Tuberculosis situation in Finland

Kristiina Salovaara / Filha
Basic information:

- Total Area: 337,000 km²
- Population: 5,351,427
- Life Expectancy: 83.46 years of age for females, 76.62 for males (2009)
- Number of Doctors: 3.64 / 1000 inhabitants
- Number of Nurses: 12.78 / 1000 inhabitants
- Total fertility rate: 1.86 born child/woman (in 2009)
- Cumulative HIV cases: 2590 (2009)
- TB incidence (all) cases: 7.9 per 100,000 (2009)
TB in Finland

- TB incidence 7.6 / 100 000 (2009)
- ~ 60 MDR cases up today (0.4 -2%)
- ~ 75 TB/HIV cumulative cases (1-9 yearly = 1.4% of TB cases 2009)
- 20-30% of all detected TB cases foreign-born
- 0-2 cases in penitentiary care yearly
- Knowledge on TB decreases
TB incidence/100 000 in Finland
TB cases according to patients age, gender and origin in 2005

<table>
<thead>
<tr>
<th>Age group</th>
<th>Male (204)</th>
<th>Female (152)</th>
</tr>
</thead>
<tbody>
<tr>
<td>65+</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>55-64</td>
<td>20%</td>
<td>10%</td>
</tr>
<tr>
<td>45-54</td>
<td>10%</td>
<td>20%</td>
</tr>
<tr>
<td>35-44</td>
<td>10%</td>
<td>20%</td>
</tr>
<tr>
<td>25-34</td>
<td>20%</td>
<td>10%</td>
</tr>
<tr>
<td>15-24</td>
<td>10%</td>
<td>20%</td>
</tr>
<tr>
<td>0-4</td>
<td>20%</td>
<td>10%</td>
</tr>
</tbody>
</table>

- Finnish
- Foreigner
<table>
<thead>
<tr>
<th>Year</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>8,6</td>
<td>13,2</td>
<td>10,3</td>
<td>12,3</td>
<td>12,5</td>
<td>14,5</td>
<td>17,8</td>
<td>21,3</td>
<td>15,7</td>
<td>30,1</td>
</tr>
</tbody>
</table>
MDR-Tuberculosis in Finland

Year

No of Cases

Total 42 patients

<table>
<thead>
<tr>
<th>Year</th>
<th>MDR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>1</td>
</tr>
<tr>
<td>1994</td>
<td>1</td>
</tr>
<tr>
<td>1996</td>
<td>2</td>
</tr>
<tr>
<td>1998</td>
<td>3</td>
</tr>
<tr>
<td>2000</td>
<td>4</td>
</tr>
<tr>
<td>2002</td>
<td>3</td>
</tr>
<tr>
<td>2004</td>
<td>2</td>
</tr>
<tr>
<td>2006</td>
<td>1</td>
</tr>
<tr>
<td>2008</td>
<td>5</td>
</tr>
<tr>
<td>2010</td>
<td>5</td>
</tr>
</tbody>
</table>

MDR - Multidrug-resistant tuberculosis.
Notification rates by age groups
Problems in low TB incidence

- TB incidence ↓
- Risk groups
- Miniepidemics
- Nosocomial infections
- Knowledge on TB ↓
  - professionals
  - general population
- Delays of physicians/patients ↑
- Inadequate treatments
- Inadequate prevention of transmissions
What has been done in Finland to meet the challenges

• National TB-program 2006, updating 2012
• Training of HCW’s, nationwide
• Enforcing national supervision and guidance, introduction of two national expert groups
• Increasing DOT, standardisation of treatment monitoring, treatment outcome monitoring
• Specific risk group measures
• More efficient prevention of transmission of TB in institutions; Infection control
• Targeting BCG-vaccinations at risk groups
TRAINING IN THE NATIONAL TUBERCULOSIS PROGRAM IN 2007-2010

Objectives

- Informing the public of the TB-program
- Enhancing the development of HD TB programs and local networking
- Improving the basic knowledge on TB
- Organising TB-training for different focus groups
- TB presentation bank for training use

Components

- Hospital district trainings
  - Training on implementation of the TB program in local level covering all hospital districts in 2007
- Web-based training
  - Open web training package for professionals and students in health care
- Other trainings
  - nurses, public health staff
  - occupational health care
  - staff in refugee centres
  - penitentiary care
  - TB presentation library
Improving risk group measures

- Screening
  - Immigrants from high incidence countries
  - Elderly $\geq$ 75 years of age
  - Homeless and drug- or alcohol abusers
- Contact investigations
- DOT
- LTBI treatments
- BCG targeted to risk groups
Different parts of the country have different problems
Åland

- 0-2 TB cases per year
- Incidence 0 – 3.7
- contacts to Sweden
Helsinki and Southern Finland county

- 117 - 152 TB cases yearly
- Incidence 6.73
- 7 prisons
- Several centres for asylum seekers
- Close contacts to Tallinn, Estonia
Eastern Finland County

• 22 - 45 TB cases yearly
• Incidence 6,7
• 5 prisons
• Close contacts to St. Petersburg, Russian Karelia and Leningrad region
Lapland

- 6 - 24 TB cases per year
- Incidence 3,2 (– 12,9)
- Long distances to services
- One prison
- Close contacts to Murmansk Region
Different parties in TB control in hospital districts

- County government
  - Main hospital of the hospital district
  - Health centres
  - General hospitals

- Private occupational health care
- Student health care

- Shelters
- Prisons
- Occupational health care

- Rehabilitation centres for abusers
- Refugee centres
- Elderly care units
Improvements still needed in research and surveillance

- Identification of risk groups
- Improved monitoring of effects of interventions like contact tracing etc.
- Analysis of delays in diagnosis and treatment
- Number and results of LTBI treatment
FILHA's TB control program cooperation:

- Murmansk
- Karelian Republic
- Leningrad
- St. Petersburg
- Estonia
- No-TB Baltic
HIV in Finland

- 2010: 190 new infections
- Cumulative 2700
- Mostly sexual; 30-40% MSM
- IDU + HIV (8 cases in 2010 - only 4% of all)
- TB+HIV tot 81 (1996-2011)
- TB+HIV+IDU 13 (96-2011; official data)
Testing

• 64% of drug users have been tested for HIV, Hep-B and Hep-C
• 70% of drug users have been tested for HIV
• 66% for B-hep
• 74% for C-hep
Thank You for your attention!