

Tuberculosis control: progress and long-term planning

Report by the Secretariat

1. In 1991, resolution WHA44.8 established two targets for global tuberculosis control by the year 2000: to detect 70% of cases and to cure 85% of sputum smear-positive patients with pulmonary tuberculosis under treatment. The choice of these levels of performance reflected the need to have a significant epidemiological impact through reaching targets that field experience had demonstrated were feasible in countries with high incidence rates of tuberculosis. Despite considerable progress in scaling up the internationally agreed tuberculosis control strategy (known as the DOTS strategy), towards the end of the 1990s it became apparent that the year 2000 targets would not be met. The date to achieve those targets was therefore postponed to 2005. In 2005, resolution WHA58.14 requested the Director-General to report to the Health Assembly in 2007 on the progress made by the end of 2005 towards reaching the global target of detecting 70% of new infectious cases and successfully treating 85% of those detected.

2. The latest global estimates of progress against the targets for 2005 indicate that, among patients with sputum smear-positive pulmonary tuberculosis diagnosed and treated under the DOTS strategy, the case-detection rate was 59% (for the cohort of patients diagnosed in 2005) and the treatment-success rate was 84% (for the cohort of patients treated in 2004) (see Table). More than 26 million tuberculosis patients were treated by DOTS programmes over the 11 years from 1995 to 2005.

Table. Progress towards the tuberculosis control targets for 2005

Region	Progress towards targets for 2005				
	Case-detection rate (in 2005) (%)	Number of countries achieving 70% detection target	Treatment-success rate (in 2004) (%)	Number of countries achieving 85% treatment-success target	Number of countries achieving both targets
African	50	13	74	6	1
Americas	65	18	80	9	7
South-East Asia	64	4	86	7	3
European	29	11	75	14	4
Eastern Mediterranean	39	8	82	7	5
Western Pacific	76	14	91	19	7
Global	59	68	84	62	27

Italics indicate rates that exceed the targets.

3. All WHO regions have made progress, with the Western Pacific Region having achieved and surpassed the targets, but with considerable variation among different countries. In all countries, the expected epidemiological impact on incidence, prevalence and mortality depends on national tuberculosis programmes performing well in ensuring the highest possible case-detection and treatment-success rates. Maximizing the expected epidemiological impact on the tuberculosis burden depends, for countries that have not reached the targets by 2005, on reaching them as soon as possible, and, for countries that have reached the targets for 2005, on sustaining and surpassing this achievement. It is important to attain targets not only globally but also in each region and country.

4. Achievement of the global rates of 59% for case detection and 84% for treatment success by 2005 represents tremendous progress in tuberculosis control since the respective targets of 70% and 85% were established in 1991. At that time no system existed for measuring the global burden of tuberculosis and the worldwide effort to implement the DOTS strategy was in its early stage. With the establishment of the global monitoring and surveillance system in the mid-1990s the rates were determined for the first time: 11% for case detection in 1995 and 77% for treatment success in 1994. Not only has the case-detection rate risen substantially over the past decade but it has doubled over the past five years, from 30% in 2001. The treatment-success rate has increased at the same time as an approximate 10-fold increase in cases detected.

5. The latest estimates of the global burden of tuberculosis refer to cases arising in 2005. Of the 8.8 million estimated cases, some 3.9 million were sputum smear-positive and 639 000 in adults infected with HIV; 1.6 million people died of tuberculosis, including 199 000 people co-infected with HIV. The estimated total number of multidrug-resistant cases worldwide in 2004 is put at 424 000. During 2006 reports began to emerge of extensively drug-resistant tuberculosis with significantly worse treatment outcomes than multidrug-resistant tuberculosis. To date, 20 countries have reported cases, including South Africa, where the extensively resistant disease has been reported in association with HIV infection with extremely high mortality (98%). It is not yet known what proportion of multidrug-resistant cases, globally, is extensively drug resistant but the United States of America, the Republic of Korea and Latvia report that it is 4%, 15% and 19% respectively.

6. After more than a decade of increase, the global annual incidence rate of tuberculosis (per 100 000 population) appears to have stabilized and may be now declining. In four WHO regions (the Americas, South-East Asia, Eastern Mediterranean and Western Pacific), the annual incidence rate has been stable or falling over the past decade. In the other two regions (African and European) the rate had been increasing for more than a decade but appears to have reached a peak. On account of the extremely high annual incidence rate in the African Region, due largely to the impact of HIV, the Fifty-fifth Regional Committee for Africa declared tuberculosis an emergency in the Region in August 2005.

7. Despite progress in all regions, many countries still face constraints to further progress in tuberculosis control, in particular: (i) limitations in geographical coverage of, and access to care in line with, the DOTS strategy, and in the quality of implementation of the strategy; (ii) the fuelling of the tuberculosis epidemic by HIV, the occurrence in some countries in all regions of multidrug-resistant tuberculosis (including extensively drug-resistant tuberculosis) due to inadequate tuberculosis-treatment practices, and the challenge posed by risk factors such as smoking; (iii) weaknesses in health systems regarding overall policy, human resources, financing, management, service delivery, and information systems; (iv) inadequate engagement of the full range of care providers, particularly those in the private sector; (v) insufficient mobilization of people with tuberculosis and of communities to promote case-finding, patient-centred support and high-quality care, and their limited engagement in partnerships to stop tuberculosis; and (vi) underinvestment in research aimed at improving the use of the currently available interventions for tuberculosis control and at developing the new diagnostics,

medicines and vaccines that are urgently needed. Extensively drug-resistant tuberculosis is especially challenging to treat. In Latvia, for instance, among a predominantly HIV-negative population and in spite of high-quality care, the cure rate was less than 30%. It is also appearing in countries with consistently poor programme performance over many years. Effective treatment demands the controlled use of second-line antituberculosis medicines, which are not yet available in many countries.

8. Ways to overcome these constraints formed the basis for the development of WHO's Stop TB strategy, which aims to reach by 2015 the internationally agreed development goal relevant to tuberculosis contained in the United Nations Millennium Declaration. The strategy was drawn up through a process of extensive consultation, endorsed by the Stop TB Partnership, and launched on 17 March 2006. Its six elements correspond to the major constraints listed above: (i) expand and enhance the DOTS strategy while maintaining its high quality; (ii) tackle HIV-related tuberculosis, multidrug-resistant tuberculosis and challenges due to risk factors; (iii) contribute to health-system strengthening; (iv) engage all care providers; (v) empower people with tuberculosis and communities; and (vi) enable and promote research. Implementing the strategy involves significant expansion in the scale and scope of tuberculosis-control activities, building on global progress made against the targets for 2005.

9. Measuring the expected impact of implementation of the Stop TB strategy on the burden of disease requires the use of specific indicators (tuberculosis incidence, prevalence and deaths) in addition to continued use of operational programme-performance indicators (case-detection and treatment-success rates). The internationally agreed development goals contained in the United Nations Millennium Declaration provide a framework and opportunity for international cooperation in improving the health of poor people. Tuberculosis, a disease of poverty and responsible for the loss of more years of healthy life than any other curable communicable disease, is one of the priorities to which these goals apply: Target 8 of Millennium Development Goal 6 is "to have halted and begun to reverse incidence by 2015" – indicators 23 and 24 specify tuberculosis. The Stop TB Partnership has endorsed international targets linked to Target 8, namely to halve tuberculosis prevalence and death rates by 2015 (in comparison with 1990 baselines).

10. As part of its enhanced support to the Stop TB Partnership, WHO led the preparation of the Partnership's Global Plan to Stop TB 2006–2015,¹ which was launched at the World Economic Forum (Davos, Switzerland, 25-29 January 2006). The Plan was developed through a process of extensive consultation with a wide range of partners, including governmental bodies, academia, civil society, nongovernmental organizations, and technical experts. As the blueprint for implementation of the Stop TB strategy, the Plan sets out the activities that are expected to result in global achievement of the international targets for 2015. These activities include the expansion of interventions against multidrug-resistant tuberculosis (including increasing access to high-quality second-line medicines at affordable prices through the Stop TB Partnership's Green Light Committee) and HIV-related tuberculosis. The Plan sets out the resources needed, underpinned by sound epidemiological analysis with robust budget justifications. The total cost (US\$ 56 000 million) over 10 years includes US\$ 47 000 million for implementation of currently available interventions and US\$ 9000 million for research and development. The estimated funding gap is US\$ 31 000 million, since an estimated US\$ 25 000 million is likely to be available based on projections of current domestic and external funding trends.

¹ Document WHO/HTM/STB/2006.35.

11. Since the launches of the Global Plan and the Stop TB strategy WHO has made good progress in promoting and supporting the implementation of both the Plan and the strategy, in collaboration with other Stop TB partners. WHO is also monitoring progress in implementation through the Global Tuberculosis Surveillance, Planning and Financing Project. Support has been provided for country planning and budgeting through regional workshops for managers of national tuberculosis-control programmes and through reviews of those programmes. A tool for national planning and budgeting developed by WHO has been successfully field-tested. WHO's support for country planning and budgeting encourages close collaboration between tuberculosis and HIV programmes in those countries where HIV is fuelling, or threatens to fuel, the tuberculosis epidemic. WHO is coordinating activities to strengthen the network of public- and private-sector laboratories, which play a crucial role in case detection and surveillance of disease, including drug-resistant tuberculosis. Strengthening laboratory capacity is one of the priorities of the Global Task Force on Extensively Drug-Resistant Tuberculosis that WHO convened (Geneva, 9–10 October 2006) in order to intensify efforts to control this problem. As a major partner in developing the International Standards for Tuberculosis Care,¹ WHO is promoting their use as a means of engaging private practitioners in implementation of the Stop TB strategy. WHO's activities in mobilizing popular and political support to implement the Global Plan range from the promotion of grass-roots advocacy to the engagement of national and world leaders in the campaign to stop tuberculosis.

ACTION BY THE EXECUTIVE BOARD

12. The Executive Board is invited to consider the following draft resolution:

The Executive Board,

Having considered the report on tuberculosis control: progress and long-term planning,²

RECOMMENDS to the Sixtieth World Health Assembly the adoption of the following resolution:³

The Sixtieth World Health Assembly,

Having considered the report on tuberculosis control: progress and long-term planning;

Noting the progress made since 1991 towards achieving the international targets for 2005, and more recently following the establishment, in response to resolution WHA51.13, of the Stop TB Partnership;

Aware of the need to build on this progress and overcome constraints in order to reach the international targets for tuberculosis control for 2015 set by the Stop TB Partnership – in line with the internationally agreed development goal relevant to

¹ Tuberculosis Coalition for Technical Assistance. *International standards for tuberculosis care*. The Hague, Tuberculosis Coalition for Technical Assistance, 2006.

² Document EB120/8.

³ See document EB120/8 Add.1 for the administrative and financial implications for the Secretariat of this resolution.

tuberculosis contained in the United Nations Millennium Declaration: “to have halted and begun to reverse incidence by 2015” – of halving tuberculosis prevalence and death rates by 2015 compared with 1990 levels;

Noting the development of the Stop TB strategy as a comprehensive approach to tuberculosis prevention and control that incorporates the internationally agreed tuberculosis control strategy (DOTS strategy) and represents a significant expansion in the scale and scope of tuberculosis-control activities;

Welcoming the Partnership’s Global Plan to Stop TB 2006–2015, which sets out the activities oriented towards implementing the Stop TB strategy and achieving the international targets for tuberculosis control for 2015;

Aware of the need to increase the scope, scale and speed of research needed to achieve the international targets for tuberculosis control for 2015 and the goal of eliminating tuberculosis as a global public-health problem by 2050;

Concerned that delays in implementing the Global Plan will result in increasing numbers of tuberculosis cases and deaths, including those due to multidrug-resistant (and extensively drug-resistant) tuberculosis and to the impact of HIV, and therefore in delays in achieving by 2015 the international targets for tuberculosis control and the internationally agreed development goal relevant to tuberculosis contained in the United Nations Millennium Declaration;

Recalling that resolution WHA58.14 encouraged Member States to fulfil their commitments to ensure the availability of sufficient domestic resources and of sufficient external resources to achieve the internationally agreed development goal relevant to tuberculosis contained in the United Nations Millennium Declaration,

1. URGES all Member States:

(1) to develop and implement long-term plans for tuberculosis prevention and control in line with the Global Plan to Stop TB 2006–2015, in the context of overall health development plans and in collaboration with other programmes (including those on HIV/AIDS, child health and strengthening of health systems), with the aim of:

(a) accelerating progress towards the international targets for tuberculosis control for 2015 through full and rapid implementation of the Stop TB strategy;

(b) limiting the emergence and transmission of multidrug-resistant tuberculosis, including extensively drug-resistant tuberculosis by ensuring high-quality performance of tuberculosis programmes;

(c) increasing access to quality-assured second-line medicines at affordable prices through the Stop TB Partnership’s Green Light Committee;

(2) to use all possible financing mechanisms in order to fulfil the commitments made in resolution WHA58.14, including that to ensure sustainable domestic and external financing for tuberculosis prevention and control;

2. REQUESTS the Director-General:

(1) to intensify support provided to Member States in developing capacity and improving the performance of national tuberculosis-control programmes within the broad context of strengthening health systems in order to achieve the international targets for 2015;

(2) to enhance WHO's support for the Stop TB Partnership in its coordination of efforts to implement the Global Plan to Stop TB 2006–2015 and to facilitate long-term commitment to its sustainable financing;

(3) to enhance WHO's role in tuberculosis research in order to promote the applied research necessary to reach the international targets for tuberculosis control for 2015 and the basic research necessary to achieve the goal of eliminating tuberculosis by 2050; and to increase global support for those areas of tuberculosis research that are currently underresourced;

(4) to report to the Sixty-third World Health Assembly through the Executive Board on:

(a) progress in implementation of the Global Plan to Stop TB 2006–2015, including mobilization of resources from domestic and external sources for its implementation;

(b) progress made in achieving the international targets for tuberculosis control by 2015, using the “proportion of tuberculosis cases detected and cured under directly observed treatment, short course (DOTS)” (Millennium Development Goal indicator 24) as a measure of the performance of national programmes, and tuberculosis incidence and “prevalence and death rates associated with tuberculosis” (Millennium Development Goal indicator 23) as a measure of the impact of control on the tuberculosis epidemic.

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