World Health Organization
REGIONAL OFFICE FOR Europe

Tuberculosis country work summary

# Armenia

Total population (millions): 3.1
High TB priority country
High MDR-TB burden country

## Epidemiological profile 2010**

| Estimates of TB burden | Number (thousands) | Rate (per 100 000) |
|---|---|---|
| Mortality | 0.33 (0.22-0.47) | 11 (7.0-15.0) |
| Prevalence | 3.5 (1.5-5.9) | 114 (48-189) |
| Incidence | 2.3 (1.9-2.7) | 73 (60-87) |
| Case detection rate | 62 (52-76)% | |

| MDR-TB burden | Number | % |
|---|---|---|
| Estimates among notified TB cases: | | |
| MDR-TB among new cases | 92 (68-120) | 9 .4 (7.0-12.4) |
| MDR-TB among previously treated | 190 (170-220) | 43.2 (37.9-48.7) |
| Notified MDR-TB cases on treatment | 154 | 87 |

Estimated prevalence of HIV among TB (number, percentage); 31 (17-49); 1.4 (0.8-2.2)%.

| Treatment outcome 2009 | Successfully treated (%) | Died (%) | Failed (%) | Lost to follow up* (%) |
|---|---|---|---|---|
| New smear-positive cases | 72.5 | 7.0 | 2.7 | 17.7 |
| New smear-negative/extrapulmonary | 81.7 | 4.5 | 0.3 | 13.5 |
| Previously treated cases | 63.5 | 7.6 | 3.9 | 25.1 |
| MDR-TB cohort 2008 | 54.5 | 2.6 | 10.4 | 32.5 |

*Includes those cases that defaulted from treatment, those that were transferred out and those that were not evaluated.
**Data provided here are based on the latest WHO global TB database accessed on 9 December 2011. Extended epidemiological profiles can be found at: http://www.who.int/tb/country/data/profiles/en/index.html

## Major challenges

Tuberculosis (TB) is one of the major public health problems in Armenia. The treatment success rate of new sputum smear-positive pulmonary TB patients is below the WHO target of 85%. Poor treatment outcome is partly explained by the high prevalence of drug-resistant forms of TB; Armenia is among the 27 high multidrug-resistant (MDR) TB burden countries in the world.

To ensure the expansion of the Stop TB Strategy in Armenia, the Minister of Health took over the management of the National Tuberculosis Programme (NTP) in 2010. Nevertheless, there is a need to strengthen the institutional capacity of the Programme. Improving the structure and status of the NTP within the health system will ensure that national and international resources, as well as technical assistance, are effectively utilized.

TB treatment is not patient-friendly and often involves unnecessary hospitalization, which contributes to the spread of (MDR) TB due to limited infection control measures. Diagnostic services need to be brought closer to patients at primary health care (PHC) level by finalizing the optimization of the TB laboratory network and improving the sputum and slide transportation system. Another weakness in diagnostic services is the length of time it takes to make drug susceptibility test results available. Furthermore, new rapid diagnostic techniques have not yet been implemented.

Armenia 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. There is a need to reduce hospitalization by enhancing service delivery at the PHC level of care, while also improving infection control standards and restructuring the financing system.

Dependency on funding for TB medicines from external sources makes the drug supply system vulnerable. The management of TB/HIV co-infection needs to be strengthened by providing a one-stop service for TB patients living with HIV. TB treatment for ex-prisoners needs to be ensured. The management of MDR-TB needs trained staff.

**Achievements in collaboration with WHO**

- The main activity coordinated by WHO was the comprehensive review of the National TB Programme in Armenia conducted during April and May 2011. This review was combined with a Green Light Committee (GLC) mission, as well as drug management and laboratory support to the country.
- WHO has also supported the NTP with the development of a draft National MDR-TB Response Plan.
- WHO has provided technical assistance with the management of TB programmes in hospitals.

**Planned WHO activities**

- The WHO Country Office will take over the Country Coordinating Mechanism (CCM) Secretariat.
- Finalization of the National M/XDR-TB Response Plan to align it with the Regional M/XDR-TB Action Plan.
- Support for updating the structure, mandate and organigram of the NTP.
- Revision and rationalization of hospitalization criteria to reduce excessive hospitalization of patients and TB suspects, and revision of TB financing mechanisms.
- Introduction of new diagnostic methods to improve early diagnosis of MDR-TB.
- Technical assistance to improve the management of co-infections, particularly TB/HIV, and strengthen collaborative mechanisms between civilian and penitentiary services.
- Technical assistance to improve TB infection control.

**Main partners of WHO**

- Ministry of Health
- The Global Fund to Fight AIDS, TB and Malaria (The Global Fund)
- United States Agency for International Development (USAID)
- Médecins Sans Frontières (MSF), France
- Project HOPE
- American University of Armenia
- Armenian Red Cross.