PROGRESS TOWARDS TARGETS FOR GLOBAL TB CONTROL

TME + 6 ROs + 201 NTPs
WORLD HEALTH ORGANIZATION
GENEVA
## Tuberculosis in the world, 2003

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>New TB cases</td>
<td>8.9m</td>
<td>(141/100K)</td>
</tr>
<tr>
<td>New ss+ TB cases</td>
<td>3.9m</td>
<td></td>
</tr>
<tr>
<td>Change incidence rate</td>
<td>1.1%/yr</td>
<td></td>
</tr>
<tr>
<td>Prevalence TB</td>
<td>15.5m</td>
<td>(246/100K)</td>
</tr>
<tr>
<td>(incl HIV+ve TB cases)</td>
<td>0.38m</td>
<td></td>
</tr>
<tr>
<td>Deaths from TB</td>
<td>1.8m</td>
<td>(29/100K)</td>
</tr>
<tr>
<td>(incl HIV+ve TB deaths)</td>
<td>0.27m</td>
<td></td>
</tr>
</tbody>
</table>
Global targets for TB control

MILLENNIUM DEVELOPMENT GOALS

<table>
<thead>
<tr>
<th>Indicator 24 (by end 2005)</th>
<th>Case detection</th>
<th>70%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Treatment success</td>
<td>85%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Indicator 23 (by 2015 cf 2000 1990)</th>
<th>Prevalence</th>
<th>halve rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Deaths</td>
<td>halve rate</td>
</tr>
</tbody>
</table>
High treatment success in DOTS areas

target 85%

DOTS smear+

non DOTS smear+

Global treatment success is 82% but...
Case detection rate, sm-pos (%)

- WHO target 70%
- Accelerated progress: target 2005
- DOTS begins
- Average rate of progress 1995-2000
Many TB cases captured by non-DOTS providers in Americas, Europe and SE Asia

<table>
<thead>
<tr>
<th>Region</th>
<th>Percent of estimated cases detected</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFR</td>
<td>34</td>
</tr>
<tr>
<td>AMR</td>
<td>134</td>
</tr>
<tr>
<td>EMR</td>
<td>180</td>
</tr>
<tr>
<td>EUR</td>
<td>239</td>
</tr>
<tr>
<td>SEAR</td>
<td>533</td>
</tr>
<tr>
<td>WPR</td>
<td>125</td>
</tr>
</tbody>
</table>
Improving case detection in China: 627 patients with TB, seen by health services

Source: 2000 prevalence survey
Integration of reporting in public health system improved case detection by about 35% in peninsular Malaysia?

Fall since 1999 2.1%/yr
Fall before 1995 1.9%/yr

Integration 1995
4-year transition
DOTS notifications as % of all notifications

- smear-positive
- all forms
WHO target 70%

accelerated progress: target 2005

DOTS begins

average rate of progress 1995-2000
Tuberculosis in Australian immigrants: a snapshot of the global epidemic
Watkins & Plant 2003

Log$_{e}$ estimated TB incidence/100K/yr at origin

Australia

Log$_{e}$ TB incidence/100K/yr

USA, Malta, New Zealand, Greece, Poland, UK, Netherlands, Germany, Turkey, Egypt, Sri Lanka, Yugoslavia, Vietnam, Indonesia, Philippines, Fiji, Singapore, Malaysia, Lebanon, China, India, Taiwan, Australia.
Dynamics of pulmonary TB in Peru 1980-2000

DOTS 1990 case finding

PTB falling at 6%/yr
Incidence is falling in Morocco, but is it because of DOTS?
Fall in prevalence of SS+ TB by 34% in DOTS areas of China
Trends in TB death registrations

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

Asia and Africa missing
Impact of improved TB control in Peru: deaths averted

- Estimated number of deaths

- DOTS 1991

- Other

- Defaulted

- Untreated

Years: 1987 to 1999
• Will achieving operational targets (case detection and treatment success) be enough to take us to the impact targets (prevalence and mortality)?

• Answer depends partly on what we think is happening outside DOTS (poor treatment reduces mortality, but increases duration and therefore prevalence)
Mortality (per 100,000 per year)

- Deaths remaining
- Extra deaths prevented by DOTS
- 70% detection under DOTS
- Deaths prevented by treatment
Global targets for TB control

MILLENNIUM DEVELOPMENT GOALS

Indicator 24 (by end 2003):
Case detection 43*/70%
Treatment success 82/85%

Indicator 23 (2000, 2003):
Prevalence† 279, 246/100K
Deaths† 30, 28/100K/yr

*provisional data, † including HIV+ve