Kazakhstan

Total population (millions): 16.2
High TB priority country
High MDR-TB burden country

Epidemiological profile 2011*

<table>
<thead>
<tr>
<th>Estimates of TB burden</th>
<th>Number (thousands)</th>
<th>Rate (per 100 000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mortality</td>
<td>2.2 (2.0-2.5)</td>
<td>14 (11-14)</td>
</tr>
<tr>
<td>Prevalence</td>
<td>27 (11-51)</td>
<td>167 (68-315)</td>
</tr>
<tr>
<td>Incidence</td>
<td>21 (18-24)</td>
<td>130 (111-148)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MDR-TB burden</th>
<th>Number (thousands)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimates among notified TB cases:</td>
<td></td>
<td></td>
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<tr>
<td>MDR-TB among new cases</td>
<td>3.8 (3.6-3.9)</td>
<td>30 (29-32)</td>
</tr>
<tr>
<td>MDR-TB among previously treated cases</td>
<td>4.5 (4.3-4.6)</td>
<td>51 (50-53)</td>
</tr>
</tbody>
</table>

Case detection rate 87 (76-101) %

Notified MDR-TB cases on treatment 4.7 63

Estimated prevalence of HIV among TB (number, percentage); 330 (270-390), 1.6 (1.4-1.7)%.

Treatment outcome 2010

<table>
<thead>
<tr>
<th></th>
<th>Successfully treated (%)</th>
<th>Died (%)</th>
<th>Failed (%)</th>
<th>Lost to follow up** (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>New smear-positive pulmonary cases</td>
<td>61</td>
<td>3.2</td>
<td>6.7</td>
<td>2.4</td>
</tr>
<tr>
<td>New smear-negative/extrapulmonary cases</td>
<td>85</td>
<td>1.4</td>
<td>2.5</td>
<td>1.7</td>
</tr>
<tr>
<td>Previously treated cases</td>
<td>47</td>
<td>8.7</td>
<td>4.5</td>
<td>4.8</td>
</tr>
<tr>
<td>MDR-TB cohort 2009</td>
<td>73</td>
<td>6.5</td>
<td>7.2</td>
<td>5.3</td>
</tr>
</tbody>
</table>

*Data provided here are based on the latest WHO global TB database accessed on 16 November 2012. Extended epidemiological profiles can be found at: http://www.who.int/tb/country/data/profiles/en/index.html

**Includes those cases that defaulted from treatment, those that were transferred out and those that were not evaluated.

Major challenges
Kazakhstan is among the 27 high multidrug-resistant (MDR) TB burden countries in the world. TB control, and especially combating MDR and extensively drug-resistant TB (M/XDR-TB), is a priority in the Health Care Development Programme 2011–2015 and the national budget for TB control has been increased several folds to enable rapid scale up of treatment for MDR-TB patients. Despite these efforts, universal access to treatment is not yet achieved. The country also lacks laboratory capacity for culture, drug susceptibility testing and early diagnosis of MDR-TB cases.

Kazakhstan practices excessive hospitalization of patients and TB suspects; nearly all regular TB patients and absolutely all MDR-TB patients are hospitalized in specialized TB wards during the intensive phase. An underlying cause of this is the reverse incentive system, which promotes hospitalization of TB patients and discourages ambulatory care. Although Kazakhstan has made progress in recent years, infection control is still suboptimal in many TB-related health care facilities. There is a need to reduce hospitalization of TB patients and improve service delivery at the primary level of health care, while at the same time improving infection control standards and restructuring the financing system.

Cross-border TB care for external migrants remains a challenge. Discussions to address this problem have started, but effective coordination with neighbouring countries to ensure cross-border TB control and care has yet to be established. Within the country, continuity of care between the penitentiary system and the community health care service is not fully ensured.

Achievements in collaboration with WHO
- Technical assistance with the Global Drug Facility (GDF) review of anti-TB drug procurement, October 2011.
- Organization of a subregional workshop on laboratory diagnosis of TB, including the Xpert MTB/RIF assay, Almaty, November 2011.
- Organization of a subregional workshop on migrants and cross-border TB control and care, Almaty, December 2011.
Upon request of the Minister of Health (MoH) of Kazakhstan, an extensive programme review to TB prevention, control and care was organized on 9-18 May 2012. A team of 15 international experts conducted the country programme review. All technical reports, surveillance data, national reports and epidemiologic data were reviewed and institutes and organizations involved in TB control were visited and their respective staffs interviewed. The review mission was grouped into four teams visiting Almaty city, Almatinski Oblast, Akmolinski Oblast and South Kazakhstan Oblast. The MoH was debriefed on key findings and recommendations shortly after the review and a detailed report was finalized and submitted.

- Update and finalization of the National M/XDR-TB Response Plan in line with the Regional M/XDR-TB Action Plan.
- Support to development of a national plan on infection control and strengthening of the national programme to implement infection control in TB-related health care facilities.
- Organization of a review of infection control recommendations and technical assistance with the development of a national infection control plan.
- Assistance with the development of mobile units with the GeneXpert MTB/RIF assay for detection of MDR-TB in remote rural areas and prisons.
- Technical assistance with strengthening the laboratory capacity for culture and Xpert MTB/RIF assay testing.

**Planned WHO activities**

- Development of a mechanism of coordination to improve subregional cross-border TB control.
- Development of guidelines for treatment of TB/HIV co-infection.
- Organization of national workshops on infection control, and development of relevant legal background documents that will enable monitoring of infection control measures by the Sanitary Epidemiological Station (SES).
- Development of guidelines on palliative care for patients with chronic TB.
- Analysis of the impact of social determinants on TB control, and monitoring the impact of the social support package of measures for TB patients, including better treatment compliance.

**Main partners of WHO**

- Ministry of Health
- United States Agency for International Development (USAID); TB Care
- Global Fund to Fight AIDS, Tuberculosis and Malaria (The Global Fund)
- German Development Bank (KfW)
- Abt Associates
- Project HOPE
- Centers for Disease Control and Prevention (CDC)
- KNCV Tuberculosis Foundation
- AIDS Foundation East-West
- International Federation of Red Cross and Red Crescent Societies (IFRC).