World Health Organization

REGIONAL OFFICE FOR **Europe**

Epidemiological burden and response-monitoring[1]

Main impact indicators TB burden estimates	Number	Rate per 100 000
Incidence (including HIV+TB)	1 200	41.0
Mortality (including HIV+TB)	106	3.51
Incidence (HIV+TB only)	110	3.7
Mortality (HIV+TB only)	14	0.46
Incidence (RR/MDR-TB[a] only)	270	8.9

TB detection and care	Number	%
Total TB new and relapses detected	1 090	90.8
Pulmonary TB	790	72.5
Bacteriologically confirmed	357	45.2
TB detected with rapid diagnostics	192	17.6
Successfully treated	959	78.1

MDR-TB detection and care	Number	%
RR/MDR-TB estimates among new TB		11.0
RR/MDR-TB estimates (previously treated TB)		47.0
RR/MDR-TB estimates (notified pulmonary TB)	150	
Tested for RR/MDR-TB	436	39.5
Detected with RR/MDR-TB from estimates	101	67.3
RR/MDR-TB started SLD[b] treatment	101	100.0
Successfully treated (RR/MDR-TB only)	45	43.3

HIV/TB detection and care	Number	%
TB cases tested for HIV status	1 090	100.0
HIV/TB cases detected from estimates	99	90.0
HIV/TB cases on ARV[c]	99	100.0
Successfully treated (HIV/TB only)	46	59.7
HIV diagnosis and care		
Newly diagnosed HIV cases	247	
HIV cases started IPT[d]	42	17.0

[a] RR/MDR = rifampicin-resistant multidrug-resistant TB.
[b] SLD = second-line drug.
[c] ARV = antiretroviral treatment.
[d] IPT = isoniazid preventive therapy.

Major challenges

Armenia is among the 18 high-priority countries fighting tuberculosis (TB) in the WHO European Region. Latest data show the main TB indices have declined, but the numbers are still above desired targets. The 78.1% treatment success for new pulmonary TB patients is below the WHO target of 85%. Poor treatment outcomes are partly explained by the high prevalence of drug-resistant TB (DR-TB) forms. Despite successes in managing drug-susceptible TB and the fact that Armenia is no longer a high-burden multi-drug resistant (MDR) TB country, DR-TB still poses a major challenge to the effectiveness of the national tuberculosis programme (NTP).

TB case notifications declined in the last year, but the number of sputum-smear positive cases is believed to be underestimated. Technical assistance might be necessary to assess the situation and identify gaps and challenges in case-finding and management. A sustainable quality-management system at the National Reference Laboratory (NRL) is required to scale up new diagnostic methods and cascade support to all levels of the diagnostic network. A data-connectivity solution to decrease turnaround time for reporting of Xpert MTB/RIF test results and ensure proper functioning and optimal performance of the diagnostic device network is also needed. Case-notification, recording and reporting systems need to be further strengthened, as the eTB-Manager online data-management system and the National TB Registry are not yet synergized: technical assistance is required to enable eTB-Manager to become a core information-management system for TB.

Mobile teams could be established to improve the quality of directly observed therapy (DOT) and care as an alternative to the existing system of improving DOT quality through the outpatient TB programme.

Armenia has been facing issues of labour migration in recent years, with patients often defaulting treatment for work outside of the country. Treatment options, including new TB drugs, for patients with DR-TB returning to Armenia for treatment often are limited, reflecting poor access to health care offered to foreign nationals in neighbouring countries. Most diagnosed DR-TB cases are associated with labour migration. Armenia is one of the countries pioneering the introduction of compassionate use

of drugs; the country should consider using the United States Agency for International Development (USAID) bedaquiline donation programme to further ensure use of new drugs. Due to new regulations on joining the Eurasian Economic Union, Armenia will not be able to directly procure first-line drugs (FLDs) using the Global Drug Facility (GDF) mechanism, which might result in higher-price FLDs. Government financial resources will be necessary to procure anti-TB medications for drug-susceptible TB patients.

Management of patients with TB/HIV coinfection needs to be strengthened by providing a one-stop service for patients and establishing the national TB/HIV coordination committee to ensure continuous care.

Achievements

Achievements in collaboration with WHO and other partners are:

- development of a new national TB control strategy for 2016–2020 in line with the WHO global End TB Strategy and European TB action plan for 2016–2020. It articulates strategic NTP directions and focuses on: 1) improving existing TB epidemiological surveillance; 2) supporting cross-sectoral cooperation and ensuring multilateral international and local cooperation; 3) promoting cooperation to scale up access to, and use of, new diagnostic methods, new drugs for managing DR-TB and TB vaccines; 4) introducing and strengthening the laboratory quality-control system in the NRL; 5) training medical personnel, including those at primary level, on TB prevention and treatment; 6) improving TB control in the mother and child health-care system; and 7) further strengthening management of TB/HIV coinfected patients.
- development of a set of indicators to measure programmatic changes due to implementation of TB financing reforms aiming at a shift from excessive hospitalization;
- joint Green Light Committee and GDF missions conducted every year since 2008 that provide support on treatment, drug management and laboratory issues;
- development of a childhood TB management curriculum for primary health-care providers to improve paediatric TB management;
- provision of training for NTC staff on case-management of multidrug-resistant TB (MDR-TB) (study tours);
- development of a training curriculum for 45 health-care providers on TB infection control (TB IC) to address knowledge and practice gaps; the curriculum is based on results from a self-assessment of TB IC risks in health-care facilities;
- capacity-building for local nongovernmental organizations (NGOs) to implement effective interventions on TB, raise TB awareness among the public, patients, families and schoolchildren, improve patient adherence to treatment, and implement TB control activities;
- provision of technical assistance to NTC to assess its capacity to function as a regional training centre; and
- the National TB Programme becoming ready for effective introduction of new drugs, specifically bedaquiline, and starting a nine-month treatment short course for eligible patients.

WHO activities

Planned WHO activities are to provide:

- technical assistance to strengthen the diagnostic network by setting up an Xpert MTB/RIF data connectivity system;
- further technical assistance to support introduction of new drugs and treatment regimens via support to the NTC and development of a transition plan for shorter treatment regimens;
- further support for the introduction and implementation of new diagnostic methods to improve early diagnosis of MDR-TB; and
- technical assistance to support development of guidance and an implementation plan on active drug-safety monitoring and digital health products for adherence.

Main partners

WHO's main partners are:

- Ministry of Health/National TB Control Centre
- the Global Fund to Fight AIDS, Tuberculosis and Malaria
- United States Agency for International Development
- Médecins Sans Frontières – France
- Armenian Red Cross.