

Tuberculosis in the WHO European Region

Tuberculosis (TB) continues to be a major public health challenge in the WHO European Region. According to the latest estimates, in 2016 about 290 000 people became ill with TB (Fig. 1) and about 26 000 people lost their lives due to TB in the Region, mostly in eastern and central European countries.

In the past 10 years, the number of new TB patients has been falling at an average rate of 4.3% per year, which is the fastest decline among all WHO regions. There were almost eight times more TB patients in high TB priority countries than in the rest of the Region.

The treatment success rate among new cases and relapses was 77%, which remains one of the lowest among WHO regions (Fig. 2).

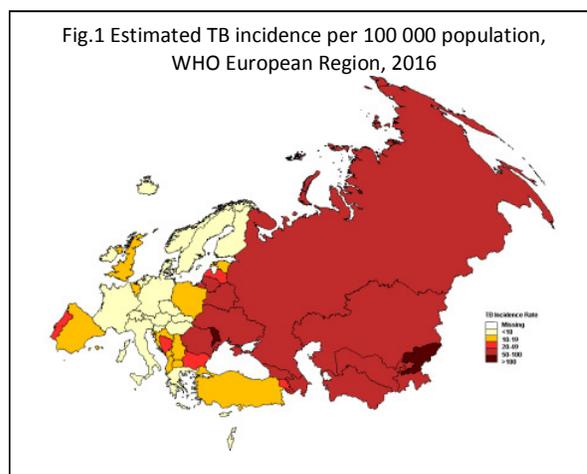
One in five new TB patients is affected by MDR-TB

Countries in the European Region have the highest rates of multidrug-resistant TB (MDR-TB) globally. Of the top 30 countries in the world with a high burden of MDR-TB, nine are in the European Region.^a The percentages of MDR-TB among new and previously treated TB patients in the Region in 2016 were 19% and 55% respectively.

Of the 71 000 cases of drug-resistant TB that are estimated to have occurred among notified TB cases in 2016, only 52 000 (73%) were diagnosed. This is mainly due to limited access to rapid and quality assured diagnosis.

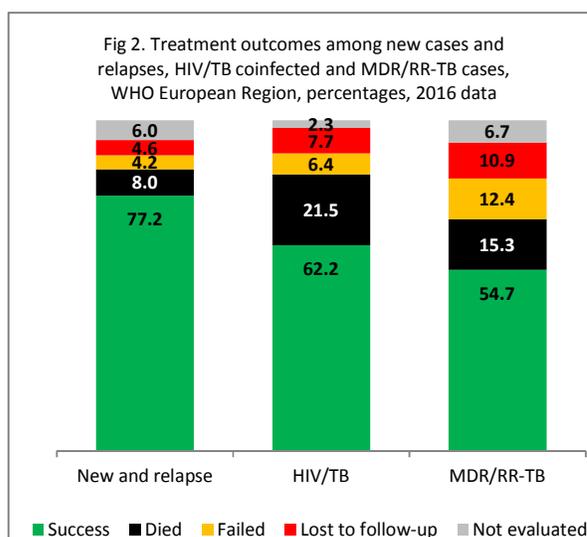
Since 2013 all MDR-TB patients are reported to have had access to treatment, with a 3% increase in treatment success of MDR-TB patients in 2016 compared to the previous year. While this represents a turning point from the steady decline in the Region since the beginning of the millennium (Fig. 2), the overall treatment success rate remains far below the regional target of 75%.¹

Fig.1 Estimated TB incidence per 100 000 population, WHO European Region, 2016



Source: European Centre for Disease Prevention and Control/WHO Regional Office for Europe. Tuberculosis surveillance and monitoring in Europe 2018. Stockholm: European Centre for Disease Prevention and Control; 2018.

Fig 2. Treatment outcomes among new cases and relapses, HIV/TB coinfectd and MDR/RR-TB cases, WHO European Region, percentages, 2016 data



Source: European Centre for Disease Prevention and Control/WHO Regional Office for Europe. Tuberculosis surveillance and monitoring in Europe 2018. Stockholm: European Centre for Disease Prevention and Control; 2018.

^a Azerbaijan, Belarus, Kazakhstan, Kyrgyzstan, Republic of Moldova, Russian Federation, Tajikistan, Ukraine and Uzbekistan.

Around 96% of all reported MDR-TB patients were tested for resistance to second-line TB drugs in 2016, which is a major achievement in the history of drug resistance surveillance in the European Region. The testing led to the detection of about 5 000 patients with extensively drug-resistant TB (XDR-TB), which accounts for about 13% of MDR-TB cases.

One in eight new TB patients is HIV positive

People living with HIV are 20 to 40 times more likely to develop active TB disease than people without HIV.² HIV and TB form a deadly combination, each speeding the progress of the other. Because of the rapid spread of HIV infection in the WHO European Region, HIV coinfection rates among TB patients also increased sharply from 6.1% to 13.4% between 2012 and 2016, respectively.

Rapid detection and appropriate treatment are vital. However, only three quarters (25 844) of the estimated 34 000 people living with HIV and coinfecting with TB were detected in 2016, and only 65% of them were offered antiretroviral treatment.

The European TB Action Plan sets targets for 2020

The Tuberculosis Action Plan for the WHO European Region 2016–2020 (the European TB Action Plan) sets the regional goal of ending the spread of TB and MDR-TB by achieving universal access to prevention, diagnosis and treatment in all countries of the Region. This, in turn, will contribute to achieving the milestones contained in WHO's Global strategy and targets for tuberculosis prevention, care and control after 2015 (the End TB Strategy) by 2030.

Under the European TB Action Plan, the targets for 2020 are as follows:

- 35% reduction in TB deaths;
- 25% reduction in new cases of TB; and
- 75% treatment success among MDR-TB patients.

The European TB Action Plan contains six strategic directions and 13 activities grouped under three areas of intervention, providing national and international partners with a framework for coordination of roles and responsibilities. It incorporates the lessons learned in implementing The Consolidated Action Plan to Prevent and Combat Multidrug- and Extensively Drug-Resistant Tuberculosis in the WHO European Region 2011–2015, and is in line with the European health policy framework, Health 2020, and other key regional health strategies and policies.

The European TB Action Plan is the regional adaptation of the global End TB Strategy, which is aligned with the 2030 Agenda for Sustainable Development and was endorsed by the World Health Assembly at its Sixty-seventh session in 2014, and is complemented by a roadmap that provides countries with directions for implementation.

WHO's support includes setting norms and standards, providing technical assistance, fostering partnerships, building capacity, creating and disseminating evidence, and monitoring and evaluating progress. The Regional Office has been working with Member States and partners to address key challenges in prevention, diagnosis and treatment of TB to make services people-centred and more efficient.

About TB

TB is a contagious disease that spreads when a person breathes in the bacteria breathed out by an infected person. This disease is mainly caused by *Mycobacterium tuberculosis*. About one third of the

world's population is infected with the latent form of the disease, and a tenth of them become ill with active TB during their lifetimes.

The symptoms depend on the organ of the body which is infected. In most cases, TB affects the lungs. In this case, the major symptoms are cough with productive sputum (sometimes with blood), shortness of breath and chest pain. There are also general symptoms such as fever, night sweats, loss of weight and appetite, fatigue and general weakness. People living with HIV or other conditions that weaken their immune system (such as diabetes), people on immunosuppressant therapy, and people who use tobacco or use alcohol harmfully are at much higher risk of developing the disease.

MDR-TB is resistant to two of the most potent anti-TB drugs. This is a result of inadequate treatment of TB and/or poor airborne infection control in health care facilities and congregate settings. XDR-TB is resistant to the most important first- and second-line drugs and there are currently very limited chances of people with XDR-TB being cured.

TB can affect everyone but in Europe is most frequently seen among young adults in the eastern part of the European Region and among migrants and elderly populations in western European countries. TB is particularly linked to social determinants of health such as migration, imprisonment and social marginalization.

¹ Tuberculosis action plan for the WHO European Region 2016–2020. Copenhagen: WHO Regional Office for Europe; 2015 (EUR/RC65/17 Rev.1; <http://www.euro.who.int/en/about-us/governance/regional-committee-for-europe/65th-session/documentation/working-documents/eurrc6517-rev.1-tuberculosis-action-plan-for-the-who-european-region-20162020>, accessed 14 March 2018).

² Getahun H, Gunneberg C, Granich R, Nunn P. HIV infection-associated tuberculosis: the epidemiology and the response. *Clin Infect Dis*. 2010;50 Suppl. 3:S201–7. doi:<https://doi.org/10.1086/651492>.

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