World Health Organization
REGIONAL OFFICE FOR THE Eastern Mediterranean

Tuberculosis action plan

for the WHO Eastern Mediterranean Region 2023–2030

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Abbreviations and acronyms

ARV	Antiretroviral
COVID-19	Coronavirus disease
DHIS 2	Digital health information system 2
DOTS	Directly observed treatment, short-course
DR-TB	Drug-resistant TB
DS-TB	Drug-susceptible TB
EQA	External quality assurance
FQ-R	Fluoroquinolone-resistant
GDP	Gross domestic product
HIV	Human immunodeficiency virus
MDR/RR-TB	Multidrug-resistant/rifampicin-resistant tuberculosis
PHC	Primary health care
PLHIV	People living with HIV
SDGs	Sustainable Development Goals
SOPs	Standard operating procedures
TB	Tuberculosis
GFTAM	The Global Fund to Fight TB, AIDS and Malaria
WHO	World Health Organization

1. Background

1.1 Global tuberculosis situation and priorities

The World Health Organization (WHO) Global Tuberculosis Report 2021 estimated that, in 2020, tuberculosis (TB) was the second most common infectious disease killer after coronavirus disease (COVID-19) and the 13th leading cause of death *(1)*. Twenty-five per cent (25%) of the world's population has latent TB infection, which can develop into disease. In 2020, WHO estimated that 9.9 million people fell ill with TB, but only about 5.8 million (60%) were diagnosed, reported and treated, an 18% fall from 7.1 million in 2019. WHO also estimates that, between 2019 and 2020, global TB mortality increased from 1.2 to 1.5 million, a 5.6% increase *(1)*. Progress towards achieving the 2020 targets and milestones of the End TB Strategy[1] and the Political Declaration of the United Nations General-Assembly High-Level Meeting on the Fight Against Tuberculosis[2] has been too slow to achieve TB elimination by 2035, as stipulated in Target 3.3 of the Sustainable Development Goals (SDGs).[3] WHO estimates that, between 2015 and 2022, the number of TB deaths declined by only 9.2% and that the incidence rate declined by only 11% *(1)*. Many people suffer from and die of TB and continue to transmit this curable disease. Drug-resistant TB (DR-TB) continues to be a public health threat. WHO estimates that, globally, half a million people developed multidrug-resistant and rifampicin-resistant TB (MDR/RR-TB) in 2019. Of these, 150 359 were detected and enrolled in treatment in 2020, down 15% from the total of 177 100 in 2019. This level of enrolment was equivalent to about one in three of the people who develop MDR/RR-TB each year *(1)*. The COVID-19 pandemic further hampered progress towards ending TB.

[1] The End TB Strategy (https://www.who.int/teams/global-tuberculosis-programme/the-end-tb-strategy, accessed 5 July 2023).

[2] Political Declaration of the UN General-Assembly High-Level Meeting on the Fight Against Tuberculosis (https://www.who.int/publications/m/item/political-declaration-of-the-un-general-assembly-high-level-meeting-on-the-fight-against-tuberculosis, accessed 5 July 2023).

[3] SDG Target 3.3 By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases (https://unstats.un.org/sdgs/metadata/?Text=&Goal=3&Target=3.3, accessed 5 July 2023).

1.2 Regional context

The WHO Eastern Mediterranean Region is characterized by a high degree of heterogeneity *(2)* and underlying complexity of context and health determinants, including poverty *(3)*. To yield the best possible health results, the regional plan must be adapted to this highly diverse and complex context. Policies such as Vision 2023: Health for all by all in the Eastern Mediterranean Region and the Salalah Declaration on Universal Health Coverage 2018 provide a framework for key TB priority actions in the Region.

The previous 2016–2020 regional TB action plan expired in 2020. *The new Tuberculosis action plan for the WHO Eastern Mediterranean Region 2023– 2030* contains an up-to-date TB situation analysis providing context-specific guidance and directions. These will provide guidance to different country groups on strategic directions and priority actions. These directions and actions will help to improve TB outcomes and impact indicators at country level. The plan will support countries in implementing the End TB Strategy at country level and bridge the gap between the highly conceptual End TB Strategy and operational, context-specific national TB strategic plans. The regional situation analysis comprises an inventory of the current context, and process, input, output, outcome and impact indicators.

[4] Vision 2023: Eastern Mediterranean Region: Health for all by all: a call for solidarity and action (http://www.emro.who.int/about-who/vision2023/vision-2023.html, accessed 5 July 2023).

[5] Salalah Declaration on Universal Health Coverage 2019 (http://www.emro.who.int/media/news/salalah-declaration-signals-countries-firm-commitment-to-universal-health-coverage.html, accessed 5 July 2023).

2. Regional situation

2.1 TB epidemiology, incidence and mortality

Between 2015 and 2020, the decline in estimated TB incidence (4.9%) and TB deaths (6.2%) in the Eastern Mediterranean Region fell short of the End TB Strategy 2020 milestones of 20% and 35%, respectively *(4)*. The increased estimated TB incidence is the result of population growth (Fig. 1). In 2020, WHO estimated that the regional incidence rate was 112 per 100 000 population, ranging from 259 per 100 000 per year in Pakistan and Somalia to less than 1 per 100 000 per year in West Bank and Gaza Strip and the United Arab Emirates (Fig. 2) *(1)*. The Region accounts for nearly 8% of global TB cases, and the two countries accounting for the highest proportions of regional TB incidence are Pakistan, with 70%, and Afghanistan, with 9% *(1)*. The estimates of TB incidence disaggregated by age and sex indicate that people in all age groups are affected by TB. Adult men aged 15 to 44, the most productive age group, accounted for 46% of all cases in 2020, while adult women accounted for 41% of cases and children for 13% (Fig. 3).

In 2020, WHO estimated the mortality rate in the Region to be 80 000 deaths for human immunodeficiency virus (HIV)-negative TB patients (11 per 100 000 population) and 2900 for HIV-positive individuals (0.39 per 100 000 population) *(1)*. A previous steady slow decline in overall mortality in the Region was reversed by a rise caused by COVID-19 in 2020.

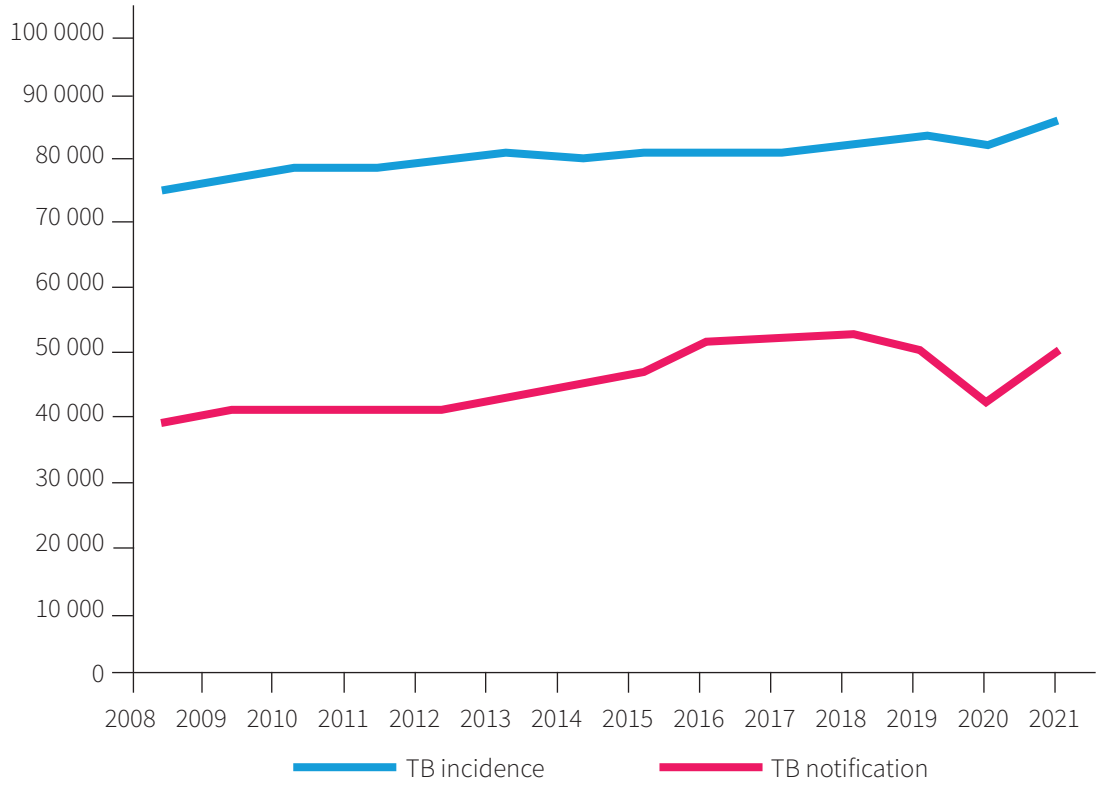


Fig. 1. Trend of estimated and notified cases in the Eastern Mediterranean Region, 2008–2022

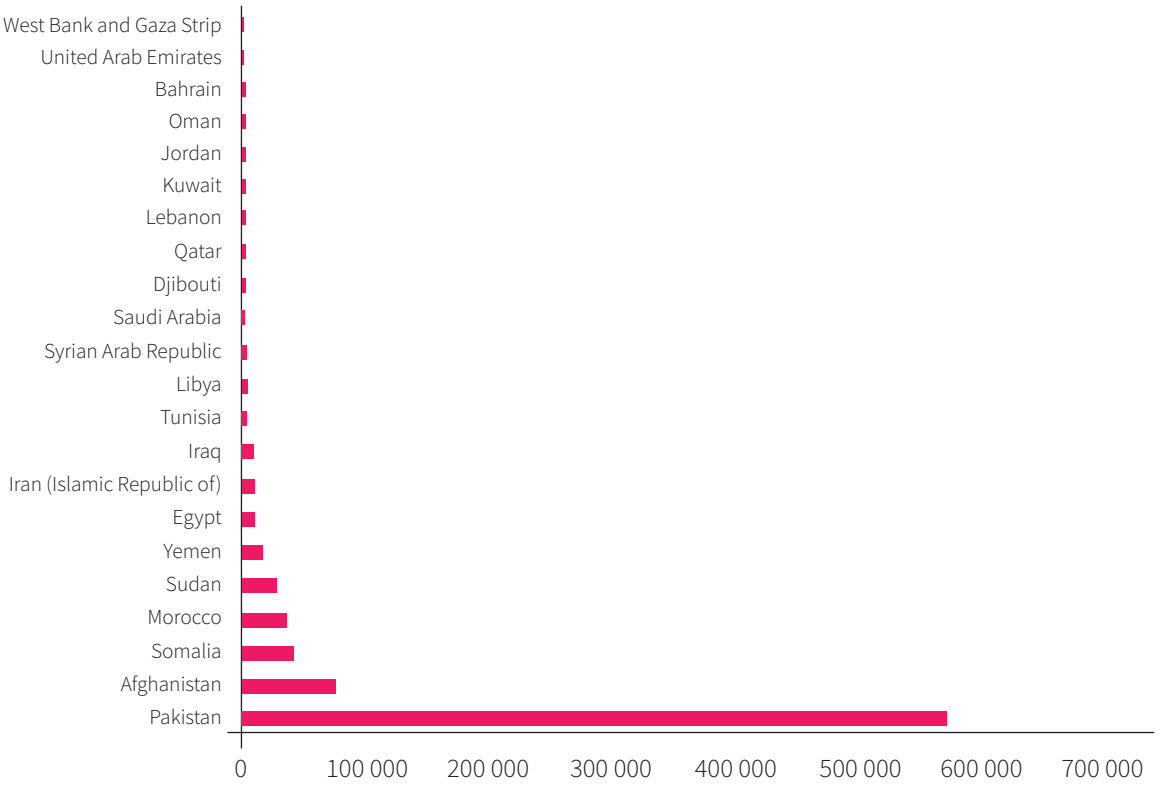


Fig. 2. Estimated TB incidence in countries and territories of the Eastern Mediterranean Region, 2020

Fig. 3. Incidence and case detection of tuberculosis by age and sex in the Eastern Mediterranean Region, 2020

2.2 Detection

As a result of COVID-19 the number of newly diagnosed and reported cases fell by 15% and the treatment coverage rate fell from 61% to 52% between 2019 and 2020 *(1)*, which was lower than the global average of 59%. The treatment coverage rate ranged from 42% in Somalia to above 100% in West Bank and Gaza Strip. West Bank and Gaza Strip and member countries of the Gulf Cooperation Council (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and United Arab Emirates) are in the TB pre-elimination phase, with a treatment coverage rate exceeding 85% (Fig. 4).

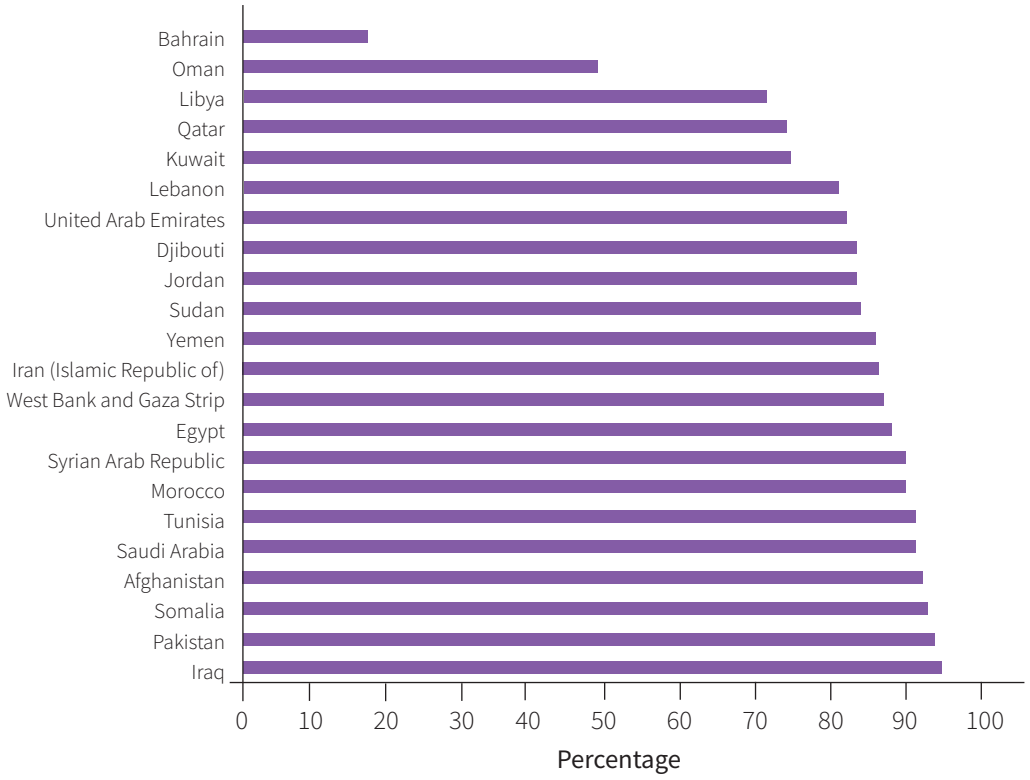


Fig. 4. Treatment coverage in countries and territories of the Eastern Mediterranean Region, 2020

2.3 MDR-TB

The Eastern Mediterranean Region accounts for almost 8% of the global MDR/RR-TB burden. In 2020, only 12% of the estimated number of people affected with DR-TB were treated in the Region, well below the global average of 30%. The percentage ranges from 7% in Somalia to 67% in Oman. In 2020, the number of people detected with MDR/RR-TB and provided with treatment for DR-TB fell by 18%, compared with 2019, as a consequence of the COVID-19 pandemic *(1)*.

2.4 Treatment success rate

The Region has the highest treatment success rate among all six WHO regions, at 91% for the 2019 drug-susceptible TB (DS-TB) cohort and 68% for the 2018 DR-TB cohort. The global averages were 86% and 59%, respectively. The treatment success rate ranged from 17% in Bahrain to 95% in Iraq for DS-TB (Fig. 5) and from 19% in Libya to 100% in Lebanon for DR-TB *(1)*.

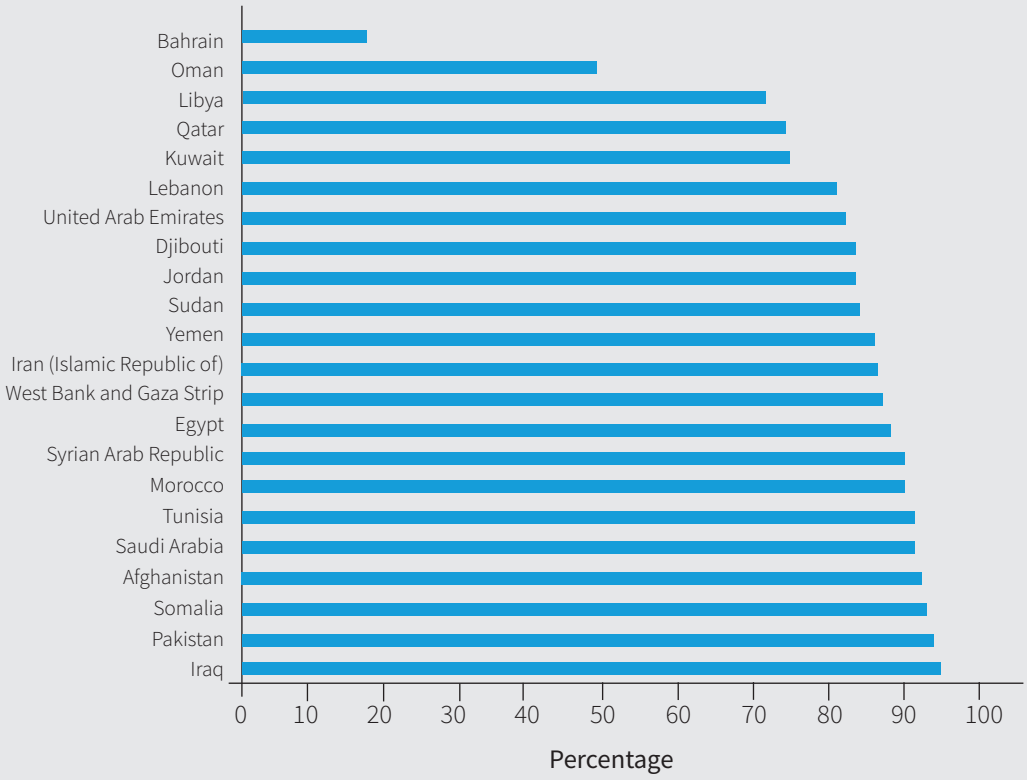


Fig. 5. Treatment success rate in countries and territories of the Eastern Mediterranean Region

2.5 TB programme status

2.5.1 Context

The countries of the Region differ in terms of upstream indicators, including contextual, structural, input and process indicators (Annex 1). Approximately 30% of countries in the Region have among the highest gross domestic product (GDP) in the world, while almost half are among the most socioeconomically challenged. Half are facing persistent or recurrent political instability, resulting in conflicts or complex or protracted emergencies. In many, numerous major domestic and cross-border migratory movements impact the entire cascade of TB prevention and care.

2.5.2 TB programme structure and adoption of WHO strategies

In all countries of the Region (except West Bank and Gaza Strip), the fight against TB is organized within the framework of national TB programmes. In the West Bank and Gaza Strip, there is no national TB programme, and the programmatic management of TB service provision is integrated in the national health policy and in overall communicable illnesses management. National TB programmes are well structured with a central unit and coordination units at intermediate and district levels. The countries of the Region have adopted and implemented WHO strategies to fight against TB in their national contexts. The Directly Observed Treatment, Short-course (DOTS) Strategy was implemented from 1995, followed by the Stop TB Strategy 2006–2015 and then the End TB Strategy 2015–2030 from early to mid-2015. Since then, all the national TB strategic plans countries have followed the principles and strategic directions specified in the End TB Strategy.

National TB programmes in countries of the Region have been operating as vertical disease programmes, with limited linkages and limited integration of TB services within overall health systems. Basic TB diagnostic services are not decentralized to or fully integrated in primary health care (PHC) services (lack of horizontal integration). Furthermore, integration is lacking between different TB service structures (lack of vertical integration), for example, between inpatient hospital settings and TB outpatient service provision in both the private and public sectors, and also involving volunteer and community contributors. Moreover, information on degree of integration is not systematically collected or reported. If it is collected at all, such information is only collected sporadically or periodically; for example, during TB programme reviews through collecting the proportion

of presumptive TB cases among all patients who seek care in PHC facilities. This composite indicator represents a proxy for measuring the dimension/notion of horizontal integration. Opportunities exist for capturing bolder and more inclusive cross-sectional and cross-sectoral integration as a special form of horizontal integration and could generate more accurate knowledge and understanding of TB epidemiology through analysis of digital health information system 2 (DHIS2) data, for example, if including TB data. Bi-directional TB/HIV and TB/COVID-19 diagnosis and TB public health activities could be refined and better targeted. The WHO standard reporting and recording system collects no proxies or formal indicators that would capture the degree of vertical integration. Such indicators could, for example, be proportions and numbers of presumptive cases diagnosed, treated and referred and counter-referred in and between different types of TB facilities (for example, inpatient versus outpatient). Collection and analysis of such indicators would be beneficial as they would provide national TB programmes with a more precise idea of patient and presumptive numbers and their 'flow' through the vertical cascade of TB facilities. Such analysis would allow effectiveness gains, better targeting of services and might free up resources that would be better used elsewhere. It would also contribute to improved TB outcomes and impact indicators.

2.6 Input indicators

2.6.1 Funding

Funding remains challenging in the Region, with a funding gap of 38% in 2021 ranging from 0% in Afghanistan, Islamic Republic of Iran, Somalia, Syrian Arab Republic and Tunisia to 54% in Sudan, 57% in Yemen and 58% in Pakistan *(5)*. Countries such as Afghanistan, Pakistan, Somalia, Sudan, Syrian Arab Republic and Yemen have made substantial efforts to mobilize funds from international partners.

2.6.2 Staffing

In general, national TB programmes are well structured and have competent staff in central units. They also have the capacity to develop their TB national strategic plans and produce national guidelines according to the updated guidelines covering different areas of TB activities, even if the national strategic plans and national guidelines of some countries need to be revised/updated. In some countries, programmatic and technical capacities have yet to be strengthened for staff through more regular and sustainable capacity-building activities.

2.6.3 Laboratory networks

TB laboratory networks are in place in all countries of the Region. They perform TB laboratory testing under the leadership of the national reference laboratory. Fourteen of the 22 countries/territories have introduced new molecular WHO-recommended diagnostics, while the other countries need to make progress in implementation. New molecular WHO-recommended diagnostics will improve confirmation of TB and MDR-TB cases. TB specimen referral and transportation is in place in 12 of the 22 countries/

territories but remain difficult to implement and maintain in some countries suffering from and insecurity and instability. In addition, the external quality assurance (EQA) system is successfully implemented in 19 countries.

2.6.4 Information systems

National TB programmes in the Region have successfully implemented a sound information system to monitor the implementation of TB activities and interventions and evaluate their outcomes, but countries need to make progress in the implementation of an electronic case-based data system and to integrate it into the national health information system, including the DHIS2 Health Data Toolkit already in place in some countries *(6)*.

2.7 Process indicators

2.7.1 TB diagnosis

While 70% of TB cases are bacteriologically confirmed in 14 of the 22 countries/territories and territories of the Region, more than one third of cases are clinically diagnosed in four countries *(5)*. GeneXpert testing is not yet applied as the initial diagnostic test for new TB patients and, in half of the countries of the Region, it is still mainly reserved for testing for rifampicin-resistance.

2.7.2 Management of drug-resistant-TB patients

The countries of the Region have developed managerial and technical capacities to manage DR-TB patients. All countries have introduced all-oral treatment regimens for such patients; half of them have introduced the shorter regimen in line with WHO guidelines. The management of DR-TB patients remains centralized in eight countries, while a further eight, including Pakistan and Somalia, which have a high burden of DR-TB, have made progress towards decentralized services delivery.

2.7.3 Prevention

Regarding prevention activities, systematic screening for TB of high-risk groups has been implemented in nine countries, while it is unknown in 11 countries and requires expansion in a further two countries of the Region. TB contact investigation and provision of TB preventive treatment are integrated into national TB programme policy. Implementation of contact investigation activities remains limited, however, with low uptake of TB preventive treatment. Eight countries in the Region provide TB preventive treatment to children under 5. Three countries have introduced preventive treatment for people living with HIV (PLHIV).

2.7.4 Co-morbidities

The management of TB/HIV collaborative activities is generally integrated in national TB programme strategies and all countries have implemented HIV testing of TB patients. Some co-infected TB/HIV patients are provided with antiretroviral therapy

(ART) and TB treatment, but not enough. In 2020, the proportion of TB patients with known HIV status was only 39%, compared with 73% globally. Furthermore, only 79% of HIV-positive TB patients received antiretroviral (ARV) treatment, compared with 88% globally. Only 11% of people living with HIV and 25% of household contacts of TB patients under the age of 5 received TB preventive treatment, much lower than the global proportions of 68% and 35%, respectively (Fig. 6).

TB and other co-morbidities, such as joint and systematic management of TB and diabetes, is not yet implemented in countries of the Region.

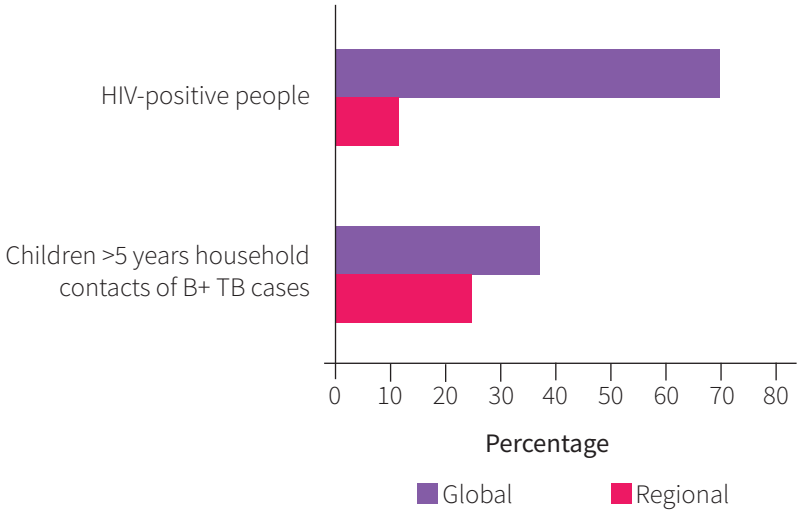


Fig. 6. Proportion of HIV-positive and children <5 years household contacts of bacteriologically confirmed TB cases receiving preventive treatment, globally and in the Region, 2020

2.7.5 Basic TB services in primary health care

TB diagnosis and treatment provision is – to a limited extent and to differing degrees – integrated in PHC networks in 10 countries of the Region. This needs to be expanded in the countries where it already exists and extended to those countries where it does not in order to increase the identification of presumed TB patients and case detection.

2.7.6 Collaboration

Collaboration with nongovernmental and civil society organizations remains limited in countries of the Region. Country-level implementation of the WHO Multisectoral Accountability Framework for TB has started to increase multisectoral inclusion and accountability for TB prevention and care.

2.7.7 Operational research

TB operational research remains a low priority for many countries of the Region and needs to be strengthened.

2.8 Output indicators

The proportion of new and relapse TB cases tested with rapid diagnostic test(s) is from 6% to 100%, while such testing is not yet documented in four countries. The proportion of new pulmonary TB patients tested for rifampicin resistance varies between 7% in Iraq and 100% in Jordan, Kuwait, Qatar and West Bank and Gaza Strip. All the countries/territories of the Region have introduced rifampicin resistance testing for patients previously treated for TB and half have reached 100% testing. The proportion of MDR/RR-TB patients put on treatment varies between 7% and 67% *(5)*.

2.9 Outcome and impact indicators

Treatment coverage ranges between 42% and 100%, while treatment success ranges from 17% to 94% for DS-TB and from 19% to 100% for DR-TB. Between 2015 and 2020, TB incidence reduction ranged between 5% and 56%, and TB deaths reduction ranged between 2% and 31% *(5)*.

2.10 Analysis according to economic situation

The higher and more favourable the context and the input and process indicators, the more likely countries are to yield more favourable output, outcome and impact indicators. Table 1 shows that, in general, a higher level of resources is associated with high(er) programmatic performance: TB treatment coverage, treatment success rates, TB mortality and TB incidence, for example. There are exceptions, however. West Bank and Gaza Strip, with one of the lowest TB incidence rates and one of the lowest levels of resources in the Region, is in the TB pre-elimination phase. A higher degree of programme integration may explain a higher performance along the full TB services cascade.

Table 1. Impact targets of the SDG and WHO End TB Strategy from 2015 baseline to 2035 horizon, WHO Eastern Mediterranean Region

Impact indicators	Baseline (2015)	WHO End TB Strategy milestone 2020				202 milestone		SDG and End TB targets SDG 2030 target		End TB 2035target	
		Original milestone set in 2015		Actual situation							
		Proportion of reduction from 2015 baseline (%)	Translation in absolute indicators	Proportion of reduction from 2015 baseline (%)	Translation in absolute indicators	Proportion of reduction from 2015 baseline (%)	Translation in absolute indicators	Proportion of reduction from 2015 baseline (%)	Translation in absolute indicators	Proportion of reduction from 2015 baseline (%)	Translation in absolute indicators
TB deaths	88 200	35	57 000	6.2	82 900	75	22 050	90	8820	95	4410
TB incidence rate[1]	118	20	94.5	4.9	112	50	59	80	23.5	90	12
Proportion of TB-affected households experiencing catastrophic costs due to TB	Unknown	0	--	--	--	0	--	--	--	0	--

2.10.1 Patterns in upper middle- and high-income countries

Generally, countries with a better economic profile (higher GDP, higher domestic funding and lower funding gaps) are characterized by better input, process and output indicators (availability of national strategic plans, guidelines, diagnostic and laboratory systems, electronic and case-based data management and regular staff training). These countries report higher TB patient health expenditures, domestic funding for TB and adequate TB staffing. They also report effective laboratory networks, regular screening of high-risk groups, contact investigation and proportion of bacteriological diagnostic TB confirmation. West Bank and Gaza Strip may compensate for its poorer socioeconomic context by (near) full system integration. Countries with more resources report generally better outcome and impact indicators.

2.10.2 Patterns in lower middle- and low-income countries

Most countries with lower resource availability perform less well on programmatic outputs, including rapid diagnostic tests, drug-resistance testing and proportion of TB cases tested for HIV, although Afghanistan and Djibouti achieve more than 60% of TB cases tested for HIV, whereas Kuwait and Morocco achieve less than 50% for the same indicator. In Afghanistan and Djibouti, joint TB and HIV diagnosis received more funding from the Global Fund to Fight AIDS, Tuberculosis and Malaria, than Kuwait and Morocco. This may be partly due to differences in funding, both from domestic and international sources for TB, and also as a result of different political priorities for TB prevention and care, and HIV/TB inter-programme collaboration.

2.10.3 Patterns unrelated to income group

Some indicators are unrelated to GDP. There is no association between economic indicators and multisectoral engagement, developing partnerships and involving the private sector (including nongovernmental and civil society organizations). Similarly, economic indicators are not associated with rates of HIV testing and ART provision.

2.11 Summary

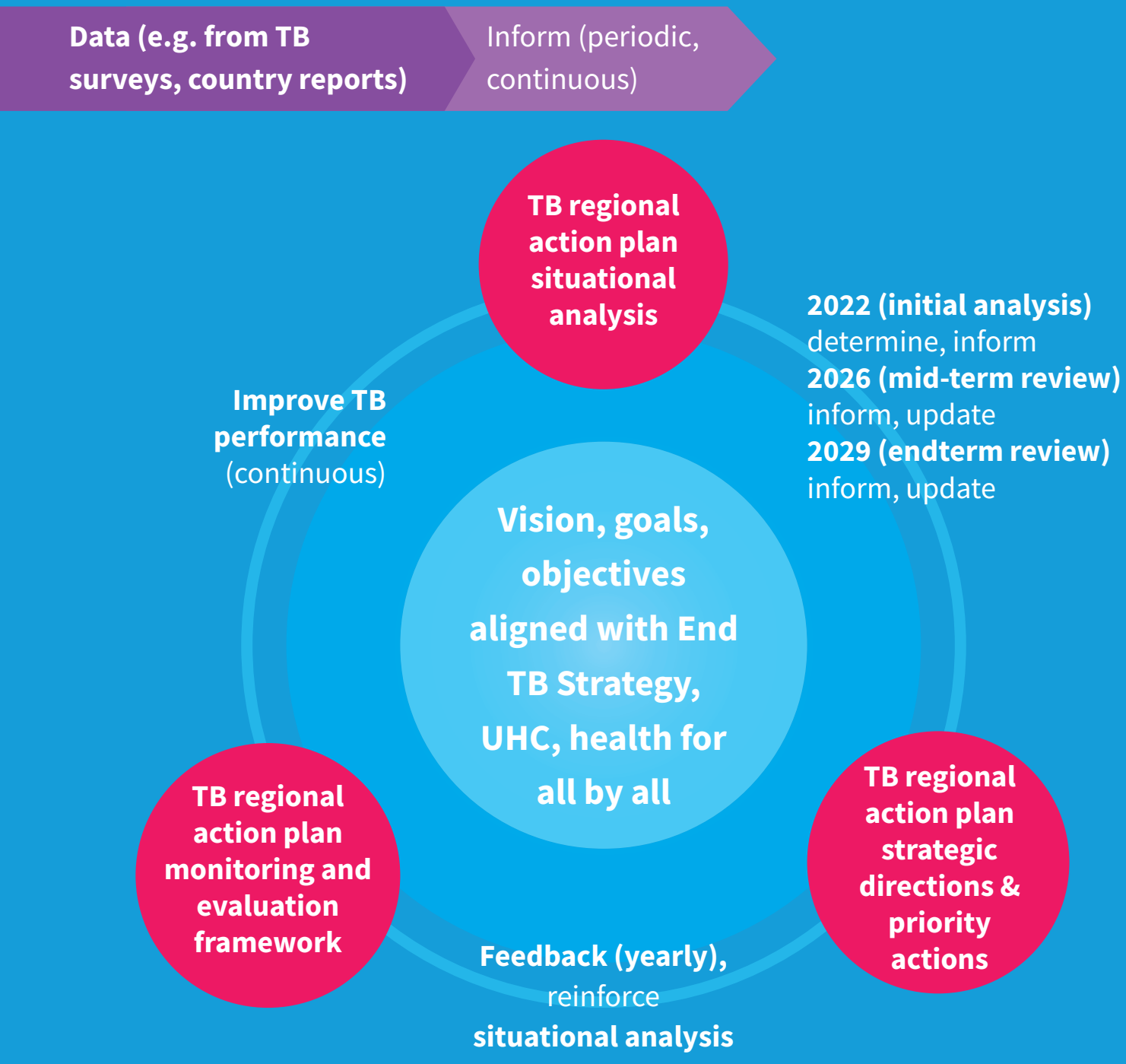
Insufficient progress towards End TB Strategy targets suggests that TB prevention and care efforts are inadequate. The heterogenicity of the contexts of the countries of the Region means that approaches must be adapted to country contexts. More investment in TB is needed to address the resource limitations hampering the achievement of TB goals and targets. Maximum beneficial impact of TB prevention and care efforts will not be achieved unless partnerships and collaboration are strengthened. Overall, the vertical TB model is starting to show its limitations; this is reflected in treatment coverage gaps for both drug-resistant and drug-susceptible TB and in the insufficient decline of TB impact indicators (estimated TB incidence and mortality). Different situations and different country contexts call for differentiated approaches.

Resources for tackling TB are limited in the Eastern Mediterranean Region, and TB partnerships need to be improved.

3. Tuberculosis action plan for the WHO Eastern Mediterranean Region, 2023–2030

3.1 Rationale

The *Tuberculosis action plan for the WHO Eastern Mediterranean Region 2023–2030* advocates regular country data collection and analysis so that indicators can be produced throughout the implementation period. Regular analysis and periodic assessment of the progress of implementation will provide data that will allow improved targeting of TB prevention and care activities. Fig. 6 provides the rationale for the regional TB action plan.



Box 1. List of indicators used for the situational analysis

Context indicators	• GDP • Health expenditure • Risk factors for TB such as HIV and diabetes mellitus
Input indicators	• TB funding gaps • Domestic and international funding • Human resources and training • Availability of TB plans, guidelines, standard operating procedures (SOPs) and algorithms • Laboratory networks • New diagnostics and specimen referral systems • TB information system and electronic case reporting
Process indicators	• Decentralized services • Integration of diagnosis and treatment services at PHC level • Involvement of the private sector • Implementation of the TB Multisectoral Accountability Framework • HIV testing • Use of GeneXpert • Phenotypic and genotypic bacteriological confirmation and testing of drug resistance • Contact tracing and screening of high-risk groups • Use of all oral and shorter regimens for drug-resistant TB • Antiretroviral therapy for co-infected TB/HIV patients • Treatment of TB infection and management of diabetes mellitus
Output indicators	
Diagnostic indicators	• Proportion of new and relapse drug-susceptible and rifampicin-resistant (RR) TB cases tested with rapid methods • Proportion of patients with known HIV status
Treatment indicators	• Proportion of confirmed MDR/RR-TB cases treated • Proportion of household contacts who are HIV-positive or children under-5 years of age put on TB preventive therapy
Outcome indicators	• TB treatment coverage • Treatment success rate in drug-susceptible and MDR/RR-TB patients
Impact indicators	• TB incidence rate per 100 000 population • Reduction rate of the estimated TB incidence rate • TB mortality rate • Reduction rate of TB deaths

3.2 Vision, goals and objectives

The Regional Office for the Eastern Mediterranean developed the objectives of the *Tuberculosis action plan for the WHO Eastern Mediterranean Region 2023–2030* following a consultative process involving all national TB programme managers in the Region. The regional vision, goals, targets and milestones are those of the End TB Strategy. The Region aims to:

- reduce TB deaths by 90%;
- reduce TB incidence by 80%;
- eliminate catastrophic costs for TB-affected households by 2030 (Table 2).

Box 2. Vision, goals and objectives of the *Tuberculosis action plan for the WHO Eastern Mediterranean Region, 2023–2030*

Vision	A WHO Eastern Mediterranean Region with zero deaths, disease and suffering due to TB
Aim	End the TB epidemic in the WHO Eastern Mediterranean Region by 2035
Goal 1.	Reduce TB deaths by 90% by 2030 compared with 2015
Goal 2.	Reduce TB incidence rate by 80% by 2030 compared with 2015
Goal 3.	Ensure that 100% of national strategic plans in the Region include actions beyond the health sector, within the health sector and within national TB programmes
Objective 1.	Reduce the proportion of missed TB cases from 48% in 2020 to no more than 20% in 2025 and 0% in 2030
Objective 2.	Maintain an average treatment success rate of at least 90% for drug-susceptible TB cases over the period 2023 to 2030
Objective 3.	Detect and treat with second-line TB medicines 90% of the estimated number of MDR/RR-TB cases by 2030
Objective 4.	Increase the proportion of notified TB patients who are tested for HIV from 39% in 2020 to 100% in 2030 and increase ARV treatment every year between 2023 and 2030, to 100% of co-infected TB/HIV patients
Objective 5.	Increase the number of eligible persons receiving preventive TB treatment to at least 2 million per year by 2030

Table 2. Priority interventions and actions per country group in the Eastern Mediterranean Region

	Strategic directions	Priority actions	Country grouping/ categorization		Objectives
			High-burden countries	Low-burden countries	
INPUT	Fundamental enabling factors for the implementation of End TB Strategy	Establish and regularly update a national TB strategy	✓✓✓	✓✓	All objectives
		Ensure multisectoral collaboration	✓✓✓	✓✓	All objectives
		Ensure a sustainable TB programme in each country	✓✓✓	✓✓✓	All objectives
PROCESS	Find missed TB cases and ensuring a high treatment success rate	Extend TB services through community engagement and PHC	✓✓✓	✓✓	1
		Update and review TB diagnosis policy	✓✓✓	✓✓	1,3
		Focus on TB services in high-risk groups	✓✓	✓✓✓	1,4,5
		Active TB screening and assessment of high-risk groups for TB	✓	✓✓✓	1
		Expand and strengthen TB services for children	✓✓	✓✓	1,2
	Scale up collaborative TB/HIV activities	Implement TB/HIV collaborative activities	✓✓✓	✓✓	4
		Enhance HIV testing in TB patients and screen PLHIV for TB	✓✓✓	✓✓	4
		Ensure TB preventive treatment of PLHIV	✓✓✓	✓✓	5
	Manage TB and co-morbidities	Establish approaches to managing TB with co-morbidities	✓✓	✓✓✓	1,2
		Expand collaboration with anti-tobacco, nutrition, diabetes and alcohol prevention services	✓✓	✓✓✓	1,2
INPUT	Strengthen TB laboratories networks	Improve access to new WHO recommended diagnostics	✓✓	✓✓	1,3
		Update diagnostic algorithms	✓✓	✓✓	1
		Ensure comprehensive referral of biological samples for universal drug susceptibility testing (DST)	✓✓	✓	1,3
		Ensuring EQA for quality diagnosis	✓✓	✓✓	1,3

✓✓✓ High priority - ✓✓ Medium priority - ✓ Low priority

Table 2. Priority interventions and actions per country group in the Eastern Mediterranean Region (cont.)

	Strategic directions	Priority actions	Country grouping/ categorization		Objectives
			High-burden countries	Low-burden countries	
PROCESS	Scaling up programmatic management of drug-resistant TB	Ensuring decentralized quality diagnosis and treatment care services	✓✓	✓✓	3
		Expanding use of the new shorter all-oral treatment regimens	✓✓	✓✓	3
		Improving DR-TB surveillance and monitoring and evaluation	✓✓	✓✓	3
PROCESS	Expand TB infection management and sustain BCG vaccination	Adopt updated TB infection guidelines and SOPs	✓✓	✓✓	5
		Improve TB diagnosis and treatment	✓✓	✓✓	5
		Adopt new shorter WHO-recommended regimens	✓	✓	
		Ensure provision of TB preventive therapy to the eligible identified high-risk groups	✓✓	✓✓	5
		Continue general BCG vaccination at birth in high-burden countries and vaccinate risk groups in low-TB incidence countries	✓✓	✓✓	5
PROCESS	Involve all care providers	Link private and public-private sectors for better TB prevention and care	✓✓	✓✓	All objectives
		Link with health services for the army and relevant professional medical associations or societies	✓✓	✓✓	All objectives
PROCESS	Ensure the availability of robust and functional TB information systems	Case-based electronic program to collect data on TB notification and outcomes	✓✓	✓✓	1,2,3
		Identify and map the clusters of notified TB cases and high-risk groups for TB	✓	✓✓	
PROCESS	Develop momentum for operational research and innovations on TB	Conduct operational research activities from planning to results stages	✓✓	✓✓	All objectives

✓✓✓ High priority - ✓✓ Medium priority - ✓ Low priority

Table 2. Priority interventions and actions per country group in the Eastern Mediterranean Region (cont.)

	Strategic directions	Priority actions	Country grouping/ categorization		Objectives
			High-burden countries	Low-burden countries	
PROCESS	Ensure required administrative and political environment to End TB in the countries of the Region	Sustain and strengthen TB services in the context of universal health coverage	✓✓	✓✓	All objectives
		Enhance drug regulatory system	✓✓	✓✓	All objectives
		Enhance mandatory TB notification and vital registration	✓✓	✓✓	All objectives
		Support TB patients and their families through social protection	✓✓	✓✓	All objectives
		Address poverty and social determinants thereof	✓✓	✓✓	All objectives
	Ensure continued TB services during the acute phase of a complex emergency	Ensure provision of TB treatment to patients in communities experiencing the acute phase of a complex emergency	✓✓	✓✓	All objectives
		Develop specific SOPs to manage TB patients living in acute phase areas	✓✓	✓✓	All objectives
		Ensure the availability of TB drugs in health facilities where TB treatment services should be provided	✓✓	✓✓	All objectives
		Monitor and supervise TB activities in the affected areas	✓✓	✓✓	All objectives
		Ensure appropriate transfer of TB patients within the national territory and from the national territory to a foreign or neighbouring country	✓✓	✓✓	All objectives

✓✓✓ High priority - ✓✓ Medium priority - ✓ Low priority

3.3 Strategic interventions and priority actions to improve structure, input and processes

3.3.1 Addressing regional diversity/heterogeneity

According to the situation analysis, this regional TB action plan suggests strategic interventions and priority actions (Table 3) for all 22 countries and territories of the Eastern Mediterranean Region. It also specifies the actions to be considered in low-burden countries to initiate and advance the process of TB elimination, and sets out the key actions to be taken to maintain crucial TB services during the acute phases of complex emergencies. These strategic directions and related priority actions are weighted by priority by country groups (low- and high-burden countries). They target or link to different plan objectives (sometimes intentionally overarching).

Prioritization of strategic directions by country groups will help countries score better in the future so that the different indicators improve.

Suggested strategic directions and priority actions cover the entire action spectrum of all pillars of the End TB Strategy (TB policy level-matching), and the full cascade of TB prevention and care (TB service provision-matching). Whereas strategic directions apply to both low- and high-burden countries, the emphasis on priority actions can vary by category of countries. In low-burden countries, there is more structural/programme integration than in high-burden countries, so establishing and regularly updating national TB strategies is less of a priority than it is for high-burden countries. Conversely, low-burden countries could benefit from national strategic plans that focus on TB elimination, and intensified integration of TB services at policy and operational levels within the health and development sectors.

3.3.2 Priorities for TB diagnosis and treatment

To find missing cases and ensure a high TB treatment success rate, low-burden countries may need to place less emphasis on reviewing specific TB diagnostic country policy guidance than high-burden countries. There is generally a higher degree of programmatic integration and embedding in the overall health system in low-burden countries, but they need to ensure that health care workers maintain TB as one possible differential diagnosis. This is particularly important since demographic transition and ageing populations increase the probability of infection evolving towards disease. Ageing and the falling immunocompetence that accompanies it increase this risk.

3.3.3 Priorities for TB services and active TB screening

Focusing on TB services and active screening of high-risk groups is a higher priority in low-burden countries than in high-burden countries. Such approaches allow low-

burden countries to progress further towards TB elimination. In high-burden countries, other areas are higher priorities in view of limited resources. Managing TB and co-morbidities are also higher priorities in low-burden countries. It is more important for many high-burden countries to improve access to diagnostics and the basic TB data surveillance system.

3.3.4 Priorities for TB infection management and preventive treatment

Managing TB infection and TB preventive treatment are higher priorities in low-burden countries than in high-burden countries, which need to continue with general BCG vaccination. Case-based, electronic TB information systems and mapping TB cases in different population groups are more important in low-burden countries; high-burden countries need to focus more on supporting patients and their families through social protection and addressing poverty and social TB determinants.

Boxes 3 to 7 provide an overview of suggested strategic directions and priorities for the countries/territories of the Region to consider, according to whether they are low burden or high burden.

Box 3. Summary of priorities for low-burden and high-burden countries

Low-burden countries	High-burden countries
Focus on TB services and active screening in high-risk groups	Improve access to diagnostics
Manage TB and co-morbidities	Improve basic TB data surveillance system
Manage TB infection with TB preventive treatment	General BCG vaccination
Case-based, electronic TB information systems, and map TB cases in different population groups	Support patients and their families through social protection and tackling poverty and social TB determinants

Box 4. Strategic directions for the 22 countries and territories of the Region for the *Tuberculosis action plan for the WHO Eastern Mediterranean Region, 2023–2030*

- **Find missed drug-susceptible TB cases by:**
  - **extending TB services through community engagement and PHC.**
  - **updating/reviewing TB diagnosis policy.**
  - **upgrading TB services for individuals belonging to high-risk groups.**
  - **expanding and strengthening TB services for children.**
- **Scale up collaborative TB/HIV activities.**
- **Manage TB and co-morbidities.**
- **Strengthen TB laboratory networks.**
- **Scale up programmatic management of drug-resistant TB.**
- **Expand TB infection management and sustain BCG vaccination.**
- **Involve all care providers.**
- **Ensure the availability of a robust and functional information system.**
- **Create momentum for operational research on TB issues.**

Box 5. Additional directions for the 11 low-burden countries of the Region to move towards elimination

- Implement a case-based electronic programme to collect data on TB notification and outcomes.
- Identify clusters of notified TB cases and high-risk groups for TB.
- Implement active screening of eligible individuals belonging to the identified clusters and high-risk groups.
- Ensure the treatment of TB cases identified.
- Ensure TB preventive therapy to eligible individuals in line with national guidelines on TB infection management.
- Monitor implementation of TB infection activities to evaluate outcomes.
- Establish a strategy to fight against TB specifically in urban settings.

Box 6. Actions for acute phase of a complex emergency and in phases of recurrent instability

- Implement a case-based electronic programme to collect data on TB notification and outcomes.
- Identify clusters of notified TB cases and high-risk groups for TB.
- Implement active screening of eligible individuals belonging to the identified clusters and high-risk groups.
- Ensure the treatment of TB cases identified.
- Ensure TB preventive therapy to eligible individuals in line with national guidelines on TB infection management.
- Monitor implementation of TB infection activities to evaluate outcomes.
- Establish a strategy to fight against TB specifically in urban settings.

Box 7. Other actions for regulatory systems and the social and political environment

- Sustain and strengthen TB services in the context of universal health coverage, e.g. by integrating TB services in the overall health system and linkage with PHC.
- Enhance the drug regulatory system.
- Enhance mandatory TB notification and vital registration.
- Support TB patients and their families through social protection.
- Tackle poverty and social determinants

3.3.5 Key priorities

In view of the many competing health and development priorities of the countries of the Region and taking into account the multidimensional and social nature of TB, two areas of work warrant key priority focus during the implementation period of this regional action plan, adopting a whole-of-society, inclusive partnership approach.

1. Implementation of the multisectoral accountability framework for TB must be further intensified to yield better TB outcomes and impact by strengthening health systems and accelerating progress towards universal health coverage.

2. Operational research and innovation needs the support of all partners to generate more effective and efficient, evidence-based novel approaches to TB prevention and care tailored to country contexts.

4. Monitoring and evaluation framework

4.1 Purpose

The monitoring and evaluation framework of the regional TB action plan will enable countries of the Region to track progress and conduct progress analysis. It is therefore a vital tool for implementation of the regional TB action plan.

4.2 Indicator monitoring

Countries of the Region will monitor progress annually through the WHO standard reporting and recording system and, every other year, any additional indicators reflected in the monitoring and evaluation framework.

4.3 Mid-term and end-implementation evaluations

The WHO Regional Office will coordinate a mid-term implementation evaluation in 2026 and an end-implementation period evaluation in 2029. These will include the full data set, comprised of the monitoring and evaluation framework indicators and the indicators from the situation analysis table. The framework will be populated with data and compared with baseline data on output, outcome and impact indicators (Table 3). These indicators are also categorized from a programmatic perspective under prevention, diagnosis and treatment indicators (Table 4).

4.4 Corrective actions

Regular analysis of data through annual monitoring of progress and mid-term and end-implementation evaluations will allow any adjustments needed to the strategic directions and priority actions, taking into account possible changes in country status from low- to high-burden and vice versa. At baseline, most indicators are less favourable than global average comparators, the exception being TB treatment outcomes.

4.5 Roles

Countries of the Region will be responsible for driving implementation of the *Tuberculosis action plan for the WHO Eastern Mediterranean Region 2023–2030*. The catalyst for implementation will be collaborative partnership, including and with the support of WHO, academia, civil society, communities and the private sector.

Table 3. Monitoring and evaluation framework featuring 2020 TB data baseline figures for countries of the Eastern Mediterranean Region

		Afghanistan	Bahrain	Djibouti	Egypt	Iran, Islamic Republic of	Iraq	Jordan	Kuwait	Lebanon	Libya	Morocco	Oman	Pakistan	Qatar	Saudi Arabia	Somalia	Sudan	Syrian Arab Republic	Tunisia	United Arab Emirates	West Bank and Gaza Strip	Yemen
Output	Percentage (%) of new and relapse TB cases tested with rapid diagnostic test(s)	26	97	0	59	0		68	64	63	46	65	93	46	100	43	31	31	–	6	54	100	31
	Percentage (%) of new pulmonary TB patients tested for rifampicin resistance	45	–	–	85	45	7	100	100	95	99	–	92	71	100	37	64	65	71	42	88	100	19
	Percentage (%) of previously treated pulmonary TB patients tested for rifampicin resistance	100	–	–	100	27	88	100	100	100	0	–	100	76	100	39	100	100	10	100	–	0	26
	Percentage (%) of confirmed MDR/RR-TB patients started on treatment	16	60	49	45	9	11	50	35	43	19	44	67	10	42	50	7	16	27	30	–	–	14
	Percentage (%) of TB patients with known HIV status	65	66	80	39	86	49	94	42	81	97	45	96	29	100	65	94	28	18	52	76	100	15
	Percentage (%) of PLHIV on TB preventive treatment	0	0	0	0	68	0	0	0	0	0	0	5	0	100	0	0	0	0	12	0	0	0
	Percentage (%) of child household contacts under 5 on TB preventive treatment	96	100	0	26	100	100	0	100	100	12	6	100	5	100	30	10	24	25	100	0	22	6

Table 3. Monitoring and evaluation framework featuring 2020 TB data baseline figures for countries of the Eastern Mediterranean Region

		Afghanistan	Bahrain	Djibouti	Egypt	Iran, Islamic Republic of	Iraq	Jordan	Kuwait	Lebanon	Libya	Morocco	Oman	Pakistan	Qatar	Saudi Arabia	Somalia	Sudan	Syrian Arab Republic	Tunisia	United Arab Emirates	West Bank and Gaza Strip	Yemen
Outcomes	TB treatment coverage (%)	62	87	71	59	56	45	49	87	87	45	83	87	47	87	87	41	63	69	62	87	80	57
	Treatment success rate of DS-TB (%)	91	17	82	87	85	94	82	74	80	70	89	48	93	73	90	92	83	89	90	81	86	85
	Treatment success rate of MDR/RR-TB (%)	69	–	72	61	60	63	100	60	100	19	43	25	70	0	67	71	84	50	79	0	–	68
Impact	TB incidence/100 000 population	193	12	224	11	13	27	4.7	19	13	59	98	7	259	34	8.1	259	63	19	36	0.79	0.48	49
	Percentage of reduction of TB incidence rate compared with 2015 (baseline)	2	-20	-39	-27	-5	-19	-27	-18	-14	8	48	-4	-21	-56	42	-33	-5	-28	-5	-5	-4	4
	TB mortality	11130	10	267	616	950	935	9	23	99	899	3726	20	44920	8	732	10180	4280	24	205	66	3	2236
	Percentage of reduction of TB deaths compared with 2015 (baseline)	-21	68	-31	42	1.9	-4	10	22	57	23	30	9.1	-0.3	-52	2.5	-14	-2.1	-42	-3.1	32	5.8	-9

Table 4. Summary of monitoring and evaluation framework indicators by cascade areas of TB

Prevention	Diagnosis	Treatment
Percentage of PLHIV on TB preventive treatment	Percentage of new and relapse TB cases tested with rapid diagnostic test(s)	TB treatment coverage (%)
Percentage of child household contacts under 5 on TB preventive treatment	Percentage of new pulmonary TB patients tested for rifampicin resistance	Treatment success rate of DS-TB (%)
	Percentage of previously treated pulmonary TB patients tested for rifampicin resistance	Percentage (%) of confirmed MDR/RR-TB patients started on treatment
	Percentage of TB patients with known HIV status	Treatment success rate of MDR-TB (%)

4.5.1 WHO Regional Office

WHO Regional Office will liaise between WHO country offices and WHO headquarters. Selected outputs/deliverables will include:

- TB programme reviews (including desk reviews);
- Green Light Committee (rGLC) reviews;
- TB country guidance documents (e.g. on DS-TB and DR-TB);
- TB national strategic plans and regional operational plans, including a plan for TB elimination;
- Multisectoral Accountability Framework for TB analysis, baseline assessments and implementation support;
- TB training courses/capacity-building activities;
- funding proposals, including Global Fund concept notes;
- annual TB data collection and reporting;
- in-depth TB data analysis and Expanded Programme on Immunization (EPI) reviews;
- operational research plan and studies oriented toward national TB programme problem-solving.

4.5.2 WHO country offices

WHO country offices are the key stakeholders in supporting country-level implementation and will be guided by the TB national strategic plan, requests from national TB programmes, country biennial plans and workplans, and country cooperation plans.

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Annex 1

Indicators

Table 1a. Critical context indicators by country

	Afghanistan	Bahrain	Djibouti	Egypt	Iran, Islamic Republic of	Iraq	Jordan	Kuwait	Lebanon	Libya	Morocco	Oman	Pakistan	Qatar	Saudi Arabia	Somalia	Sudan	Syrian Arab Republic	Tunisia	United Arab Emirates	West Bank and Gaza Strip	Yemen
Diabetes prevalence (%)	9.2 (2018)	–	–	16.5 (2017)	–	13.9 (2015)	7.2 (2019)	14.6 (2014)	10.5 (2017)	17.6 (2009)	10.6 (2017)	11.5 (2017)	–	16.7 (2012)	–	–	6.0 (2016)	–	15.5 (2016)	12.0 (2018)	–	–
GDP per capita, 2020 (US$)	1979	42 000	5481	11 951	15 000	9255	9817	45 000	11 649	16 000	6916	30 000	5100	85 000	44 000	1200	3900	–	9728	63 000	5395	–
Health expenditure per notified TB patient (US$ per patient), 2020	194.92	–	281.40 (2018)	19.80 (2017)	176.80	4018.30	6.60	–	866.80	1331.40 (2013)	682.70	–	129.20	–	–	92.60	183.10	335.40	327.90	–	137.40	10.41 (2014)

Table 1b. Input indicators by country

	Afghanistan	Bahrain	Djibouti	Egypt	Iran, Islamic Republic of	Iraq	Jordan	Kuwait	Lebanon	Libya	Morocco	Oman	Pakistan	Qatar	Saudi Arabia	Somalia	Sudan	Syrian Arab Republic	Tunisia	United Arab Emirates	West Bank and Gaza Strip	Yemen
TB funding gap (2021) (%)	0	–	–	–	0	12	38	–	20	0	16	–	58	–	–	0	54	0	0	–	–	57
Domestic funding for TB (2021) (%)	–	–	–	–	100	86	25	–	43	23	76	–	2.40	–	–	0	1	0	100	–	–	1.70
International funding for TB (2021) (%)	100	–	100	–	–	2.8	37	–	37	77	7.1	–	40	–	–	100	45	100	0	–	–	42
Human resources for TB at central level																						
Availability of TB national strategic plan																						
Availability of TB laboratory network and national reference laboratory																						
Updated national guidelines DS-TB																						
Updated national guidelines DR-TB																						
Updated guidelines on TB infection management and TB preventive treatment																						
Algorithms and standards for TB systematic screening																						
Updated laboratory guidelines and SOPs																						

Not yet implemented | Partially implemented | Implemented | No data available

AM – Ambulatory model HB – Hospital-based HM – Hybrid model

Table 1b. Input indicators by country

	Afghanistan	Bahrain	Djibouti	Egypt	Iran, Islamic Republic of	Iraq	Jordan	Kuwait	Lebanon	Libya	Morocco	Oman	Pakistan	Qatar	Saudi Arabia	Somalia	Sudan	Syrian Arab Republic	Tunisia	United Arab Emirates	West Bank and Gaza Strip	Yemen
Introduction of the new WHO recommended molecular diagnostics																						
EQA system for laboratory																						
Specimen referral and transportation																						
Infection control in place in health facilities																						
TB surveillance system																						
Electronic case-based data system																						
Regular training of TB staff including laboratory																						

Not yet implemented Partially implemented Implemented No data available

AM – Ambulatory model HB – Hospital-based HM – Hybrid model

Table 1c. Process indicators by country

	Afghanistan	Bahrain	Djibouti	Egypt	Iran, Islamic Republic of	Iraq	Jordan	Kuwait	Lebanon	Libya	Morocco	Oman	Pakistan	Qatar	Saudi Arabia	Somalia	Sudan	Syrian Arab Republic	Tunisia	United Arab Emirates	West Bank and Gaza Strip	Yemen
Use of GeneXpert as initial diagnostic test																						
Bacteriological confirmation of TB cases (%)	68	90	84	97	74	68	67	63	81	72	92	98	49	94	94	66	63	83	87	94	87	56
Systematic screening of TB in high-risk groups																						
DR-TB testing (FQ-R) by rapid molecular tests (GeneXpert 10 colour)																						
Decentralized DR-TB services*	AM	HB	HM	HM	HM	AM	HB	HB	HB		AM	HB	AM	HB	HB	AM	AM	AM		HB		AM
Introduction of all-oral treatment regimens for DR-TB patients																						
Introduction of the shorter all-oral treatment regimen for DR-TB patients																						
Contact investigation																						
Provision of TB preventive treatment																						
HIV testing for TB patients (%)	65	66	80	39	86	49	94	42	81	97	45	96	29	100	65	94	28	18	52	76	100	15

Not yet implemented Partially implemented Implemented No data available

AM – Ambulatory model HB – Hospital-based HM – Hybrid model

Table 1c. Process indicators by country

	Afghanistan	Bahrain	Djibouti	Egypt	Iran, Islamic Republic of	Iraq	Jordan	Kuwait	Lebanon	Libya	Morocco	Oman	Pakistan	Qatar	Saudi Arabia	Somalia	Sudan	Syrian Arab Republic	Tunisia	United Arab Emirates	West Bank and Gaza Strip	Yemen
ART for co-infected TB HIV patients (%)	100	63	36	100	91	100	--	100	100	0	98	100	100	76	98	100	100	100	100	100	100	0
Management of TB and diabetes in place																						
Integration of TB diagnosis and treatment in primary health network																						
TB service provision by private sector aligned with NTP guidelines																						
Collaboration with nongovernmental and civil society organizations																						
Implementation of the WHO Multisectoral Accountability Framework																						
TB operational research implementation																						

Not yet implemented Partially implemented Implemented No data available

AM – Ambulatory model HB – Hospital-based HM – Hybrid model

Table 1d. Output indicators by country

	Afghanistan	Bahrain	Djibouti	Egypt	Iran, Islamic Republic of	Iraq	Jordan	Kuwait	Lebanon	Libya	Morocco	Oman	Pakistan	Qatar	Saudi Arabia	Somalia	Sudan	Syrian Arab Republic	Tunisia	United Arab Emirates	West Bank and Gaza Strip	Yemen
Percentage (%) of new and relapse TB cases tested with rapid diagnostic test(s)	26	97	0	59	0	–	68	64	63	46	65	93	46	100	43	31	31	–	6	54	100	31
Percentage (%) of new pulmonary TB patients tested for rifampicin resistance	45	–	–	85	45	7	100	100	95	99	–	92	71	100	37	64	65	71	42	88	100	19
Percentage (%) of previously treated pulmonary TB patients tested for rifampicin resistance	100	–	–	100	27	88	100	100	100	0	–	100	76	100	39	100	100	10	100		0	26
Percentage (%) of confirmed MDR/RR-TB patients started on treatment	16	60	49	45	9	11	50	35	43	19	44	67	10	42	50	7	16	27	30	–	–	14

Table 1d. Output indicators by country

	Afghanistan	Bahrain	Djibouti	Egypt	Iran, Islamic Republic of	Iraq	Jordan	Kuwait	Lebanon	Libya	Morocco	Oman	Pakistan	Qatar	Saudi Arabia	Somalia	Sudan	Syrian Arab Republic	Tunisia	United Arab Emirates	West Bank and Gaza Strip	Yemen
Percentage (%) of TB patients with known HIV status	65	66	80	39	86	49	94	42	81	97	45	96	29	100	65	94	28	18	52	76	100	15
Percentage (%) of PLHIV on TB preventive treatment	0	0	0	0	68	0	0	0	0	0	0	5	0	100	0	0	0	0	12	0	0	0
Percentage (%) of child household contacts under 5 on TB preventive treatment	96	100	0	26	100	100	0	100	100	12	6	100	5	100	30	10	24	25	100	0	22	6

Table 1e. Outcome and impact indicators by country

	Afghanistan	Bahrain	Djibouti	Egypt	Iran, Islamic Republic of	Iraq	Jordan	Kuwait	Lebanon	Libya	Morocco	Oman	Pakistan	Qatar	Saudi Arabia	Somalia	Sudan	Syrian Arab Republic	Tunisia	United Arab Emirates	West Bank and Gaza Strip	Yemen
TB treatment coverage (%)	62	87	71	59	56	45	49	87	87	45	83	87	47	87	87	41	63	69	62	87	80	57
Treatment success rate of DS-TB (%)	91	17	82	87	85	94	82	74	80	70	89	48	93	73	90	92	83	89	90	81	86	85
Treatment success rate of MDR/RR-TB (%)	69	–	72	61	60	63	100	60	100	19	43	25	70	0	67	71	84	50	79	0	–	68
TB incidence/ 100 000 population	193	12	224	11	13	27	4.7	19	13	59	98	7	259	34	8.1	259	63	19	36	0.79	0.48	49
Percentage of reduction of TB incidence rate compared with 2015 (baseline)	2	-20	-39	-27	-5	-19	-27	-18	-14	8	48	-4	-21	-56	42	-33	-5	-28	-5	-5	-4	4
TB mortality	11 130	10	267	616	950	935	9	23	99	899	3 726	20	44 920	8	732	10 180	4 280	24	205	66	3	2 236
Percentage of reduction of TB deaths compared with 2015 (baseline)	-21	68	-31	42	1.9	-4	10	22	57	23	30	9.1	-0.3	-52	2.5	-14	-2.1	-42	-3.1	32	5.8	-9

The *Tuberculosis action plan for the WHO Eastern Mediterranean Region 2023–2030* provides an up-to-date TB situation analysis and guidance to different country groups on strategic directions and priority actions to improve TB outcomes and output indicators at country level and progress towards the Sustainable Development Goals 2030 and End TB 2035 targets. The plan advocates regular collection and analysis of country data to develop indicators throughout its implementation period and periodic assessment of progress to help inform improvements in the targeting of TB prevention and care interventions. The objectives of the plan were developed following a consultative process involving all national TB programme managers in the Region and aim to support countries to bridge the gap between the highly conceptual End TB Strategy and operational, context-specific, national TB strategic plans.