TB/HIV in the WHO European Region

Accelerating advocacy on TB/HIV
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Presentation outline

- Epidemiology in WHO European Region
  - TB, HIV & HIV/TB
- Regional specificities
## Surveillance: most important impact TB indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>What to measure</th>
<th>How to measure</th>
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</thead>
</table>
| Incidence rate (/100,000) | New TB cases *estimated* in one year  \\
|                         |                                                      | x 100,000                             |
|                         | Total midyear population                            | x determinants coefficient            |
| Notification rate (/100,000) | New TB cases *notified* in one year  \\
|                         |                                                      | x 100,000                             |
|                         | Total midyear population                            | Notifications of TB                   |
| Case detection rate (%) | New TB cases *notified* in one year  \\
|                         |                                                      | x 100                                 |
|                         | New TB cases *estimated* in one year                | Reports TB case finding               |
| Prevalence rate (/100,000) | New and old TB cases *estimated* in one year  \\
|                         |                                                      | x 100,000                             |
|                         | Total midyear population                            | TB prevalence survey                  |
| Mortality rate (/100,000) | TB deaths in one year  \\
|                         |                                                      | x 100,000                             |
|                         | Total midyear population                            | Vital registration                    |
- 9.4 mln new TB cases estimated globally in 2008 (139 per 100 000 population)
- 6% contribution of European Region to the Global burden

In 2008, 50 (of 54) countries from the Region reported a total of 461,645 TB cases.

The overall TB notification rate was 52.2 per 100,000 population.

46% notified cases from Russia.

87.6% contribution of 18 HPC to the Regional TB burden.
TB notification* rate and estimated incidence
WHO European Region (1980-2008)

** 18 High Priority Countries

Armenia
Azerbaijan
Belarus
Bulgaria
Estonia
Georgia
Kazakhstan
Kyrgyzstan
Latvia
Lithuania
Moldova
Romania
Russian Fed.
Tajikistan
Turkey
Turkmenistan
Ukraine
Uzbekistan

* Newly notified episodes (TB cases) = new cases + relapses
*** excluding Bulgaria and Romania that become EU in 2007
Overall, about 61% (5.5 million) of the estimated number of incident cases detected Case-detection has been stagnating globally since 2006.
Notified and estimated TB mortality rates
WHO European Region (2003-2007)

Map 3: TB mortality rates per 100,000 population, Europe, 2007

* Data from Kosovo (in accordance with Security Council Resolution 1244 (1999)) is not included in the figures reported for Serbia
Smear Positive treatment success rates 2007

- 85% treatment success rate: 79%
- 82%
- 88%
- 88%
- 92%
- 87%

Region: AFR, AMR, EMR, EUR, SEAR, WPR, Global

TSR (average in EUR) in 2005: 52/71
TSR (average in EUR) in 2006: 55/70
Among all incident TB cases globally an estimated 3.6% are MDR-TB
<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated MDR prevalence, among all TB cases</td>
<td>19.1% (81,000 cases)*</td>
</tr>
<tr>
<td>Notified MDR prevalence, among all TB cases</td>
<td>18.1% (18,365 cases)**</td>
</tr>
<tr>
<td>Detection Rate of all MDR-TB cases</td>
<td>22.7%</td>
</tr>
</tbody>
</table>

Out of 27 countries that account for 85% of all MDR-TB cases, 15 are in the European Region

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*** Data considered reliable if 50% of all cases were culture-positive, and 80% of them had reported DST results.
Cumulative number of reported HIV/AIDS cases in WHO European Region 1985-2008

- HIV
- AIDS
- AIDS deaths
- people on HAART
IDU as % of all HIV/AIDS cases with known transmission route

NOTE: % of AIDS cases in countries not reporting HIV: France, Italy, Spain  Sources: WHO/ECDC, national reports.
Scaling up treatment in Europe

Central and Eastern Europe
Western Europe

Feb-03 Apr-03 Jun-03 Aug-03 Oct-03 Dec-03
Feb-04 Apr-04 Jun-04 Aug-04 Oct-04 Dec-04
Feb-05 Apr-05 Jun-05 Aug-05 Oct-05 Dec-05
Feb-06 Apr-06 Jun-06 Aug-06 Oct-06 Dec-06
Feb-07 Apr-07 Jun-07 Aug-07 Oct-07 Dec-07
Feb-08 Apr-08 Jun-08 Aug-08 Oct-08
• Оценочная распространенность ВИЧ-инфекции среди случаев ТБ = 5.6% (≈ 23.800 people)
• HIV testing coverage = 79% (≈ 357.000 patients)
• HIV prevalence among tested TB = 3.0% (≈ 11.500 patients)
• 48% of TB/HIV patients are detected
• 28% of TB/HIV patients are covered by ARV treatment
### HIV testing and treatment in TB patients, by WHO Regions (2008)

<table>
<thead>
<tr>
<th>Region</th>
<th>Number of TB patients with known HIV status (thousands)</th>
<th>% of notified TB patients tested for HIV</th>
<th>% of tested TB patients HIV-positive</th>
<th>% of estimated HIV-positive TB cases identified by testing</th>
<th>% of identified HIV-positive TB patients started on CPT</th>
<th>% of identified HIV-positive TB patients started on ART</th>
<th>Regional distribution of estimated TB among HIV-positive (%)</th>
<th>Number of HIV-positive people provided IPT (thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFR</td>
<td>636</td>
<td>45</td>
<td>46</td>
<td>27</td>
<td>73</td>
<td>30</td>
<td>78</td>
<td>729</td>
</tr>
<tr>
<td>AMR</td>
<td>113</td>
<td>49</td>
<td>15</td>
<td>45</td>
<td>36</td>
<td>67</td>
<td>2.7</td>
<td>48</td>
</tr>
<tr>
<td>EMR</td>
<td>22</td>
<td>5.4</td>
<td>4.1</td>
<td>5.8</td>
<td>39</td>
<td>55</td>
<td>1.1</td>
<td>12</td>
</tr>
<tr>
<td>EUR</td>
<td>357</td>
<td>79</td>
<td>3.3</td>
<td>48</td>
<td>61</td>
<td>28</td>
<td>1.7</td>
<td>205</td>
</tr>
<tr>
<td>SEA</td>
<td>94</td>
<td>4.1</td>
<td>18</td>
<td>9.3</td>
<td>54</td>
<td>35</td>
<td>13</td>
<td>300</td>
</tr>
<tr>
<td>WPR</td>
<td>152</td>
<td>11</td>
<td>7.0</td>
<td>24</td>
<td>55</td>
<td>28</td>
<td>3.1</td>
<td>90</td>
</tr>
<tr>
<td>Global</td>
<td>1374</td>
<td>22</td>
<td>26</td>
<td>25</td>
<td>71</td>
<td>32</td>
<td>100</td>
<td>1384</td>
</tr>
</tbody>
</table>

Number of HIV-positive people provided IPT (thousands)
Regional challenges

- Both epidemics spread within vulnerable “most at risk populations” i.e. drug users, prisoners and migrants
- Out of the system, poor access to services, marginalized and stigmatized
- Low uptake of HIV testing, limited access to ART
- Limited collaboration between the vertical HIV and TB programmes (drug dependence, STIs, viral hepatitis)
- Lack of integration between HIV and TB services