# PROGRESS TOWARDS THE MILLENNIUM DEVELOPMENT GOALS for tuberculosis control

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9m cases annually: 36% in India and China
Highest TB rates per capita are in Africa.

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Tuberculosis in the world, 2003

- New TB cases: 8.9m (141/100K)
- New ss+ TB cases: 3.9m
- Change incidence rate: 1.1%/yr
- Prevalence TB: 15.5m (246/100K) (incl HIV+ve TB cases 0.38m)
- Deaths from TB: 1.8m (29/100K) (incl HIV+ve TB deaths 0.27m)
Growth of TB in Africa and Eastern Europe

- Africa - high HIV
- Eastern Europe
- Africa - low HIV

Standardized notification rate

TB epidemics are slowing in African and Ex-Soviet countries.

[Graph showing annual rate change in case notifications for different regions.]
Decline of TB in Europe and the Middle East

- W Europe
- C Europe
- Middle East

Standardized notification rate

- 1980
- 1985
- 1990
- 1995
- 2000
MILLENIUM DEVELOPMENT GOALS

"To have halted and begun to reverse the spread…"

Implementation

Indicator 24 (by end 2005)
Case detection 70%
Treatment success 85%

Impact

Indicator 23 (by 2015 cf 2000 or 1990?)
Prevalence halve rate
Deaths halve rate
<table>
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<th>Regions</th>
<th>Strategies, notifications and treatment outcome data</th>
<th>Financial data</th>
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</table>
Global treatment success is 82% but...

![Bar chart showing the percent of cohort death, default+transfer, and failure by region.](chart.png)
16m patients treated in 9 years, and accelerating...

... but not quickly enough
Regional progress towards 70% case detection:
Europe low, SE Asia accelerating, Americas high
>70% of the 02-03 *increase* in global case detection in India and China
Where are the missing cases? 63% in top 8 countries

14.7% increase in case detection 02-03
TB Disease Prevalence Surveys
Number by Decade by Region

Africa

Americas

E Mediterranean

Europe

SE Asia

W Pacific
DOTS reduces prevalence of TB by 37% over a decade in China
"Model DOTS Project" reduces TB prevalence in south India

source: TRC Chennai

The prevalence of TB has fallen by approximately 10% per year in the Model DOTS Project (MDP), as indicated by the following graph:

- **Male C+** and **Male S+** show a decrease in prevalence.
- **Female C+** and **Female S+** also exhibit a decline in prevalence.

Year ranges from 1968-70 to 2001-03.
Trends in TB death registrations

- Former Soviet Union
- Central Europe
- Industrialized
- Latin America

no data for Africa or Asia
Dynamics of pulmonary TB in Peru 1980-2000

DOTS 1990

case finding

PTB falling at 6%/yr
Decline in TB incidence in the Maldive Islands

Case notification rate (/100K/yr)

- all TB
- new sm+

- decline 9%/yr
- decline 10%/yr
Trends in TB prevalence and deaths

TB prevalence rate (all forms)/100K/yr

2000: 270
2001: 260
2002: 250

TB death rate/100K/yr

prevalence
deaths
Global targets for TB control

MILLENIUM DEVELOPMENT GOALS

www.who.int/gtb

**Implementation**

*Indicator 24 (by end 2003)*

Case detection 43/70%

Treatment success 82/85%

**Impact**

*Indicator 23 (2003/2000 per 100K per yr)*

Prevalence 246/279

Deaths 28/30
Worldwide treatment programmes cut TB case fatality

Number of TB deaths (‘000s)


BCG vaccine
no Tx
Tx - DOTS
Tx + DOTS
Tx + DOTS 70%