
		2000	43	43	100	93	0	7	0	0	0
		2005	27	27	100	85	0	11	0	0	4
		2006	21	21	100	90	0	5	0	0	5
		2007	5	36	720	89	0	6	0	0	6
	– 90	2008	31	31	100	90	0	6	0	0	3
Japan		1995	14 367		–						
		2000	11 853	10 348	87	30	15	5	4	1	44
		2005	10 931	10 931	100	38	22	11	3	1	26
		2006	10 159	8 609	85	20	33	21	2	6	18
		2007	9 433	9 421	100	17	29	18	1	5	30
	– 48	2008	8 995	8 999	100	18	30	19	1	4	28
Kiribati		1995		31	–	45	42	13			0
		2000	54	54	100	83	7	7	2	0	0
		2005	124	123	99	62	31	7	0	1	0
		2006	129	126	98	61	29	10	0	1	0
		2007	103	100	97	79	14	7	0	0	0
	87 96	2008	147	146	99	93	3	4	0	0	0
Lao People's Democratic Republic		1995	478	343	72	62	8	6	2	19	4
		2000	1 526	1 588	104	68	9	7	0	9	7
		2005	2 806	2 802	100	85	5	5	1	3	1
		2006	3 041	3 047	100	88	3	5	0	2	1
		2007	3 080	3 080	100	91	2	6	0	1	0
	70 93	2008	3 079	3 075	100	92	1	5	0	1	0
Malaysia		1995	6 688	13 398	200	69	0	6	2	8	14
		2000	8 156	7 915	97	0	78	8	0	10	4
		2005	8 446	8 446	100	69	1	9	0	5	16
		2006	9 414	9 414	100	46	3	6	0	3	42
		2007	9 578	10 236	107	67	5	8	0	5	15
	69 78	2008	10 441	9 757	93	78	1	8	0	4	11
Marshall Islands		1995		163	–	3	21	7	0	67	1
		2000	11	11	100	64	27	0	0	9	0
		2005	48	47	98	85	2	2		2	9
		2006	45	44	98	73	2	11			14
		2007	19	27	142	93	4	0	0	4	0
	25 97	2008	28	35	125	91	6	0	0	3	0
Micronesia (Federated States of)		1995	9	10	111	80	0	10	0	10	0
		2000	15	14	93	93	0	7	0	0	0
		2005	32	20	63	75	5	10	5	0	5
		2006	41	78	190	60	29	6	1	1	1
		2007	47	52	111	25	40	8	2	4	21
	80 47	2008	38	59	155	39	8	2	0	2	49

[a] TREATMENT SUCCESS = percent cured + percent completed then rounded to the nearest digit.

TABLE A2.4 **Treatment outcomes, new smear-positive cases, 1995–2008**

	TREATMENT SUCCESS (%)[a] 1995–2008	YEAR	NUMBER NOTIFIED	SIZE OF COHORT	COHORT AS % NOTIFIED	% OF COHORT					
						CURED	COMPLETED	DIED	FAILED	DEFAULTED	NOT EVALUATED
Mongolia		1995	455	455	100	66	7	8	6	10	2
		2000	1 389	1 389	100	83	4	3	3	4	3
		2005	1 868	1 868	100	82	6	3	5	3	2
		2006	2 129	2 129	100	84	4	2	7	2	1
		2007	1 856	1 855	100	85	4	2	6	2	0
74	87	2008	1 838	1 838	100	84	3	3	7	2	1
Nauru		1995			–						
		2000	4	4	100	25					75
		2005	0	3	–	0	67	33	0	0	0
		2006	2	2	100	50	50	0	0	0	0
		2007	3	2	67	0	100	0	0	0	0
–	100	2008	2	3	150	33	67	0	0	0	0
New Caledonia		1995	21	32	152	75		13		3	9
		2000	20	45	225	33	56	9		2	0
		2005	16	16	100	88	6	6	0	0	0
		2006	9	9	100	89		11			0
		2007	12	13	108	69	8	23	0	0	0
75	82	2008	9	11	122	9	73	9	9	0	0
New Zealand		1995	78		–						
		2000	74	73	99	5	25	23			47
		2005	83	84	101	0	60	6	0	1	33
		2006	97	101	104		70	7		4	19
		2007	81	84	104	0	86	7	0	1	6
–	73	2008	101	98	97	0	73	8	0	3	15
Niue		1995	0		–						
		2000	0		–						
		2005	0	0	–	–	–	–	–	–	–
		2006	0	0	–	–	–	–	–	–	–
		2007	0	0	–	–	–	–	–	–	–
–	–	2008	0	0	–	–	–	–	–	–	–
Northern Mariana Islands		1995	14		–						
		2000	27	27	100	81	0	0	0	0	19
		2005	15	15	100	73	0	0	0	0	27
		2006	15	26	173	42	42	0	0	0	15
		2007	14	13	93	0	92	0	0	0	8
–	77	2008	13	13	100		77	8	0	0	15
Palau		1995	9	9	100	56	11	0	0	11	22
		2000			–						
		2005	3	3	100	100	0	0	0	0	0
		2006	6	5	83	40	20	20	0	0	20
		2007	5		–						
67	–	2008		0	–	–	–	–	–	–	–
Papua New Guinea		1995	1 652	4 904	297		56	4	0	15	25
		2000	1 933	422	22	39	24	2	0	26	9
		2005	1 805	1 292	72	57	14	4	1	19	5
		2006	1 948	1 494	77	59	15	3	2	21	0
		2007	2 087	2 087	100	33	6	1	2	6	51
56	64	2008	2 323	2 259	97	58	7	4	2	16	13
Philippines		1995	94 768	90 297	95	54	6	1	1	5	34
		2000	67 056	50 196	75	73	15	2	1	6	3
		2005	81 647	81 125	99	82	7	2	1	4	3
		2006	85 740	85 797	100	80	8	2	1	4	4
		2007	86 566	86 566	100	79	10	2	1	4	3
60	88	2008	85 025	85 025	100	80	8	2	1	4	5
Republic of Korea		1995	11 754	11 675	99	74	2	2	3	5	14
		2000	8 216	3 231	39	81	2	2	1	3	12
		2005	11 638	3 752	32	81	2	1	1	4	11
		2006	11 513	3 422	30	78	2	1	1	3	15
		2007	10 927	3 987	36	81	1	1	1	4	12
76	84	2008	11 048	4 056	37	82	2	1	0	3	12
Samoa		1995	15	15	100	13	67	20	0	0	0
		2000	13	13	100	85	8	8	0	0	0
		2005	11	11	100	91	0	9	0	0	0
		2006	13		–						
		2007		13	–	85	8	0	8	0	0
80	71	2008	6	7	117	71	0	29	0	0	0
Singapore		1995	455	122	27	71	15	2	0	11	0
		2000	248	242	98		71	14	0	14	0
		2005	552	548	99		83	14	0	2	1
		2006	537	537	100	70	14	14	0	1	1
		2007	504	859	170	62	19	16	0	1	1
86	81	2008	525	951	181	62	19	16	0	0	2
Solomon Islands		1995	109	368	338		65	6	0	4	26
		2000	109	109	100	73	7	5	0	4	11
		2005	169	169	100	56	30	8	0	4	2
		2006	124	124	100	73	16	3	1	5	2
		2007	142	142	100	75	17	6	0	1	1
65	94	2008	140	140	100	82	11	2	0	1	3
Tokelau		1995	1		–						
		2000	0		–						
		2005	0		–						
		2006	0	0	–	–	–	–	–	–	–
		2007	0		–						
–	–	2008	0		–						
Tonga		1995	9	20	222	75	0	10	5	0	10
		2000	15	15	100	93	0	0	7	0	0
		2005	11	11	100	73	0	18	0	0	9
		2006	14	14	100	100	0	0	0	0	0
		2007	14	14	100	93	0	7	0	0	0
75	100	2008	11	11	100	100	0	0	0	0	0
Tuvalu		1995	6		–						
		2000	0	7	–		86			14	0
		2005	5	6	120	100	0	0	0	0	0
		2006	4	4	100	75		0	0	25	0
		2007	12	16	133	56	19	13	0	6	6
–	78	2008	9	9	100	67	11	11	0	11	0
Vanuatu		1995	30	13	43	38	46	15	0	0	0
		2000	63	26	41	77	12	8	0	4	0
		2005	35	42	120	64	17	10	7	2	0
		2006	42	42	100	88	2	2	2	0	5
		2007	41	42	102	81	12	2	0	0	5
85	91	2008	45	43	96	63	28	5	2	2	0

[a] TREATMENT SUCCESS = percent cured + percent completed then rounded to the nearest digit.

Data can be downloaded from www.who.int/tb/data

TABLE A2.4 **Treatment outcomes, new smear-positive cases, 1995–2008**

	TREATMENT SUCCESS (%)[a] 1995–2008	YEAR	NUMBER NOTIFIED	SIZE OF COHORT	COHORT AS % NOTIFIED	% OF COHORT					
						CURED	COMPLETED	DIED	FAILED	DEFAULTED	NOT EVALUATED
Viet Nam		1995	37 550	38 189	102	84	5	3	2	4	2
		2000	53 169	53 169	100	90	2	3	1	2	2
		2005	55 492	55 492	100	90	2	3	1	1	2
		2006	56 437	56 085	99	90	2	3	1	2	2
		2007	54 457	54 457	100	89	2	3	1	2	2
	89 92	2008	53 484	53 482	100	90	2	3	1	2	2
Wallis and Futuna Islands		1995	3		–						
		2000			–						
		2005	1		–						
		2006		4	–	50	50	0	0	0	0
		2007	1		–						
	– 100	2008		3	–	100	0	0	0	0	0

[a] TREATMENT SUCCESS = percent cured + percent completed then rounded to the nearest digit.

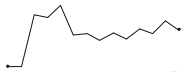
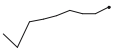
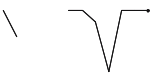
TABLE A2.5 **Treatment outcomes, retreatment cases, 1995–2008**

	TREATMENT SUCCESS (%)[a] 1995–2008	YEAR	NUMBER NOTIFIED	SIZE OF COHORT	COHORT AS % NOTIFIED	% OF COHORT					
						CURED	COMPLETED	DIED	FAILED	DEFAULTED	NOT EVALUATED
American Samoa		1995			–						
		2000	0		–						
		2005	1	1	100		100				0
		2006		0	–	–	–	–	–	–	–
		2007	0	0	–	–	–	–	–	–	–
–	–	2008	0	0	–	–	–	–	–	–	–
Australia		1995			–						
		2000	17	11	65	9	73	9	0	0	9
		2005	43	43	100	16	56	5		5	19
		2006	72	66	92	8	80	5	0	2	6
		2007	47	55	117	7	69	5	0	4	15
–	66	2008	43	50	116	4	62	12	0	2	20
Brunei Darussalam		1995			–						
		2000	15		–						
		2005	5	5	100	40	40	20	0	0	0
		2006	12	3	25	100	0	0	0	0	0
		2007	12	12	100	75	25	0	0	0	0
–	–	2008	12		–						
Cambodia		1995	605	436	72	59	26	5	3	3	4
		2000	814	827	102	85	5	6	1	4	0
		2005	1 306	1 306	100	49	27	9	2	3	11
		2006	1 497	1 389	93	48	37	6	2	2	4
		2007	1 542	711	46	77	6	6	4	2	5
85	79	2008	1 435	597	42	74	5	7	5	3	6
China		1995	18 693	54 052	289	90	2	2	3	1	1
		2000	73 144	43 252	59	86	2	1	1	1	8
		2005	140 487	89 239	64	85	5	3	3	1	4
		2006	118 025	78 146	66	85	5	2	2	1	5
		2007	112 816	70 163	62	84	5	2	2	1	5
92	90	2008	102 079	64 023	63	85	4	2	2	1	5
China, Hong Kong SAR		1995			–						
		2000	782	218	28	27	26	4	17	18	8
		2005	719	716	100	40	18	4	9	7	22
		2006	624	622	100	39	22	5	11	5	18
		2007	572	555	97	0	61	6	8	5	19
–	66	2008	561	526	94	21	45	13	0	5	16
China, Macao SAR		1995	49		–						
		2000	12	37	308	68	16	11	0	5	0
		2005	31	37	119	51	24	11	0	0	14
		2006	35	33	94	45	45	3	0	0	6
		2007	46	46	100	37	35	13	0	0	15
–	82	2008	38	38	100	55	26	3	0	3	13
Cook Islands		1995	0		–						
		2000	0		–						
		2005	0	0	–	–	–	–	–	–	–
		2006	0		–						
		2007			–						
–	–	2008	0	0	–	–	–	–	–	–	–
Fiji		1995	2		–						
		2000	0		–						
		2005		0	–	–	–	–	–	–	–
		2006	1		–						
		2007	1		–						
–	–	2008	4	0	0	–	–	–	–	–	–
French Polynesia		1995		2	–	50	0	50	0	0	0
		2000	1		–						
		2005	3	4	133		75	25			0
		2006	2	4	200	50	0	50	0	0	0
		2007	2	4	200	50		50	0	0	0
50	75	2008	2	4	200		75	0	0	25	0
Guam		1995			–						
		2000	1		–						
		2005	2	2	100	50	0	0	0	50	0
		2006	0	0	–	–	–	–	–	–	–
		2007	2	1	50	100					0
–	–	2008	1	0	0	–	–	–	–	–	–
Japan		1995	736		–						
		2000	1 367	1 169	86	31	15	5	6	1	41
		2005	1 992	1 992	100	29	16	8	2	2	43
		2006	1 924	1 030	54	13	31	12	2	9	33
		2007	1 685	1 423	84	14	24	13	1	9	39
–	44	2008	1 836	1 547	84	14	30	16	1	8	31
Kiribati		1995			–						
		2000	3	9	300	89	0	11	0	0	0
		2005	10	3	30	100					0
		2006	5	15	300	20	60	7	0	13	0
		2007	24	5	21	100	0	0	0	0	0
–	76	2008	17	17	100	53	24	12	0	12	0
Lao People's Democratic Republic		1995	2	1	50	100	0	0	0	0	0
		2000	64	64	100	41	8	11	8	11	22
		2005	185	181	98	75	12	6	2	5	1
		2006	171	170	99	78	5	8	4	2	4
		2007	151	149	99	83	3	7	5	3	0
100	90	2008	180	153	85	86	3	9	1	0	1
Malaysia		1995	210		–						
		2000	0		–						
		2005	983	1 056	107	46	9	8	1	9	27
		2006	995	995	100	19	17	5	1	6	53
		2007	1 147	1 362	119	23	18	7	2	27	22
–	61	2008	1 054	1 171	111	36	26	11	1	5	22
Marshall Islands		1995			–						
		2000	0		–						
		2005	5	20	400	60	10				30
		2006	18	16	89	31	6	6			56
		2007	11	16	145	13	63	13	0	13	0
–	50	2008	7	2	29	0	50	50	0	0	0
Micronesia (Federated States of)		1995	2	9	450	100	0	0	0	0	0
		2000	3	20	667	25	60	5	10	0	0
		2005	21	9	43	11	89				0
		2006	12	2	17	50	0	0	0	0	50
		2007	5	8	160	0	25	75	0	0	0
100	60	2008	5	5	100	40	20	20	0	0	20

[a] TREATMENT SUCCESS = percent cured + percent completed then rounded to the nearest digit.

Data can be downloaded from www.who.int/tb/data

TABLE A2.5 **Treatment outcomes, retreatment cases, 1995–2008**

	TREATMENT SUCCESS (%)[a] 1995–2008	YEAR	NUMBER NOTIFIED	SIZE OF COHORT	COHORT AS % NOTIFIED	% OF COHORT					
						CURED	COMPLETED	DIED	FAILED	DEFAULTED	NOT EVALUATED
Mongolia		1995	82	23	28	61	0	9	13	13	4
		2000	126	126	100	57	14	8	8	7	6
		2005	341	443	130	39	34	9	11	4	3
		2006	441	531	120	41	30	9	12	5	3
		2007	609	609	100	43	33	6	12	5	1
	61 73	2008	544	385	71	51	22	6	16	4	1
Nauru		1995			–						
		2000	0		–						
		2005		0	–	–	–	–	–	–	–
		2006	0	0	–	–	–	–	–	–	–
		2007	1	1	100	0	100	0	0	0	0
	– –	2008	3	0	0	–	–	–	–	–	–
New Caledonia		1995	4	4	100	100					0
		2000	4		–						
		2005	7	7	100	86	0	14	0	0	0
		2006	7	7	100	71		29			0
		2007	4	2	50	100	0	0	0	0	0
	100 40	2008	4	5	125	0	40	40	20	0	0
New Zealand		1995	4		–						
		2000	7	23	329	0	30	4			65
		2005	19	18	95	0	67	0	0	0	33
		2006	20	20	100		90	10			0
		2007	17	17	100	0	65	24	0	0	12
	– 91	2008	11	11	100	0	91	0	0	0	9
Niue		1995	0		–						
		2000			–						
		2005		0	–	–	–	–	–	–	–
		2006	0	0	–	–	–	–	–	–	–
		2007	0	0	–	–	–	–	–	–	–
	– –	2008	0	0	–	–	–	–	–	–	–
Northern Mariana Islands		1995	0		–						
		2000	0		–						
		2005	0	0	–	–	–	–	–	–	–
		2006	0	0	–	–	–	–	–	–	–
		2007	0	2	–	0	100	0	0	0	0
	– –	2008	2	0	0	–	–	–	–	–	–
Palau		1995	0		–						
		2000			–						
		2005	0	0	–	–	–	–	–	–	–
		2006	0	0	–	–	–	–	–	–	–
		2007	0		–						
	– –	2008		0	–	–	–	–	–	–	–
Papua New Guinea		1995	273		–						
		2000	955	68	7	29	35	4	1	21	9
		2005	1 456	65	4	42	14	15	6	20	3
		2006	1 040		–						
		2007	1 277		–						
	– –	2008	1 799		–						
Philippines		1995	8		–						
		2000			–						
		2005	3 957		–						
		2006	5 068	3 293	65	63	17	5	4	5	6
		2007	5 075	4 101	81	53	18	4	6	7	11
	– 70	2008	8 866	3 819	43	56	15	4	4	7	14
Republic of Korea		1995	2 082	2 004	96	39	1	1	2	3	53
		2000	2 262	131	6	59	2	3	3	12	21
		2005	7 098	3 331	47	72	3	2	0	6	18
		2006	6 702	2 261	34	69	3	1	1	5	21
		2007	6 583	2 698	41	70	2	1	1	6	20
	40 76	2008	6 310	2 476	39	74	2	1	1	6	16
Samoa		1995	0		–						
		2000	0		–						
		2005	0	0	–	–	–	–	–	–	–
		2006	3		–						
		2007		1	–	100					0
	– –	2008	0	0	–	–	–	–	–	–	–
Singapore		1995	120		–						
		2000	55		–						
		2005	153	149	97		79	15	0	5	1
		2006	164	164	100	47	29	18	0	4	2
		2007	149	116	78	71	11	15	1	3	0
	– 70	2008	151	149	99	40	30	22	0	3	5
Solomon Islands		1995	13		–						
		2000	0		–						
		2005	5	5	100	20	40	20	20	0	0
		2006	5	5	100	60	40	0	0	0	0
		2007	9	9	100	78	22	0	0	0	0
	– 100	2008	14	14	100	79	21	0	0	0	0
Tokelau		1995	0		–						
		2000	0		–						
		2005	0		–						
		2006	0	0	–	–	–	–	–	–	–
		2007	0		–						
	– –	2008	0		–						
Tonga		1995	0	9	–	100	0	0	0	0	0
		2000	1	1	100	100					0
		2005		0	–	–	–	–	–	–	–
		2006	0	0	–	–	–	–	–	–	–
		2007	0	0	–	–	–	–	–	–	–
	100 –	2008	0	0	–	–	–	–	–	–	–
Tuvalu		1995	1		–						
		2000			–						
		2005	3	0	0	–	–	–	–	–	–
		2006	0	0	–	–	–	–	–	–	–
		2007	1	0	0	–	–	–	–	–	–
	– –	2008	2	0	0	–	–	–	–	–	–
Vanuatu		1995	1		–						
		2000	5	5	100	100	0	0	0	0	0
		2005	8	0	0	–	–	–	–	–	–
		2006	2	0	0	–	–	–	–	–	–
		2007	0	0	–	–	–	–	–	–	–
	– –	2008	1	1	100	0	0	100	0	0	0

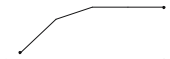
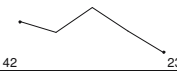
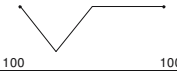
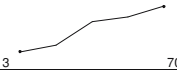
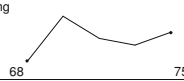
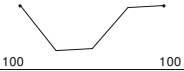
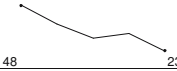
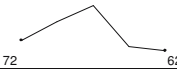
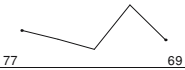
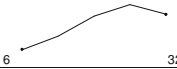
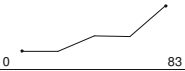
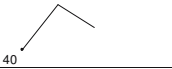
[a] TREATMENT SUCCESS = percent cured + percent completed then rounded to the nearest digit.

TABLE A2.5 **Treatment outcomes, retreatment cases, 1995–2008**

	TREATMENT SUCCESS (%)[a] 1995–2008	YEAR	NUMBER NOTIFIED	SIZE OF COHORT	COHORT AS % NOTIFIED	% OF COHORT					
						CURED	COMPLETED	DIED	FAILED	DEFAULTED	NOT EVALUATED
Viet Nam		1995	3 616	2 384	66	80	2	5	8	2	4
		2000	5 493	8 806	160	74	5	6	5	3	7
		2005	7 301	7 374	101	79	4	5	6	3	3
		2006	7 491	7 496	100	79	4	6	5	3	3
		2007	7 658	7 659	100	79	3	6	5	4	3
	81 73	2008	7 534	329	4	68	5	6	3	14	4
Wallis and Futuna Islands		1995	1		–						
		2000			–						
		2005			–						
		2006		0	–	–	–	–	–	–	–
		2007	0		–						
	– –	2008		0	–	–	–	–	–	–	–

[a] TREATMENT SUCCESS = percent cured + percent completed then rounded to the nearest digit.

TABLE A.6 **HIV testing and provision of CPT, ART and IPT, 2005–2009**

	% OF TB PATIENTS WITH KNOWN HIV STATUS 2005–2009	YEAR	% OF TB PATIENTS WITH KNOWN HIV STATUS	NUMBER OF TB PATIENTS WITH KNOWN HIV STATUS	PATIENTS NOTIFIED (NEW AND RETREAT)[a]	NUMBER OF HIV-POSITIVE TB PATIENTS	% OF TESTED TB PATIENTS HIV-POSITIVE	% OF HIV-POSITIVE TB PATIENTS ON CPT	% OF HIV-POSITIVE TB PATIENTS ON ART	NUMBER OF HIV-POSITIVE PEOPLE PROVIDED IPT
American Samoa		2005	0	0	6		–	–	–	
		2006	75	3	4		–	–	–	
		2007	100	3	3	0	0	–	–	0
		2008	100	3	3	0	0	–	–	0
	0 100	2009	100	4	4	0	0	–	–	0
Australia		2005	42	448	1 073	22	5	9	–	
		2006	35	423	1 203	15	4	20	7	
		2007	51	575	1 133	20	3	15	50	
		2008	36	440	1 227	17	4	12	59	
	42 23	2009	23	297	1 314	15	5	–	–	
Brunei Darussalam		2005	100	163	163	2	1	0	0	
		2006	2	4	202	4	100	–	–	
		2007	100	209	209	0	0	–	–	0
		2008	100	223	223	0	0	–	–	0
	100 100	2009	100	213	213	2	1	–	–	
Cambodia		2005	3	1 044	36 123	86	8	–	–	
		2006	13	4 721	35 466	1 628	34	59	24	53
		2007	47	17 105	36 495	5 782	34	19	11	77
		2008	54	21 523	39 820	3 309	15	39	22	66
	3 70	2009	70	28 246	40 199	3 597	13	30	15	66
China		2005	–		990 509		–	–	–	
		2006	0	1 440	1 015 674	108	8	24	56	
		2007	6	67 265	1 045 939	1 523	2	45	34	0
		2008	8	81 682	1 034 199	2 848	3	54	20	
	– 6	2009	6	63 227	982 303	2 511	4	87	43	
China, Hong Kong SAR		2005	68	4 209	6 160	35	1	49	54	
		2006	78	4 511	5 766	33	1	64	45	64
		2007	73	4 075	5 545	41	1	63	66	63
		2008	72	4 121	5 729	48	1	35	33	75
	68 75	2009	75	3 993	5 348	40	1	23	28	78
China, Macao SAR		2005	91	378	415	1	0	0	100	
		2006	91	399	437	4	1	0	50	2
		2007	90	360	401	4	1	0	25	9
		2008	91	376	411	1	0	0	100	0
	91 91	2009	91	336	371	1	0	0	0	1
Cook Islands		2005	0	0	1	0	–	–	–	
		2006	0	0	1	0	–	–	–	0
		2007	–				–	–	–	
		2008	0	0	2	0	–	–	–	0
	0 0	2009	0	0	32	0	–	–	–	0
Fiji		2005	100	132	132	1	1	–	–	
		2006	59	67	114	3	4	67	67	0
		2007	61	57	94	0	0	–	–	
		2008	98	104	106		–	–	–	
	100 100	2009	100	144	144	0	0	–	–	0
French Polynesia		2005	48	30	63	0	0	–	–	
		2006	38	26	69	0	0	–	–	0
		2007	30	19	64	0	0	–	–	0
		2008	32	16	50	0	0	–	–	0
	48 23	2009	23	12	53	0	0	–	–	0
Guam		2005	72	46	64	0	0	–	–	
		2006	91	40	44	0	0	–	–	0
		2007	107	58	54	0	0	–	–	0
		2008	66	59	90	2	3	50	50	1
	72 62	2009	62	63	102	0	0	–	–	0
Japan		2005	–		28 319		–	–	–	
		2006	–		26 384		–	–	–	
		2007	64	16 100	25 311	57	0	–	–	
		2008	56	13 777	24 760	67	0	–	–	
	– 51	2009	51	12 429	24 170	52	0	–	–	
Kiribati		2005	13	44	339	2	5	0	0	
		2006	–		379		–	–	–	
		2007	–		352		–	–	–	0
		2008	5	16	342	0	0	–	–	0
	13 55	2009	55	152	278	0	0	–	–	
Lao People's Democratic Republic		2005	–		3 883		–	–	–	
		2006	10	404	3 994	91	23	100	93	
		2007	12	469	4 010	196	42	93	31	0
		2008	13	557	4 152	221	40	98	59	0
	– 17	2009	17	686	3 930	179	26	89	–	
Malaysia		2005	73	11 661	16 066	1 468	13	–	–	
		2006	78	13 039	16 665	1 438	11	–	–	
		2007	60	10 082	16 918	1 629	16	0	4	0
		2008	88	15 337	17 506	1 819	12	–	43	0
	73 84	2009	84	15 192	18 102	1 644	11	10	10	0
Marshall Islands		2005	77	86	112	0	0	–	–	
		2006	70	103	148	0	0	–	–	
		2007	60	98	163	0	0	–	–	0
		2008	100	127	127	0	0	–	–	
	77 69	2009	69	98	143	2	2	0	100	0
Micronesia (Federated States of)		2005	6	7	112		–	–	–	
		2006	16	18	113	0	0	–	–	0
		2007	30	44	145	0	0	–	–	0
		2008	39	64	166	0	0	–	–	0
	6 32	2009	32	49	155	0	0	–	–	0
Mongolia		2005	0	1	4 726	1	100	100	100	
		2006	0	1	5 216	1	100	100	100	
		2007	29	1 450	4 970	3	0	33	33	0
		2008	27	1 296	4 767	1	0	100	100	0
	0 83	2009	83	3 993	4 787	0	0	–	–	0
Nauru		2005	0	0	11	0	–	–	–	
		2006	0	0	12		–	–	–	0
		2007	0	0	4	0	–	–	–	0
		2008	0	0	7	0	–	–	–	0
	0 –	2009	–				–	–	–	0
New Caledonia		2005	40	21	53	0	0	–	–	
		2006	50	25	50	0	0	–	–	0
		2007	45	21	47	0	0	–	–	
		2008	–		51		–	–	–	
	40 –	2009	–		63		–	–	–	

[a] Data presented as of 31 August 2010. Notification data for European Union countries were not available.

TABLE A.6 **HIV testing and provision of CPT, ART and IPT, 2005–2009**

	% OF TB PATIENTS WITH KNOWN HIV STATUS 2005–2009	YEAR	% OF TB PATIENTS WITH KNOWN HIV STATUS	NUMBER OF TB PATIENTS WITH KNOWN HIV STATUS	PATIENTS NOTIFIED (NEW AND RETREAT)[a]	NUMBER OF HIV-POSITIVE TB PATIENTS	% OF TESTED TB PATIENTS HIV-POSITIVE	% OF HIV-POSITIVE TB PATIENTS ON CPT	% OF HIV-POSITIVE TB PATIENTS ON ART	NUMBER OF HIV-POSITIVE PEOPLE PROVIDED IPT
New Zealand		2005	41	140	340	8	6	–	–	
		2006	37	131	355	10	8	–	–	
		2007	36	104	287	4	4	–	–	
		2008	46	136	297	8	6	–	–	
	41 45	2009	45	137	302	4	3	–	–	
Niue		2005	–	0	0	0	–	–	–	
		2006	–	0	0	0	–	–	–	0
		2007	–	0	0	0	–	–	–	0
		2008	–	0	0	0	–	–	–	0
	– –	2009	–	0	0	0	–	–	–	0
Northern Mariana Islands		2005	98	56	57	0	0	–	–	
		2006	98	50	51	0	0	–	–	0
		2007	93	41	44	0	0	–	–	1
		2008	117	35	30	0	0	–	–	0
	98 84	2009	84	32	38	0	0	–	–	0
Palau		2005	90	9	10	0	0	–	–	
		2006	75	9	12	0	0	–	–	0
		2007	100	11	11	0	0	–	–	0
		2008	–	18			–	–	–	
	90 100	2009	100	19	19	0	0	–	–	0
Papua New Guinea		2005	–		12 564		–	–	–	
		2006	–		13 532		–	–	–	183
		2007	1	117	16 183	17	15	159	1 882	215
		2008	4	582	13 984		–	–	–	47
	– 10	2009	10	1 305	13 220	196	15	–	–	
Philippines		2005	–		137 100		–	–	–	
		2006	–		148 217		–	–	–	
		2007	0	46	142 576	0	0	–	–	
		2008	1	1 069	145 892	0	0	–	–	
	– 1	2009	1	1 136	151 656	1	0	0	0	1
Republic of Korea		2005	–		46 969		–	–	–	
		2006	–		46 284		–	–	–	
		2007	–		45 597		–	–	–	
		2008	–		44 170		–	–	–	
	– –	2009	–		47 299		–	–	–	
Samoa		2005	8	2	24	0	0	–	–	
		2006	0	0	26	0	–	–	–	0
		2007	–				–	–	–	
		2008	0	0	12	0	–	–	–	0
	8 0	2009	0	0	16	0	–	–	–	
Singapore		2005	–		1 469		–	–	–	
		2006	–		1 419		–	–	–	
		2007	–		1 405		–	–	–	
		2008	–		1 601		–	–	–	
	– 71	2009	71	1 121	1 574	52	5	–	–	
Solomon Islands		2005	0	0	397	0	–	–	–	
		2006	1	4	371	0	0	–	–	0
		2007	1	3	397	0	0	–	–	0
		2008	0	0	387	0	–	–	–	0
	0 0	2009	0	0	366	0	–	–	–	0
Tokelau		2005	–	0	0	0	–	–	–	
		2006	–	0	0		–	–	–	
		2007	–	0	0	0	–	–	–	0
		2008	–	0	0	0	–	–	–	0
	– –	2009	–		0		–	–	–	
Tonga		2005	–		18		–	–	–	
		2006	–		18		–	–	–	
		2007	100	23	23	0	0	–	–	0
		2008	100	13	13	0	0	–	–	0
	– 100	2009	100	8	8	0	0	–	–	0
Tuvalu		2005	–		15		–	–	–	
		2006	0	0	9	0	–	–	–	0
		2007	0	0	18	0	–	–	–	0
		2008	89	17	19	0	0	–	–	0
	– 0	2009	0	0	18	0	–	–	–	0
Vanuatu		2005	0	0	81	0	–	–	–	
		2006	0	0	132	0	–	–	–	0
		2007	0	0	122	0	–	–	–	0
		2008	16	17	104	0	0	–	–	
	0 8	2009	8	11	136	0	0	–	–	0
Viet Nam		2005	15	14 128	95 892	595	4	–	–	
		2006	2	1 822	98 284	198	11	–	–	
		2007	6	5 495	98 344	1 431	26	–	–	
		2008	11	11 332	98 684	2 210	20	78	32	500
	15 36	2009	36	34 907	98 192	5 934	17	89	6	1 500
Wallis and Futuna Islands		2005	–		7	0	–	–	–	
		2006	–	2			–	–	–	
		2007	100	2	2	0	0	–	–	0
		2008	–	4			–	–	–	
	– 100	2009	100	9	9	0	0	–	–	0

[a] Data presented as of 31 August 2010. Notification data for European Union countries were not available.

Data can be downloaded from www.who.int/tb/data

TABLE A2.7 **Testing for MDR-TB and number of confirmed cases of MDR-TB, 2005–2009**

			NEW CASES				PREVIOUSLY TREATED CASES			
	YEAR	TOTAL CONFIRMED CASES OF MDR-TB[a]	NOTIFIED	NUMBER OF NOTIFIED TESTED FOR MDR-TB	% OF NOTIFIED TESTED FOR MDR-TB	NUMBER OF CONFIRMED CASES OF MDR-TB	NOTIFIED	NUMBER OF NOTIFIED TESTED FOR MDR-TB	% OF NOTIFIED TESTED FOR MDR-TB	NUMBER OF CONFIRMED CASES OF MDR-TB
American Samoa	2005	0	5	0	0	0	1	0	0	0
	2006		4		–				–	
	2007	0	3	0	0	0	0	0	–	0
	2008	0	3	0	0	0	0	0	–	0
	2009	0	4	0	0	0	0	0	–	0
Australia	2005	12	1 030	787	76		43		–	
	2006	27	1 127	951	84	17	72	69	96	10
	2007	25	1 081	793	73	17	47	39	83	8
	2008	19	1 182	896	76	15	43	33	77	4
	2009		1 176		–		61		–	
Brunei Darussalam	2005	0	158	0	0	0	5	0	0	0
	2006		190		–		12		–	
	2007	0	195	148	76	0	12	2	17	0
	2008	0	211	0	0	0	12	0	0	0
	2009		213		–		0		–	
Cambodia	2005		34 817		–		1 306		–	
	2006	0	33 969	0	0	0	1 497	0	0	0
	2007	16	34 953	0	0	0	1 542	56	4	16
	2008	31	38 385	11	0	3	1 435	91	6	28
	2009	2	38 770		–		1 429		–	
China	2005		844 721		–		140 487		–	
	2006	2	889 077	0	0	0	118 025	10	0	2
	2007	79	933 123	50	0	13	112 816	236	0	66
	2008		932 120		–		102 079		–	
	2009	474	922 720		–	12	59 583		–	367
China, Hong Kong SAR	2005	29	5 441	3 382	62	16	719	473	66	13
	2006	34	5 142	3 348	65	16	624	392	63	18
	2007	25	4 973	3 238	65	19	572	145	25	6
	2008	28	5 168	3 121	60	14	561	390	70	14
	2009		4 839		–		509		–	
China, Macao SAR	2005	7	341	341	100	5	31	31	100	2
	2006	7	363	251	69	7	35	27	77	0
	2007	5	314	251	80	4	46	31	67	1
	2008	7	338	243	72	5	38	25	66	2
	2009	3	291	201	69	3	45	27	60	0
Cook Islands	2005	0	1	0	0	0	0	0	–	0
	2006	0	1	0	0	0	0	0	–	0
	2007				–				–	
	2008	0	2	0	0	0	0	0	–	0
	2009	0	32	0	0	0	0	0	–	0
Fiji	2005		132		–				–	
	2006	0	113	43	38	0	1	1	100	0
	2007	0	93	2	2	0	1	0	0	0
	2008	0	102		–		4		–	
	2009	0	142	0	0	0	2	2	100	0
French Polynesia	2005	0	60		–	0	3	3	100	0
	2006	0	67	40	60	0	2	2	100	0
	2007	0	62	42	68	0	2	2	100	0
	2008	0	48	46	96	0	2	2	100	0
	2009	0	48	42	88	0	5	4	80	0
Guam	2005	1	62	39	63	1	2	0	0	0
	2006	1	44	34	77	1	0	0	–	0
	2007	0	52	38	73	0	2	1	50	0
	2008	0	89	37	42	0	1	0	0	0
	2009	1	101	50	50	1	1	1	100	0
Japan	2005		26 327		–		1 992		–	
	2006		24 460		–		1 924		–	
	2007	58	23 626	4 457	19	26	1 685	443	26	32
	2008		22 924		–		1 836		–	
	2009		22 419		–		1 751		–	
Kiribati	2005	1	329	1	0		10		–	
	2006		374		–		5		–	
	2007	0	328	0	0	0	24	0	0	0
	2008	0	325	0	0	0	17	0	0	0
	2009		274		–		4		–	
Lao People's Democratic Republic	2005	0	3 633	0	0	0	185	0	0	0
	2006		3 823		–		171		–	
	2007	0	3 783	0	0	0	151	0	0	0
	2008	0	3 896	0	0	0	180	0	0	0
	2009		3 694		–		184		–	
Malaysia	2005	1	15 010	15 010	100	1	983	1 056	107	
	2006	42	15 670		–		995		–	
	2007	41	15 771		–		1 147		–	
	2008	56	16 452		–		1 054		–	
	2009	55	16 921		–		1 181		–	
Marshall Islands	2005	2	107	52	49	2	5	3	60	0
	2006	2	129	38	29		18	3	17	
	2007	1	152	29	19	0	11	10	91	1
	2008		120		–		7		–	
	2009	1	135	40	30	1	2	1	50	0
Micronesia (Federated States of)	2005	1	91	35	38	0	21	21	100	1
	2006	2	101	21	21	2	12	2	17	2
	2007	1	137		–	1	5		–	
	2008	4	161	40	25	4	5	3	60	0
	2009	3	146	48	33	3	9	2	22	0
Mongolia	2005	0	4 385	0	0	0	341	16	5	0
	2006	98	4 775	48	1	9	441	250	57	89
	2007	123	4 361	9	0	2	609	180	30	65
	2008	115	4 223	75	2	1	544	334	61	114
	2009	168	4 218	121	3	3	569	508	89	165
Nauru	2005	0	11	0	0	0		0	–	0
	2006	0	12	0	0	0	0	0	–	0
	2007	0	3	0	0	0	1	0	0	0
	2008	0	4	0	0	0	3	0	0	0
	2009	0		0	–	0		0	–	0
New Caledonia	2005	0	46	0	0	0	7		–	0
	2006	1	41	41	100	1	7	0	0	0
	2007	0	43	42	98	0	4	4	100	0
	2008	0	41	41	100	0	4	4	100	0
	2009	0	54	43	80	0	9	1	11	0

[a] TOTAL CONFIRMED CASES OF MDR-TB includes cases with unknown previous treatment history (i.e. not included under NEW CASES or PREVIOUSLY TREATED CASES).

TABLE A2.7 **Testing for MDR-TB and number of confirmed cases of MDR-TB, 2005–2009**

			NEW CASES				PREVIOUSLY TREATED CASES			
	YEAR	TOTAL CONFIRMED CASES OF MDR-TB[a]	NOTIFIED	NUMBER OF NOTIFIED TESTED FOR MDR-TB	% OF NOTIFIED TESTED FOR MDR-TB	NUMBER OF CONFIRMED CASES OF MDR-TB	NOTIFIED	NUMBER OF NOTIFIED TESTED FOR MDR-TB	% OF NOTIFIED TESTED FOR MDR-TB	NUMBER OF CONFIRMED CASES OF MDR-TB
New Zealand	2005	4	321	248	77	1	19	14	74	3
	2006	1	335	250	75	1	20	16	80	0
	2007	2	270	271	100	0	17	17	100	2
	2008	0	286	231	81	0	11	11	100	0
	2009		293		–		9		–	
Niue	2005	0	0	0	–	0		0	–	0
	2006	0	0	0	–	0	0	0	–	0
	2007	0	0	0	–	0	0	0	–	0
	2008	0	0	0	–	0	0	0	–	0
	2009	0	0		–				–	
Northern Mariana Islands	2005	2	57	8	14	2	0	1	–	0
	2006	2	51	18	35	2	0	0	–	0
	2007	0	44	14	32	0	0	0	–	0
	2008	0	28	0	0	0	2	0	0	0
	2009	0	38	21	55	0	0	0	–	0
Palau	2005	0	10	3	30	0	0	0	–	0
	2006	0	12	0	0	0	0	0	–	0
	2007	0	11	4	36	0	0	0	–	0
	2008				–				–	
	2009	0	19		–	0	0		–	0
Papua New Guinea	2005		11 108		–		1 456		–	
	2006		12 492	0	0		1 040	0	0	
	2007	0	14 906	0	0	0	1 277	0	0	0
	2008	5	12 185		–		1 799		–	
	2009		11 832		–		1 388		–	
Philippines	2005	274	133 143	4	0	4	3 957	138	3	119
	2006	403	143 149	33	0	19	5 068	424	8	384
	2007	568	137 501	16	0	4	5 075	325	6	270
	2008	929	137 026	74	0	14	8 866	1 305	15	729
	2009	1 073	142 102	1 242	1	1 050	9 554	36	0	23
Republic of Korea	2005		35 269		–		7 098		–	
	2006		35 361		–		6 702		–	
	2007		34 710		–		6 583		–	
	2008		34 153		–		6 310		–	
	2009		35 842		–		6 880		–	
Samoa	2005	0	24	0	0	0	0	0	–	0
	2006	0	23	0	0	0	3	0	0	0
	2007				–				–	
	2008	0	12	0	0	0	0	0	–	0
	2009		16		–		0		–	
Singapore	2005	3	1 296	895	69	2	153	105	69	1
	2006	6	1 245	861	69	3	164	101	62	3
	2007	4	1 249	827	66	3	149	105	70	1
	2008	4	1 437	919	64	1	151	103	68	3
	2009	3	1 442	915	63	3	132	85	64	0
Solomon Islands	2005		392	0	0	0	5	0	0	0
	2006	0	366	364	99	0	5	5	100	0
	2007	0	388	0	0	0	9	0	0	0
	2008	0	373	0	0	0	14	0	0	0
	2009	0	364	5	1	0	2	15	750	0
Tokelau	2005	0	0	0	–	0	0	0	–	0
	2006		0		–		0		–	
	2007	0	0	0	–	0	0	0	–	0
	2008	0	0	0	–	0	0	0	–	0
	2009		0		–		0		–	
Tonga	2005		18		–				–	
	2006		18		–		0		–	
	2007	0	23	0	0	0	0	0	–	0
	2008	0	13	0	0	0	0	0	–	0
	2009		8		–		0		–	
Tuvalu	2005		12		–		3		–	
	2006	0	9	0	0	0	0	0	–	0
	2007	0	17	0	0	0	1	0	0	0
	2008	0	17	0	0	0	2	0	0	0
	2009	0	18	0	0	0	0	0	–	0
Vanuatu	2005	0	73	0	0	0	8	0	0	0
	2006		126		–		2		–	
	2007	0	122	0	0	0	0	0	–	0
	2008	0	103	0	0	0	1	0	0	0
	2009	0	133	0	0	0	3	0	0	0
Viet Nam	2005	2	88 591		–		7 301		–	
	2006		90 793		–		7 491		–	
	2007		90 686		–		7 658		–	
	2008		91 150		–		7 534		–	
	2009	217	88 236		–		8 131		–	
Wallis and Futuna Islands	2005	0	7	0	0	0		0	–	0
	2006				–				–	
	2007	0	2	0	0	0	0	0	–	0
	2008				–				–	
	2009		9		–		0		–	

[a] TOTAL CONFIRMED CASES OF MDR-TB includes cases with unknown previous treatment history (i.e. not included under NEW CASES or PREVIOUSLY TREATED CASES).

Data can be downloaded from www.who.int/tb/data

TABLE A2.8 **New smear-positive case notification by age and sex, 1995–2009**

		MALE								FEMALE								
	YEAR	0–14	15–24	25–34	35–44	45–54	55–64	65+	UNKNOWN	0–14	15–24	25–34	35–44	45–54	55–64	65+	UNKNOWN	MALE/FEMALE RATIO
American Samoa	1995																	–
	2000					1	1							1				2.0
	2005											1		2				0.0
	2009	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	–
Australia	1995																	–
	2000	3	16	35	25	24	19	49		0	15	19	12	15	5	14		2.1
	2005	0	32	27	23	11	12	30		2	18	26	11	10	6	14		1.6
	2009	3	30	37	16	24	12	34	0	4	31	27	14	12	11	12	0	1.4
Brunei Darussalam	1995																	–
	2000	0	6	4	15	5	7	15		0	4	6	9	6	3	4		1.6
	2005	0	9	19	19	12	9	0		0	9	11	8	3	2	0		2.1
	2009	1	5	5	16	13	18	29	0	0	10	12	11	7	3	10	0	1.6
Cambodia	1995	161	453	1 244	1 147	1 253	1 257	707		123	388	1 133	1 435	1 426	1 180	578		1.0
	2000	26	519	1 323	1 618	1 456	1 373	1 058		38	457	1 157	1 649	1 798	1 459	892		1.0
	2005	49	894	1 600	2 349	2 043	1 964	1 811		45	790	1 413	2 089	2 323	2 058	1 573		1.0
	2009	37	746	1 522	1 884	2 117	1 543	1 548		45	801	1 252	1 461	1 894	1 637	1 376		1.1
China	1995	1 102	12 791	18 306	15 487	13 105	13 489	10 130		1 169	10 890	13 250	8 376	5 679	4 579	2 841		1.8
	2000	1 131	19 111	29 399	25 206	25 593	21 429	21 771		1 420	14 536	18 496	12 377	9 899	7 102	6 296		2.0
	2005	1 416	43 005	49 558	55 400	54 872	53 822	69 779		1 864	31 180	27 759	24 728	19 889	18 203	21 244		2.3
	2009	944	44 757	41 439	53 300	54 700	57 653	67 213	0	1 078	29 195	22 179	21 636	16 898	17 537	20 623	0	2.5
China, Hong Kong SAR	1995																	–
	2000	4	78	102	160	211	236	578		5	65	115	86	44	45	211		2.4
	2005	3	76	84	108	200	168	453		3	67	81	92	57	34	135		2.3
	2009	3	53	64	79	176	179	413	0	7	56	107	82	56	39	130	0	2.0
China, Macao SAR	1995	0	7	19	20	13	12	16		0	9	18	12	4	5	6		1.6
	2000	0	10	8	25	22	9	17		0	10	4	6	6	3	13		2.2
	2005	3	6	9	21	23	17	22		0	5	9	7	8	1	5		2.9
	2009	0	12	12	8	24	15	10	0	1	5	10	5	6	3	5	0	2.3
Cook Islands	1995	0	0	0	0	0	1	0		0	0	0	0	1	0	0		1.0
	2000	0	0	0	0	0	0	0		0	0	0	0	0	0	0		–
	2005	0	1	0	0	0	0	0		0	0	0	0	0	0	0		–
	2009	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	–
Fiji	1995	0	8	10	9	4	2	3		1	10	9	2	3	4	3		1.1
	2000	0	8	6	13	5	4	2		0	7	5	7	1	4	0		1.6
	2005	7	9	18	18	14	16	6		7	7	9	6	4	6	5		2.0
	2009	0	15	14	7	8	6	2	0	1	11	7	4	4	3	1	0	1.7
French Polynesia	1995																	–
	2000	1	3	3	4	4	4	3		1	4	1	0	1	0	0		3.1
	2005	0	2	2	2	0	4	2		0	2	3	0	1	1	3		1.2
	2009	1	1	4	1	3	0	0	0	0	2	0	0	1	3	1	0	1.4
Guam	1995																	–
	2000	2	1	6	6	9	6	9		0	3	1	2	5	2	2		2.6
	2005	0	2	4	4	2	2	4		0	3	1	1	2	0	2		2.0
	2009	0	1	0	5	3	9	4	0	1	1	3	1	1	2	0	0	2.4
Japan	1995	15	342	627	995	1 847	2 059	4 089		14	258	476	298	476	637	2 234		2.3
	2000	2	246	572	676	1 494	1 509	3 816		5	222	464	213	292	384	1 958		2.4
	2005	9	197	488	605	868	1 418	3 867		5	187	428	249	224	309	2 077		2.1
	2009	1	134	328	410	580	946	3 406		3	105	287	254	169	221	2 009		1.9
Kiribati	1995																	–
	2000	2	9	3	3	3	8	2		2	5	6	3	4	1	3		1.3
	2005	3	15	15	12	17	4	1		5	22	12	7	7	3	1		1.2
	2009	6	22	13	12	8	6	6	0	10	19	12	9	14	5	3	0	1.0
Lao People's Democratic Republic	1995	6	56	71	68	78	90	55		3	49	49	69	54	52	26		1.4
	2000	7	92	128	166	201	177	176		10	59	95	131	122	91	71		1.6
	2005	13	136	223	296	373	300	352		7	101	186	205	244	192	178		1.5
	2009	11	159	235	325	382	366	351		6	119	186	205	265	217	207		1.5
Malaysia	1995	59	640	879	775	788	374	1 072		58	446	448	345	316	149	339		2.2
	2000	32	694	1 138	1 177	908	814	891		41	464	564	424	367	356	286		2.3
	2005	244	1 179	2 218	2 277	1 980	1 427	1 507		208	1 044	1 061	947	816	586	572		2.1
	2009																	–
Marshall Islands	1995																	–
	2000	3	5	4	1	3	5	3		7	7	3	0	2	2	0		1.1
	2005	2	4	4	5	6	1	1		1	9	2	4	3	4	2		0.9
	2009	1	12	5	2	5	4	0	0	1	5	5	4	5	2	1	0	1.3
Micronesia (Federated States of)	1995	0	1	0	3	1	0	0		0	0	1	0	0	0	1		2.5
	2000	0	2	0	1	0	0	1		4	3	1	1	0	1	1		0.4
	2005																	–
	2009	5	7	5	5	2	1	2	1	8	6	9	4	4	1	1	0	0.8
Mongolia	1995	37	99	111	68	19	13	15		30	70	78	33	15	9	25		1.4
	2000	6	181	260	171	68	38	23		32	200	213	113	41	26	17		1.2
	2005	7	271	253	232	147	52	36		15	320	270	145	63	32	25		1.1
	2009	2	280	264	199	157	64	27	0	20	306	235	140	61	27	27	0	1.2
Nauru	1995																	–
	2000					1								1	1			0.5
	2005																	–
	2009																	–
New Caledonia	1995	3	2	3	4	2	2	3		2	1	1	3	3	0	1		1.7
	2000	1	1	3	4	2	3	4		1	8	1	1	3	2	4		0.9
	2005	0	2	1	0	0	3	0		0	1	2	1	2	0	4		0.6
	2009	0	0	0	0	1	0	5	0	0	1	1	3	0	2	2	0	0.7
New Zealand	1995	0	4	3	3	5	7	7		1	2	3	4	2	2	4		1.6
	2000	0	6	5	6	8	10	7		1	6	6	5	0	4	10		1.3
	2005	4	6	10	6	6	5	10		1	11	9	6	6	1	2		1.3
	2009	1	8	11	10	5	7	10	0	0	6	10	5	5	7	5	0	1.4
Niue	1995																	–
	2000																	–
	2005	0	0	0	0	0	0	0		0	0	0	0	0	0	0		–
	2009																	–
Northern Mariana Islands	1995	1	1	3	5	10	3	3		0	0	2	6	4	1	1		1.9
	2000	1	4	8	9	9	3	2		0	10	17	7	3	1	1		0.9
	2005	0	0	1	3	4	1	2		0	0	0	1	1	1	1		2.8
	2009	0	0	1	4	4	3	1	0	0	1	0	0	1	1	0	0	4.3
Palau	1995	0	2	3	0	2	1	0		0	0	0	0	1	0	0		8.0
	2000																	–
	2005			2				1										–
	2009	0	0	0	0	1	1	1		0	0	0	0	1	0	2		1.0
Papua New Guinea	1995																	–
	2000	8	87	70	30	21	12	5		6	77	45	21	15	5	1		1.4
	2005	28	183	205	108	94	48	12		38	200	204	124	65	35	2		1.0
	2009																	–
Philippines	1995	2	43	56	61	46	47	26		1	20	32	26	20	19	11		2.2
	2000																	–
	2005	482	7 358	11 275	13 253	12 531	7 646	4 279		374	3 710	5 268	5 565	4 603	3 274	2 029		2.3
	2009	479	9 228	12 240	13 534	12 974	8 491	4 577	0	410	4 827	5 641	5 463	4 577	3 166	2 119	0	2.3

[a] Data presented as of 31 August 2010. Notification data for countries that are members of the European Union were not available.

TABLE A2.8 **New smear-positive case notification by age and sex, 1995–2009**

		MALE								FEMALE								
	YEAR	0–14	15–24	25–34	35–44	45–54	55–64	65+	UN-KNOWN	0–14	15–24	25–34	35–44	45–54	55–64	65+	UN-KNOWN	MALE/FEMALE RATIO
Republic of Korea	1995	27	1 131	1 613	1 425	1 207	1 307	1 225		46	908	863	431	296	408	867		2.1
	2000	19	821	1 085	988	853	731	901		25	546	544	393	220	295	795		1.9
	2005	22	687	1 171	1 326	1 336	1 005	1 669		27	590	842	491	370	373	1 729		1.6
	2009	25	567	803	1 059	1 417	992	1 904	0	26	506	685	525	441	360	1 975	0	1.5
Samoa	1995	0	1	1	1	0	3	2		1	2	2	0	0	1	1		1.1
	2000	0	3	1	1	1	2	1		0	2	1	1	0	0	0		2.3
	2005	0	4	0	1	1	0	0		0	2	0	2	0	1	0		1.2
	2009				1		111	111					1	11	11	1 111		0.2
Singapore	1995	0	9	40	60	62	70	94		1	8	18	21	22	19	31		2.8
	2000	1	8	9	34	51	26	64		1	9	8	7	9	5	16		3.5
	2005	0	8	25	61	94	96	118		0	5	20	33	29	20	43		2.7
	2009	0	16	27	56	100	92	131	0	0	15	22	24	18	23	28	0	3.2
Solomon Islands	1995	2	14	6	5	7	9	3		3	17	11	7	12	13	0		0.7
	2000	3	13	4	8	8	10	6		8	15	13	7	7	5	2		0.9
	2005	4	14	18	9	15	12	11		9	23	21	12	11	9	1		1.0
	2009	3	11	17	8	8	8	6	0	9	19	19	9	11	7	3	0	0.8
Tokelau	1995																	–
	2000																	–
	2005																	–
	2009																	–
Tonga	1995	0	1	0	0	0	1	2		0	0	1	1	0	2	1		0.8
	2000		2	1	1		1	5			1	1	1		1	1		2.0
	2005	0	2	1	0	2	1	0		0	2	1	0	0	2	0		1.2
	2009	0	0	0	1	1	0	0	0	0	0	1	0	0	2	1	0	0.5
Tuvalu	1995	1	0	1	0	0	1	0		0	1	1	0	0	1	0		1.0
	2000																	–
	2005					1	1				1				2			0.7
	2009		1		1					1			1	2	1	1		0.3
Vanuatu	1995	0	6	2	5	3	4	0		0	5	0	2	3	0	0		2.0
	2000	2	7	5	1	10	5	2		5	3	15	7	3	3	1		0.9
	2005	1	4	5	5	0	4	1		0	5	1	2	4	1	2		1.3
	2009	0	6	3	3	1	3	2	0	2	3	5	3	5	4	1	0	0.8
Viet Nam	1995																	–
	2000	51	2 367	6 147	8 209	6 713	5 150	7 712		64	1 334	2 320	2 754	2 594	2 847	4 907		2.2
	2005	54	3 408	7 105	8 738	8 606	4 958	7 573		47	1 747	2 293	2 116	2 298	2 023	4 604		2.7
	2009	41	3 122	7 152	7 731	8 333	5 494	6 162		47	1 895	2 401	1 677	1 989	1 849	3 397		2.9
Wallis and Futuna Islands	1995																	–
	2000																	–
	2005																	–
	2009			1				1			1							2.0

[a] Data presented as of 31 August 2010. Notification data for countries that are members of the European Union were not available.

TABLE A2.9 **Laboratories, NTP services, drug management, human resources and infection control, 2009**

	LABORATORIES					FREE THROUGH NTP		DRUG MANAGEMENT			% OF STAFF TRAINED BY THE NTP (IN 2009)[c]				TB NOTIFICATION RATE PER 100 000 HEALTH-CARE WORKERS
	SMEAR LABS PER 100K POPULATION	CULTURE LABS PER 5M POPULATION	DST LABS PER 10M POPULATION	SECOND-LINE DST AVAILABLE	NRL[a]	TB DIAGNOSIS	FIRST-LINE DRUGS	RIFAMPICIN USED THROUGHOUT TREATMENT	% OF PATIENTS TREATED WITH FDC[b]	PAEDIATRIC FORMULATIONS PROCURED	MEDICAL OFFICERS	NURSES	HEALTH ASSISTANTS	LABORATORY TECHNICIANS	
American Samoa				No	No	Yes, all suspects	Yes	Yes	0	No					
Australia				In country	Yes	Yes, all suspects	Yes	Yes	0	Yes					
Brunei Darussalam						Yes, all suspects	Yes	Yes	0	Yes					
Cambodia	1.4	1.0	0.7	Out of country	Yes	Yes, all suspects	Yes	Yes	100	Yes					
China	0.2	3.1	1.0	In and out of cty	Yes	Yes, all suspects	Yes	Yes	10	No					
China, Hong Kong SAR	0.4	14.2	4.3	In country	Yes	Yes, all suspects	Yes	Yes	5	Yes	100	100	100	100	26
China, Macao SAR	1.5	9.3	18.6	In and out of cty	No	Yes, all suspects	Yes	Yes	0	Yes					
Cook Islands				Out of country	No	No	Yes	Yes	100	No					
Fiji	0.5	5.9	0	Out of country	Yes	Yes, all suspects	Yes	Yes	0	Yes	0	0	0	0	0
French Polynesia	1.1	37.2	0	Out of country	No	If TB is confirmed	Yes	Yes	100	Yes					
Guam	0.6	28.1	56.3	Out of country	Yes	Yes, all suspects	Yes	Yes	0	No	50	50	25	100	100000
Japan															
Kiribati	2.0			Out of country	No	Yes, all suspects	Yes	Yes	0	No					276
Lao People's Democratic Republic	2.5	0.8	0	No	Yes	Yes, all suspects	Yes	No	99	No	100	100	100	100	0
Malaysia	2.6	5.8	1.5	In country	Yes	Yes, all suspects	Yes	Yes	10	No	50	50	50	50	71
Marshall Islands	4.8	80.6	161.2	Out of country	No	Yes, all suspects	Yes	Yes	0	Yes	100	100	100	100	316
Micronesia (Federated States of)	3.6	0	0	Out of country	Yes	Yes, all suspects	Yes	Yes	100	No					0
Mongolia	1.3	1.9	3.7	In and out of cty	Yes	Yes, all suspects	Yes	Yes	100	Yes					804
Nauru				Out of country	Yes	Yes, all suspects	Yes								
New Caledonia				In country	Yes	Yes, all suspects	Yes	Yes	100	Yes					0
New Zealand				In country	Yes	Yes, all suspects	Yes	Yes	100	No					
Niue				No	Yes	Yes, all suspects	Yes	Yes	0	Yes					
Northern Mariana Islands	1.2	57.5	115.1	Out of country	No	Yes, all suspects	Yes	Yes	100	Yes	100	100	100	0	
Palau	4.9	244.4	488.8	Out of country		Yes, all suspects	Yes			Yes					
Papua New Guinea	1.8	0.7	0	Out of country	Yes	Yes, all suspects	Yes	Yes	45	Yes					
Philippines	2.2	0.5	0.3	In country	Yes	Yes, all suspects	Yes	Yes	100	Yes	75	75	70	75	
Republic of Korea	1.0	51.7	1.4	In country	Yes	Yes, all suspects	Yes	Yes	0	No	100	100	100	100	0
Samoa	1.1	0	0	Out of country	Yes	Yes, all suspects		Yes	100	No					
Singapore				In country	Yes	No	No	Yes	0	No					
Solomon Islands	1.7	0	0	Out of country	No	Yes, all suspects	Yes	Yes	100	No	0	80	0	90	
Tokelau															
Tonga	1.0	0	0	Out of country	Yes	Yes, all suspects	Yes	Yes	100	No					
Tuvalu	10.1	0	0	No	Yes	If TB is confirmed	Yes	Yes	100	Yes	20	75	0	10	0
Vanuatu	2.5	0	0	Out of country	No	Yes, all suspects	Yes	Yes	0	No	20	25	25	50	
Viet Nam	0.9	1.3	0.2	In country	Yes	If TB is confirmed	Yes	No	100	No	25	12	43	20	
Wallis and Futuna Islands				Out of country	No	Yes, all suspects	Yes	Yes	100	Yes					

a NRL = national reference laboratory
b FDC = fixed-dose combination
c NURSES (Registered Nurses, Registered Midwives, Enrolled Nurses, Enrolled Midwives); HEALTH ASSISTANTS (Medical Assistants, Clinical Officers); LABORATORY TECHNICIANS (Microscopists)

ANNEX 3

Country profiles

Country profiles – online and for all countries

All of the WHO reports on global TB control published from 2002 to 2009 included country profiles (of 3–4 pages each) that gathered together data for a specific country on epidemiology, implementation of DOTS (until 2005) and the Stop TB Strategy (since 2006) and financing. These profiles were produced for the 22 high-burden countries (HBCs), but not for other countries.

Profiles are now available online for all countries

In 2009, WHO introduced a new web-based system for management of global data on the TB epidemic and progress in TB care and control. In 2010, further development of this system has made it possible to produce real-time country profiles for all countries that are accessible via the web anywhere in the world, always drawing on the latest data contained in the global TB database.

From November 2010 onwards, country profiles will be available online, for all countries. Two profiles are available. The first is a one-page summary of data for the most important indicators of disease burden and progress in the implementation and financing of TB care and control. The second is a **one-page financial profile**, for the approximately 100 countries that report comprehensive financial data to WHO. Regional profiles will be produced in the near future.

Since country profiles are now available online for all countries, profiles for the 22 HBCs are not included in the printed version of this report.

What are the benefits?

Making country profiles available online rather than in the printed version of the report has various benefits. These include:

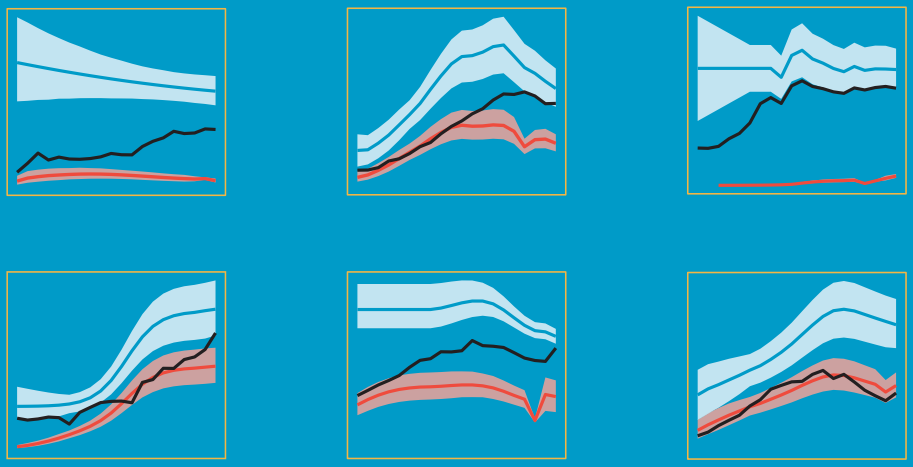
- profiles are available for all countries that have reported data.
- profiles based on the most up-to-date data are always available.

- people can select, download and print whichever profiles are of specific interest to them, rather than only having access to a set of profiles that are part of a big report. This may be of particular value for those working in a particular country (where the interest may be in the profile for that country and other countries in the same region) as well as for those travelling on missions to specific countries (when they can take one profile rather than the full report).
- items can be added, corrected or removed without waiting for a new global report to be published.
- it is possible for other websites to link to particular country profiles. These include the Global Health Observatory of WHO, which aims to link to country profiles for specific diseases or programmes.
- additional information that is related to the profile can be easily located in a few clicks, using links on the WHO website.

In the 2011 round of global TB data collection, the aim is that country profiles will also be generated for viewing by those reporting data, as data are entered. This will help with validation of data as well as prompting review and correction of data reported in earlier years.

www.who.int/tb/data

The World Health Organization monitors the global tuberculosis epidemic in support of national TB control programmes.



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