

Ethiopia

Overview of TB control system

Health sector reform, carried out within the framework of the Health Sector Development Plan (HSDP), has integrated TB treatment into the general health services, and is progressively decentralizing service delivery to peripheral health units in woredas. However, more than half of the Ethiopian population lives farther than 10 km from the nearest health facility, usually in regions with poor transport.

Surveillance, planning, operations

Case notification rates have increased rapidly since 1995, at about 16% per year both for smear-positive cases and all forms of TB. These increases can be attributed both to improved case finding under DOTS and to the spread of HIV. Notification rates are highest among young adults, which is characteristic of countries with high rates of HIV infection (an estimated 29% of adult TB patients are HIV-positive). Treatment success for the 2001 cohort was only 76%, mainly because 7% of patients died during treatment, 6% defaulted, and 7% were not evaluated. Both case detection and cure rates faltered between October 2002 and October 2003 as a result of weaknesses in management, mainly at the federal level.

Ethiopia has a 2002–6 Strategic Plan for TB Control that includes the DOTS strategy. A standardized planning process has contributed to rapid DOTS expansion. In October 2003, a joint TB and leprosy review was undertaken in partnership with WHO. The review confirmed that the NTP was fully integrated into the general health services, and operates within the framework of the HSDP. Although

cooperation between the NTP and the HSDP could be improved, it has already delivered a 5-fold increase in the number of patients notified between 1994 and 2002. The 2003 annual programme review, led by WHO, recommended a shift in focus of the TB and Leprosy Central Team to support, among other things, improved case detection in the regions through expanding health facility coverage, testing community-based DOTS strategies, implementing PPM projects, and intensifying case finding among people with HIV/AIDS.

DOTS expansion has been facilitated in some regions by decentralization of TB care, with peripheral health stations, rather than hospitals and health centres, now providing care. Of the 70 zones in the

country, 64 are now implementing DOTS in at least one facility. Of the 605 woredas, 522 or 86% have at least one DOTS facility. Of the 2552 government health facilities and NGOs in Ethiopia, half are implementing DOTS. Nearly all of the population (96%) lives in the DOTS woredas, but because woredas are so large, only about 40% of the people have true access to DOTS, meaning that they live within 10 km or 2 hours walk from a health facility offering DOTS treatment. Decentralization has stalled the expansion of DOTS in some regions due to a serious shortage of managerial staff, lack of timely disbursement of funds, lack of supervision, high turnover of trained staff, and insufficient awareness of TB on the part of high level officials and

PROGRESS IN TB CONTROL IN ETHIOPIA

Indicators

• Treatment success 2001 cohort	76%
• DOTS detection rate, 2002	33%
• NTP budget available, 2003	100%
• Government contribution to NTP budget, including loans, 2003	19%
• Government contribution to total TB control costs, including loans, 2003	41%
• Government health spending used for TB, 2003	5%

Constraints to achieving targets

- Services have been decentralized to regions, zones, and woredas that do not yet have sufficient capacity to implement them; funds have flowed slowly from central to peripheral levels
- Poorly developed infrastructure (e.g. transport, communication, organization) means that access to TB services remains difficult in half the country
- Serious staffing problems include low morale, inadequate remuneration, migration of educated people to urban areas, and attraction to the private sector
- Deficiencies in management, supervision, training, equipment, and monitoring
- Irregular drug supply
- Weak laboratory quality assurance

Remedial actions needed

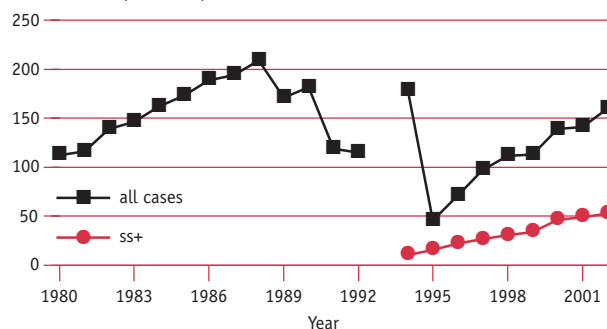
- Expand DOTS into all existing health facilities
- Develop community-based TB services in remote areas
- Strengthen public-private partnerships
- Design plan for recruitment, retention, and training of staff at all levels
- Strengthen capacity of Pharmaceutical Administration and Supply Service (PASS) to improve drug procurement and distribution
- Develop plan to strengthen laboratory component of NTP and improve quality of smear microscopy

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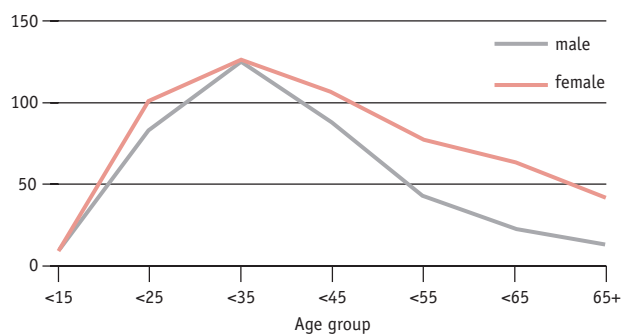
LATEST ESTIMATES ^a		TRENDS	1999	2000	2001	2002
Population	68 961 044	DOTS population coverage (%)	63	85	70	95
Global rank (by est. number of cases)	7	Notification rate (all cases/100 000 pop)	113	139	141	160
Incidence (all cases/100 000 pop)	370	Notification rate (new ss+/100 000 pop)	34	47	49	53
Incidence (new ss+/100 000 pop)	159	Detection of all cases (%)	38	43	41	43
Prevalence (ss+/100 000 pop)	265	Detection of new ss+ cases (%)	26	34	33	33
TB mortality per 100 000 pop	88	DOTS detection of new ss+ (%)	26	34	33	33
% of adult (15-49y) TB cases HIV+	29	DOTS detection of new ss+/coverage(%)	41	40	47	35
% of new cases multi-drug resistant	2.3	DOTS treatment success (new ss+, %)	76	80	76	—

Notification rate (per 100 000 pop)

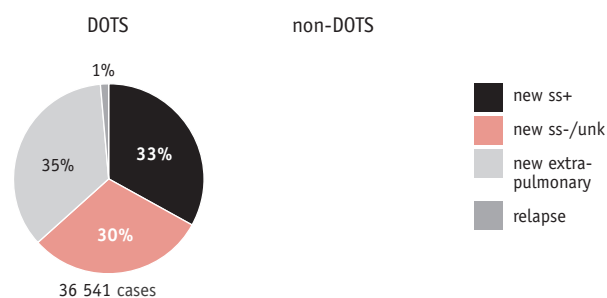
Notification (all cases) = 110 289 in 2002



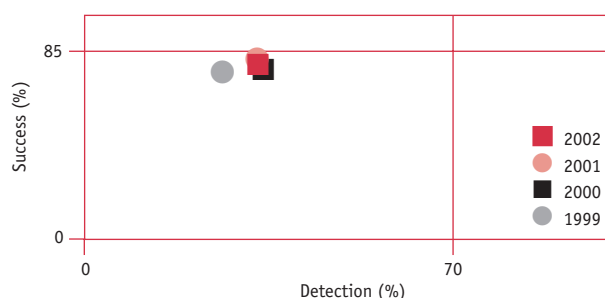
Notification rate by age and sex (new ss+)^b



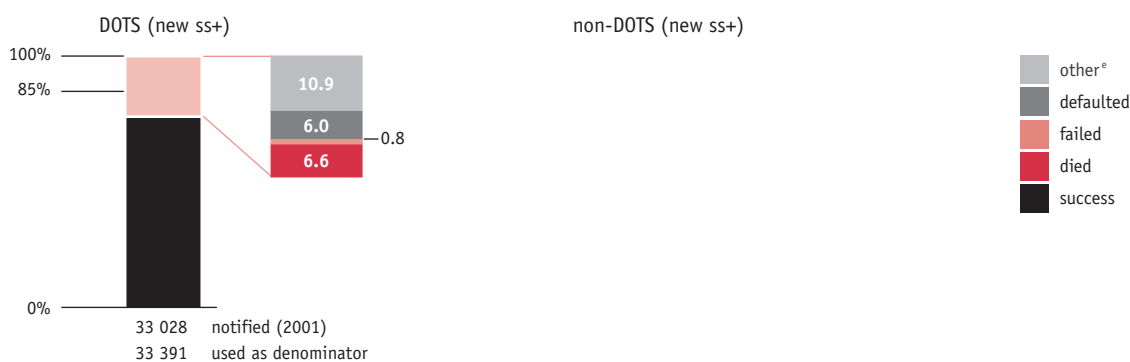
Case types notified^c



DOTS progress towards targets^d



Treatment outcomes^e



Notes

ss+ Indicates smear-positive; ss-, smear-negative; pop, population; unk, unknown.

^a See Methods for data sources.

^b The sum of cases notified by age and sex is less than the number of new smear-positive cases notified for some countries.

^c Non-DOTS is blank for countries which are 100% DOTS, or where no non-DOTS data were reported.

^d DOTS progress towards targets: DOTS detection rate for given year, DOTS success rate for cohort registered in previous year.

^e "Other" includes transfer out and not evaluated, still on treatment, and other unknown.

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policy makers. Regular supervision and monitoring are needed to strengthen service delivery and DOTS expansion in woredas.

The recording and reporting system is becoming increasingly reliable. A programme to assure the quality of laboratory work has been established in 4 regions, and by Addis Ababa City Administration and Dire Dawa Administrative Council. Laboratory personnel were provided with refresher training, and NTP and laboratory manuals were distributed. Expansion of the laboratory network did not occur because of the delay in decentralization of care coupled with a shortage of trained staff. Of the 456 government-run diagnostic centres, 396 follow WHO recommendations but the quality of diagnosis needs improvement and continuous monitoring.

Very few of the new staff appointments needed in woredas have been made. A limit has been placed on recruitment within the government health sector, which means that it may not be possible to correct existing staff shortages with outside funding. There remains, therefore, a major concern about whether the NTP will have the capacity to perform the

necessary training, supervision, and monitoring.

A national TB/HIV coordinating body has been set up, but joint activities in TB/HIV control have not yet begun. The exception is a single research project on the treatment of latent TB infection. There is no systematic testing for HIV infection among TB patients, but the NTP plans to provide ART from 2004. The first nationwide survey of drug resistance is currently under way.

A delegation from Ethiopia attended a PPM workshop in Nairobi in June 2003 and drafted a proposal for pilot testing PPM in Addis Ababa, the capital city. There are 12 private hospitals and more than 450 private clinics in Addis Ababa. PPM implementation began in 2003.

Other plans for 2004 include staff training, the building of laboratory capacity, improved monitoring and evaluation through the revision of supervision guidelines, development of a comprehensive plan for IEC, establishment of a national TB association, and strengthening of financial management within the MoH and regional health bureaux.

Partnerships

The HSDP facilitates international partnerships for TB control. A WHO expert posted at the central level provides technical assistance. The University of Brescia (Italy) and ALERT organize, with the NTP, regional programmes for the training of trainers. The Dutch government currently gives funds for anti-TB drugs and to cover some operational costs. GRLA provides funds for overall programme support and WHO contributes to some specific activities. MSF Belgium provides technical and financial support in the Somali Region. The GFATM has approved substantial funding. The dependence on donors is unavoidable in the short-term, and technical and financial partnerships will probably need to continue for some years.

Budgets and expenditures

The NTP budget for the fiscal year 2003 (from 1 July) is US\$ 10.6 million. This is US\$ 5.8 million more than was received in 2002. The NTP estimates that it will treat 110 000 patients during 2003, implying a budget per patient of US\$ 97. The government will contribute US\$ 2.2

Budget estimates, existing funding, and budget gaps for fiscal year 2003, US\$ millions

	REQUIRED FUNDING	EXPECTED FUNDING				FUNDING GAP
		GOVERNMENT	LOANS	GRANTS	OTHER	
NTP budget						
Drugs	3.0	—	—	3.0	—	—
Dedicated staff working exclusively for TB control	0.2	0.2	—	—	—	—
New activities to raise case detection and cure rates	—	—	—	—	—	—
Buildings, equipment, vehicles	3.6	2.0	—	1.6	—	—
All other line items	3.8	—	—	3.8	—	—
TOTAL NTP BUDGET	10.6	2.2	—	8.4	—	—
Costs not covered by NTP budget ^a						
Hospital stay	0.2	0.2	—	—	—	—
Clinic visits for DOT and monitoring	3.4	3.4	—	—	—	—
TOTAL COSTS NOT COVERED BY NTP BUDGET	3.6	3.6	—	—	—	—
TOTAL TB CONTROL COSTS	14.2	5.8	—	8.4	—	—

— Indicates zero; NA, not available

^a WHO estimates, data not provided by the NTP

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million to the 2003 budget, an increase of US\$ 1.1 million over 2002. The government will cover approximately 41% of total costs of TB control in the public sector. TB control activities account for 5% of the government's spending on health.

In August 2003, Ethiopia received US\$ 6.5 million from the GFATM for TB control activities. The grant from the GFATM eliminated the financing

gap previously anticipated for 2003. Compared to 2002, large increases for buildings, equipment, and vehicles are expected during 2003. Between 2002 and 2003, the drug budget increased by US\$ 200 000 which is in line with expectations for increased case detection. The drug budget, at US\$ 3 million, is equivalent to US\$ 27 per patient.

Costs associated with TB control

that are not funded from the NTP budget amount to an estimated US\$ 3.6 million, of which US\$ 0.2 million is for hospital admissions during treatment and US\$ 3.4 million is for clinic visits during treatment. These data imply total TB control costs of US\$ 14.2 million per year, and US\$ 129 per patient.