

China

TB control within the health care system

A three-tier primary health care system is in place in the rural areas with health units at the country, township, and village levels. Villages have simple clinics staffed by doctors, townships have a clinic or a small hospital, and counties have several hospitals. In urban areas, the health system is dominated by hospitals of various sizes. Outpatient departments of the hospitals serve as the entry point for patients seeking primary care. Fewer than 20% of patients have health insurance and 80–90% of patients pay out-of-pocket for medical expenses.

Currently, there are three modes of TB control in China, though these will be integrated in 2002. The first mode delivers the DOTS strategy with free diagnosis for all suspects and free treatment for infectious TB cases, and was supported (until the end of 2001) through a World Bank loan for half of the country. The drug supply is centralized and is procured by international bidding, keeping prices low and quality high. Treatment in DOTS programmes is provided in TB dispensaries, to which cases diagnosed elsewhere should be referred. The second mode is the “Promoting and Strengthening TB Control Project” funded by the government and covering a population of 160 million with a modified DOTS strategy. The fees paid by patients are based on socioeconomic status. The third mode covers the remaining 480 million people without a well-defined strategy.

Progress in DOTS coverage

After rapid expansion of DOTS during the early 1990s, DOTS coverage in 2000 (68%) and case detection in 2000 (33%) have changed little since 1996. The World Bank-funded Infectious and Endemic Disease Control (IEDC) Project provided DOTS to approximately 50% of the population until the end of 2001, with

Partnerships

China has combined growing national political commitment with international technical and financial cooperation. The World Bank has been a key partner since 1991 through their World Bank loan project. Japan is providing grant aid support to a TB project in 2002. DFID will likely join with the World Bank to fund a new TB project, beginning in 2002. WHO has provided overall technical collaboration since inception of the World Bank loan project in 1991 and has posted one TB expert in the country since late 1999. Other partners include DFB through their support to TB control in Tibet and Inner Mongolia, KNCV through their participation in regular joint World Bank-WHO monitoring mission, and IUATLD through their support to the Chinese Anti-TB association.

the remaining 18% being funded by national sources.

Preliminary results from the 2000 National TB Prevalence Survey (NPS) found that in the 13 provinces covered by the project, the prevalence of smear-positive TB had fallen by 36% since 1990, compared to 3% elsewhere. Only 13% of cases with a known diagnosis of TB were referred to TB dispensaries for treatment, suggesting gross under-referral of TB patients from hospitals where most TB diagnoses are made. Improving the system of referral, or integrating hospitals into DOTS programmes, is clearly essential for improving TB control in China.

Planning for TB control

The three priorities for TB control in China are: to maintain DOTS services where they have been introduced during the 1990s; to increase case detection within DOTS areas by strengthening the referral of patients to TB dispensaries; and to expand DOTS to the remaining 40% of the country.

China has completed a National Plan for the Prevention and Control of TB (2001–2010), though the implementation plan and annual work plans for 2001–2005 are still under development and not yet available. A National Interagency

Coordinating Committee has been established and its first meeting will be held in early 2002.

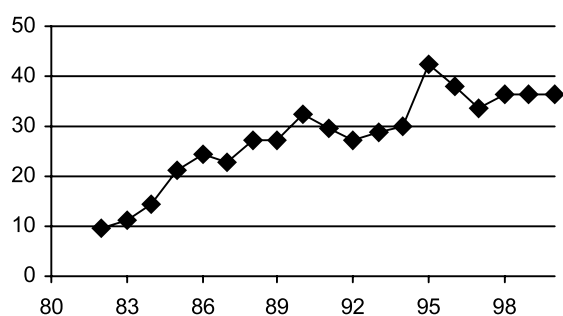
Beginning in 2002, additional support is expected to expand DOTS to 20 provinces: 7 provinces will be funded through combined resources contributed by Japanese Grant Aid, the World Bank, and DFID; 9 provinces by World Bank and DFID; and 4 provinces with Japanese Government Grant Aid alone. Together, these funds will cover around 610 million people in 20 provinces in 2002. Therefore, if the provinces previously funded by the IEDC project (and not included in the new projects) are able to continue providing DOTS, the total DOTS coverage for the country should exceed the previous coverage of 68%.

Beginning in 2002, the national TB control plan (2001–2010) will unify and harmonize the three present modes of TB control. The plan aims to facilitate DOTS expansion to 90% of the country and double the current case detection rate (to reach 70%) by 2005, while keeping the same high level of treatment success. Strengthening of the central TB control unit is being planned and this will be essential if the proposed expansion is to be achieved. National TB policies and guidelines will be formulated and used throughout the country. Initiation

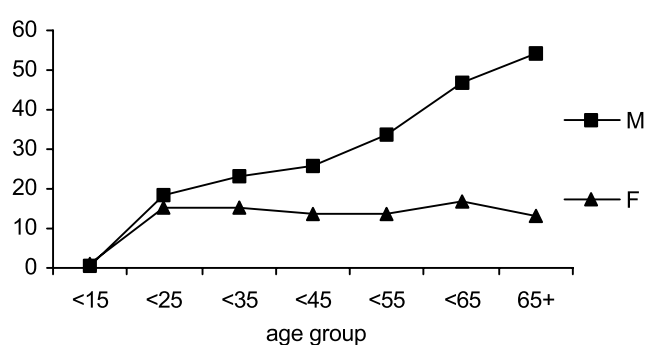
CHINA

LATEST INFORMATION:		2000	TRENDS:				
			1997	1998	1999	2000	
Population		1 275 132 866	DOTS population coverage (%)	64	64	64	68
Est. incidence (all cases/100 000 pop)		107	Notification rate (all cases/100 000 pop)	34	36	36	36
Global rank (by est. number of cases)		2	Detection (new ss+ cases, %)	33	37	36	36
Regional rank		1	- DOTS detection (new ss+, %)	26	33	32	33
Est. adult (15-49y) TB cases that are HIV+ (%)		0.4	Treatment success countrywide (new ss+, %)	95	95	95	--
Est. multi-drug resistance (new cases)		5.3	- Treatment success under DOTS (%)	96	97	96	--
DOTS status (year adopted)		DOTS (1995)	- Est. new ss+ success under DOTS (%)	28	32	31	--

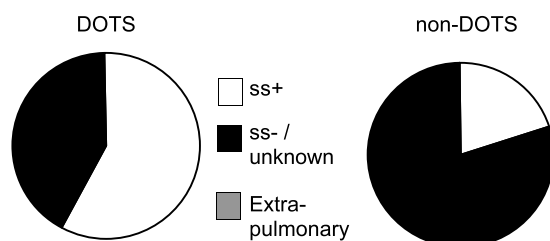
NOTIFICATION RATE (all cases per 100 000 pop)



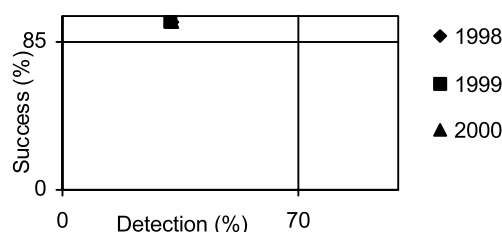
RATE BY AGE AND SEX (new ss+) *



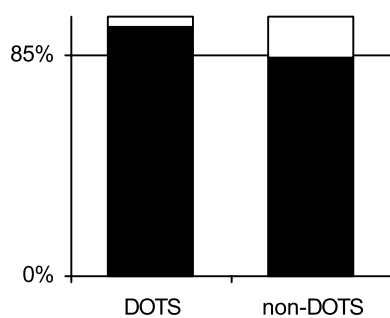
CASE TYPES NOTIFIED (new)



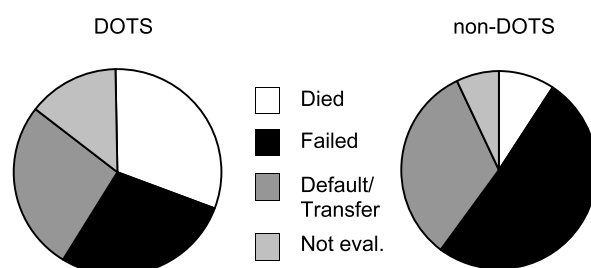
DOTS DETECTION AND DOTS SUCCESS RATES **



TREATMENT SUCCESS RATE (new ss+)



UNSUCCESSFUL TREATMENT OUTCOMES (new ss+)



Nb registered: 188 112 DOTS , 19 878 non-DOTS

* The age and sex rates may be based on data that do not include all smear-positive cases notified.

** DOTS treatment success rates are shown here by year of report, i.e., for the cohort registered during the previous year. ss+ = sputum smear-positive. Est = estimated. '-' = data not yet collected by WHO. Eval = evaluated. Pop = population.

of the new 10-year TB control plan coincides with the termination of the World Bank IEDC TB project, the government's own project, and the start of new projects.

Financial estimates

Detailed budget estimates have been prepared. The total budget for DOTS implementation for the period 2001–2005 is US\$ 484.8 million (average US\$ 97 million per year). The main budget items are staff, programme management and supervision, diagnosis, training, and drugs. Central government funding of US\$ 4.8 million per year and provincial government funding of US\$ 10.5 million per year have already been committed, as have donor funds of about US\$ 2.5 million for 2002. Staff and buildings are funded at the local level. There is a budget gap of about US\$ 44 million per year at present. However, further funds are expected to be available from a World Bank loan and local governments, both of which are currently being discussed. ●

CHINA: Budget estimates, existing funding, and budget gaps for 2002 and 2001–2005, US\$ millions

COST ITEM	BUDGET	FUNDING			BUDGET	FUNDING		
	2002	2002			2001–5	2001–5		
		GOV'T	GRANTS	GAP		GOV'T	GRANTS	GAP
Staff	37	37			185	185		
Buildings	1.8				5.3			
Diagnosis	7.8		0.7		35.2		0.7	
Drugs	7.9		1.5		54.1		1.5	
Training	8.5				39.6			
Programme management and supervision	24.7				118.5			
Activities to increase case detection and cure rates*	6.0		0.3		32.5		0.3	
Miscellaneous	4.2				14.6			
TOTAL	97.9	52.3**	2.5	43.1	484.8	261.5**	2.5	220.8

* includes health education, case reporting fee, operational research and social assessments

** US\$ 15.3 million per year (or US\$ 76.5 million over 5 years) in governmental funding has been allocated but not yet been ear-marked for specific budget categories. Therefore, this amount is not reflected in the line item breakdown, but is included in the total.

CHINA: Constraints to DOTS expansion and remedial actions

	CONSTRAINTS TO DOTS EXPANSION	ACTION TAKEN IN 2001 TO OVERCOME CONSTRAINTS TO DOTS EXPANSION	ACTION PLANNED IN 2002 TO OVERCOME CONSTRAINTS TO DOTS EXPANSION
POLITICAL ENVIRONMENT			
Political commitment	<ul style="list-style-type: none"> Lack of a national plan to fully expand DOTS to the entire country 	<ul style="list-style-type: none"> The State Council of China developed and disseminated the National Plan to Prevent and Control TB (2001-2010) National Interagency Coordination Committee (NICC) established to build political support 	<ul style="list-style-type: none"> Based on the national plan, develop implementation and annual work plans for 2001-2005 First meeting of NICC to be held in early 2002
Financial resources	<ul style="list-style-type: none"> Insufficient funding to expand DOTS 	<ul style="list-style-type: none"> Central government will provide \$US4.8 million each year for TB from 2001 to 2005 Provincial governments are preparing to provide additional funds for TB control Preparations made for a WB/DFID TB Control Project that will cover 16 provinces Japanese Grant Aid Project was approved for 11 provinces 	<ul style="list-style-type: none"> Anticipated approval of new WB/DFID TB Control Project in first half of 2002 The government will seek additional support in order to fill remaining gap in funding for TB control
Sustainability of existing DOTS services	<ul style="list-style-type: none"> Sustainability of DOTS coverage achieved cannot be ensured by national resources alone 	<ul style="list-style-type: none"> Commitment secured from Japan to support TB project in 2002, and ongoing preparation for new WB/DFID project 	<ul style="list-style-type: none"> Same as for "Financial resources"
HEALTH SYSTEM CAPACITY			
Health sector reform including private sector integration	<ul style="list-style-type: none"> Insufficient cooperation between TB control institutions and other health care providers 		<ul style="list-style-type: none"> Based on the National Plan, strengthen the referral of TB patients to the TB dispensaries for diagnosis and treatment
Staffing	<ul style="list-style-type: none"> Insufficient staff to expand DOTS at each level 	<ul style="list-style-type: none"> Plan to strengthened central provincial and lower level TB control unit with needed human and financial resources 	
	<ul style="list-style-type: none"> Insufficient training provided to TB control staff 	<ul style="list-style-type: none"> Plan made to strengthen training of staff at all level 	<ul style="list-style-type: none"> Implement training program for TB control workers through new TB projects
Management and communication issues	<ul style="list-style-type: none"> Lack of trained TB program managers 	<ul style="list-style-type: none"> Management training for core group of programme managers especially at provincial level 	<ul style="list-style-type: none"> Strengthen management and coordination of various TB projects
Drug supply	<ul style="list-style-type: none"> Insufficient access to free TB drugs in the country 	<ul style="list-style-type: none"> Funding secured through central governmental funding and Japanese Grant Aid for free drugs to about 3/4 of the country 	<ul style="list-style-type: none"> Procure and distribute quality TB drugs
Laboratory resources	<ul style="list-style-type: none"> System for quality control of sputum microscopy not fully operational 		<ul style="list-style-type: none"> Develop and implement national plan for quality control of sputum microscopy
Programme monitoring and surveillance	<ul style="list-style-type: none"> TB surveillance system tied to different projects and not to a single national reporting system Insufficient monitoring of provincial TB control programmes 	<ul style="list-style-type: none"> Revision of TB reporting system underway and decision made to have a single uniform reporting system Plan made to strengthen supervision visits to provinces beginning in 2002 	<ul style="list-style-type: none"> Finalization and implementation of new national TB surveillance system Increase monitoring visits to provinces from central level
Emerging issues	<ul style="list-style-type: none"> Increasing mobile population making case-finding and management more difficult Emergence of MDR-TB Emergence of TB-HIV co-epidemic 	<ul style="list-style-type: none"> Drug resistance surveillance projects expanded to 2 more provinces in China 	<ul style="list-style-type: none"> Pilot project will be established to tackle problems of TB among the mobile population and HIV-associated TB Free TB diagnosis and treatment will be provided to TB patients in mobile population Drug resistance surveillance projects to expand to 2 more provinces in China Rapid expansion of DOTS to reduce MDR-TB
PEOPLE AND COMMUNITIES			
Community health education	<ul style="list-style-type: none"> Lack of population knowledge about TB 		<ul style="list-style-type: none"> New IEC strategy will be developed and implementation will begin in 2002 Carry out social assessments; develop and implement new IEC strategy