

Eastern Mediterranean Region plan 2021-2025 to accelerate implementation of the global roadmap for neglected tropical diseases 2030



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FOREWORD

During the implementation of the first neglected tropical diseases (NTDs) road map 2012–2020, Member States of the WHO Eastern Mediterranean Region made significant progress, reducing the overall NTD burden and eliminating some NTDs as a public health problem: trachoma from the Islamic Republic of Iran, Morocco and Oman, and lymphatic filariasis from Egypt and Yemen. Many of the targets set for 2020 were not met, however.

WHO and its partners have held extensive consultations to develop the new global NTDs road map for the period 2021–2030 to deliver more coordinated and cost-effective NTD interventions. This will improve programme coverage and guarantee that the poorest have enhanced access to quality-assured, effective and safe medicines and diagnostics. The new road map will move from a disease-specific approach to an integrated approach that cuts across all 20 diseases and disease groups to ensure country ownership and leadership. It will also promote the development of new tools for prevention, diagnosis and treatment.

This plan is designed to accelerate implementation of the new global NTDs road map in the Eastern Mediterranean Region during 2021–2025 by providing clear milestones that will enable national governments to take the lead in delivering NTD interventions. Disease-specific and cross-cutting approaches in line with WHO's Thirteenth General Programme of Work (GPW13) and our regional *Vision 2023* will be combined to reach the 2025 milestones and pave the way for Member States to achieve the NTD-related Sustainable Development Goal (SDG) targets by 2030.

Dr Ahmad Al-Mandhari

WHO Regional Director for the Eastern Mediterranean

ABBREVIATIONS

CL	Cutaneous leishmaniasis
DALYs	Disability-adjusted life years
EDL	Essential Diagnostics List
EML	Essential Medicines List
EPIRF	Epidemiological data reporting form
G2D	Grade 2 disability
ICCDE	International Commission for the Certification of Dracunculiasis Eradication
JAP	Joint Application Package
MDA	Mass drug administration
MMDP	Morbidity management and disability prevention
NTDs	Neglected tropical diseases
PC-NTDs	Preventive chemotherapy – neglected tropical diseases
Pre-SAC	Preschool-age children
RAG	Red, amber, green
SAC	School-age children
SAFE	Surgery, antibiotics, facial cleanliness, environmental improvement
SDG	Sustainable Development Goal
TAS	Transmission assessment survey
TT	Trachomatous trichiasis
VL	Visceral leishmaniasis

CONTEXT AND PURPOSE

The neglected tropical diseases (NTDs) prioritized by WHO are a diverse set of 20 communicable and noncommunicable diseases and disease groups with one common feature: their devastating impact on impoverished communities. WHO Regional Committee for the Eastern Mediterranean resolution EM/RC54/R.3 in 2006 and World Health Assembly resolution WHA66.12 in 2013, both emphasized the importance of controlling, eliminating and eradicating NTDs. To achieve this, the first global NTD road map 2012–2020, *Accelerating work to overcome the global impact of neglected tropical diseases* (World Health Organization, 2012), set targets for the control, elimination and eradication of NTDs.

In 2020, the WHO Regional Office for the Eastern Mediterranean conducted a review of NTDs programme implementation during 2012–2019 in the WHO Eastern Mediterranean Region to assess the progress made on the 2012–2020 road map in the Region (WHO Regional Office for the Eastern Mediterranean, unpublished).

The main findings of the review included:



All 22 countries/territories in the Eastern Mediterranean Region are affected by one or more NTDs, whether autochthonous or imported cases.



Between 2012 and 2019, the estimated number of people requiring interventions against NTDs in the Region declined by 38%, from 124.9 million to 77.8 million (47 million fewer people requiring interventions in 2019 than in 2012). Fourteen of the 22 countries/territories in the Region reported this decline, the largest declines being in Sudan (from 30.8 to 12 million), Egypt (from 24 to 6.9 million) and Pakistan (from 31.5 to 25.2 million). However, increases were reported in Afghanistan (from 14 to 16.2 million) and Syrian Arab Republic (from an average of 53 000 per year until 2016 to 2.4 million in 2019).



In 2019, WHO estimated that 77.8 million people – or 12% of the population – still required interventions for NTDs in the Eastern Mediterranean Region. The majority (82%) of them were in four countries: Pakistan, Afghanistan, Sudan and Yemen (Fig. 1).



The Region accounts for the highest burden globally of cutaneous leishmaniasis (80% in 2019), which continues to disfigure people. Individuals often endure stigma leading to social exclusion (Fig. 2). However, the number of visceral leishmaniasis cases reported declined by 50% between 2012 and 2019.



In the Region, 1 089 573 disability-adjusted life years (DALYs) were lost to NTDs in 2019, more than the DALYs lost as a result of malaria (694 857), HIV/AIDS (835 910) and hepatitis (803 667). Among the NTDs, leishmaniasis (341 843) accounted for the largest number of DALYs lost, followed by soil-transmitted helminthiases (175 762), echinococcosis (132 135), schistosomiasis (128 886) and rabies (107 891) (World Health Organization, 2020a).



Three countries eliminated trachoma and two countries eliminated lymphatic filariasis as a public health problem by 2019.



All countries except Somalia eliminated leprosy as a public health problem (defined as less than 1 case registered for treatment per 10 000 population). In Somalia, incidence and prevalence increased, mainly as a result of enhanced case detection, which led to an increasing trend in the overall regional case detection rate (Fig. 3).



Preventive chemotherapy coverage for populations requiring mass treatment in endemic areas increased from 42% in 2012 to 49% in 2019. In 2019, nine countries required mass drug administration to eliminate five NTDs amenable to preventive chemotherapy (PC-NTDs). All five diseases are endemic in Sudan, four are endemic in Yemen, two in Afghanistan, Egypt, Pakistan and Somalia, and one in Djibouti, Iraq and Syrian Arab Republic (Fig. 4).

Fig. 1.

Eastern Mediterranean Region countries with the largest estimated number of people requiring interventions against NTDs, 2019

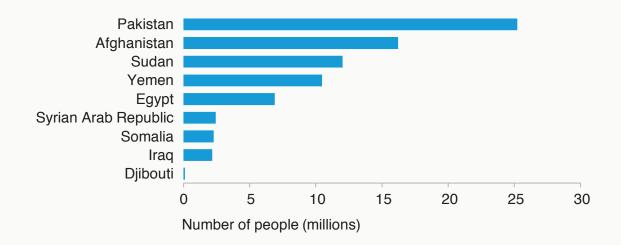


Fig. 2.

Number of reported autochthonous cutaneous leishmaniasis (CL) in the Eastern Mediterranean Region, 2012–2019

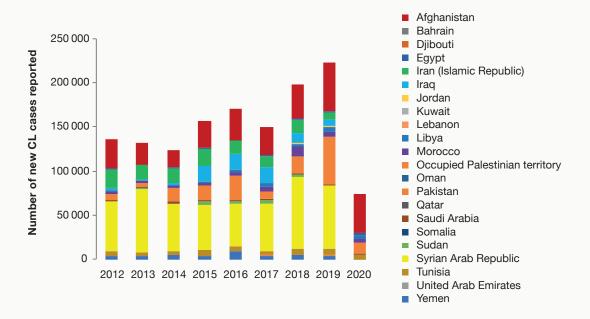


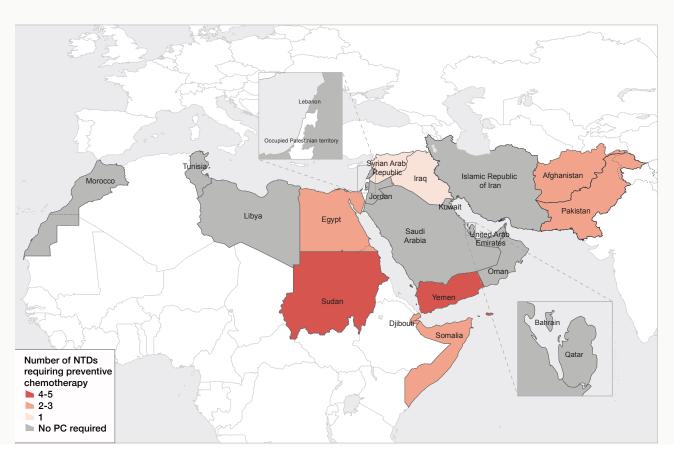
Fig. 3.

Leprosy case detection rate per million population in the Eastern Mediterranean Region, 2012–2019



Fig. 4.

Countries requiring mass drug administration to eliminate PC-NTDs



The performance of countries/territories in tackling NTDs during 2012–2020 and the outcomes by 2019 are summarized in Table 1, using red, amber, green (RAG) ratings. Green denotes 'favourable', red denotes 'unfavourable' and amber denotes a 'neutral' performance.

RAG status is attributed to each country for each relevant priority NTD using standardized criteria that are outlined in Annex 1. The public health actions required for each disease was given a rating: red – priority public health action is needed; amber – continued action is needed; and green – targets have been achieved, continued action is needed to sustain the gains.

Overall:



Twelve countries required priority public health action (a red rating) for one or more NTDs. Two countries required priority public health action for five or more NTDs (Sudan six and Yemen five).



Somalia, Sudan and Yemen were affected by seven or more NTDs.



Most countries/territories were affected by leprosy.

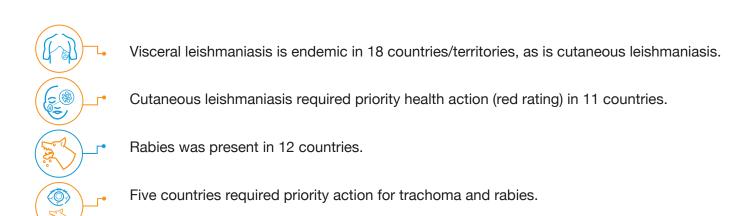
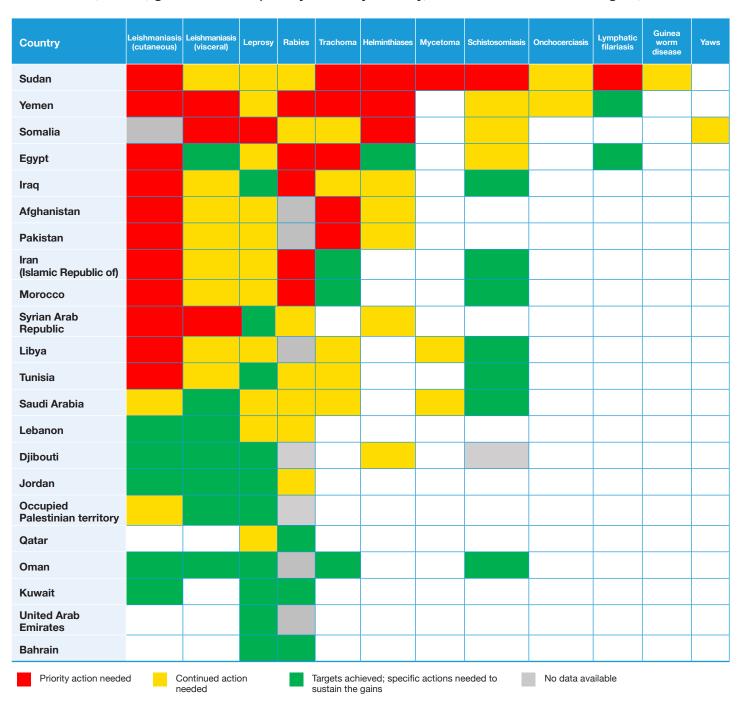


Table 1. Red, amber, green status of priority NTDs by country, Eastern Mediterranean Region, 2019



NEW ROAD MAP FOR NEGLECTED TROPICAL DISEASES 2021–2030

The new global road map for NTDs 2021–2030, Ending the neglect to attain the Sustainable Development Goals: A road map for neglected tropical diseases 2021–2030, is WHO's second blueprint to prevent, control and, where feasible, eliminate and eradicate NTDs (World Health Organization, 2020b). It follows the first road map, Accelerating work to overcome the global impact of neglected tropical diseases, issued in 2012, which set out global targets and milestones to 2020 for the 17 NTDs that then comprised WHO's NTD portfolio. The aim of the new road map is to facilitate alignment among Member States and other stakeholders and to accelerate progress towards the prevention, control, elimination and eradication of the 20 NTDs and disease groups now prioritized by WHO and the attainment of the Sustainable Development Goals (SDGs).

3 REGIONAL IMPLEMENTATION PLAN

Purpose

The purpose of this regional implementation plan is to guide the work of the countries/territories of the WHO Eastern Mediterranean Region during the next five years and pave the way for the attainment of the global NTD road map targets by 2030. It also reflects the fundamental shift in approaches to NTDs proposed in the new road map.

The regional plan has been built on current epidemiology and the gains so far achieved by implementation of the 2012 road map. A situation analysis of the NTDs prevalent in the countries/ territories of the Region was conducted to assess progress and identify gaps in their prevention and control. The synthesis of these findings has resulted in recommendations on the way forward for the next five years and the development of this regional plan for the implementation of the new global NTD road map.

Development process

The WHO Regional Office for the Eastern Mediterranean developed an initial concept for the implementation plan and submitted it to the nineteenth meeting of the Regional Programme Review Group and national NTD programme managers, held in February 2021. During the development of this plan, the Regional Office, in collaboration with WHO country offices, also conducted virtual discussions with national NTD focal points in countries with a high or moderate NTD burden. WHO shared the draft plan and its targets and milestones with countries with a low NTD burden through WHO country offices to obtain the view of relevant national focal points.

Objectives of the implementation plan:



 Enable national governments to take the lead in delivering NTD interventions by providing clear milestones and disease-specific and cross-cutting approaches to reaching them by 2025, paving the way for Member States to achieve NTDrelated SDG targets by 2030.



2. Encourage partners to increase their commitments to overcoming NTDs in the coming five years.

4 TARGETS AND MILESTONES

This section provides regional disease-specific targets for 2025 and milestones for 2023 and 2025 established by WHO in consultation with the countries and territories of the Region. The targets were derived from *Ending the neglect to attain the Sustainable Development Goals: A road map for neglected tropical diseases 2021–2030* and the NTD indicator compendium (World Health Organization, in press), adapted to the regional context. The compendium provides a comprehensive and standardized listing of recommended NTD road map indicators. It strives to achieve uniformity in defining indicators to allow comparisons over time and between different programmes.

Tables 2 and 3 show the targets and milestones related to SDG indicator 3.3.5. and each NTD for the countries and territories of the Region. Under the regional plan, WHO invites countries to adopt these targets and milestones, where applicable, when they develop their country-specific NTD strategies and action plans.

WHO will report on progress in achieving the milestones by the second quarter of the following year, that is by June 2024 and June 2026.

Of the indicators:



Fifteen are NTD road map 2030 indicators described in the NTD compendium (yellow). The purpose of the NTD indicators is to monitor and evaluate progress in reaching the milestones of the NTD road map.



Countries/territories report on 16 indicators annually (blue).



Five are new indicators specific to the Region (orange), which were developed to monitor progress regarding NTDs that have a high burden in the Region, including leishmaniasis and rabies. Annex 2 provides the definitions, type, numerator, denominator, source of data and reporting frequency for all new indicators.

Table 2. SDG 3.3.5, indicator and milestones

SDG indicator	Baseline 2019	Milestone 2023	Milestone 2025
	(millions)	(millions)	(millions)
Number of people requiring interventions against neglected tropical diseases	77.9	75	70

Table 3. Disease-specific targets, indicators and milestones, regional implementation plan, 2021–2025

Disease	Target	Indicator	Baseline 2020	Milestones 2023	Milestones 2025	Assumptions
1. Leprosy	1.1. Reduce the number of countries/ territories reporting new autochthonous leprosy cases in the Region	1.1.1. Number of countries/ territories with zero new autochthonous leprosy cases	7 (Bahrain, Jordan, Kuwait, Lebanon, Oman, Qatar, United Arab Emirates)	7 (Bahrain, Jordan, Kuwait, Lebanon, Oman, Qatar, United Arab Emirates)	9 (Bahrain, Jordan, Kuwait, Lebanon, occupied Palestinian territory, Oman Qatar, Tunisia, United Arab Emirates)	Countries reporting 0 autochthonous cases in baseline will sustain 0 autochthonous cases until 2025
	1.2. Reduce the rate of new paediatric cases of leprosy per million child population in the Region	1.2.1. Rate (per million children) of new paediatric cases of leprosy	Region: 0.75	Region: 0.60	Region: 0.50	
	1.3. Maintain the rate of grade 2 disability (G2D) to less than 1 per million in all countries (except Somalia and Sudan)	1.3.1. Rate of new leprosy cases with G2D per million of population	Region: 0.3	Region: < 1	Region: < 1	Countries with G2D less than 1 per million will maintain the same rate (except Somalia and Sudan)
2. Visceral leishmaniasis (VL)	2.1. Increase treatment rate of detected VL cases to 95% in all endemic countries/ territories	2.1.1. Number of countries/ territories reporting VL treatment rate of at least 95% of reported cases	Unknown	9 (Iran [Islamic Republic of], Iraq, Libya, Morocco, Somalia, Sudan, Syrian Arab Republic, Tunisia, Yemen)	181	Countries have access to safe and effective diagnostics and medicines Countries have sufficient resources (domestic and
	2.2. Reduce case fatality of primary VL to less than 1% in selected countries/ territories of the Region	2.2.1. Number of countries/ territories reporting case fatality rate of less than 1%	6 (Jordan, occupied Palestinian territory, Somalia, Syrian Arab Republic, Tunisia, United Arab Emirates)	7 (Jordan, occupied Palestinian territory, Somalia, Syrian Arab Republic, Tunisia, United Arab Emirates, Yemen)	10 (Iraq, Jordan, Morocco, occupied Palestinian territory, Somalia, Sudan, Syrian Arab Republic, Tunisia, United Arab Emirates, Yemen)	external) to support case management Countries have a strong surveillance system in place capable of capturing minimum required data
	2.3. Increase access to VL diagnostics	2.3.1. Proportion of countries/ territories with VL diagnostics included on the essential in vitro diagnostics list (EDL)	Unknown	50% (9 countries/ territories)	100% (18 countries/ territories)	

¹ Afghanistan, Djibouti, Egypt, Iran (Islamic Republic of), Iraq, Jordan, Lebanon, Libya, Morocco, occupied Palestinian territory, Oman, Pakistan, Saudi Arabia, Somalia, Sudan, Syrian Arab Republic, Tunisia, Yemen.

Table 3. Disease-specific targets, indicators and milestones, regional implementation plan, 2021–2025 *(continued)*

Disease	Target	Indicator	Baseline 2020	Milestones 2023	Milestones 2025	Assumptions
2. Visceral leishmaniasis (VL)	2.4. Increase access to medicines	2.4.1. Number of countries/ territories with VL medicines included on the essential medicines list (EML)	Unknown	9 (Iran [Islamic Republic of], Iraq, Libya, Morocco, Somalia, Sudan, Syrian Arab Republic, Tunisia, Yemen)	18²	
3. Cutaneous leishmaniasis (CL)	3.1. Increase detection of CL cases to 85% in all endemic countries/ territories	3.1.1. Number of countries/ territories that detected 85% of all CL cases	Unknown	To be determined tools and guidan WHO to estimate	ce available from	Technical partners will be able to provide disease burden estimates for the Region and countries/territories
	3.2. Increase reporting of CL cases to 85% in all endemic countries/ territories	3.2.1. Number of countries/ territories that reported 85% of all detected CL cases	Unknown	To be determined tools and guidan to estimate all Cl	ce available from	Countries/territories, have access to safe and effective diagnostics and medicines Countries/territories
	3.3. Increase treatment rate of CL cases to 95% in all endemic countries/ territories	3.3.1 Number of countries/ territories that treated 95% of all reported CL cases	Unknown	To be determined tools and guidan WHO to estimate	ce available from	have sufficient resources (domestic and external) to support case management
4. Onchocerciasis	4.1. Complete mapping of all endemic districts	4.1.1. Number of endemic countries that have completed mapping	0	2 (Sudan, Yemen)	2 (Sudan, Yemen)	Countries have sufficient resources (domestic and external) to support activities
	4.2. Increase coverage of PC-NTD treatment to at least effective coverage levels in all endemic countries	4.2.1. Number of endemic countries implementing mass drug administration (MDA) with effective coverage	2 (Sudan, Yemen)	2 (Sudan, Yemen)	2 (Sudan, Yemen)	
		4.2.2. Number of countries that have stopped MDA in at least one foci	1 (Sudan)	2 (Sudan, Yemen)	2 (Sudan, Yemen)	
		4.2.3. Number of countries that have conducted impact assessments	0	2 (Sudan, Yemen)	2 (Sudan, Yemen)	

² Afghanistan, Djibouti, Egypt, Iran (Islamic Republic of), Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, occupied Palestinian territory, Oman, Pakistan, Saudi Arabia, Sudan, Syrian Arab Republic, Tunisia, Yemen.

Table 3. Disease-specific targets, indicators and milestones, regional implementation plan, 2021–2025 *(continued)*

Disease	Target	Indicator	Baseline 2020	Milestones 2023	Milestones 2025	Assumptions
5. Lymphatic filariasis	5.1. Complete mapping in all endemic districts in Sudan	5.1.1. Number of districts completed mapping	0	1 (Sudan)	1 (Sudan)	Countries have sufficient resources (domestic and external) to support
	5.2. Scale down treatment in Sudan	5.2.1. Impact ssessment carried out/ post-MDA surveillance	1 (Sudan)	1 (Sudan)	1 (Sudan)	activities
	5.3. Increase coverage of PC-NTD treatment to at least effective coverage levels in Sudan	5.3.1. MDA national coverage	Sudan: 41%	Sudan: ≥ 65%	Sudan: > 65%	
	5.4. Increase the inclusion of morbidity management and disability prevention (MMDP) in universal health coverage care packages in all endemic countries	5.4.1. Proportion of cases requiring MMDP interventions receiving care in endemic countries	NA	50%	75%	
6. Schistoso- miasis	6.1. Complete mapping in all endemic districts	6.1.1. Number of countries that have completed mapping	1 (Egypt)	3 (Egypt, Sudan, Yemen)	4 (Egypt, Somalia, Sudan, Yemen)	Guideline for validation of elimination of schistosomiasis
	6.2. Increase coverage of PC-NTD treatment to at least effective	6.2.1. Number of countries conducting MDA with effective coverage	2 (Egypt, Yemen)	3 (Egypt, Somalia, Yemen)	4 (Egypt, Somalia, Sudan, Yemen)	completed Countries have sufficient resources (domestic and external) to support activities
	coverage levels in all endemic countries	6.2.2. Number of countries conducting impact assessments		2	4	
	6.3. Eliminate schistosomiasis as a public health problem	6.3.1. Number of countries validated for elimination of schistosomiasis as a public health problem	0	3 (Islamic Republic of Iran, Morocco, Oman)	5 (Egypt., Islamic Republic of Iran, Iraq, Morocco, Oman)	
7. Soil- transmitted helminthiases	7.1. Complete mapping of all endemic districts	7.1.1. Number of countries that have completed mapping	7 (Afghanistan, Iraq, Pakistan, Somalia, Sudan, Syrian Arab Republic, Yemen)	7	8 + Djibouti	Countries have sufficient resources (domestic and external) to support activities

Table 3. Disease-specific targets, indicators and milestones, regional implementation plan, 2021–2025 *(continued)*

Disease	Target	Indicator	Baseline 2020	Milestones 2023	Milestones 2025	Assumptions
	7.2. Increase coverage of PC-NTD treatment to at least effective coverage levels	7.2.1. Number of countries conducting MDA with effective coverage for pre-SAC	2 (Pakistan, Somalia)	5 (+ Afghanistan, Syrian Arab Republic, Yemen)	7 (+ Iraq, Sudan)	
	in all endemic countries	7.2.2. Number of countries conducting MDAs with effective coverage for SAC	2 (Afghanistan, Syrian Arab Republic)	6 (+ Iraq, Pakistan, Somalia, Yemen)	7 (+ Sudan)	
	7.3. Scale down treatment in all endemic countries	7.3.1. Number of countries that have conducted impact assessments	0	1 (Afghanistan)	3 (Afghanistan, Iraq, Syrian Arab Republic)	
8. Trachoma	8.1. Complete mapping of all endemic districts	8.1.1. Number of countries that have completed mapping of all endemic districts	4 (Afghanistan, Sudan, Yemen, Pakistan)	5 (Afghanistan, Sudan, Yemen, Pakistan, Egypt)	6 (Afghanistan, Sudan, Yemen, Pakistan, Egypt, Somalia)	
	8.2. Increase coverage of antibiotic treatment to 50%	8.2.1. National coverage for all countries in Region implementing MDA	Region: 17.4%	Region: 25%	Region: 50%	
	8.3. Increase the number of people receiving surgical interventions for trachomatous trichiasis (S of SAFE) by 100% compared with 2020	8.3.1. Number of persons operated on for trachomatous trichiasis (S of SAFE)	Region: 346		Region: 692	Countries have sufficient resources (domestic and external) to support activities
	8.4. Eliminate trachoma in selected endemic countries	8.4.1. Number of countries validated for elimination as a public health problem	3 (Iran [Islamic Republic of], Morocco, Oman)	8 (Iran [Islamic Republic of], Iraq, Jordan, Morocco, Oman, Pakistan, Saudi Arabia, Tunisia)	8 (Iran [Islamic Republic of], Iraq, Jordan, Morocco, Oman, Pakistan, Saudia Arabia, Tunisia)	

Table 3. Disease-specific targets, indicators and milestones, regional implementation plan, 2021–2025 *(continued)*

Disease	Target	Indicator	Baseline 2020	Milestones 2023	Milestones 2025	Assumptions
9. Mycetoma	9.1. Strengthen surveillance of mycetoma in 11 countries of the Region	9.1.1. Number of countries in which mycetoma is included in national control programmes and surveillance systems	1 (Sudan)	5 (Bahrain, Kuwait, Qatar, Saudi Arabia, Sudan)	11 (Bahrain, Kuwait, Morocco, Oman, Qatar, Saudi Arabia, Somalia, Sudan, Tunisia, United Arab Emirates, Yemen)	
10. Scabies	10.1. Scale up management of scabies in two countries where it is endemic	10.1.1. Number of countries having incorporated scabies management in the universal health coverage care package	0	1 (Sudan)	2 (Sudan, Yemen)	Countries have sufficient resources (domestic and external) to support activities
		10.1.2. Number of countries using MDA intervention for scabies in districts where it is endemic	0	0	1 (Yemen)	Availability of ivermectin through WHO donation
11. Rabies	11.1. Enhance annual country reporting and reduce the number of countries/ territories reporting new human rabies cases in the Region	11.1.1. Number of countries/ territories sharing annual number of human rabies cases; number of countries with zero new human rabies cases	7	9	11	
12. Dracunculiasis	12.1. Certify eradication of dracunculiasis in all countries on the Region	12.1.1. Completion of certification process in all countries, territories and areas in the Region	0	1 (Sudan)	0	Favourable political and security context
13. Yaws	13.1. Certify eradication of yaws	13.1.1. Number of countries certified free of transmission	0	0	1 (Somalia)	Status of all countries/ territories of the Region is non-endemic (except Somalia, for which status is unknown)

5 ACCELERATE PROGRAMMATIC ACTION

The disease-specific targets for each NTD will continue to require considerable work by countries/ territories and stakeholders. Each disease and disease group should be assessed to establish the needed technical requirements, strategy and service delivery, programme capacity and enablers, to determine where action is needed.

The response to NTDs must engage health systems and the public and private sectors more broadly if it is to be cost-effective and sustainable.

The NTD road map includes four cross-cutting themes:

- 1. Integration of NTDs. An integrated approach will place the NTDs endemic in a country on a single NTD platform that will allow links to be established among programmes, where appropriate. A single platform will also centralize the planning, implementation and evaluation of interventions for several NTDs, including skin NTDs. Integration will change the focus from technical interventions in vertical disease silos to an approach based on the needs of patients and communities. An integrated platform will encourage a broader, more holistic approach that includes treatment, care, rehabilitation and health education, as well as prevention. It can also provide support for the most neglected NTDs to ensure that they are tackled systematically and that the action taken is commensurate with the need.
- 2. Mainstreaming delivery platforms in national health systems. Mainstreaming NTD activities in the health system and building capacity to deliver interventions through its infrastructure will contribute to sustainable, efficient NTD prevention and control and enable NTD patients to access all aspects of treatment, care and support. A common indicator and accountability mechanism should be defined to track progress in mainstreaming. These activities will contribute to overall health system strengthening, greater country ownership and poverty alleviation.
- 3. Coordinating efforts across sectors. Meeting the global 2030 NTD road map targets will require the coordination of adjacent sectors and programmes, both within and beyond health, in the broader NTD network. Sectors such as vector control and water, sanitation and hygiene (WASH) make critical contributions to progress on NTDs. Working together more effectively can accelerate and sustain progress towards disease control, elimination and eradication. Coordination is also necessary with the wide array of relevant NTD partners, including donors, academic institutions, pharmaceutical companies, disease experts, multilateral organizations and implementing partners, to ensure effective service delivery.

4. Strengthening health systems with robust regional and global support. National health systems need to be strengthened through support that improves capacity to deliver interventions on the ground, such as supply chain monitoring ad evaluation. Global and regional resources and expertise can strengthen health systems by extending overall support to NTD programmes through advocacy and funding, for example.

Meeting the 2025 NTD regional targets will require concerted action in three areas:

- 1. Accelerate programmatic action against NTDs, including interventions to reduce incidence, prevalence, morbidity, disability and death. This will require scientific advances, new interventions and tools, strengthened strategies and service delivery, and enablers.
- 2. Intensify cross-cutting approaches by integrating interventions for several NTDs and mainstreaming them into national health systems, and coordination with related programmes (such as WASH, vector control and others).
- 3. Change the operating models and culture by increasing country ownership, clarifying the roles, culture and perceptions of organizations, institutions and other stakeholders, and aligning them to meet the global 2030 NTD road map targets.

Table 4 sets out the critical programmatic actions countries need to initiate and accelerate for each disease, in addition to activities already ongoing.

Table 4. Programmatic actions countries/territories need to sustain, initiate and accelerate for NTDs

Disease	Planning, governance and programme implementation	Operational and normative guidance	Monitoring and evaluation	Access and logistics
Leprosy	Integrate leprosy with other skin NTDs	Adapt the WHO guidelines for the diagnosis, treatment and prevention of leprosy issued in 2018 to country context	Sustain annual reporting to WHO on local and imported cases, disaggregated by gender and age	Ensure continuous supply of quality-assured anti-leprosy medicine to patients by obtaining them through the WHO donation programme
		Update country guidelines to include use of single-dose	Report annually on new G2D (grade 2 disability) cases	
	rifampicin for post- exposure prophylaxis for contacts, based on WHO guidance issued in 2020 on contact-tracing and post-exposure prophylaxis		Monitor adverse events (pharmacovigilance) and resistance	
Visceral leishmaniasis (VL)	Enable early detection to ensure prompt treatment, e.g. conduct active case	Update the national case management guidelines to include use of safe	Report treatment outcomes disaggregated by gender and age	Ensure continuous supply of medicines to enable prompt access to
	detection	and effective treatment	Mainstream VL surveillance into national health information system	treatment, especially for children, young adults and pregnant women
Cutaneous leishmaniasis (CL)	Train health care workers on diagnosis and treatment, including	management guidelines to include use of all therapeutic interventions, including physical treatment M su	Report annually local and imported cases at subnational levels	Ensure supply of medicines to health facilities
	physical treatment		Mainstream CL surveillance into national health information systems	
			Carry out country surveys in high burden countries to estimate disease burden	Ensure availability of cryotherapy and thermotherapy treatment facilities at least in main
			Report on access to diagnostics and treatment	health facilities situated in all highly-endemic localities
Onchocerciasis	Improve delivery of current mass drug administration (MDA) programmes to achieve effective coverage		Update the epidemiological data reporting form (EPIRF) based on mapping results	
			Submit Joint Application Package (JAP) on time to ensure smooth implementation of MDA	

Table 4. Programmatic actions countries/territories need to sustain, initiate and accelerate for NTDs (continued)

Disease	Planning, governance and programme implementation	Operational and normative guidance	Monitoring and evaluation	Access and logistics
Lymphatic filariasis	Improve capacity of health and community health workers on morbidity management and disability prevention (MMDP) and integrate MMDP in primary health care settings		Sudan to update EPIRF based on results of mapping in previously inaccessible areas; timely submission of JAP; conduct transmission assessment survey (TAS)	
	and community-based settings as part of universal health coverage package		All three endemic countries to develop register of persons requiring MMDP	
Schistosomiasis	Implement effective interventions, including extending preventive chemotherapy to all populations in need		Conduct micro-mapping to implement focused interventions	Ensure access to the necessary medicines
	Implement targeted snail control			
Soil-transmitted			Submit JAP on time	
helminthiases			Conduct prevalence and impact assessment surveys to estimate transmission reduction	
Trachoma	Integrate trachoma MDA with other preventive chemotherapy NTDs (PC-NTDs) targeted for MDA		Conduct prevalence surveys in all suspected endemic areas	
	Conduct outreach/ mobile clinics for people requiring trachomatous trichiasis (TT) surgery			
	Increase partnerships with WASH to address facial cleanliness and environmental improvement to reduce transmission			
Mycetoma			Establish/strengthen surveillance system (emphasis on zero reporting by all countries)	
Scabies	Integrate with skin NTDs case management		Establish/strengthen surveillance system	
	Advocate inclusion in universal health coverage		(emphasis on zero reporting by all countries)	

Table 4. Programmatic actions countries/territories need to sustain, initiate and accelerate for NTDs (continued)

Disease	Planning, governance and programme implementation	Operational and normative guidance	Monitoring and evaluation	Access and logistics
Diseases targeted for eradication	Sudan must finalize the country dracunculiasis (Guinea worm disease) report for submission to the International Commission for the Certification of Dracunculiasis Eradication (ICCDE) Somalia must be certified for eradication of yaws			
Other NTDs	Snakebite envenoming: train physicians in managing snakebite and build awareness in communities on best practices in prevention and seeking treatment for snakebite envenoming			Echinococcosis: ensure access to effective treatment Foodborne trematodes: ensure the availability of praziquantel

WHO is in the process of developing companion documents to complement the global NTD road map to facilitate implementation and support NTD control programmes and partners in order to reach NTD targets by 2030.

Mechanisms to intensify cross-cutting approaches and change operating models and culture will be elaborated in the following companion documents:



Ending the neglect to attain the Sustainable Development Goals. A sustainability framework for action against neglected tropical diseases 2021–2030 (World Health Organization, 2021c)

The WHO sustainability framework for action against neglected tropical diseases 2021–2030 aims to embed sustainability considerations into national health policies, strategies and plans and to facilitate the achievement of the 2030 road map targets and universal health coverage. It incorporates fundamental shifts by focusing on cross-cutting, multisectoral interventions rather than disease-specific activities, outcome measurement rather than inputs, and the inclusion of NTD interventions and targets in wider national health systems.



Ending the neglect to attain the Sustainable Development Goals. A framework for monitoring and evaluating progress of the road map for neglected tropical diseases 2021–2030 (World Health Organization, 2021a)

The road map for neglected tropical diseases 2021–2030 sets global targets and milestones to prevent, control, eliminate or eradicate 20 diseases and disease groups. It also sets cross-cutting targets aligned with both WHO's Thirteenth General Programme of Work and the Sustainable Development Goals. The set of indicators and tools to track progress towards the 2030 targets presented in the road map are described as: 36 core quantitative indicators (four overarching, ten cross-cutting and 22 disease-specific) and 34 additional disease-specific indicators; and a qualitative gap assessment conducted for each NTD independently and analysed in a cross-cutting manner through a heat map.

The monitoring and evaluation framework presents a theory of change that shows how the shifts described in the road map will come about, and what needs to be done to reach the road map goals and targets.



Ending the neglect to attain the Sustainable Development Goals. A global strategy on water, sanitation and hygiene to combat neglected tropical diseases 2021–2030 (World Health Organization, 2021b)

The fundamental link between WASH and NTDs gained recognition within the global public health community by including the provision of safe water, sanitation and hygiene as one of the five core interventions of the NTD road map.

The vision of the updated global strategy is to accelerate and sustain the achievement of the NTD road map targets, particularly among the poorest and most vulnerable, through better-targeted, joint WASH and NTD efforts.

The main strategic objectives of the strategy are:

- 1. Increase awareness of the co-benefits of joint action and engagement on WASH and NTDs by sharing experiences and evidence throughout the programme cycle.
- 2. Use WASH data in NTD programmes and NTD data in WASH programmes to highlight inequalities, target investment and track progress.
- 3. Strengthen evidence and establish best practice on integrated approaches to NTDs based on robust documentation and analysis and embed the findings in guidance and national strategies.
- 4. Jointly plan, deliver and evaluate programmes to enhance the accountability, sustainability and equity of programme impact.



Ending the neglect to attain the Sustainable Development Goals. One Health: Approach for action against neglected tropical diseases 2021–2030 (World Health Organization, 2022)

This companion document aims to support a range of stakeholders (including countries in which neglected tropical diseases are endemic), international organizations and non-State actors, to achieve the road map targets through a transdisciplinary, cross-cutting One Health approach. Specifically, it provides guidance on the One Health actions needed by major stakeholders and how to support a paradigm shift towards One Health in national NTD programmes. Examples of common One Health challenges and how they can be overcome as well as illustrative cases studies are provided throughout.

6 REFERENCES

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ANNEX 1.

LIST OF NTDS WITH TARGETS, AS OUTLINED IN THE WHO ROAD MAP 2012–2020, WITH PRIORITY PUBLIC HEALTH APPROACH, AS DEFINED BY THE WHO NTD PROGRESS DASHBOARD

Priority public	Disease	Targets outlined in	Criteria for red, amber and green rating for each disease			
health approach		WHO road map for NTDs 2012–2020	Red	Amber	Green	
Intensified disease management	Dracunculiasis (Guinea worm disease)	Eradication by 2015 Continuing need for interventions, including strong surveillance Awaiting certification of eradication		certification of	Eradication certified	
	Endemic treponematoses	Eradication by 2020	Ongoing endemicity	Previously endemic	Eradication certified	
	Leprosy	Global elimination by 2020	Prevalence ≥ 1 registered case /10 000 population	Prevalence < 1 case registered case/10 000 population	0 registered cases	
	Leishmaniasis (visceral)	Regional elimination in South-East Asia Region	≥ 10 autochthonous cases reported last available year and increasing when compared with 2012 with interventions	≥ 10 autochthonous cases reported last available year and declining when compared to 2012	< 10 autochthonous cases reported in last available year	
	Leishmaniasis (cutaneous)	70% of all cases detected and at least 90% of all detected cases treated in the Eastern Mediterranean Region by 2015	≥ 1 000 autochthonous cases reported last available year and increasing when compared with 2012	<1 000 and ≥ 100 autochthonous cases reported last available year and declining when compared to 2012	< 100 autochthonous cases reported at last available year	
	Rabies	Regional elimination in three other regions by 2020	Average number of deaths per year reported (2012–2018) ≥ 5.0	Average number of deaths per year reported (2012– 2018) < 5.0	No deaths reported 2012–2018	
	Mycetoma	Not applicable	≥ 100 cases reported in any one year since 2016	< 100 cases reported in any one year since 2016	0 cases reported in all years since 2016	

Priority public	Disease	Targets outlined in	Criteria for red, amber and green rating for each disease			
health approach		WHO road map for NTDs 2012–2020	Red	Amber	Green	
Preventive chemotherapy	Lymphatic filariasis	Global elimination by 2020	Preventative chemotherapy required	Mass drug administration stopped	Elimination as a public health problem validated	
	Onchocerciasis	Country elimination in Yemen by 2015	Intervention required to be implemented	Intervention scaled up (last year)	Elimination of transmission verified	
	Schistosomiasis (Bilharzia)	Regional elimination in Eastern Mediterranean Region by 2015	National treatment coverage < 75% (last available year)	National treatment coverage > 75% (last available year)	No preventive chemotherapy required	
	Soil-transmitted helminthiases	75% of preschool and school-aged children in need of treatment regularly treated in all countries by 2020	National treatment coverage < 75% (last available year)	National treatment coverage > 75% (last available year)	No preventive chemotherapy required	
	Trachoma	Global elimination by 2020	Continued intervention needed	May need intervention or awaiting validation of elimination as a public health problem	Elimination as a public health problem validated	

ANNEX 2.

EASTERN MEDITERRANEAN REGION-SPECIFIC NEW INDICATORS: THEIR DEFINITIONS AND OTHER DETAILS

Disease	Indicator	Definition	Туре	Numerator	Denominator	Data source and collection	Reporting frequency
Visceral leishmaniasis (VL)	Number of reporting VL countries/ territories treatment rate of at least 95% of reported cases	Reporting of any start of treatment for reported VL cases	Number	Number of countries/ territories reporting VL treatment rate of at least 95% of reported cases	N/A	Survey	
	Proportion of countries/ territories with VL diagnostics included on the essential diagnostics list (EDL)	Recommended VL diagnostics included on national EDLs as a proxy for access to VL diagnostics (if it is a requirement for the country/ territory)	Proportion	Number of countries/ territories with VL diagnostics included on EDL	Number of countries/ territories with EDLs		Every three years
	Number of countries/ territories with VL medicines included on the essential medicines list (EML)	Recommended VL medicines for each specific focus included on national EMLs as a proxy for access to VL medicines. Eastern Mediterranean Region has two recognized foci: the Mediterranean basin and East Africa	Number	Number of countries/ territories with VL medicines included on EML	N/A		
Cutaneous leishmaniasis (CL)	Number of countries/ territories with all primary health care facilities conducting probable diagnosis and treatment/ referrals in endemic districts	Primary health care facilities in CL-endemic districts should provide initial clinical diagnosis, confirmatory diagnosis (parasitological/ serological) and treatment for situation 1 cases requiring wash/ dressing or referrals	Number	Number of countries/ territories with all primary health care facilities conducting probable diagnosis and treatment/ referrals in endemic districts	N/A	Survey	Every three years

Disease	Indicator	Definition	Туре	Numerator	Denominator	Data source and collection	Reporting frequency
Cutaneous leishmaniasis (CL)	Number of countries/ territories with all secondary care health facilities providing case management in endemic districts	Secondary care health facilities in CL endemic districts should provide full case management, which includes: (1) confirmatory diagnosis either parasitological or serological; and (2) treatment according to the situation – local and systemic	Number	Number of countries/ territories with all secondary care health facilities providing case management in endemic districts	N/A	Survey	Every three years
	Number of countries/ territories with health care facilities providing physical treatment in more than 75% of endemic districts	Physical treatment includes both thermotherapy and cryotherapy for the treatment of situation 2 CL cases according to the Eastern Mediterranean Region manual for CL case management	Number	Number of countries/ territories with health care facilities providing physical treatment in more than 75% of endemic districts	N/A		
Lymphatic filariasis	Proportion of cases requiring morbidity management and disability prevention (MMDP) interventions receiving care in endemic countries	National registers to be set up in endemic countries to monitor patients receiving MMDP	Proportion	Number of cases receiving MMDP	Number of cases requiring MMDP	National register of cases	Annually
Rabies	Number of countries/ territories sharing annual number of human rabies cases Number of countries/ territories with zero new human rabies cases						

NOTES

