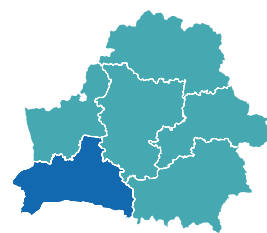




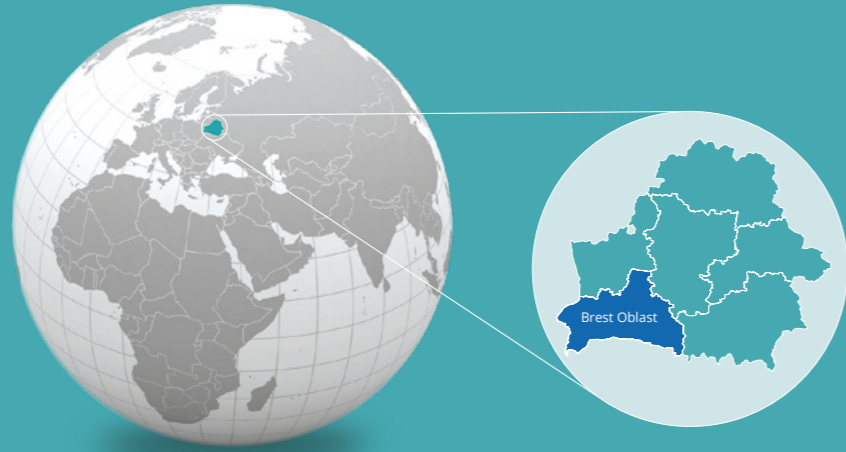
World Health  
Organization

REGIONAL OFFICE FOR Europe

# Towards a people-centred model of tuberculosis care in Belarus



**BELARUS**



Belarus is one of 18 countries considered high priority in the fight against tuberculosis (TB) in the WHO European Region; it is also among the 30 countries in the world with the highest burden of multidrug-resistant TB<sup>1</sup>.

Belarus is implementing a people-centred model of TB care, in line with WHO's recommendations in *A people-centred model of TB care*<sup>2</sup> and the ministry of health's five-year national TB programme, "Plan on MDR/XDR-TB [multidrug-resistant/extremely drug-resistant TB] prevention and control in the Republic of Belarus for 2016–2020". Brest oblast, which has a pilot project in place to implement the model, has experienced a number of successes in TB prevention and reduction in mortality in recent years. The next step to end TB is to ensure that appropriate payment mechanisms for inpatient and outpatient services are developed.

<sup>1</sup> Global tuberculosis report 2017. Geneva: World Health Organization; 2017 ([http://www.who.int/tb/publications/global\\_report/en/](http://www.who.int/tb/publications/global_report/en/))

<sup>2</sup> A people-centred model of TB care: a blueprint for eastern European and central Asian countries, first edition. Copenhagen: WHO Regional Office for Europe; 2017 (<http://www.euro.who.int/en/health-topics/Health-systems/health-systems-response-to-tuberculosis/publications/a-people-centred-model-of-tb-care-2017>, accessed 5 June 2018).

## Current model of TB care in Belarus

Belarus is one of 18 countries considered high priority in the fight against TB in the WHO European Region; it is also among the 30 countries in the world with the highest burden of MDR-TB. In 2016 the TB mortality rate was 3.4 per 100 000 population, while TB morbidity was 27.6 per 100 000 population in 2016 and 18.1 for the first nine months of 2017. Improvements in infection control measures, increase in active screening and lowering hospitalization rates are some of the major commitments that need to be undertaken to address MDR-TB. Belarus had 24 TB hospitals in the public system in 2016, with a total capacity of 4274 beds (including 1840 beds for MDR-TB patients), and one TB hospital in the penitentiary system with 1860 beds (including 160 beds for MDR-TB patients), for 2684 new TB cases in the country in 2016.

At present, a mixed model of TB care is in use: all TB cases start their treatment in inpatient settings, stay there during most of the intensive phase and then complete their course of therapy in outpatient settings. The majority of patients are hospitalized at specialized TB inpatient facilities immediately after a confirmed diagnosis by specialists at outpatient clinics. This model has resulted in unnecessarily high hospitalization rates, as well as hospitalizations of excessively long duration, including for patients with a low degree of or no infectiousness. Moving away from

a model of TB care centred around hospitalization also has a positive effect on: continuity of treatment, integration with the primary health care sector, TB contact tracing, actions to encourage patients to follow up treatment and capacity to re-engage them in adequate care. An analysis of the current TB model undertaken by WHO during a technical visit to Belarus also identified that a clear assignment of responsibilities is needed in the care provided by TB specialists and primary health care providers, with regard to TB prevention activities and completion of TB treatment at the outpatient phase. Further areas that could be improved are the distribution of responsibilities between physicians and mid-level health professionals, enhancing knowledge and practical skills among primary health care workers for timely TB detection, control and uninterrupted treatment.



## Regional project on health systems strengthening for improved TB prevention and care

The TB Regional Eastern European and Central Asia Project (TB-REP) on strengthening health systems for effective TB and drug-resistant TB prevention and care focuses on accelerating TB prevention and care by removing health system barriers and scaling up health system reforms through catalysing and supporting interventions in 11 eastern European and central Asian countries, including Belarus. The project actively supports a comprehensive multicomponent approach and addresses a series of programmatic gaps related to health system strengthening for TB prevention and care, providing technical assistance to project countries in moving towards people-centred care. In line with the project, policy dialogues and technical assistance helped initiate the implementation of a people-centred model of TB care<sup>3</sup>, and the roadmap for a people-centred model for Brest oblast was developed. To support these developments and to enhance national capacity, decision makers, senior officials and high-level health system administrators from ministries of health and finance, managers of national TB programme as well as experts and leaders in key roles in the implementation of health system reforms related to TB prevention and care

participated in the WHO Barcelona Course on Health System Strengthening for Improved TB prevention and care.

TB-REP is a three-year project that started in 2016, funded by the Global Fund to Fight AIDS, Tuberculosis and Malaria, implemented by the Center for Health Policies and Studies of the Republic of Moldova as the principal recipient and the WHO Regional Office for Europe as the technical lead agency, in collaboration with partners.

The 11 countries involved in the project have appointed high-level government officials as national focal points to oversee and support implementation, with the engagement of ministries and other relevant stakeholders. In Belarus the first deputy minister of health is the TB-REP focal point and has established national working group mechanisms on health system strengthening for improved TB prevention and care.

## Moving towards people-centred care in Belarus

To address the strong reliance on hospital treatment, the need for reallocation of funds from hospital to outpatient care and other relevant issues in TB care, various laws and regulations were adopted in Belarus in 2017, facilitated by the WHO Regional Office for Europe.

When the ministry of health proposed piloting a people-centred model of TB prevention and care, Brest oblast, one of six administrative regions in the country, agreed to be the pilot location. Initial discussions started in November–December 2016, and in May 2017 Belarus began

preparations for the pilot project on changing financing mechanisms for TB services with a round-table consultation in Minsk. At the meeting, representatives from four of the six oblasts shared their ideas on improving the provision of people-oriented TB care and on changing the country's model of TB service financing.

Following the results of a World Bank analysis of the efficiency of TB programmes in Belarus<sup>4</sup>, which showed that about 70% of the national budget for TB is spent on hospital services, experts recommended shifting resources

<sup>3</sup> A people-centred model of TB care: a blueprint for eastern European and central Asian countries, first edition. Copenhagen: WHO Regional Office for Europe; 2017 (<http://www.euro.who.int/en/health-topics/Health-systems/health-systems-response-to-tuberculosis/publications/a-people-centred-model-of-tb-care-2017>, accessed 5 June 2018).

<sup>4</sup> Optimizing investments in Belarus' Tuberculosis response. Washington DC: World Bank Group; 2017 (<http://documents.worldbank.org/curated/en/915061498581699905/Optimizing-investments-in-Belarus-Tuberculosis-response>, accessed 8 June 2018).



In Brest oblast, over the last five years, TB mortality decreased by **48.5%** and by the end of 2016 reached a rate of **3.4** per 100 000 population.

towards well-targeted active case-finding and adequate ambulatory care. The WHO Regional Office for Europe set out the fundamental principles of the proposed model of care at the

launch meeting for *A people-centred model of TB care: a blueprint for eastern European and central Asian countries*<sup>5</sup>, which took place in Belarus in May 2017.

## Piloting a people-centred model of TB care in Brest oblast

Brest has experienced a number of successes in TB prevention and care in recent years – including, for example, reductions in TB mortality. Over the past five years, TB mortality decreased by 48.5% and by the end of 2016 reached a rate of 3.4 per 100 000 population. The incidence of new TB cases (all forms of TB) decreased by 24% over the past five years; at the end of 2016 it reached a rate of 28.9% per 100 000 population. These are the results of preventive activities, improved access to TB diagnosis and scaled-up use of new TB drugs, among a multitude of prevention and care interventions and activities, in line with WHO's *Tuberculosis action plan for the WHO European Region 2016–2020*.

In June 2017, the TB-REP focal point for Belarus requested technical assistance from the Regional Office in assessing the regulatory framework and supporting the implementation of a people-centred model of TB care in Brest oblast.

Belarus started the pilot project to set up a people-centred model of TB care in Brest oblast in January 2018. On 1 January the TB inpatient wards in Pinsk and Baranovichi were closed but the outpatient clinics with their departments remained open. A day-care unit, at which patients could receive treatment without being hospitalized, was established and enhanced; well trained and experienced TB staff – including those from the former inpatient wards – were concentrated in the outpatient services, strengthening ambulatory TB care.

TB services in the oblast had previously received funds from a variety of sources. Decision No. 660 of 20 October 2017 “On reorganization of the phthisiatric service of Brest oblast” changed the financing structure so that funds came from a single source —the regional budget. This helped solve the problem of financial and administrative fragmentation, set clear goals for TB services and established well-defined cooperation with the primary health care sector.

Availability of regional financing created an opportunity to use the released funds rationally in outpatient services and to scale up the outpatient model of care. Within this context, the number of TB beds in hospitals was reduced by 33% by 1 January 2018. Furthermore, Brest oblast developed a comprehensive action plan to improve TB services and to introduce people-centred TB care by 2019. The plan lists actions and instruments for 27 activities in the following areas:

- reorganization of TB services
- improving financing mechanisms for TB services
- provision of social support to TB patients in outpatient settings
- organizational arrangements.

These are in line with the ministry of health's five-year national TB programme, “Plan on MDR/XDR-TB prevention and control in the Republic of Belarus for 2016–2020”.

<sup>5</sup> A people-centred model of TB care: a blueprint for eastern European and central Asian countries, first edition. Copenhagen: WHO Regional Office for Europe; 2017 (<http://www.euro.who.int/en/health-topics/Health-systems/health-systems-response-to-tuberculosis/publications/a-people-centred-model-of-tb-care-2017>, accessed 5 June 2018).

<sup>6</sup> Tuberculosis action plan for the WHO European Region 2016–2020. Copenhagen: WHO Regional Office for Europe; 2015 (<http://www.euro.who.int/en/about-us/governance/regional-committee-for-europe/past-sessions/65th-session/documentation/working-documents/eurr6517-rev.1-tuberculosis-action-plan-for-the-who-european-region-20162020>, accessed 6 June 2018).

## Incentives to health workers

At present, TB care in Brest oblast is provided in outpatient settings by specialists at 18 TB units in the central district hospitals and at treatment wards of the regional TB dispensary, Baranovichi interdistrict TB dispensary and Pinsk municipal TB dispensary, as well as by primary health care workers. To ensure effective and efficient TB treatment, an outpatient model of care is being introduced: directly observed therapy (DOT) is provided at outpatient TB units, at feldsher units run by mid-level health professionals<sup>7</sup>, at general practitioners' outpatient units and at district hospitals at the primary health care level.

To enhance adherence to TB treatment, patients under DOT receive food packages no less than twice a month. The Red Cross also provides travel passes and monetary allowances to patients with pulmonary TB.

DOT is provided at patients' homes by specialized visiting teams, as well as in the day-care clinics, with intravenous infusions of drugs due twice a day, six days a week. At present, 37 day-care beds are available in Brest oblast.

A TB specialist is responsible for successful completion of outpatient treatment. The responsibility of primary health care workers in successful completion of TB treatment in outpatient settings is minimal; this causes some uncertainties with regard to assignment of responsibilities for successful completion of treatment at the outpatient phase, which the new model aims to resolve.

To move further towards a more ambulatory model of care and to motivate medical staff to provide TB services, the Ministry of Labour and Social Protection of the Republic of Belarus adopted Law No. 826 "On the additional payment to mid-level health professionals for provision of DOT" on 11 December 2017. As a result, for each patient receiving DOT in an outpatient medical facility, the staff member is paid an additional bonus at the rate of 5% of the base tariff rate, but no more than 10% of the base tariff rate per day, regardless of the number of patients. For each

patient receiving DOT at home – i.e. during a home visit by a nurse – the bonus payment doubles to 10% of the base tariff rate, but it is capped at 20% of the base tariff rate per day, regardless of the number of patients.

Furthermore, the Order of the Ministry of Health of the Republic of Belarus No. 50 of 24 January 2018 "On additional measures to organize drug provision for patients with TB and HIV-associated TB" contributes to integration of TB and HIV services and hence a more people-centred model of care, so that patients with HIV and TB get their drugs at primary health care level at the same time.

<sup>7</sup> Nurses, feldshers, doctors' assistants, laboratory staff, laboratory technicians, radiologists and so on.



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## Policy changes and next steps

Implementation of a people-centred model of TB care requires several changes in organization of TB care across different care settings; financing mechanisms applied to provider payments and financial incentives; and shifts of tasks and responsibilities across the health workforce involved in TB service delivery. The centralization of human, material and financial resources in Brest oblast created the necessary preconditions for advancement of much needed reforms of the TB care system. These reforms also require further coordinated efforts from all relevant stakeholders (including the ministry of health, oblast health authorities and donors) for implementation of sustainable financial mechanisms and revised clinical guidelines to increase the effectiveness of TB services and develop the new model of care.

All these aspects are regulated by a number of legal documents, procedures and practices, which will require revision and development for the introduction of a people-centred model of TB care.

### In particular, this will necessitate:

- identifying legal and technical solutions to support better budget planning for TB services;
- specifying new payment mechanisms for hospital care that give more flexibility to reallocate funds from inpatient care to other services;
- defining the system of budget allocations in accordance with the new model;
- calculating the cost of medical services, taking into account the definitions of clinical groups – i.e. patients receiving different drug regimens and/or inpatient versus outpatient and mixed care approaches;
- reviewing the definitions of groups at risk in Belarus, since the current broad definitions of such groups cover 67.9% of the population in Brest oblast;

- developing and updating hospitalization and discharge criteria;
- developing indicators to monitor effective involvement of primary health care services in early detection of TB, treatment and successful project implementation;
- discussing further development of primary health care services and development of possible incentives for general practitioners, as well as adapting the regulatory framework concerned; and
- discussing the potential delivery of training for primary health care workers, which will be developed jointly with the WHO European Centre for Primary Health Care.





This publication is part of the WHO Regional Office for Europe's health system strengthening activities on TB prevention and care. TB-REP is a three-year project that started in 2016, funded by the Global Fund to Fight AIDS, Tuberculosis and Malaria, implemented by the Center for Health Policies and Studies of the Republic of Moldova as the principal recipient and the WHO Regional Office for Europe as the technical lead agency, in collaboration with partners.

For further information, visit the website at:

<http://www.euro.who.int/en/health-topics/Health-systems/health-systems-response-to-tuberculosis>.

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