



Chagas disease Echinococcosis (alveolar and cystic) Foodborne trematodiases Human African trypanosomiasis Mycetoma, chromoblastomycosis and other deep mycoses Onchocerciasis Scabies and other ectoparasitoses

A compendium of indicators for monitoring and evaluating progress of the road map for neglected tropical diseases 2021–2030



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## Introduction



## Introduction

The road map 2030 was developed by WHO through an extensive global consultation, with indicators set for measuring progress against targets and milestones.<sup>1</sup> This compendium of indicators provides a comprehensive and standardized listing of recommended indicators, including the 70 core indicators presented in the M&E framework.<sup>2</sup> These indicators will also support reporting on strategies described in other road map companion documents to guide action against neglected tropical diseases include the sustainability framework,<sup>3</sup> the global strategy on water, sanitation and hygiene,<sup>4</sup> the One Health approach<sup>5</sup> and the strategic framework for integrated control and elimination of skin-related neglected tropical diseases.<sup>6</sup>

#### Purpose and scope of the compendium

The purpose of this compendium is to guide monitoring and evaluation of programmes and thereby to improve their quality and effectiveness in alignment with the road map goals. It provides a standardized listing of the most widely used indicators relevant to countries, with uniformity in defining indicators to allow comparisons over time and among different programmes. Detailed metadata are provided for each of these indicators to facilitate validity, internal consistency, standardized measurement, estimation methods and comparability of data across countries.

The compendium has three main components:

- road map indicators categorized as overarching, cross-cutting and disease-specific;
- programmatic indicators for measuring countrylevel progress towards the road map indicators, including detailed indicators for routine tracking of activities, interventions and data on morbidity, mortality and disability; and

• additional indicators for special studies and ad hoc analyses using secondary data, for which neglected tropical disease programmes are not the primary data source.

The basis of evidence used to provide the definition, description and method of measurement for these indicators is obtained mainly from already published disease-specific technical guidance. Such guidance is indicated on each indicator reference sheet on the row marked for further information and related links. Where such guidance does not exist yet, the WHO Working Group on Monitoring, Evaluation and Research for neglected tropical diseases has completed the indicator reference sheet through technical consensus based on expert advice. Future improvements on the method of measurement or estimation for such indicators will be made as more evidence is generated and learning is obtained from the implementation of programme activities in the field.

This compendium will be updated periodically to incorporate new technical developments when these become available.

#### Structure of the compendium

The indicators in this compendium are presented using a standardized template, as depicted below, with a description of the basic terminology used for each indicator. Key terms are presented on reference sheets that specify the definition, numerator, denominator, method of measurement, method of estimation, frequency of data collection, preferred data source and key technical reference document. These precise definitions enable anyone using data on neglected tropical diseases to derive the same indicator values and allow data users to compare performance. Wherever available, the reference sheets also provide information on procedures for analysis and list responsible entities.

<sup>&</sup>lt;sup>1</sup> Ending the neglect to attain the Sustainable Development Goals: a road map for neglected tropical diseases. Geneva: World Health Organization (https://apps.who.int/iris/ handle/10665/338565, accessed 19 September 2022).

<sup>&</sup>lt;sup>2</sup> 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. Geneva: World Health Organization; 2021 (https://apps.who.int/iris/handle/10665/341313, accessed 19 September 2022).

<sup>&</sup>lt;sup>3</sup> Ending the neglect to attain the sustainable development goals: a sustainability framework for action against neglected tropical diseases 2021–2030. Geneva: World Health Organization; 2021 (https://apps.who.int/iris/handle/10665/338886, accessed 19 September 2022).

<sup>&</sup>lt;sup>4</sup> Ending the neglect to attain the sustainable development goals: a global strategy on water, sanitation and hygiene to combat neglected tropical diseases, 2021–2030. Geneva: World Health Organization; 2021 (https://apps.who.int/iris/handle/10665/340240)

<sup>&</sup>lt;sup>5</sup> Ending the neglect to attain the sustainable development goals: One health: approach for action against neglected tropical diseases 2021–2030. Geneva: World Health Organization; 2022 (https://apps.who.int/iris/handle/10665/351193, accessed 19 September 2022

<sup>&</sup>lt;sup>6</sup> Ending the neglect to attain the sustainable development goals: a strategic framework for integrated control and management of skin-related neglected tropical diseases. Geneva: World Health Organization; 2022 (https://apps.who.int/iris/handle/10665/355448, accessed 19 September 2022.

1 Indicates the name of the indicator

Indicates the unique ID for the indicator

3 Indicates the results chain typical of logic models: input includes those items that the programme invests in (e.g. human resource, staffing); process/activity refers to the planning, implementation and coordination of NTD activities; output refers to what was delivered/produced from conducting activities (e.g. number of posters distributed); outcome refers to changes in behaviour after the programme implemented activities (e.g. number of people using NTD services or aware of disease, and voluntary reporting to the health facility); impact refers to impact on health status of population (e.g. number of people in need of treatment or DALYs averted).

4 Provides detailed definitions of the words included in the name or the content of the indicator.

<sup>5</sup> Indicates the reason why the indicator is important and the justification for measuring it.

6 Indicates the number of the population or unit meeting the criteria for inclusion in the numerator of the indicators

Indicates the total number of the population or unit meeting the criteria for inclusion in the denominator of the indicators

<sup>8</sup> Indicates how the data are disaggregated or the breakdown of the data (e.g. age, gender, country, WHO region).

Provides guidance on how the indicator should be measured, including how the data are collected, compiled and analysed, and the data sources. This field specifies the methodology of data collection such as baseline and follow up surveys, routine and specific monitoring; guidance on sampling methodology and data collection tools, information systems and methods of calculation. Precise definitions of the numerator and the denominator are provided for indicators that are expressed as percentages or ratios.

10 In situations where primary data collection is not available, this field provides guidance on how the indicator is estimated, including the institution responsible for estimates, methodology, data source and statistical model used, and how the analysis is made.

11 Indicates the frequency of measuring the indicator (e.g. ad hoc, annual, biannual).

12 This field indicates the data sources, which could be population-based or institution-based (e.g. civil registry and vital statistics, Ministry of Health, Health Statistics Office).

Disease-specific indicator	
Dracunculiasis	
Number of countries certified f	free of transmission
Number of countries certified	
Alternative indicator name	
Indicator ID 2	NTDDRA0000132
M&E framework	Impact 3
Domain	Health status
Subdomain	Improved health outcomes & equity
Public health target	Eradication
Definition	Certification of elimination of transmission is confirmed absence of the emergence of adult female worms (defined as compatible with the interruption of transmission of <i>Dracunculus medinensis</i> ) in humans and animals for 3 consecutive years or longer at the country level.
Unit measurement	Country
Rationale	WHA39.21 (1986), WHA42.29 (1989) and WHA64.16 (2011) on elimination of dracunculiasis (1989); WHA44.5 (1991), WHA50.35 (1997) and WHA57.9 (2004) on eradication of dracunculiasis; WHA66.12 on neglected tropical diseases (2013)
Numerator	Number of countries certified free of transmission
Denominator	
Disaggregation	Country 8
Method of measurement	The country submits a declaration and a completed questionnaire of dracunculiasis- free status and, for formerly endemic countries, a national report. An international certification team conducts a field visit to assess and verify the claim included in the national report. The surveillance system and documentation at all levels are assessed for their readiness to detect and respond appropriately to any rumours or suspected cases of the disease. This assessment includes but is not limited to surveys at household, village, market, school and health-facility levels to assess the awareness of the population about the disease and its prevention as well as the reward system, and to determine the source of drinking-water. The international certification team reports to the International Commission for the Certification of Dracunculiasis Eradication. The Commission decides upon and recommends to WHO if the country should be certified free of dracunculiasis transmission. An report by the international certification team is then submitted to the Commission for review and to recommend to WHO if the country has met the criteria for certification. WHO certifies the country in which transmission has been interrupted.
Method of estimation	
Frequency of reporting by national level to WHO	11
Preferred datasource	World Health Organization 12
Other datasources	
Primary level of data collection	Member State 13
Timing of primary data collection	Ad hoc
Further information and related links	Certification of dracunculiasis eradication: criteria, strategies, procedures: a practical guide. Geneva: World Health Organization; 1996 (https://apps.who.int/iris/handle/10665/63434, accessed 19 September 2022)
Type of indicator	High-level indicator Road map 2030

13 Indicates the first level where the data are collected (e.g. household, community or health facility)

14 Highlights the hierarchical level of the health information system or high level strategic guidance the indicator is associated with.

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## Summary list of road map indicators by category

Category	Disease	Indicator name
Overarching target indicator	Neglected tropical diseases	Number of countries having eliminated at least one neglected tropical disease
		Percentage reduction in people requiring interventions against neglected tropical diseases
		Percentage reduction in disability-adjusted life years related to neglected tropical diseases
		Number of neglected tropical diseases eradicated
Cross-cutting target indicator	Neglected tropical diseases	Share of the population at risk protected against catastrophic out-of-pocket health expenditure due to neglected tropical diseases – to achieve target 3.8 of Sustainable Development Goal 3
		Percentage reduction in number of deaths from vector-borne neglected tropical diseases (relative to 2016) – to achieve WHO's global vector control response goal
		Share of countries with neglected tropical diseases integrated in national health strategies/plans
		Share of countries reporting on all relevant endemic neglected tropical diseases
		Share of countries with guidelines for management of neglected tropical disease-related disabilities within national health systems.
		Share of countries collecting and reporting data on neglected tropical diseases disaggregated by gender
		Number of countries that adopt and implement integrated strategies for skin-related neglected tropical diseases
		Access to at least basic water supply, sanitation and hygiene in areas endemic for neglected tropical diseases – to achieve targets 6.1 and 6.2 of Sustainable Development Goal 6
		Share of countries including neglected tropical disease interventions in their package of essential services and budgeting for them Integrated treatment coverage index for preventive chemotherapy
Disease-specific indicator	Buruli ulcer	Proportion of cases in category III (late stage) at diagnosis Proportion of laboratory-confirmed cases
		Proportion of confirmed cases who have completed a full course of antibiotic treatment
	Chagas disease	Number of countries achieving verification of interruption of domiciliary vectoral transmission
		Number of countries achieving verification of interruption of transfusional transmission
		Number of countries achieving verification of interruption of transplantation transmission
		Number of countries achieving verification of interruption of congenital transmission
		Number of countries achieving interruption of transmission through the four transmission routes: vectoral (domiciliary), transfusional (infected blood/blood products), transplantation (organ/tissue) and congenital (mother-to-child), with 75% antiparasitic treatment coverage of the target population
	Chikungunya	Vaccine development for one or more vaccine candidates
		Number of endemic countries identified and mapped for chikungunya

Category	Disease	Indicator name
		Develop optimized and prioritized integrated strategies for case management and estimate the potential public health benefits by 2025
	Chromoblastomycosis and other deep mycoses	Number of countries in which chromoblastomycosis, sporotrichosis and/or paracoccidioidomycosis are included in national control programmes and surveillance systems
	Cystic echinococcosis	Number of countries with intensified control for cystic echinococcosis in hyperendemic areas
	Dengue	Case-fatality rate due to dengue Number of countries able to detect and respond to dengue outbreaks To reduce the burden of the disease and its incidence by 25% (2010–2020 as baseline)
	Dracunculiasis	Number of countries certified free of transmission
	Foodborne trematodiases	Number of countries with intensified control in hyperendemic areas
	Human African trypanosomiasis (gambiense)	Number of gambiense human African trypanosomiasis cases reported Number of countries verified for interruption of transmission
	Human African trypanosomiasis (rhodesiense)	Areas with > human African trypanosomiasis case per 10 000 people per year (average of 5 years) Number of countries validated for elimination as a public health problem
	Leishmaniasis (cutaneous)	Number of countries in which: 85% of all cases are detected and reported, and 95% of reported cases are treated
	Leishmaniasis (visceral)	Number of countries in the WHO South-East Asia Region validated for elimination as a public health problem Number of countries validated for elimination as a public health problem In the Region, post-kala-azar dermal leishmaniasis cases detected (visceral leishmaniasis post-treatment follow-up 3 years) and treated
	Leprosy (Hansen's disease)	Annual number of new leprosy cases detected Rate (per million population) of new cases with grade-2 disability Number of countries with zero new autochthonous leprosy cases Rate (per million population) of new paediatric cases with leprosy
	Lymphatic filariasis	Number of countries implementing post-mass drug administration or post-validation surveillance Population requiring mass drug administration Number of countries validated for elimination as a public health problem
		Number of countries in which mycetoma is included in national control programmes and surveillance systems

Category	Disease	Indicator name
	Onchocerciasis	Number of countries verified for interruption of transmission
		Number of countries that have stopped mass drug administration in at least one focus
		Number of countries that have stopped mass drug administration for 50% of the population requiring preventive chemotherapy for onchocerciasis
		Number of countries that have stopped mass drug administration for 100% of the population requiring preventive chemotherapy for onchocerciasis
	Rabies	Number of countries having achieved zero human deaths from rabies
		Number of countries having reduced mortality due to dog-transmitted human rabies by 50%
		Number of countries having reached 70% vaccination coverage of dogs in high-risk areas
	Scabies	Number of countries using mass drug administration intervention in all endemic districts
		Number of countries having incorporated scabies management in the universal health coverage package of care
	Schistosomiasis	Number of countries validated for elimination of schistosomiasis as a public health problem
		Number of countries where absence of infection in humans has been validated
	Snakebite envenoming	Number of countries achieved reduction of mortality and morbidity by 50%
		Percentage of new antivenom producers joining market by 2030 Number of effective treatments for snakebite envenoming available
		worldwide
		Minimum number of WHO-recommended poly-specific antivenom products in each region
	Soil-transmitted helminthiases	Number of countries including ivermectin in preventive chemotherapy in all areas endemic for <i>S. stercoralis</i>
		Number of countries validated for elimination as a public health problem
	Taeniasis and cysticercosis	Number of countries with intensified control for <i>T. solium</i> in hyperendemic areas
	Trachoma	Number of people requiring management of trachomatous trichiasis; S of SAFE [Surgery, Antibiotics, Facial cleanliness, Environmental improvement]
		Number of people at risk requiring A, F and E of SAFE for trachoma elimination purposes
		Number of countries validated for elimination as a public health problem
	Yaws	Number of countries certified free of transmission



# Reference sheets for indicators by category

# **Overarching indicators**

#### Neglected tropical diseases

#### Number of countries having eliminated at least one neglected tropical disease

Alternative indicator name	
Indicator ID	NTDGEN0000155
M&E framework	Impact
Domain	Health status
Subdomain	Improved health outcomes and equity
Public health target	Not applicable
Definition	A country previously endemic for neglected tropical diseases that has been verified for elimination (interruption of transmission) or validated for elimination as a public health problem. A letter of acknowledgement is issued by the WHO Director-General. The country is counted once, regardless of the number of diseases eliminated. These terms were defined by the Strategic and Technical Advisory Group for Neglected Tropical Diseases as (i) eradication: permanent reduction to zero of the incidence of a specific pathogen, as a result of deliberate efforts, with no risk of reintroduction. The process of documenting eradication is called <b>certification</b> ; (ii) elimination of transmission (also referred to as interruption of transmission): reduction to zero of the incidence of actions to prevent re-establishment of transmission may be required. The process of documenting elimination is called <b>verification</b> ; (iii) elimination as a public health problem: a term related to both infection and disease, defined by achievement of measurable targets set by WHO in relation to a specific disease; when reached, continued action is required to maintain the targets and/or to advance interruption of transmission. The process of documenting elimination is required to maintain the targets and/or to advance interruption of transmission.
Unit measurement	Countries
Rationale	Tracking global progress towards attaining the targets set in the road map 2030
Numerator	Number of countries having eliminated at least one neglected tropical disease.
Denominator	Not applicable
Disaggregation	
Method of measurement	Countries are certified, verified and/or validated by WHO. Any country for which WHO has certified/verified/validated the eradication/elimination/elimination as a public health problem of at least one neglected tropical disease is counted in the numerator, regardless of the number of neglected tropical diseases eliminated.
Method of estimation	
Frequency of reporting by national level to WHO	Ad hoc
Preferred datasource	World Health Organization
Other datasources	
Primary level of data collection	Country
Timing of primary data collection	Varies by indicator in dossier
Further information and related links	NTD road map tracker 2021 - 2030, https://www.who.int/teams/control-of-neglected-tropical-diseases/data-platforms- and-tools/road-map-tracker
Type of indicator	High-level indicator
	Road map 2030

#### Neglected tropical diseases

#### Number of neglected tropical diseases eradicated

Alternative indicator name	
Indicator ID	NTDNTD0000213
M&E framework	Impact
Domain	Health status
Subdomain	Improved health outcomes and equity
Public health target	Eradication
Definition	Eradication is defined as the permanent reduction to zero of the worldwide incidence of infection caused by a specific pathogen, as a result of deliberate efforts, with no risk of reintroduction. Documentation of eradication is termed certification. Eradication occurs when the causative agent is eliminated in 194 countries.
Unit measurement	Disease
Rationale	WHA39.21 (1986), WHA42.29 (1989) and WHA64.16 (2011) on elimination of dracunculiasis (1989); WHA44.5 (1991), WHA50.35 (1997) and WHA57.9 (2004) on eradication of dracunculiasis; WHA66.12 on neglected tropical diseases (2013)
Numerator	Number of neglected tropical diseases eradicated
Denominator	
Disaggregation	
Method of measurement	Two diseases (dracunculiasis and yaws) are targeted for eradication. Eradication occurs when WHO has certified 194 Member States as free of disease transmission. Once all countries are certified free of disease transmission, a resolution is submitted to the World Health Assembly to declare eradication of the disease.
Method of estimation	
Frequency of reporting by national level to WHO	Not applicable
Preferred datasource	World Health Organization
Other datasources	
Primary level of data collection	World Health Organization
Timing of primary data collection	Ad hoc
Further information and related links	NTD road map tracker 2021 - 2030: https://www.who.int/teams/control-of-neglected-tropical-diseases/data-platforms-and-tools/road-map-tracker
Type of indicator	High-level indicator Road map 2030

#### Neglected tropical diseases

#### Percentage reduction in disability-adjusted life years related to neglected tropical diseases

Alternative indicator name	
Indicator ID	NTDNTD0000211
M&E framework	Impact
Domain	Health status
Subdomain	Improved health outcomes and equity
Public health target	Not applicable
Definition	Disability-adjusted life years, or "DALYs", for a disease or health condition are calculated as the sum of the years of life lost due to premature mortality in the population and the years lost due to disability for people living with the health condition or its consequences.
Unit measurement	DALY
Rationale	Mortality does not give a complete picture of the burden of disease borne by individuals in different populations. The overall burden of disease is assessed using the DALY, a time-based measure that combines years of life lost due to premature mortality and years of life lost due to time lived in states of less than full health, or years lost due to disability. One DALY represents the loss of the equivalent of one year of full health. Using DALYs, the burden of diseases that cause premature death but little disability can be compared to that of diseases that do not cause death but do cause disability.
Numerator	DALYs related to neglected tropical diseases (2015)-DALYs related to neglected tropical diseases (most recent year for which estimates are available)
Denominator	DALYs related to neglected tropical diseases (2015)
Disaggregation	WHO region, disease
Method of measurement	The burden of disease is calculated using the DALY. One DALY represents the loss of the equivalent of one year of full health. DALYs for a disease or health condition are the sum of years of life lost due to premature mortality and years lost due to disability due to prevalent cases of the disease or health condition in a population. Sum of DALYs related to neglected tropical diseases (baseline)-Sum of DALYs related to neglected tropical diseases (baseline)-Sum of DALYs related to neglected tropical diseases (baseline). Baseline data are DALYs as of 2015, which are the most recently available at the time of launching in 2020.
Method of estimation	Data calculated using the Global Health Estimates
	Disability-adjusted life years (DALYs). In: WHO/The Global Health Observatory [website]. Geneva: World Health Organization; 2022 (https://www.who.int/data/gho/ indicator-metadata-registry/imr-details/158, accessed 19 September 2022)
Frequency of reporting by national level to WHO	
Preferred datasource	Global Health Estimates
Other datasources	
Primary level of data collection	Country
Timing of primary data collection	
Further information and related links	WHO methods and data sources for global burden of disease estimates 2000–2019. Geneva: World Health Organization; 2020 (https://cdn.who.int/media/docs/ default-source/gho-documents/global-health-estimates/ghe2019_daly-methods. pdf?sfvrsn=31b25009_7, accessed 19 September 2022)
Type of indicator	High-level indicator Road map 2030

#### Neglected tropical diseases

#### Percentage reduction in people requiring interventions against neglected tropical diseases

M&E framework     Impact.       Domain     Health status       Subdomain     Improved health outcomes and equity       Public health target     Not applicable       Definition     Reduction in number of people requiring treatment and care for any one of the neglected tropical diseases targeted by the road map 2030 and World Health Assembly resolutions and reported to WHO, compared with the baseline (2010).       Unit measurement     Number of people       Rationale     The average annual number of people requiring treatment and care for neglected tropical diseases is the number that is expected to decrease toward the end of neglecter dtropical diseases is the number of people requiring other increases is a the auther of absention of additional disease (eguitational diseases).       Number of people requiring iteratment and care for neglected tropical diseases is the number of people at risk for neglected tropical diseases is a the number of other targets and indicators, namely unversal health coverage and unversal access to water and sonitation. This number of people at risk for neglected tropical diseases (eguitatics above at threshold level of prevenence) it does not include all contacts and others at risk of infection. This number of people at risk for neglected tropical diseases (eguitatics above at the end of neglected tropical diseases. The infection advector includes all contacts and others at risk of infection. This number can be interpreted as the number of people at risk for neglected tropical diseases. The infection advector of neglected tropical diseases.       Numeerator     Numbero of people requiring intereventions advector incl	Alternative indicator name	
Domain     Health status       Subdomain     Improved health outcomes and equity       Public health target     Not applicable       Definition     Reduction in number of people requiring treatment and care for any one of the neglected tropical diseases targeted by the road map 2020 and Work Health Assembly resolutions and reported to WHO, compared with the baseline (2010).       Unit measurement     Number of people       Rationale     The average annual number of people requiring treatment and care for neglected tropical diseases is the number that is people acquiring treatment and care for neglected tropical diseases is the number of appeople requiring treatment, whether statisticated, eliminated or controlled. The number of people requiring there interventions against neglected tropical diseases is to water and santiation. This number should not be interpreted as the number of people at nisk. Mass treatment is limited to those living in districts above a threshol level of prevalence; it does not include all pople living in districts with any risk of infection. Individual treatment and care for neglected tropical diseases.       Number of people requiring interventions (2010). Number of people at nisk of neglection the improved survention-that is, treatment and care for neglected tropical diseases.       Number of people requiring interventions against neglected tropical diseases.       Unitations: Country reports may not be perfetly comparable over time. Improved surventions due to require the reading medical intervention-that is, treatment and care for neglected tropical diseases.       Number of people requiring interventions against neglect	Indicator ID	NTDNTD0000154
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tropical diseases is the number that is expected to decrease toward "the end of neglected tropical diseases" by 2030 (target 3.3), as neglected tropical diseases are eradicated, eliminated or controlled. The number of people requiring other interventions against neglected tropical diseases (e.g. vector management, veterinary public health, water, sanitation and hyglene) are expected to be maintained beyond 2030 and are therefore to be addressed in the context of other targets and indicators. number should not be interpreted as the number of opeople at risk for neglected to does not include all people hing in districts above a threshold level of prevalence; it does not include all code all people hing in districts above at threshold level of prevalence; it does not include all concel hing in districts with any risk of infection. Individual treatment and care is for those who are or have aiready been infected: It does to enduct all and others at risk of infection. Individual treatment and care for neglected tropical diseases.NumeratorNumber of people requiring interventions (2010). Number of people korney to require treatment and care for neglected tropical diseases.NumeratorNumber of people requiring interventions (2010). Number of requiring interventions against neglected tropical diseases (2010). Number of people requiring interventions against neglected tropical diseases (2010). Number of people requiring interventions against neglected tropical diseases. Science in success and	Unit measurement	Number of people
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Other datasourcesImage: Constraint of the sector of the secto	Frequency of reporting by national level to WHO	Annual
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linksun.org/sdgs/metadata/files/Metadata-03-03-05.pdf, accessed 19 September 2022)Type of indicatorHigh-level indicator	Timing of primary data collection	Annual
	Further information and related links	
Road map 2030	Type of indicator	High-level indicator
		Road map 2030

# **Cross-cutting indicators**

#### Neglected tropical diseases

### Access to at least basic water supply, sanitation and hygiene in areas endemic for neglected tropical diseases – to achieve targets 6.1 and 6.2 of Sustainable Development Goal 6

Alternative indicator name	
Indicator ID	NTDNTD0000281
M&E framework	Outcome
Domain	Risk factor
Subdomain	Prevalence risk behaviours and factors
Public health target	Not applicable
Definition	Access to at least basic water supply, sanitation and hygiene is defined based on the service ladder used by the WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene to monitor progress against Goal 6.1 on drinking-water and 6.2 on sanitation (https://washdata.org/). A basic drinking-water service is defined as an improved water source that can be accessed within 30-minute round trip. A basic sanitation service is an improved sanitation facility that is not shared with other households. A basic hygiene service is a handwashing facility with water and soap at home.
Unit measurement	Country
Rationale	
Numerator	Population using at least basic drinking water services ; population using at least basic sanitation services; population using basic hygiene services.
Denominator	Total population in countries endemic for neglected tropical diseases
Disaggregation	
Method of measurement	The Joint Monitoring Programme tracks progress via three main indicators: 6.1.1 (proportion of population that uses safely managed drinking-water services), 6.2.1a (proportion of population that uses safely managed sanitation services) and 6.2.1b (proportion of population with handwashing facility with water and soap). Safely managed services represent the top rung of the Programme's service ladder. The Programme also contributes data that are used to calculate indicator 1.4 (the proportion of population living in households with access to basic services). Estimates are calculated from data produced by national authorities. The database includes over 5000 national data sources with information on water, sanitation and hygiene in households including nationally representative household surveys, censuses and administrative reports. Detailed explanations on the methods can be found in the JMP methodology (2017 update).
Method of estimation	The Programme uses a simple linear regression to estimate the population using different levels of service using the ladders for drinking-water, sanitation and hygiene. More information on the estimation methods can be found in the JMP methodology (2017 update).
Frequency of reporting by national level to WHO	Reports on progress on water, sanitation and hygiene among households are published every 2 years
Preferred datasource	https://washdata.org
Other datasources	
Primary level of data collection	Nationally representative surveys and administrative data
Timing of primary data collection	
Further information and related links	JMP methodology: 2017 update and SDG baselines. Geneva: World Health Organization; United Nations Children's Fund, Joint Monitoring Programme; 2018 (JMP-2017-update-methodology (1).pdf, accessed 19 September 2022) Methods. In: JMP/monitoring [website]. 2018 (https://washdata.org/monitoring/ methods, accessed 19 September 2022)
Type of indicator	Road map 2030

#### Neglected tropical diseases

#### Integrated treatment coverage index for preventive chemotherapy

Alternative indicator name	PC Index	
Indicator ID	NTDNTD0000220	
M&E framework	Outcome	
Domain	Service coverage	
Subdomain	Coverage of intervention	
Public health target	Not applicable	
Definition	The integrated treatment coverage index is the geometric mean of the reported	
	coverage rates for the five neglected tropical diseases amenable to preventive chemotherapy (lymphatic filariasis, onchocerciasis, soil-transmitted helminthiases, schistosomiasis and trachoma).	
Unit measurement	Preventive chemotherapy coverage for five neglected tropical diseases combined	
Rationale	The integrated treatment coverage index emphasizes equity and integrated delivery for five diseases (lymphatic filariasis, soil-transmitted helminthiases, schistosomiasis, onchocerciasis and trachoma), whereby very high coverage for one disease does not substitute for very low coverage for another. This index offers valuable insights into the state of progress towards universal health coverage.	
Numerator		
Denominator		
Disaggregation	Country	
Method of measurement	WHO developed an index focused on coverage of services for neglected tropical diseases, comparable in methods to the UHC Service Coverage Index. Data since 2008 for the five diseases amenable to preventive chemotherapy (lymphatic filariasis, onchocerciasis, schistosomiasis, soil-transmitted helminthiases, and trachoma) were used to develop the index based on the geometric mean of coverage rates for individual services with regularly reported data. WHO then compared this service coverage index for neglected tropical diseases with the UHC Service Coverage Index. A high UHC index value and a low disease index value suggest that a country might not be adequately prioritizing interventions for the poor. WHO measured Spearman rank-order correlation ( $\rho$ ) of the neglected tropical diseases service coverage index with income inequality, as measured by the Gini coefficient (range of 0–1), where values of the Gini coefficient close to 1 indicate higher income inequality, and a negative correlation was evidence of socioeconomic barriers to health service coverage for people who are least well off: Joint Reporting Form, Trachoma Elimination Mapping Programme.	
Method of estimation	In line with the UHC Service Coverage Index, the neglected tropical diseases service coverage index is based on the geometric mean of coverage rates for individual disease services with regularly reported data.	
Frequency of reporting by national level to WHO		
Preferred datasource	Health management information system/Community health information system/ disease-specific programmes	
Other datasources		
Primary level of data collection	Household/Community/School	
Timing of primary data collection		
Further information and related links	Fitzpatrick C, Bangert M, Mbabazi PS, Mikhailov A, Zouré H, Polo Rebollo M, et al. Monitoring equity in universal health coverage with essential services for neglected tropical diseases: an analysis of data reported for five diseases in 123 countries over 9 years. Lancet Glob Health. 2018;6(9)e980-e988 (https://www.sciencedirect.com/ science/article/pii/S2214109X18303073, accessed 19 September 2022)	
Type of indicator	Road map 2030	

#### Neglected tropical diseases

### Number of countries that adopt and implement integrated strategies for skin-related neglected tropical diseases

Alternative indicator name	
Indicator ID	NTDNTD0000271
M&E framework	Input
Domain	Health system
Subdomain	Leadership/governance
Public health target	Not applicable
Definition	In the context of the skin-related neglected tropical diseases, integration is defined as the implementation of two or more programme activities simultaneously at community and health facility levels in order to optimize the use of limited resources. Activities include social mobilization, active case detection, training and capacity building, self care, mental well-being, clinical and laboratory, stigmatization, inclusion and human
	rights, supply chain, integrated planning, water, sanitation and hygiene, monitoring and evaluation, advocacy, and/or mass drug administration. The portfolio of diseases includes nine diseases and groups of skin-related neglected tropical diseases: Buruli ulcer; cutaneous leishmaniasis; leprosy (Hansen's disease); lymphatic filariasis; mycetoma, chromoblastomycosis and other deep mycoses (including sporotrichosis); onchocerciasis; post-kala-azar dermal leishmaniasis; scabies and other ectoparasitoses (including tunguasis) and yaws.
Unit measurement	Country
Rationale	This indicator is a key reflection of the strategic shifts in the road map 2030 on integration. Reporting of this indicator by countries encourages holistic integration. The rationale for integration of skin-related neglected tropical diseases includes several factors: (i) they are often co-endemic in many countries, districts and communities; (ii) they may have some common manifestations and approaches to detection. Examination of the skin therefore serves as an opportunity to identify multiple conditions in a single intervention and also to improve case detection; (iii) they are often underreported or are not included in routine surveillance systems. An integrated approach offers opportunities for active screening in communities and in schools; (iv) they are associated with stigmatization, discrimination and socioeconomic problems; (v) integrated morbidity management for two or more diseases enables increased access to health and rehabilitative services as well as social support; (vi) integrated training of health workers and community volunteers can be expanded to cover a number of diseases; (vii) combined activities to control skin NTDs improves understanding of their total related burden and of the need for greater advocacy and optimal and efficient use of human, material and financial resources; (viii) an integrated approach to skin-related neglected tropical diseases makes a compelling case for their prevention and control as donors, nongovernmental organizations and professional groups share similar elimination objectives; (ix) integration optimizes the use of common laboratory and case management infrastructure to address many of these diseases; and (x) community participation and motivation for control and surveillance can be enhanced as progress is made and visible results of treatment are achieved.
Numerator	Number of countries that adopt and implementation of two or more integrated strategies/activities for skin-related neglected tropical diseases
Denominator	Not applicable
Disaggregation	Country
Method of measurement	Surveys including global survey on neglected tropical diseases
Method of estimation	
Frequency of reporting by national level to WHO	Ad hoc
Preferred datasource	Health ministry

#### Neglected tropical diseases (continued)

Other datasources	
Primary level of data collection	Country
Timing of primary data collection	Ad hoc
Further information and related links	Ending the neglect to attain the sustainable development goals: a strategic framework for integrated control and management of skin-related neglected tropical diseases. Geneva: World Health Organization; 2022 (https://apps.who.int/iris/handle/10665/355448, accessed 19 September 2022)
Type of indicator	Road map 2030

#### Neglected tropical diseases

### Percentage reduction in number of deaths from vector-borne neglected tropical diseases (relative to 2016) – to achieve WHO's global vector control response goal

Alternative indicator name	
Indicator ID	NTDNTD0000158
M&E framework	Impact
Domain	Health status
Subdomain	Improved health outcomes and equity
Public health target	Not applicable
Definition	Several neglected tropical diseases are vector-borne, and among them several may lead to the death of the patient. This indicator, as defined in the Global vector control response 2017–2030, targets more specifically dengue, chikungunya and leishmaniasis. Number of deaths from vector-borne neglected tropical diseases globally relative to 2016.
Unit measurement	Deaths
Rationale	WHA70.16 on Global vector control response: an integrated approach for the control of vector-borne diseases (2017)
Numerator	Number of deaths from vector-borne neglected tropical diseases (2016)-Number of deaths from vector-borne neglected tropical diseases (latest year for which data are available)
Denominator	Number of deaths from vector-borne neglected tropical diseases (2016)
Disaggregation	WHO region, disease
Method of measurement	Sum of deaths attributable to chikungunya, dengue or leishmaniasis. Health management information system data sent to health ministry to consolidate and report to WHO. Reduction compares to baseline data of 2016.
Method of estimation	
Frequency of reporting by national level to WHO	Annual
Preferred datasource	Civil registration and vital statistics, Health management information system, Disease-specific reporting
Other datasources	
Primary level of data collection	Health facility
Timing of primary data collection	Monthly
Further information and related links	Global vector control response 2017–2030. Geneva: World Health Organization; 2017 (https://apps.who.int/iris/handle/10665/259205, accessed 19 September 2022)
Type of indicator	High-level indicator
	Road map 2030

#### Neglected tropical diseases

### Share of countries collecting and reporting data on neglected tropical diseases disaggregated by gender

Alternative indicator name	
Indicator ID	NTDNTD0000218
M&E framework	Process
Domain	Health system
Subdomain	Health information systems
Public health target	Not applicable
Definition	Proportion of endemic countries that have collected and reported at least 75% of their neglected tropical disease reports with gender disaggregated data.
Unit measurement	Member State
Rationale	WHA60.25 on integrating gender analysis and actions into the work of WHO (2007), Sustainable Development Goal 5 (gender equality) and Sustainable Development Goal 10 (reduced inequalities)
Numerator	Number of endemic countries reporting gender disaggregated data on relevant endemic neglected tropical diseases
Denominator	Total number of countries submitting report to WHO
Disaggregation	WHO region, country, disease, reporting rate < 25%, 26–49%, 50–74%, > 74%
Method of measurement	WHO counts the number of Member States that submit reports containing at least 75% of the required minimum data set disaggregated by gender for each neglected tropical disease. Annually, WHO assesses the completeness of this reporting based on the required
	minimum dataset for prevalence/incidence data, mortality data, morbidity data, and/or service coverage (intervention and/treatment data) disaggregated by gender for each disease.
Method of estimation	
Frequency of reporting by national level to WHO	Annual
Preferred datasource	Health ministry
Other datasources	
Primary level of data collection	Varies
Timing of primary data collection	
Further information and related links	Country support package for equity, gender and human rights in leaving no one behind in the path to Universal Health Coverage. Geneva: World Health Organization; 2017 (https://apps.who.int/iris/handle/10665/325057, accessed 19 September 2022)
Type of indicator	High-level indicator
	Road map 2030

#### Neglected tropical diseases

### Share of countries including neglected tropical disease interventions in their package of essential services and budgeting for them

Alternative indicator name	Proportion of countries including interventions against neglected tropical disease in their package of essential services and budgeting for them
Indicator ID	NTDNTD0000219
M&E framework	Input
Domain	Health system
Subdomain	Health financing
Public health target	Not applicable
Definition	Countries include strategic interventions against neglected tropical diseases in their package of essential services (universal health coverage) and budget for them. The package includes preventive, promotive, curative, rehabilitative and palliative health services aimed at individuals, which are typically delivered through five levels of health care: community level, primary health care facilities, first level hospitals, tertiary level hospitals and at the population level. Providing essential health care services is the primary responsibility of the health sector.
Unit measurement	Country
Rationale	Mainstreaming interventions against neglected tropical diseases in health systems and strengthening country ownership of programmes. To track core strategic interventions against neglected tropical diseases in universal health coverage.
Numerator	Number of endemic countries including interventions against neglected tropical diseases in their package of essential services and budgeting for them
Denominator	Total number of endemic countries
Disaggregation	WHO region, disease
Method of measurement	Assessed by reviewing national essential health services or equivalent packages, and health budgets including neglected tropical diseases as a group or individual disease as endemic in the country.
Method of estimation	
Frequency of reporting by national level to WHO	Ad hoc
Preferred datasource	Health ministry, Finance ministry
Other datasources	Global survey on neglected tropical diseases
Primary level of data collection	Country
Timing of primary data collection	Annual
Further information and related links	UHC coverage compendium: repository of interventions for universal health coverage. In: WHO/Interventions by programme areas [website]. Geneva: World Health Organization; 2022 (https://www.who.int/universal-health-coverage/compendium/ interventions-by-programme-area, accessed 19 September 2022)
Type of indicator	High-level indicator Road map 2030

#### Neglected tropical diseases

#### Share of countries reporting on all relevant endemic neglected tropical diseases

Alternative indicator name	
Indicator ID	NTDNTD0000216
M&E framework	Process
Domain	Health system
Subdomain	Health Information Systems
Public health target	Not applicable
Definition	Countries reporting on at least 75% of all neglected tropical diseases endemic in the country to WHO. The country is expected to report on data related to programmatic indicators related to the road map.
Unit measurement	Member State
Rationale	Indicative of mainstreaming of neglected tropical disease services into national health systems and sustainability.
Numerator	Number of endemic countries reporting on all relevant endemic neglected tropical diseases
Denominator	Total number of endemic countries expected to report to WHO
Disaggregation	WHO region, disease
Method of measurement	WHO will calculate the proportion of Member States that report on at least 75% of all endemic neglected tropical diseases in the country (reports should contain at least 75% of the required minimum data set for each disease). Annually, WHO will assess the completeness of this reporting based on the required minimum dataset for prevalence/incidence data, mortality data, morbidity data, and/or service coverage (intervention and/treatment data) for each disease.
Method of estimation	
Frequency of reporting by national level to WHO	
Preferred datasource	Health ministry
Other datasources	Systematic reviews and periodic surveys
Primary level of data collection	Varies
Timing of primary data collection	Annual
Further information and related links	NTD road map tracker: https://www.who.int/teams/control-of-neglected-tropical-diseases/data-platforms-and-tools/road-map-tracker
Type of indicator	High-level indicator
	Road map 2030

#### Neglected tropical diseases

### Share of countries with guidelines for management of neglected tropical disease-related disabilities within national health systems

Alternative indicator name	
Indicator ID	NTDNTD0000217
M&E framework	Input
Domain	Health system
Subdomain	Leadership/governance
Public health target	Not applicable
Definition	Countries with national policies and protocols for implementation of WHO-recommended care for persons with disability related to neglected tropical diseases. Disability is defined as an umbrella term for impairments, activity limitations and participation restrictions; it is an interaction between individuals with a health condition (e.g. lymphatic filariasis) and personal and environmental factors (e.g. negative attitudes, inaccessible transportation and public buildings, and limited social support). Disability related to neglected tropical diseases includes that arising from the following diseases and disease groups: Buruli ulcer; Chagas disease; dengue and chikungunya; dracunculiasis; mycetoma, chromoblastomycosis and other deep mycoses (including sporotrichosis); leishmaniasis; leprosy; lymphatic filariasis; onchocerciasis; scabies and other ectoparasitoses (including tungiasis); snakebite envenoming; taeniasis and cysticercosis; and trachoma.
Unit measurement	Country
Rationale	Number of countries with guidelines for management of neglected tropical disease-related disabilities within national health systems
Numerator	No of endemic countries with national guidelines/protocol/policies for management of NTD-related disabilities within national health systems
Denominator	Total number of countries endemic for NTDs causing disability
Disaggregation	Disease
Method of measurement	Country has the available guideline(s)/protocol(s)/policies for disability and rehabilitation due to endemic neglected tropical diseases incorporated into the national health system
Method of estimation	
Frequency of reporting by national level to WHO	Annual
Preferred datasource	Health ministry
Other datasources	Global survey on neglected tropical diseases
Primary level of data collection	Country
Timing of primary data collection	Annual
Further information and related links	NTD road map tracker 2021 - 2030: https://www.who.int/teams/control-of-neglected-tropical-diseases/data-platforms-and- tools/road-map-tracker
Type of indicator	High-level indicator
	Road map 2030

#### Neglected tropical diseases

#### Share of countries with neglected tropical diseases integrated in national health strategies/plans

Alternative indicator name	
Indicator ID	NTDNTD0000215
M&E framework	Input
Domain	Health system
Subdomain	Leadership/governance
Public health target	Not applicable
Definition	Proportion of endemic countries having incorporated at least 75% of neglected tropical diseases in the country into the annual or multi-year national health strategic plan for their elimination or control as per the road map.
Unit measurement	Country
Rationale	
Numerator	Number of countries with 75% of endemic neglected tropical diseases integrated into national health strategies and plans
Denominator	Total number of endemic countries with at least one neglected tropical disease
Disaggregation	Disease
Method of measurement	Assessed by reviewing the national health plan/policy, which should include neglected tropical diseases, or as a group for those neglected tropical diseases endemic in the country. Health ministry: national health plan.
Method of estimation	
Frequency of reporting by national level to WHO	Annual
Preferred datasource	Health ministry
Other datasources	Finance ministry
Primary level of data collection	Country
Timing of primary data collection	Annual
Further information and related links	NTD road map tracker 2021 - 2030: https://www.who.int/teams/control-of-neglected-tropical-diseases/data-platforms-and- tools/road-map-tracker
Type of indicator	High-level indicator
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#### Neglected tropical diseases

Share of the population at risk protected against catastrophic out-of-pocket health expenditure due to neglected tropical diseases – to contribute target 3.8 of Sustainable Development Goal 3

Alternative indicator name	
Indicator ID	NTDNTD0000156
M&E framework	Impact
Domain	Health system
Subdomain	Health financing
Public health target	Not applicable
Definition	To be defined
Unit measurement	Population
Rationale	This indicator intends to capture the evolution of financing risk that the population affected by neglected tropical diseases is facing. Ideally, it would be preferable to measure the financing risk specific to the affected population. However, such data are not easily available for two reasons: (i) the data on financial risk are normally collected from expensive and time-consuming household surveys; and (ii) from the household perspective, the health financing risk they are facing concerns all diseases that they encounter.
	Based on this understanding, under discussion if universal health coverage 3.8.2 indicator will be used as a proxy for financial risk of affected population.
Numerator	To be defined
Denominator	To be defined
Disaggregation	To be defined
Method of measurement	
Method of estimation	At global level, the share of the population not bearing catastrophic health expenditure due to neglected tropical diseases of the total population having health expenditure due to neglected tropical diseases
Frequency of reporting by national level to WHO	
Preferred datasource	Household surveys, which are conducted by national statistics offices in consultation with Health Ministry
Other datasources	Universal health coverage 2030 Sustainable Development Goal 3.8.2 data portal
Primary level of data collection	To be defined
Timing of primary data collection	Ad hoc
Further information and related links	Ending the neglect to attain the Sustainable Development Goals: a rationale for continued investment in tackling neglected tropical diseases 2021–2030. Geneva: World Health Organization; 2022 (https://apps.who.int/iris/rest/bitstreams/1469465/ retrieve; re-submitted for production clearance 23 September 2022)
	Investing to overcome the global burden of neglected tropical diseases: third WHO report on neglected tropical diseases. Geneva: World Health Organization; 2015 (https://apps.who.int/iris/handle/10665/152781, accessed 19 September 2022)
Type of indicator	High-level indicator
	Road map 2030

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#### Buruli ulcer

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#### Proportion of cases in category III (late stage) at diagnosis

Alternative indicator name	Proportion of confirmed Buruli ulcer cases in category III (late stage) at diagnosis
Indicator ID	NTDBUR0000022
M&E framework	Outcome
Domain	Health status
Subdomain	Risk factors and behaviour
Public health target	Control
Definition	Category III lesion(s) at diagnosis is a proxy for late detection. WHO defines categories as follows: category I: a single lesion $\leq$ 5 cm in diameter; category II: a single lesion 5–15 cm in diameter; category III: a single lesion > 15 cm in diameter, multiple lesions or osteomyelitis.
Unit measurement	Cases
Rationale	WHA57.1 on surveillance and control of Buruli ulcer (2004)
Numerator	Number of new Buruli ulcer cases confirmed in category III
Denominator	Number of new laboratory- confirmed Buruli ulcer cases reported
Disaggregation	Age, gender
Method of measurement	Buruli ulcer cases are recorded and reported on specific data collection tools: form BU01 is the patient file; form BU02 is the case register which is shared with the national Buruli ulcer control programme. The proportion of cases in category III (late stage) at diagnosis is calculated as the number of new Buruli ulcer suspected cases diagnosed in category III/number of new Buruli ulcer suspected cases reported * 100.
Method of estimation	
Frequency of reporting by national level to WHO	Annual
Preferred datasource	Health management information system
Other datasources	
Primary level of data collection	Health facility
Timing of primary data collection	Daily routine data collection: reporting to upper levels on monthly basis
Further information and related links	Ending the neglect to attain the sustainable development goals: a strategic framework for integrated control and management of skin-related neglected tropical diseases. Geneva: World Health Organization; 2022 (https://apps.who.int/iris/handle/10665/355448, accessed 19 September 2022)
	Treatment of <i>Mycobacterium ulcerans</i> disease (Buruli ulcer): guidance for health workers. Geneva: World Health Organization; 2012 (https://apps.who.int/iris/handle/10665/77771, accessed 19 September 2022)
Type of indicator	Road map 2030

#### Buruli ulcer

#### Proportion of confirmed cases who have completed a full course of antibiotic treatment

Alternative indicator name	Proportion of confirmed Buruli ulcer cases who have completed a full course of antibiotic treatment
Indicator ID	NTDBUR0000046
M&E framework	Outcome
Domain	Service coverage
Subdomain	Coverage of interventions
Public health target	Control
Definition	WHO currently recommends a combination of rifampicin (10 mg/kg once daily) and clarithromycin (7.5 mg/kg twice daily) for 8 weeks.
Unit measurement	Cases
Rationale	WHA57.1 on surveillance and control of Buruli ulcer (2004)
Numerator	Number of new laboratory-confirmed Buruli ulcer cases who have completed a full course of antibiotic treatment
Denominator	Number of new laboratory-confirmed Buruli ulcer cases reported
Disaggregation	Age, gender
Method of measurement	Buruli ulcer cases are recorded and reported on specific data collection tools: form BU01 is the patient file; form BU02 is the case register which is shared with the national Buruli ulcer control programme.
Method of estimation	Data reported by national programmes annually
Frequency of reporting by national level to WHO	Annual
Preferred datasource	Health management information system, Health ministry
Other datasources	
Primary level of data collection	Health facility
Timing of primary data collection	Daily routine data collection: reporting to upper levels monthly
Further information and related links	Ending the neglect to attain the sustainable development goals: a strategic framework for integrated control and management of skin-related neglected tropical diseases. Geneva: World Health Organization; 2022 (https://apps.who.int/iris/handle/10665/355448, accessed 19 September 2022)
	Treatment of <i>Mycobacterium ulcerans</i> disease (Buruli ulcer): guidance for health workers. Geneva: World Health Organization; 2012 (https://apps.who.int/iris/handle/10665/77771, accessed 19 September 2022)
Type of indicator	Road map 2030

#### Buruli ulcer

#### Proportion of laboratory-confirmed cases

Alternative indicator name	Proportion of Buruli ulcer cases confirmed by a WHO-recommended method
Indicator ID	NTDBUR0000027
M&E framework	Output
Domain	Health system
Subdomain	Intervention access and service readiness
Public health target	Control
Definition	Currently WHO recommends laboratory confirmation with polymerase chain reaction, but other laboratory tests may be recommended for confirmation by WHO before 2030.
Unit measurement	Cases
Rationale	WHA57.1 on surveillance and control of Buruli ulcer (2004)
Numerator	Number of new laboratory-confirmed Buruli ulcer cases by a WHO-recommended method
Denominator	Number of new suspected Buruli ulcer cases reported
Disaggregation	Age, gender
Method of measurement	Buruli ulcer cases are recorded and reported on specific data collection tools: form BU01 is the patient file; form BU02 is the case register which is shared with the national Buruli ulcer control programme.
Method of estimation	Data reported by national programmes annually
Frequency of reporting by national level to WHO	Annual
Preferred datasource	Health management information system, Health ministry
Other datasources	
Primary level of data collection	Health facility
Timing of primary data collection	Daily routine data collection: reporting to upper levels monthly
Further information and related links	Ending the neglect to attain the sustainable development goals: a strategic framework for integrated control and management of skin-related neglected tropical diseases. Geneva: World Health Organization; 2022 (https://apps.who.int/iris/handle/10665/355448, accessed 19 September 2022)
	Treatment of <i>Mycobacterium ulcerans</i> disease (Buruli ulcer): guidance for health workers. Geneva: World Health Organization; 2012 (https://apps.who.int/iris/ handle/10665/77771, accessed 19 September 2022)
Type of indicator	Road map 2030

#### Chagas disease

Number of countries achieving interruption of transmission through the four transmission routes: vectoral (domiciliary), transfusional (infected blood/blood products), transplantation (organ/tissue) and congenital (mother-to-child), with 75% antiparasitic treatment coverage of the target population

Alternative indicator name	Number of countries achieving interruption of transmission of <i>Trypanosoma cruzi</i> infection/Chagas disease through the four transmission routes: vectoral, transfusional, transplantation and congenital (mother-to-child), with 75% antiparasitic treatment coverage of the target population
Indicator ID	NTDCHA0000130
M&E framework	Impact
Domain	Health status
Subdomain	Improved health outcomes and equity
Public health target	Elimination as a public health problem
Definition	Interruption of domiciliary vectoral transmission is considered as absence of dwelling colonization by insect vectors and no children aged < 5 years infected with <i>T. cruzi</i> through domiciliary vectoral transmission (other potential routes discarded) during 3 years.
	Interruption of transfusional transmission from infected blood/blood products is considered if the following are implemented: (i) universal donor screening in all blood banks (through questionnaire or blood screening) and (ii) systematic referral of discarded donors at risk.
Unit measurement	Country
Rationale	WHA63.20 on Chagas disease: control and elimination (2010)
Numerator	Number of countries achieving interruption of transmission through the four transmission routes (vectoral, transfusional, transplantation and congenital), with 75% antiparasitic treatment coverage of eligible cases
Denominator	
Disaggregation	By WHO region
Method of measurement	The Member State submits the completed dossier to WHO. An ad hoc regional Reviewing Authority collectively discusses each dossier received, via video conference, teleconference or at a face-to-face meeting. Country visits are not required unless requested by the Reviewing Authority. The Reviewing Authority decides by consensus and within one year of receipt of the dossier to either (i) validate the claim of elimination as a public health problem or (ii) postpone such decision until more evidence is provided in the dossier to demonstrate that this has occurred. WHO summarizes the comments and decision of the Reviewing Authority. If the claim of elimination is accepted, the summary is forwarded to the WHO Director-General. If the claim of elimination is postponed, WHO requests the country to provide any further evidence needed to enable validation by the Reviewing Authority.
Method of estimation	
Frequency of reporting by national level to WHO	Ad hoc
Preferred datasource	World Health Organization
Other datasources	Health ministry
Primary level of data collection	Country
Timing of primary data collection	Ad hoc
Further information and related links	Chagas disease (American trypanosomiasis). In: WHO/fact sheets [website]. Geneva: World Health Organization; 2022 (https://www.who.int/news-room/fact-sheets/detail/ chagas-disease-(american-trypanosomiasis), accessed 19 September 2022)
	Guidelines for the diagnosis and treatment of Chagas disease. Washington (DC): Pan American Health Organization; 2019 (https://iris.paho.org/bitstream/ handle/10665.2/49653/9789275120439_eng.pdf, accessed 19 September 2022)
Type of indicator	Road map 2030

#### Chagas disease

#### Number of countries achieving verification of interruption of congenital transmission

Alternative indicator name	Number of countries achieving verification of interruption of congenital transmission of <i>Trypanosoma cruzi</i> infection/Chagas disease
Indicator ID	NTDCHA0000129
M&E framework	Impact
Domain	Health status
Subdomain	Improved health outcomes and equity
Public health target	Elimination as a public health problem
Definition	Interruption of congenital transmission includes: (i) implementation of universal screening of girls and women of childbearing age at risk of <i>T. cruzi</i> infection, (ii) screening of all at-risk pregnant women without previous antiparasitic treatment, (iii) screening of newborns with direct parasitological test (microhaematocrit and direct observation) and any subsequent serological follow-up in infancy for acute congenital infection, starting at 8 months of age.
Unit measurement	Country
Rationale	WHA63.20 on Chagas disease: control and elimination (2010)
Numerator	Number of countries achieving verification of interruption of congenital transmission of <i>T. cruzi</i> infection
Denominator	
Disaggregation	By WHO region
Method of measurement	The Member State submits the completed dossier to WHO. An ad hoc regional Reviewing Authority collectively discusses each dossier received, via video conference, teleconference or at a face-to-face meeting. Country visits are not required unless requested by the Reviewing Authority. The Reviewing Authority decides by consensus and within one year of receipt of the dossier to either (i) validate the claim of elimination as a public health problem or (ii) postpone such decision until more evidence is provided in the dossier to demonstrate that this has occurred. WHO summarizes the comments and decision of the Reviewing Authority. If the claim of elimination is accepted, the summary is forwarded to the WHO Director-General. If the claim of elimination is postponed, WHO requests the country to provide any further evidence needed to enable validation by the Reviewing Authority.
Method of estimation	
Frequency of reporting by national level to WHO	Ad hoc
Preferred datasource	World Health Organization
Other datasources	
Primary level of data collection	Country
Timing of primary data collection	Ad hoc
Further information and related links	Chagas disease (American trypanosomiasis). In: WHO/fact sheets [website]. Geneva: World Health Organization; 2022 (https://www.who.int/news-room/fact-sheets/detail/ chagas-disease-(american-trypanosomiasis), accessed 19 September 2022) Guidelines for the diagnosis and treatment of Chagas disease. Washington (DC): Pan American Health Organization; 2019 (https://iris.paho.org/bitstream/ handle/10665.2/49653/9789275120439_eng.pdf, accessed 19 September 2022)
Type of indicator	High-level indicator Road map 2030
## Chagas disease

## Number of countries achieving verification of interruption of domiciliary vectoral transmission

Alternative indicator name	Number of countries achieving verification of interruption of domiciliary vectoral
	transmission of <i>Trypanosoma cruzi</i> infection/Chagas disease
Indicator ID	NTDCHA0000095
M&E framework	Impact
Domain	Health status
Subdomain	Improved health outcomes and equity
Public health target	Elimination as a public health problem
Definition	Interruption of domiciliary vectoral transmission is considered as absence of dwelling colonization by insect (vector) and no children aged < 5 years infected with <i>T. cruzi</i> through domiciliary vectorial transmission (other potential routes discarded) during 3 years.
Unit measurement	Country
Rationale	WHA63.20 on Chagas disease: control and elimination (2010)
Numerator	Number of countries achieving verification of interruption of domiciliary vectorial transmission from domiciles
Denominator	
Disaggregation	By WHO region
Method of measurement	The Member State submits the completed dossier to WHO. An ad hoc regional Reviewing Authority collectively discusses each dossier received, via video conference, teleconference or at a face-to-face meeting. Country visits are not required unless requested by the Reviewing Authority. The Reviewing Authority decides by consensus and within one year of receipt of the dossier to either (i) validate the claim of elimination as a public health problem or (ii) postpone such decision until more evidence is provided in the dossier to demonstrate that this has occurred. WHO summarizes the comments and decision of the Reviewing Authority. If the claim of elimination is accepted, the summary is forwarded to the WHO Director-General. If the claim of elimination is postponed, WHO requests the country to provide any further evidence needed to enable validation by the Reviewing Authority.
Method of estimation	
Frequency of reporting by national level to WHO	Ad hoc
Preferred datasource	World Health Organization
Other datasources	
Primary level of data collection	Country
Timing of primary data collection	Ad hoc
Further information and related links	Chagas disease (American trypanosomiasis). In: WHO/fact sheets [website]. Geneva: World Health Organization; 2022 (https://www.who.int/news-room/fact-sheets/detail/ chagas-disease-(american-trypanosomiasis), accessed 19 September 2022)
	Guidelines for the diagnosis and treatment of Chagas disease. Washington (DC): Pan American Health Organization; 2019 (https://iris.paho.org/bitstream/handle/10665.2/49653/9789275120439_eng.pdf, accessed 19 September 2022)
Type of indicator	Road map 2020
	Road map 2030

## Chagas disease

## Number of countries achieving verification of interruption of transfusional transmission

Alternative indicator name	Number of countries achieving verification of interruption of transfusional transmission of <i>Trypanosoma cruzi</i> infection/Chagas disease
Indicator ID	NTDCHA0000103
M&E framework	Impact
Domain	Health status
Subdomain	Improved health outcomes and equity
Public health target	Elimination as a public health problem
Definition	Interruption of transfusional transmission from infected blood/blood products is considered if (i) and (ii) are implemented: (i) universal donor screening in all blood banks (through questionnaire or blood screening) and (ii) systematic referral for treatment of blood donors tested positive for <i>T. cruzi</i> infection.
Unit measurement	Country
Rationale	WHA63.20 on Chagas disease: control and elimination (2010)
Numerator	Number of countries with verified interruption of transfusional transmission
Denominator	
Disaggregation	By WHO region
Method of measurement	The Member State submits the completed dossier to WHO. An ad hoc regional Reviewing Authority collectively discusses each dossier received, via video conference, teleconference or at a face-to-face meeting. Country visits are not required unless requested by the Reviewing Authority. The Reviewing Authority decides by consensus and within one year of receipt of the dossier to either (i) validate the claim of elimination as a public health problem or (ii) postpone such decision until more evidence is provided in the dossier to demonstrate that this has occurred. WHO summarizes the comments and decision of the Reviewing Authority. If the claim of elimination is accepted, the summary is forwarded to the WHO Director-General. If the claim of elimination is postponed, WHO requests the country to provide any further evidence needed to enable validation by the Reviewing Authority.
Method of estimation	
Frequency of reporting by national level to WHO	Ad hoc
Preferred datasource	World Health Organization
Other datasources	
Primary level of data collection	Country
Timing of primary data collection	Ad hoc
Further information and related links	Chagas disease (American trypanosomiasis). In: WHO/fact sheets [website]. Geneva: World Health Organization; 2022 (https://www.who.int/news-room/fact-sheets/detail/ chagas-disease-(american-trypanosomiasis), accessed 19 September 2022) Guidelines for the diagnosis and treatment of Chagas disease. Washington
Type of indicator	(DC): Pan American Health Organization; 2019 (https://iris.paho.org/bitstream/ handle/10665.2/49653/9789275120439_eng.pdf, accessed 19 September 2022) Road map 2020
	Road map 2030

## Chagas disease

## Number of countries achieving verification of interruption of transplantation transmission

Alternative indicator name	Number of countries achieving verification of interruption of transplantation
	transmission of <i>Trypanosoma cruzi</i> infection/Chagas disease
Indicator ID	NTDCHA0000119
M&E framework	Impact
Domain	Health status
Subdomain	Improved health outcomes and equity
Public health target	Elimination as a public health problem
Definition	Interruption of transmission from organ/tissue transplantation is considered as implementation of (i) universal screening of organ donors and recipients, (ii) internal and external laboratory quality control, and (iii) zero transplantation cases in look-back investigations.
Unit measurement	Country
Rationale	WHA63.20 on Chagas disease: control and elimination (2010)
Numerator	Number of countries achieving verification of interruption of transplantation transmission of <i>T. cruzi</i> infection
Denominator	
Disaggregation	By WHO region
Method of measurement	The Member State submits the completed dossier to WHO. An ad hoc regional Reviewing Authority collectively discusses each dossier received, via video conference, teleconference or at a face-to-face meeting. Country visits are not required unless requested by the Reviewing Authority. The Reviewing Authority decides by consensus and within one year of receipt of the dossier to either (i) validate the claim of elimination as a public health problem or (ii) postpone such decision until more evidence is provided in the dossier to demonstrate that this has occurred. WHO summarizes the comments and decision of the Reviewing Authority. If the claim of elimination is accepted, the summary is forwarded to the WHO Director-General. If the claim of elimination is postponed, WHO requests the country to provide any further evidence needed to enable validation by the Reviewing Authority.
Method of estimation	
Frequency of reporting by national level to WHO	Ad hoc
Preferred datasource	World Health Organization
Other datasources	
Primary level of data collection	Country
Timing of primary data collection	Ad hoc
Further information and related links	Chagas disease (American trypanosomiasis). In: WHO/fact sheets [website]. Geneva: World Health Organization; 2022 (https://www.who.int/news-room/fact-sheets/detail/ chagas-disease-(american-trypanosomiasis), accessed 19 September 2022) Guidelines for the diagnosis and treatment of Chagas disease. Washington (DC): Pan American Health Organization; 2019 (https://iris.paho.org/bitstream/ handle/10665.2/49653/9789275120439_eng.pdf, accessed 19 September 2022)
Type of indicator	High-level indicator
	Road map 2030

## Dengue and chikungunya

#### Chikungunya

# Develop optimized and prioritized integrated strategies for case management and estimate the potential public health benefits by 2025

Alternative indicator name	
Indicator ID	NTDDEN0000227
M&E framework	Input
Domain	Health system
Subdomain	Leadership/governance
Public health target	Control
Definition	Develop optimized and prioritized integrated strategies for case management and estimate the potential public health benefits by 2025 (to be defined).
Unit measurement	
Rationale	
Numerator	
Denominator	
Disaggregation	
Method of measurement	Medical records using the WHO International Classification of Diseases (11th revision) and laboratory reports
Method of estimation	
Frequency of reporting by national level to WHO	
Preferred datasource	World Health Organization
Other datasources	
Primary level of data collection	
Timing of primary data collection	
Further information and related links	Chikungunya. In: WHO/fact sheets. Geneva: World Health Organization; 2022 (https://www.who.int/news-room/fact-sheets/detail/chikungunya, accessed 19 September 2022)
Type of indicator	Road map 2030

## Dengue and chikungunya Chikungunya

# Number of endemic countries identified and mapped for chikungunya

Alternative indicator name	
Indicator ID	NTDDEN0000226
M&E framework	Output
Domain	Health system
Subdomain	Health security
Public health target	Control
Definition	Number of countries identified and mapped as endemic for chikungunya.
Unit measurement	Country
Rationale	SEA/RC70/10 on vector control (2017)
Numerator	Number of endemic countries identified and mapped for chikungunya
Denominator	
Disaggregation	WHO region
Method of measurement	Medical records using the WHO International Classification of Diseases (11th revision) and laboratory reports through health management information system
Method of estimation	
Frequency of reporting by national level to WHO	Annual
Preferred datasource	Health ministry
Other datasources	
Primary level of data collection	Country
Timing of primary data collection	Annual
Further information and related links	Chikungunya. In: WHO/fact sheets. Geneva: World Health Organization; 2022 (https://www.who.int/news-room/fact-sheets/detail/chikungunya, accessed 19 September 2022)
Type of indicator	Road map 2030

## Dengue and chikungunya

## Chikungunya

#### Vaccine development for one or more vaccine candidates

Alternative indicator name	
Indicator ID	NTDDEN0000131
M&E framework	Input
Domain	Health system
Subdomain	Medical products, vaccines and technologies
Public health target	Control
Definition	Candidate vaccines with phase 3 trials conducted in populations where outbreaks have occurred or are likely to occur.
Unit measurement	Phase 3 candidate vaccine
Rationale	
Numerator	Number of candidates in phase 3 vaccine trials
Denominator	
Disaggregation	By types, by phase
Method of measurement	Scoping progress in vaccine development. Number of vaccines in advanced phase developed.
Method of estimation	Immunization and research reports submitted to WHO
Frequency of reporting by national level to WHO	
Preferred datasource	WHO vaccination and immunization
Other datasources	
Primary level of data collection	
Timing of primary data collection	
Further information and related links	WHO consultation on chikungunya vaccine evaluation. Geneva: World Health Organization; 2018 (https://www.who.int/docs/default-source/blue-print/ chikungunya-vaccines-workshop-29-november-2018.pdf?sfvrsn=7c40e201_2, accessed 19 September 2022)
Type of indicator	High-level indicator
	Road map 2030

## Dengue and chikungunya Dengue

#### Case-fatality rate due to dengue

Alternative indicator name	
Indicator ID	NTDDEN0000171
M&E framework	Impact
Domain	Health status
Subdomain	Improved health outcomes and equity
Public health target	Control
Definition	Number of deaths attributable to dengue/total number of confirmed dengue cases * 100 per 100 000
Unit measurement	Not applicable
Rationale	
Numerator	Number of deaths attributable to dengue
Denominator	Total number of confirmed cases
Disaggregation	
Method of measurement	Death registries or death certificates and medical records registries using the WHO International Classification of Diseases (11th revision). Number of deaths attributable to dengue/total number of confirmed dengue cases * 100 per 100 000 population
Method of estimation	
Frequency of reporting by national level to WHO	
Preferred datasource	Health ministry
Other datasources	
Primary level of data collection	Health facility
Timing of primary data collection	Monthly
Further information and related links	Dengue and severe dengue. In: WHO/fact sheets. Geneva: World Health Organization; 2022 (https://www.who.int/news-room/fact-sheets/detail/dengue-and-severe-dengue), accessed 19 September 2022)
Type of indicator	High-level indicator
	Road map 2030

## Dengue and chikungunya Dengue

## Number of countries able to detect and respond to dengue outbreaks

Alternative indicator name	
Indicator ID	NTDDEN0000228
M&E framework	Input
Domain	Health system
Subdomain	Health information systems
Public health target	Control
Definition	Burden of disease due to dengue and its impact on health systems; ability to detect and respond to dengue outbreaks. Outbreak is defined as an unexpected sudden increase of dengue cases that usually occurs during the wet season. The seasonal increase of dengue cases, usually during the rainy season, has to be distinguished from the unexpected increase of cases above a defined threshold.
	Dengue outbreak response is defined as the sum of measures specifically addressing a dengue outbreak, with the aim of reducing case-fatality rates, numbers of cases and entomological parameters.
Unit measurement	Country
Rationale	Global strategy for dengue prevention and control, 2012–2020. Sustainable Development Goal 3 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"
Numerator	Number of countries able to detect and respond to dengue outbreaks
Denominator	
Disaggregation	
Method of measurement	Country reports on dengue outbreaks and the respective public health responses for effective containment and mitigation, as per WHO guidelines and International Health Regulations (2005). WHO compiles the data for global reporting
Method of estimation	Not applicable
Frequency of reporting by national level to WHO	
Preferred datasource	Health ministry
Other datasources	
Primary level of data collection	Country
Timing of primary data collection	Ad hoc
Further information and related links	Technical handbook for dengue surveillance, outbreak prediction/detection and outbreak response. Geneva: World Health Organization; 2016 (https://apps.who.int/iris/handle/10665/250240, accessed 19 September 2022)
Type of indicator	Road map 2030

## Dengue and chikungunya Dengue

## To reduce the burden of the disease and its incidence by 25% (2010–2020 as baseline)

Alternative indicator name	
Indicator ID	NTDDEN0000229
M&E framework	Impact
Domain	Health status
Subdomain	Improved health outcomes and equity
Public health target	Control
Definition	Burden of disease due to dengue and its impact on health systems (Institute for Health Metrics and Evaluation, and economic burden)
Unit measurement	Cases
Rationale	Global strategy for dengue prevention and control, 2012–2020
Numerator	Incidence rate
Denominator	
Disaggregation	
Method of measurement	Population-based survey. Reports from disability-adjusted life years (DALYs), which are the sum of years of life lost due to premature mortality in the population and the years lost due to disability. DALYs take into account both premature death and health-related suffering to portray the total years of healthy life lost from all causes. Ranking the causes of DALYs in a population shows the health problems that cause the most suffering in a society, whether it is by killing people when they are very young, by shortening by a few years the lives of many people, or by causing daily, long-term suffering for many people.
Method of estimation	Toolkit for national dengue burden estimation (2018)
Frequency of reporting by national level to WHO	
Preferred datasource	Institute for Health Metrics and Evaluation
Other datasources	
Primary level of data collection	Community
Timing of primary data collection	Ad hoc
Further information and related links	A toolkit for national dengue burden estimation. Geneva: World Health Organization; 2018 (https://apps.who.int/iris/handle/10665/277257, accessed 19 September 2022)
Type of indicator	Road map 2030

## Dracunculiasis

#### Number of countries certified free of transmission

Alternative indicator name	
Indicator ID	NTDDRA0000132
M&E framework	Impact
Domain	Health status
Subdomain	Improved health outcomes & equity
Public health target	Eradication
Definition	Certification of elimination of transmission is confirmed absence of the emergence of adult female worms (defined as compatible with the interruption of transmission of <i>Dracunculus medinensis</i> ) in humans and animals for 3 consecutive years or longer at the country level.
Unit measurement	Country
Rationale	WHA39.21 (1986), WHA42.29 (1989) and WHA64.16 (2011) on elimination of dracunculiasis (1989); WHA44.5 (1991), WHA50.35 (1997) and WHA57.9 (2004) on eradication of dracunculiasis; WHA66.12 on neglected tropical diseases (2013)
Numerator	Number of countries certified free of transmission
Denominator	
Disaggregation	Country
Method of measurement	The country submits a declaration and a completed questionnaire of dracunculiasis- free status and, for formerly endemic countries, a national report. An international certification team conducts a field visit to assess and verify the claim included in the national report. The surveillance system and documentation at all levels are assessed for their readiness to detect and respond appropriately to any rumours or suspected cases of the disease. This assessment includes but is not limited to surveys at household, village, market, school and health-facility levels to assess the awareness of the population about the disease and its prevention as well as the reward system, and to determine the source of drinking-water. The international certification team reports to the International Commission for the Certification of Dracunculiasis Eradication. The Commission decides upon and recommends to WHO if the country should be certified free of dracunculiasis transmission. An report by the international certification team is then submitted to the Commission for review and to recommend to WHO if the country has met the criteria for certification. WHO certifies the country in which transmission has been interrupted.
Method of estimation	
Frequency of reporting by national level to WHO	
Preferred datasource	World Health Organization
Other datasources	
Primary level of data collection	Member State
Timing of primary data collection	Ad hoc
Further information and related links	Certification of dracunculiasis eradication: criteria, strategies, procedures: a practical guide. Geneva: World Health Organization; 1996 (https://apps.who.int/iris/handle/10665/63434, accessed 19 September 2022)
Type of indicator	High-level indicator Road map 2030

## Echinococcosis (alveolar and cystic) Cystic echinococcosis

#### Number of countries with intensified control for cystic echinococcosis in hyperendemic areas

Alternative indicator name	Number of countries conducting intensified control for cystic echinococcosis in hyperendemic areas
Indicator ID	NTDECH0000222
M&E framework	Outcome
Domain	Service coverage
Subdomain	Coverage of intervention
Public health target	Control
Definition	Number of countries with hyperendemic areas (areas with annual incidence of 2:5 cases/100 000 people) that are implementing intensified control activities (that is, periodic ( $\geq$ 6 monthly) deworming of dogs, $\geq$ 80% vaccination coverage of sheep, and access to ultrasound diagnosis available in the area).
Unit measurement	Country
Rationale	
Numerator	Number of countries conducting intensified control for cystic echinococcosis in hyperendemic areas
Denominator	
Disaggregation	By WHO region
Method of measurement	Country reports with data reported by national programmes
Method of estimation	
Frequency of reporting by national level to WHO	Annual
Preferred datasource	Various sources including other sectors (One Health)
Other datasources	
Primary level of data collection	Community/health facility
Timing of primary data collection	
Further information and related links	Eckert J, Gemmell MA, Meslin F-X, Pawlowski ZS, editors. WHO/OIE manual on echinococcosis in humans and animals : a public health problem of global concern. Geneva: World Health Organization and Paris: World Organisation for Animal Health; 2001 (https://apps.who.int/iris/handle/10665/42427, accessed 19 September 2022)
	Foodborne parasitic infections: cystic and alveolar echinococcosis. World Health Organization, Food and Agriculture Organization of the United Nations & World Organisation for Animal Health; 2021 (https://apps.who.int/iris/handle/10665/341874, accessed 19 September 2022)
	Guidelines for treatment of cystic and alveolar echinococcosis in humans. WHO Informal Working Group on Echinococcosis. <i>Bulletin of the World Health</i> Organization. 1996;74(3):231–42 (https://apps.who.int/iris/handle/10665/264213, accessed 19 September 2022)
Type of indicator	High-level indicator
	Road map 2030

## Foodborne trematodiases

## Number of countries with intensified control in hyperendemic areas

Alternative indicator name	Number of countries conducting intensified control in hyperendemic areas
Indicator ID	NTDFBT0000134
M&E framework	Outcome
Domain	Service coverage
Subdomain	Coverage of intervention
Public health target	Control
Definition	Countries implementing preventive chemotherapy or vector, intermediate host or
Demitton	reservoir control
Unit measurement	Country
Rationale	
Numerator	
Denominator	
Disaggregation	By WHO region
Method of measurement	Country reports with data reported by national programmes
Method of estimation	
Frequency of reporting by national level to WHO	Annual
Preferred datasource	Health ministry, One Health, Water Sanitation and Hygiene
Other datasources	Special studies
Primary level of data collection	Community
Timing of primary data collection	
Further information and related links	A key role for veterinary authorities and animal health practitioners in preventing and controlling neglected parasitic zoonoses: a handbook with focus on <i>Taenia</i> <i>solium</i> , <i>Trichinella</i> , <i>Echinococcus</i> and <i>Fasciola</i> . World Health Organization, Food and Agriculture Organization of the United Nations & World Organisation for Animal Health; 2021 (https://apps.who.int/iris/handle/10665/349921, accessed 19 September 2022)
	Expert consultation to accelerate control of foodborne trematode infections, taeniasis and cysticercosis, Seoul, Republic of Korea, 17–19 May 2017 : meeting report. Manila: WHO Regional Office for the Western Pacific (https://apps.who.int/iris/handle/10665/260007, accessed 19 September 2022)
	Foodborne parasitic infections: clonorchiasis and opisthorchiasis.
	World Health Organization, Food and Agriculture Organization of the United Nations & World Organisation for Animal Health; 2021 (https://apps.who.int/iris/handle/10665/341855, accessed 19 September 2022)
	Foodborne parasitic infections: fascioliasis (liver fluke). World Health Organization, Food and Agriculture Organization of the United Nations & World Organisation for Animal Health; 2021 (https://apps.who.int/iris/handle/10665/341878, accessed 19 September 2022)
	Foodborne parasitic infections: paragonimiasis (lung fluke). World Health Organization, Food and Agriculture Organization of the United Nations & World Organisation for Animal Health; 2021 (https://apps.who.int/iris/ handle/10665/341881, accessed 19 September 2022)
	Foodborne parasitic infections: taeniasis and cysticercosis.
	World Health Organization, Food and Agriculture Organization of the United Nations & World Organisation for Animal Health 2021 (https://apps.who.int/iris/handle/10665/341882, accessed 19 September 2022)
	Foodborne parasitic infections: trichinellosis (trichinosis).
	World Health Organization, Food and Agriculture Organization of the United Nations & World Organisation for Animal Health 2021 (https://apps.who.int/iris/handle/10665/341886, accessed 19 September 2022)
Type of indicator	High-level indicator
	Road map 2030

## Echinococcosis (alveolar and cystic)

## Human African trypanosomiasis (gambiense)

#### Number of countries verified for interruption of transmission

Alternative indicator name	Number of countries verified for human African trypanosomiasis ( <i>Trypanosoma brucei gambiense</i> ) interruption of transmission
Indicator ID	NTDHAT0000140
M&E framework	Impact
Domain	Health status
Subdomain	Improved health outcomes and equity
Public health target	Elimination
Definition	Elimination of transmission (also referred to as interruption of transmission) is defined by the Strategic and Technical Advisory Group for Neglected Tropical Diseases as the reduction to zero of the incidence of infection caused by a specific pathogen in a defined geographical area, with minimal risk of reintroduction, as a result of deliberate efforts; continued actions to prevent re-establishment of transmission may be required. Documentation of elimination of transmission is called <b>verification</b> .
Unit measurement	Country
Rationale	
Numerator	Number of countries verified for human African trypanosomiasis ( <i>T. b. gambiense</i> ) interruption of transmission
Denominator	
Disaggregation	By WHO region
Method of measurement	The Member State submits the completed dossier to WHO. An ad hoc Reviewing Authority collectively discusses each dossier received. Country visits may be requested by the Reviewing Authority. The Reviewing Authority decides by consensus and within one year of receipt of the dossier to either (i) verify the claim of elimination as interruption of transmission or (ii) postpone such decision until more evidence is provided in the dossier to demonstrate that this has occurred. WHO summarizes the comments and decision of the Reviewing Authority. If the claim of elimination is accepted, the summary is forwarded to the WHO Director-General. If the claim of elimination is postponed, WHO requests the country to provide any further evidence needed to enable verification by the Reviewing Authority.
Method of estimation	
Frequency of reporting by national level to WHO	Ad hoc
Preferred datasource	World Health Organization
Other datasources	
Primary level of data collection	Health ministry
Timing of primary data collection	Ad hoc
Further information and related links	Control and surveillance of human African trypanosomiasis: report of a WHO expert committee. Geneva: World Health Organization; 2013 (https://apps.who.int/iris/ handle/10665/95732, accessed 19 September 2022) WHO interim guidelines for the treatment of gambiense human African trypanosomiasis. Geneva: World Health Organization; 2019 (https://apps.who.int/iris/ headle/1026170 experient/10 Control head2020)
Turne of indicatory	handle/10665/326178, accessed 19 September 2022)
Type of indicator	Road map 2030

## Human African trypanosomiasis

## Human African trypanosomiasis (gambiense)

#### Number of gambiense human African trypanosomiasis cases reported

Alternative indicator name	Number of new reported cases of human African trypanosomiasis ( <i>Trypanosoma brucei gambiense</i> )
Indicator ID	NTDHAT0000136
M&E framework	Impact
Domain	Health status
Subdomain	Improved health outcomes and equity
Public health target	Elimination
Definition	Number of new cases of human African trypanosomiasis ( <i>T. b. gambiense</i> ) detected either through active screening activities or through passive screening, and officially reported to WHO by the national sleeping sickness control programme.
Unit measurement	Cases
Rationale	WHA66.12 on neglected tropical diseases (2013)
Numerator	Number of new reported cases of human African trypanosomiasis (T. b. gambiense)
Denominator	
Disaggregation	By diagnostic stage (P1/P2), by type of surveillance and by diagnostic status (confirmed/ suspected)
Method of measurement	Gambiense cases are detected either during active screening in endemic villages by dedicated mobile teams, or when a case seeks treatment at a health facility. The number of new gambiense cases is reported to the national sleeping sickness control programme, which reports it annually to WHO.
Method of estimation	WHO compiles data as reported by national authorities. Type of statistics: unadjusted
Frequency of reporting by national level to WHO	
Preferred datasource	National sleeping sickness control programmes, National surveillance systems
Other datasources	Health management information system, Case reports from non-endemic countries
Primary level of data collection	Health facility
Timing of primary data collection	Daily
Further information and related links	Control and surveillance of human African trypanosomiasis: report of a WHO expert committee. Geneva: World Health Organization; 2013 (https://apps.who.int/iris/handle/10665/95732, accessed 19 September 2022)
	WHO interim guidelines for the treatment of gambiense human African trypanosomiasis. Geneva: World Health Organization; 2019 (https://apps.who.int/iris/handle/10665/326178, accessed 19 September 2022)
Type of indicator	Road map 2020
	Road map 2030

## Human African trypanosomiasis

## Human African trypanosomiasis (rhodesiense)

#### Areas with > 1 human African trypanosomiasis case per 10 000 people per year (average of 5 years)

Alternative indicator name	
Indicator ID	NTDHAT0000137
M&E framework	Impact
Domain	Health status
Subdomain	Improved health outcomes and equity
Public health target	Elimination as a public health problem
Definition	Rhodesiense disease risk is defined as the ratio between disease intensity and population intensity in the same unit of space. Areas are classified in five categories of risk, ranging from "very high" to "very low". The indicator measures the area (in km <sup>2</sup> ) where the risk is $\geq$ 1 case per 10 000 people per year. This indicator can be estimated over different time periods. To fulfil the criteria for elimination as a public health problem (< 1 case per 10 000 people per year), it is calculated as the mean of the past 5 years.
Unit measurement	km <sup>2</sup>
Rationale	Rhodesiense disease is strongly clustered, leaving vast areas apparently free of disease transmission. It affects rural populations living mostly in small villages and towns, where the impact is intense. This indicator reflects better this reality than the crude number of cases, showing the surface area where rhodesiense infection is considered as a public health problem ( $\geq$ 1 case/10 000 people). Monitoring trends of the risk in space and time allows the progress of eliminating the disease to be followed, and provides key information to guide the positioning and strength of control activities.
Numerator	Spatial intensity of cases calculated through a kernel smoothing using a radius of 30 km.
Denominator	Intensity of population living in the same space using the same kernel smoothing.
Disaggregation	None
Method of measurement	The number of new cases of human African trypanosomiasis is reported either by mobile teams actively screening endemic villages, or by health facilities trained in and equipped for diagnosis. Cases are reported at village level to the national sleeping sickness control programme, which reports to WHO on an annual basis.
Method of estimation	The risk of rhodesiense infection is estimated using published methods (Simarro, 2012) as the ratio of two surfaces: disease intensity and population intensity. The former is based on rhodesiense cases; the latter relies on estimations of human population density as provided by Landscan databases. Both intensity surfaces are calculated through kernel smoothing with a search radius of 30 km. This indicator measures in km <sup>2</sup> the area where risk is $\geq$ 1 rhodesiense case per 10 000 people per year.
Frequency of reporting by national level to WHO	
Preferred datasource	National sleeping sickness control programmes
Other datasources	Landscan is used for the population raster
Primary level of data collection	Mobile teams (active) and sentinel sites (passive)
Timing of primary data collection	Daily
Further information and related links	Control and surveillance of human African trypanosomiasis: report of a WHO expert committee. Geneva: World Health Organization; 2013 (https://apps.who.int/iris/handle/10665/95732, accessed 19 September 2022)
	Simarro PP, Cecchi G, Franco JR, Paone M, Diarra A, Ruiz-Postigo JA, et al. Estimating and mapping the population at risk of sleeping sickness. PLoS Negl Trop Dis. 2012; 6(10):e1859 (https://doi.org/10.1371/journal.pntd.0001859, accessed 19 September 2022)
	WHO interim guidelines for the treatment of gambiense human African trypanosomiasis. Geneva: World Health Organization; 2019 (https://apps.who.int/iris/handle/10665/326178, accessed 19 September 2022)
Type of indicator	Road map 2030

## Human African trypanosomiasis

## Human African trypanosomiasis (rhodesiense)

#### Number of countries validated for elimination as a public health problem

Alternative indicator name	Number of countries validated for human African trypanosomiasis ( <i>Trypanosoma brucei rhodesiense</i> ) elimination as a public health problem (defined as < 1 case/10 000 people per year, in each health district of the country averaged over the previous 5-year period)
Indicator ID	NTDHAT0000139
M&E framework	Impact
Domain	Health status
Subdomain	Improved health outcomes and equity
Public health target	Elimination as a public health problem
Definition	Elimination as a public health problem is a term related to both infection and disease. It is defined by the Strategic and Technical Advisory Group for Neglected Tropical Diseases as achievement of measurable targets set by WHO in relation to a specific disease. When reached, continued action is required to maintain the targets and/or to advance interruption of transmission. Documentation of elimination as a public health problem is called <b>validation</b> .
	For human African trypanosomiasis, the measurable target is set at < 1 case/10 000 people per year, in each health district of the country averaged over the previous 5-year period.
Unit measurement	Country
Rationale	
Numerator	Number of countries validated for human African trypanosomiasis ( <i>T. b. rhodesiense</i> ) elimination as a public health problem
Denominator	
Disaggregation	By WHO region
Method of measurement	
Method of estimation	The Member State submits the completed dossier to WHO. An ad hoc Reviewing Authority collectively discusses each dossier received. Country visits are not required unless requested by the Reviewing Authority. The Reviewing Authority decides by consensus and within one year of receipt of the dossier to either (i) validate the claim of elimination as a public health problem or (ii) postpone such decision until more evidence is provided in the dossier to demonstrate that this has occurred. WHO summarizes the comments and decision of the Reviewing Authority. If the claim of elimination as a public health problem is accepted, the summary is forwarded to the WHO Director-General. If the claim of elimination as a public health problem such any further evidence needed to enable validation by the Reviewing Authority.
Frequency of reporting by national level to WHO	
Preferred datasource	World Health Organization
Other datasources	
Primary level of data collection	Health ministry
Timing of primary data collection	Ad hoc
Further information and related links	Control and surveillance of human African trypanosomiasis: report of a WHO expert committee. Geneva: World Health Organization; 2013 (https://apps.who.int/iris/handle/10665/95732, accessed 19 September 2022)
	Simarro PP, Cecchi G, Franco JR, Paone M, Diarra A, Ruiz-Postigo JA, et al. (2012) Estimating and Mapping the Population at Risk of Sleeping Sickness. PLoS Negl Trop Dis 6(10): e1859 (https://doi.org/10.1371/journal.pntd.0001859, accessed 19 September 2022)
	WHO interim guidelines for the treatment of gambiense human African trypanosomiasis. Geneva: World Health Organization; 2019 (https://apps.who.int/iris/handle/10665/326178, accessed 19 September 2022)
Type of indicator	Road map 2030

#### Leishmaniasis

#### Leishmaniasis (cutaneous)

# Number of countries in which: 85% of all cases are detected and reported, and 95% of reported cases are treated

Alternative indicator name	Number of countries endemic for cutaneous leishmaniasis in which: 85% of all cases are detected and reported, and 95% of reported cases are treated
Indicator ID	NTDLEI0000143
M&E framework	Outcome
Domain	Service coverage
Subdomain	Coverage of intervention
Public health target	Control
Definition	This composite indicator has three sub-indicators related to case detection rate, reporting rate and treatment coverage. The case detection rate is defined as the proportion of actual cases detected, i.e. <sup>2</sup> cases diagnosed by a healthcare worker. The reporting rate is defined as the proportion of detected cases reported to upper levels, either through the national health information system or the national disease surveillance system, or directly to the national leishmaniasis control programme. Treatment coverage is defined as the proportion of cases treated (among the total number of cases reported). A probable case is defined as a person living in or having travelled to endemic areas who shows typical skin lesions (macule, plaque, nodule, ulcer). A confirmed case can be either laboratory-confirmed (parasitological confirmation, positive smear, rapid test, culture or polymerase chain reaction) or clinically-confirmed (a case who has not been confirmed by any laboratory test (i.e. test(s) not done or negative), but is assessed by a clinician to be a confirmed case based on clinical grounds.
Unit measurement	Country
Rationale	WHA60.13 on control of leishmaniasis (2007)
Numerator	Number of countries endemic for cutaneous leishmaniasis having reached: 85% of all cases detected and reported, and 95% of reported cases are treated
Denominator	
Disaggregation	By WHO region
Method of measurement	This composite indicator has three sub-indicators related to case detection rate, reporting rate and treatment coverage. The case detection rate is measured through community-based surveys which compare the number of cases found during active screening in the community with the number of cases detected during routine activities. The reporting rate is measured during health facility assessments by comparing the number of cases found in the health facility register with the number of cases reported to upper levels. Treatment coverage is measured through routine surveillance by dividing the number of cases treated by the number of cases reported.
Method of estimation	
Frequency of reporting by national level to WHO	
Preferred datasource	Community based-survey, Health facility assessment, Health management information system
Other datasources	Community-based surveys
Primary level of data collection	Community, Health facility
Timing of primary data collection	Various

## Leishmaniasis

## Leishmaniasis (cutaneous) (continued)

Further information and related links	Control of the leishmaniases: report of a meeting of the WHO Expert Committee on the Control of Leishmaniases, Geneva, 22–26 March 2010. Geneva: World Health Organization; 2010 (WHO Technical Report Series, No. 949; https://apps.who.int/iris/ handle/10665/44412, accessed 19 September 2022).
	Ejov M, Dagne D. Strategic framework for leishmaniasis control in the WHO European Region 2014–2020. Copenhagen: WHO Regional Office for Europe; 2014 (https://apps. who.int/iris/handle/10665/329477, accessed 19 September 2022).
	Ending the neglect to attain the sustainable development goals: a strategic framework for integrated control and management of skin-related neglected tropical diseases. Geneva: World Health Organization; 2022 (https://apps.who.int/iris/handle/10665/355448, accessed 19 September 2022)
	Framework for action on cutaneous leishmaniasis in the Eastern Mediterranean Region 2014–2018. Cairo: WHO Regional Office for the Eastern Mediterranean; 2014 (https://apps.who.int/iris/handle/10665/120003, accessed 19 September 2022)
	Gradoni L, López-Vélez, Mokni M. Manual on case management and surveillance of the leishmaniases in the WHO European Region. Copenhagen: WHO Regional Office for Europe; 2017 (https://apps.who.int/iris/handle/10665/344118, accessed 19 September 2022)
	Manual for case management of cutaneous leishmaniasis in the WHO Eastern Mediterranean Region. Cairo: WHO Regional Office for the Eastern Mediterranean; 2014 (https://apps.who.int/iris/handle/10665/120002, accessed 19 September 2022)
	Manual de procedimientos para vigilancia y control de las leishmaniasis en las Américas. [Manual of procedures for surveillance and control of leishmaniasis in the Americas]. Washington (DC): Pan American Health Organization; 2019 (in Spanish; https://www. who.int/publications/i/item/9789275320631, accessed 19 September 2022).
	Plan of action to strengthen the surveillance and control of leishmaniasis in the Americas 2017–2022. Washington (DC): Pan American Health Organization; 2017 (https://iris.paho.org/bitstream/handle/10665.2/34147/PlanactionLeish20172022-eng. pdf, accessed 19 September 2022).
	Post-kala-azar dermal leishmaniasis: a manual for case management and control. Geneva: World Health Organization; 2013 (https://apps.who.int/iris/ handle/10665/78608, accessed 19 September 2022)
Type of indicator	Road map 2030

#### Leishmaniasis

## Leishmaniasis (visceral)

# In the WHO South-East Asia Region, number of post-kala-azar dermal leishmaniasis cases detected (visceral leishmaniasis post-treatment follow-up 3 years) and treated

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Alternative indicator name	Post-kala-azar dermal leishmaniasis detected (visceral leishmaniasis post-treatment follow-up 3 years) and treated
Indicator ID	NTDLEI0000197
M&E framework	Outcome
Domain	Service coverage
Subdomain	Coverage of intervention
Public health target	Control
Definition	Post-kala-azar dermal leishmaniasis is a sequela of visceral leishmaniasis that appears after patients have apparently been cured of the disease. It has also been reported in patients without a history of visceral leishmaniasis. Post-kala-azar dermal leishmaniasis is a non-life-threatening skin condition that does not affect daily activities in most cases, resulting in poor treatment-seeking behaviour. However, cases can act as a reservoir of visceral leishmaniasis and hence represent a challenge in the elimination of the disease. In order to achieve and sustain elimination of visceral leishmaniasis as a public health problem, it is therefore recommended to: (i) follow-up all cases of visceral leishmaniasis for 3 years after treatment in order to detect cases of post-kala-azar dermal leishmaniasis as early as possible; (ii) treat all cases of post-kala-azar dermal leishmaniasis (detected through follow-up of visceral leishmaniasis patients after treatment or through active case-finding in the community or passive detection at the health facility). This indicator is therefore a composite indicator to reflect the two major activities regarding detection and treatment of post-kala-azar dermal leishmaniasis: (i) the follow-up rate of visceral leishmaniasis cases is the proportion of cases who have been successfully followed up for 3 years after treatment; (ii) treatment coverage of post-kala-azar dermal leishmaniasis is the proportion of cases who have completed treatment. The final indicator measured here is the multiplication of these two sub-indicators.
Unit measurement	Cases
Rationale	WHA60.13 on control of leishmaniasis (2007)
Numerator	(visceral leishmaniasis case follow-up-rate) x (post-kala-azar dermal leishmaniasis coverage rate)
Denominator	
Disaggregation	
Method of measurement	<ul> <li>Calculating this indicator (and its two sub-indicators) requires longitudinal follow-up of a cohort of patients: (i) the cohort of cases of visceral leishmaniasis detected in a certain year N is followed-up for 3 years and the number of cases successfully followed-up for 3 years after treatment is reported to the number of cases detected in the relevant cohort; (ii) the cohort of the cases of post-kala-azar dermal leishmaniasis detected in a certain year N is followed-up for the duration of the treatment in order to capture the completion of treatment. The two sub-indicators are calculated as follows:</li> <li>visceral leishmaniasis case follow-up rate = number of cases successfully followed-up for 3 years after treatment in the cohort/number of cases detected in the cohort x 100</li> <li>post-kala-azar dermal leishmaniasis treatment coverage = number of cases who completed treatment in the cohort/number of cases detected in the cohort x 100.</li> </ul>
Method of estimation	completed a counterent and consist number of coses detected in the consist x 100.
Frequency of reporting by national	
level to WHO	
Preferred datasource	National surveillance system, Health management information system
Other datasources	
Primary level of data collection	Health facility

## Leishmaniasis

## Leishmaniasis (visceral) (continued)

Timing of primary data collection	Daily
Timing of primary data collection	
Further information and related links	Control of the leishmaniases: report of a meeting of the WHO Expert Committee on the Control of Leishmaniases, Geneva, 22–26 March 2010. Geneva: World Health Organization; 2010 (WHO Technical Report Series, No. 949; https://apps.who.int/iris/handle/10665/44412, accessed 19 September 2022).
	Ejov M, Dagne D. Strategic framework for leishmaniasis control in the WHO European Region 2014–2020. Copenhagen: WHO Regional Office for Europe; 2014 (https://apps. who.int/iris/handle/10665/329477, accessed 19 September 2022).
	Ending the neglect to attain the sustainable development goals: a strategic framework for integrated control and management of skin-related neglected tropical diseases. Geneva: World Health Organization; 2022 (https://apps.who.int/iris/handle/10665/355448, accessed 19 September 2022)
	Framework for action on cutaneous leishmaniasis in the Eastern Mediterranean Region 2014–2018. Cairo: WHO Regional Office for the Eastern Mediterranean; 2014 (https://apps.who.int/iris/handle/10665/120003, accessed 19 September 2022)
	Gradoni L, López-Vélez, Mokni M. Manual on case management and surveillance of the leishmaniases in the WHO European Region. Copenhagen: WHO Regional Office for Europe; 2017 (https://apps.who.int/iris/handle/10665/344118, accessed 19 September 2022)
	Manual for case management of cutaneous leishmaniasis in the WHO Eastern Mediterranean Region. Cairo: WHO Regional Office for the Eastern Mediterranean; 2014 (https://apps.who.int/iris/handle/10665/120002, accessed 19 September 2022)
	Manual de procedimientos para vigilancia y control de las leishmaniasis en las Américas. [Manual of procedures for surveillance and control of leishmaniasis in the Americas]. Washington (DC): Pan American Health Organization; 2019 (in Spanish; https://www. who.int/publications/i/item/9789275320631, accessed 19 September 2022).
	Plan of action to strengthen the surveillance and control of leishmaniasis in the Americas 2017–2022. Washington (DC): Pan American Health Organization; 2017 (https://iris.paho.org/bitstream/handle/10665.2/34147/PlanactionLeish20172022-eng. pdf, accessed 19 September 2022).
	Post-kala-azar dermal leishmaniasis: a manual for case management and control. Geneva: World Health Organization; 2013 (https://apps.who.int/iris/ handle/10665/78608, accessed 19 September 2022)
Type of indicator	Road map 2030

#### Leishmaniasis

## Leishmaniasis (visceral)

# Number of countries in the WHO South-East Asia Region validated for elimination as a public health problem

Alternative indicator name	Number of countries in the WHO South-East Asia Region validated for elimination as a public health problem (defined as < 1 case (new and relapses) per 10 000 population at district level in Nepal and at subdistrict level in Bangladesh and India
Indicator ID	NTDLEI0000145
M&E framework	Impact
Domain	Health status
Subdomain	Improved health outcomes and equity
Public health target	Control
Definition	Elimination as a public health problem is a term related to both infection and disease. It is defined by the Strategic and Technical Advisory Group for Neglected Tropical Diseases as achievement of measurable targets set by WHO in relation to a specific disease. When reached, continued actions are required to maintain the targets and/ or to advance the interruption of transmission. Documentation of elimination as a public health problem is called <b>validation</b> . In the WHO South-East Asia Region, the measurable target for visceral leishmaniasis is set as an incidence of < 1 case (new and relapse)/10 000 population per year at district level in Nepal and at subdistrict level in Bangladesh and India.
Unit measurement	Country
Rationale	WHA60.13 on control of leishmaniasis (2007)
Numerator	Number of countries validated for elimination of visceral leishmaniasis as a public health problem (defined as <1 case (new and relapses) per 10 000 population at subnational level
Denominator	
Disaggregation	By WHO region
Method of measurement	The Member State submits the completed dossier to WHO. An ad hoc regional Reviewing Authority collectively discusses each dossier received, via video conference, teleconference or at a face-to-face meeting. Country visits are not required unless requested by the Reviewing Authority. The Reviewing Authority decides by consensus and within one year of receipt of the dossier to either (i) validate the claim of elimination as a public health problem or (ii) postpone such decision until more evidence is provided in the dossier to demonstrate that this has occurred. WHO summarizes the comments and decision of the Reviewing Authority. If the claim of elimination is accepted, the summary is forwarded to the WHO Director-General. If the claim of elimination is postponed, WHO requests the country to provide any further evidence needed to enable validation by the Reviewing Authority.
Method of estimation	
Frequency of reporting by national level to WHO	
Preferred datasource	World Health Organization
Other datasources	
Primary level of data collection	Country
Timing of primary data collection	Ad hoc

## Leishmaniasis

## Leishmaniasis (visceral) (continued)

Further information and related links	Control of the leishmaniases: report of a meeting of the WHO Expert Committee on the Control of Leishmaniases, Geneva, 22–26 March 2010. Geneva: World Health Organization; 2010 (WHO Technical Report Series, No. 949; https://apps.who.int/iris/handle/10665/44412, accessed 19 September 2022).
	Ejov M, Dagne D. Strategic framework for leishmaniasis control in the WHO European Region 2014–2020. Copenhagen: WHO Regional Office for Europe; 2014 (https://apps. who.int/iris/handle/10665/329477, accessed 19 September 2022).
	Framework for action on cutaneous leishmaniasis in the Eastern Mediterranean Region 2014–2018. Cairo: WHO Regional Office for the Eastern Mediterranean; 2014 (https://apps.who.int/iris/handle/10665/120003, accessed 19 September 2022)
	Gradoni L, López-Vélez, Mokni M. Manual on case management and surveillance of the leishmaniases in the WHO European Region. Copenhagen: WHO Regional Office for Europe; 2017 (https://apps.who.int/iris/handle/10665/344118, accessed 19 September 2022)
	Manual for case management of cutaneous leishmaniasis in the WHO Eastern Mediterranean Region. Cairo: WHO Regional Office for the Eastern Mediterranean; 2014 (https://apps.who.int/iris/handle/10665/120002, accessed 19 September 2022)
	Manual de procedimientos para vigilancia y control de las leishmaniasis en las Américas. [Manual of procedures for surveillance and control of leishmaniasis in the Americas]. Washington (DC): Pan American Health Organization; 2019 (in Spanish; https://www. who.int/publications/i/item/9789275320631, accessed 19 September 2022).
	Plan of action to strengthen the surveillance and control of leishmaniasis in the Americas 2017–2022. Washington (DC): Pan American Health Organization; 2017 (https://iris.paho.org/bitstream/handle/10665.2/34147/PlanactionLeish20172022-eng. pdf, accessed 19 September 2022).
	Post-kala-azar dermal leishmaniasis: a manual for case management and control. Geneva: World Health Organization; 2013 (https://apps.who.int/iris/handle/10665/78608, accessed 19 September 2022)
Type of indicator	Road map 2020
	Road map 2030

#### Leishmaniasis

## Leishmaniasis (visceral)

#### Number of countries validated for elimination as a public health problem

Alternative indicator name	Number of countries validated for elimination of visceral leishmaniasis as a public
	health problem (defined as < 1% case-fatality rate due to primary disease)
Indicator ID	NTDLEI0000146
M&E framework	Impact
Domain	Health status
Subdomain	Improved health outcomes and equity
Public health target	Not Applicable
Definition	Elimination as a public health problem is a term related to both infection and disease. It is defined by the Strategic and Technical Advisory Group for Neglected Tropical Diseases as achievement of measurable targets set by WHO in relation to a specific disease. When reached, continued actions are required to maintain the targets and/or to advance the interruption of transmission. Documentation of elimination as a public health problem is called <b>validation</b> . The measurable target for visceral leishmaniasis is a case-fatality rate due to primary disease of < 1%. The case-fatality rate is defined as the number of deaths attributable to visceral leishmaniasis divided by the number of visceral leishmaniasis cases.
Unit measurement	Country
Rationale	WHA60.13 on control of leishmaniasis (2007)
Numerator	Number of countries validated for elimination of visceral leishmaniasis as a public health problem (defined as < 1% case-fatality rate due to primary disease)
Denominator	
Disaggregation	By WHO region
Method of measurement	The Member State submits the completed dossier to WHO. An ad hoc regional Reviewing Authority collectively discusses each dossier received, via video conference, teleconference or at a face-to-face meeting. Country visits are not required unless requested by the Reviewing Authority. The Reviewing Authority decides by consensus and within one year of receipt of the dossier to either (i) validate the claim of elimination as a public health problem or (ii) postpone such decision until more evidence is provided in the dossier to demonstrate that this has occurred. WHO summarizes the comments and decision of the Reviewing Authority. If the claim of elimination is accepted, the summary is forwarded to the WHO Director-General. If the claim of elimination is postponed, WHO requests the country to provide any further evidence needed to enable validation by the Reviewing Authority. Case-fatality rate = number of deaths * 100/number of cases
Method of estimation	
Frequency of reporting by national level to WHO	Annual
Preferred datasource	World Health Organization
Other datasources	
Primary level of data collection	Country
Timing of primary data collection	Ad hoc
	//dilioc

## Leishmaniasis

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## Leishmaniasis (visceral) (continued)

Further information and related links	Control of the leishmaniases: report of a meeting of the WHO Expert Committee on the Control of Leishmaniases, Geneva, 22–26 March 2010. Geneva: World Health Organization; 2010 (WHO Technical Report Series, No. 949; https://apps.who.int/iris/ handle/10665/44412, accessed 19 September 2022).
	Ejov M, Dagne D. Strategic framework for leishmaniasis control in the WHO European Region 2014–2020. Copenhagen: WHO Regional Office for Europe; 2014 (https://apps. who.int/iris/handle/10665/329477, accessed 19 September 2022).
	Framework for action on cutaneous leishmaniasis in the Eastern Mediterranean Region 2014–2018. Cairo: WHO Regional Office for the Eastern Mediterranean; 2014 (https://apps.who.int/iris/handle/10665/120003, accessed 19 September 2022)
	Gradoni L, López-Vélez, Mokni M. Manual on case management and surveillance of the leishmaniases in the WHO European Region. Copenhagen: WHO Regional Office for Europe; 2017 (https://apps.who.int/iris/handle/10665/344118, accessed 19 September 2022)
	Manual for case management of cutaneous leishmaniasis in the WHO Eastern Mediterranean Region. Cairo: WHO Regional Office for the Eastern Mediterranean; 2014 (https://apps.who.int/iris/handle/10665/120002, accessed 19 September 2022)
	Manual de procedimientos para vigilancia y control de las leishmaniasis en las Américas. [Manual of procedures for surveillance and control of leishmaniasis in the Americas]. Washington (DC): Pan American Health Organization; 2019 (in Spanish; https://www. who.int/publications/i/item/9789275320631, accessed 19 September 2022).
	Plan of action to strengthen the surveillance and control of leishmaniasis in the Americas 2017–2022. Washington (DC): Pan American Health Organization; 2017 (https://iris.paho.org/bitstream/handle/10665.2/34147/PlanactionLeish20172022-eng. pdf, accessed 19 September 2022).
	Post-kala-azar dermal leishmaniasis: a manual for case management and control. Geneva: World Health Organization; 2013 (https://apps.who.int/iris/ handle/10665/78608, accessed 19 September 2022)
Type of indicator	Road map 2030

## Leprosy Leprosy (Hansen's disease)

#### Rate (per million population) of new cases with grade-2 disability

Alternative indicator name	New leprosy cases with grade-2 disability rate per 1 000 000 population
Indicator ID	NTDLEP0000037
M&E framework	Impact
Domain	Health status
Subdomain	Morbidity
Public health target	Elimination
Definition	Number of new cases with grade-2 disability detected among new cases (never treated before) in a defined population in a year expressed as the rate per one million population. (This indicator suggests delayed diagnosis and disability burden in the community.)
Unit measurement	Cases (rate per million population)
Rationale	WHA73(33) Road map for neglected tropical diseases 2021–2030 (2020)
	WHA44.9 on leprosy (1991) to improve national information systems and facilitate monitoring and evaluation of elimination of leprosy
Numerator	Number of new leprosy cases with grade-2 disability
Denominator	Mid-year population/1 000 000
Disaggregation	Member States, WHO region
Method of measurement	Health management information system or national programmes: The number of new leprosy cases with grade 2 disability reported and collected annually. Grade-2 disability indicates visible deformity and damage to the hands and/or feet or severe visual impairment.
Method of estimation	Rates are calculated using the number of new cases with grade-2 disability reported and the population number taken from the United Nations World Population Prospects 2019 revision.
Frequency of reporting by national level to WHO	Annual
Preferred datasource	Health management information system, National surveillance system, National leprosy programme
Other datasources	Not applicable
Primary level of data collection	Health facility
Timing of primary data collection	Daily
Further information and related links	Ending the neglect to attain the sustainable development goals: a strategic framework for integrated control and management of skin-related neglected tropical diseases. Geneva: World Health Organization; 2022 (https://apps.who.int/iris/handle/10665/355448, accessed 19 September 2022.
	Global Leprosy Strategy 2016–2020. Accelerating towards a leprosy-free world. Monitoring and evaluation guide. New Delhi: WHO Regional Office for South-East Asia; 2017 (https://apps.who.int/iris/handle/10665/254907, accessed 19 September 2022)
	Guidelines for the diagnosis, treatment and prevention of leprosy. New Delhi: WHO Regional Office for South-East Asia; 2018 (https://apps.who.int/iris/ handle/10665/274127, accessed 19 September 2022)
	Leprosy/Hansen disease: contact tracing and post-exposure prophylaxis. Technical guidance. Geneva: World Health Organization; 2020 (https://apps.who.int/iris/handle/10665/336679, accessed 19 September 2022)
	Leprosy/Hansen disease: management of reactions and prevention of disabilities. Technical guidance Geneva: World Health Organization; 2020 (https://apps.who.int/iris/ handle/10665/332022, accessed 19 September 2022)
	Towards zero leprosy. Global leprosy (Hansen's disease) strategy 2021–2030. Geneva: World Health Organization; 2021 (https://apps.who.int/iris/handle/10665/340774, accessed 19 September 2022)
Type of indicator	Road map 2030

## Leprosy Leprosy (Hansen's disease)

#### Annual number of new leprosy cases detected

Alternative indicator name	Number of new leprosy cases
Indicator ID	NTDLEP0000031
M&E framework	Impact
Domain	Health status
Subdomain	Improved health outcomes and equity
Public health target	Elimination
Definition	A case of leprosy is a person having one or more of the following: (i) hypo-pigmented skin lesion with loss of sensation; (ii) impairment or involvement of nerves as demonstrated by (a) loss of sensation or (b) weakness of hands/feet/or face or (c) autonomic function disorders such as anhidrosis (dry skin); (iii) visible deformities; and (iv) signs of disease with demonstrated presence of bacilli in skin smear or histopathological confirmation.
Unit measurement	Cases (count)
Rationale	WHA73(33) Road map for neglected tropical diseases 2021–2030 (2020)
	WHA44.9 on leprosy (1991) to improve national information systems and facilitate monitoring and evaluation of elimination of leprosy
Numerator	Number of new cases of leprosy reported in a year
Denominator	
Disaggregation	Member States, WHO region
Method of measurement	Health management information system or national programmes: the number of new cases reported and collected by age group annually.
Method of estimation	Not applicable
Frequency of reporting by national level to WHO	Annual
Preferred datasource	Health management information system, National surveillance system, National leprosy programme
Other datasources	Not applicable
Primary level of data collection	Health facility
Timing of primary data collection	Daily
Further information and related links	Ending the neglect to attain the sustainable development goals: a strategic framework for integrated control and management of skin-related neglected tropical diseases. Geneva: World Health Organization; 2022 (https://apps.who.int/iris/handle/10665/355448, accessed 19 September 2022)
	Global Leprosy Strategy 2016–2020. Accelerating towards a leprosy-free world. Monitoring and evaluation guide. New Delhi: WHO Regional Office for South-East Asia; 2017 (https://apps.who.int/iris/handle/10665/254907, accessed 19 September 2022)
	Guidelines for the diagnosis, treatment and prevention of leprosy. New Delhi: WHO Regional Office for South-East Asia; 2018 (https://apps.who.int/iris/ handle/10665/274127, accessed 19 September 2022)
	Leprosy/Hansen disease: contact tracing and post-exposure prophylaxis. Technical guidance. Geneva: World Health Organization; 2020 (https://apps.who.int/iris/handle/10665/336679, accessed 19 September 2022)
	Leprosy/Hansen disease: management of reactions and prevention of disabilities. Technical guidance Geneva: World Health Organization; 2020 (https://apps.who.int/ iris/handle/10665/332022, accessed 19 September 2022)
	Towards zero leprosy. Global leprosy (Hansen's disease) strategy 2021–2030. Geneva: World Health Organization; 2021 (https://apps.who.int/iris/ handle/10665/340774, accessed 19 September 2022)

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## Leprosy Leprosy (Hansen's disease)

#### Number of countries with zero new autochthonous leprosy cases

Alternative indicator name	Number of countries with zero new autochthonous leprosy cases
Indicator ID	NTDLEP0000163
M&E framework	
Domain	Impact Health status
Subdomain	Improved health outcomes and equity
Public health target	Elimination
Definition	Number of countries verified for zero new autochthonous cases of leprosy for the year. Excludes non-autochthonous cases of leprosy. (Autochthonous cases are defined as those suspected to have contracted the disease within the country. Zero new autochthonous cases indicates interruption of transmission of leprosy in the community.)
Unit measurement	Member State
Rationale	WHA73(33) Road map for neglected tropical diseases 2021–2030 (2020)
	WHA44.9 on leprosy (1991) to improve national information systems and facilitate monitoring and evaluation of elimination of leprosy
Numerator	Number of countries with zero new autochthonous leprosy cases
Denominator	
Disaggregation	Member States
Method of measurement	Health management information system or national programmes: countries expected to report cases, even zero autochthonous leprosy cases. Verification criteria to be developed.
Method of estimation	Not applicable
Frequency of reporting by national level to WHO	Annual
Preferred datasource	Health management information system, National surveillance system, National leprosy programme
Other datasources	Not applicable
Primary level of data collection	Health facility
Timing of primary data collection	Daily
Further information and related links	Ending the neglect to attain the sustainable development goals: a strategic framework for integrated control and management of skin-related neglected tropical diseases. Geneva: World Health Organization; 2022 (https://apps.who.int/iris/handle/10665/355448, accessed 19 September 2022)
	Global Leprosy Strategy 2016–2020. Accelerating towards a leprosy-free world. Monitoring and evaluation guide. New Delhi: WHO Regional Office for South-East Asia; 2017 (https://apps.who.int/iris/handle/10665/254907, accessed 19 September 2022)
	Guidelines for the diagnosis, treatment and prevention of leprosy. New Delhi: WHO Regional Office for South-East Asia; 2018 (https://apps.who.int/iris/ handle/10665/274127, accessed 19 September 2022)
	Leprosy/Hansen disease: contact tracing and post-exposure prophylaxis. Technical guidance. Geneva: World Health Organization; 2020 (https://apps.who.int/iris/handle/10665/336679, accessed 19 September 2022)
	Leprosy/Hansen disease: management of reactions and prevention of disabilities. Technical guidance Geneva: World Health Organization; 2020 (https://apps.who.int/iris/ handle/10665/332022, accessed 19 September 2022)
	Towards zero leprosy. Global leprosy (Hansen's disease) strategy 2021–2030. Geneva: World Health Organization; 2021 (https://apps.who.int/iris/handle/10665/340774, accessed 19 September 2022)
Type of indicator	High-level indicator
	Road map 2030

## Leprosy

## Leprosy (Hansen's disease)

#### Rate (per million population) of new paediatric cases with leprosy

Alternative indicator name	New leprosy child case (aged < 15 years) detection rate per 1 000 000 child population
Indicator ID	NTDLEP000203
M&E framework	
Domain	Impact Health status
Subdomain	Improved health outcomes and equity
Public health target	Elimination
Definition	New cases of leprosy reported among children (aged < 15 years) per 1 000 000 child population
Unit measurement	Cases (rate per million child population)
Rationale	WHA73(33) Road map for neglected tropical diseases 2021–2030 (2020)
	WHA44.9 on leprosy (1991) to improve national information systems and facilitate monitoring and evaluation of elimination of leprosy
Numerator	Number of new cases of leprosy reported among children (aged < 15 years) in a year
Denominator	Mid-year population of children/1 000 000
Disaggregation	Member States, WHO region
Method of measurement	Health management information system or national programme: the number of new cases are reported and collected by age group, specifically children (aged < 15 years).
Method of estimation	Rates are calculated using the number of new cases reported and the number of children in the population, taken from the United Nation's World Population Prospect 2019 revision.
Frequency of reporting by national level to WHO	Annual
Preferred datasource	Health management information system, National surveillance system, National leprosy programme
Other datasources	Not applicable
Primary level of data collection	Health facility
Timing of primary data collection	Daily
Further information and related links	Ending the neglect to attain the sustainable development goals: a strategic framework for integrated control and management of skin-related neglected tropical diseases. Geneva: World Health Organization; 2022 (https://apps.who.int/iris/handle/10665/355448, accessed 19 September 2022)
	Leprosy/Hansen disease: contact tracing and post-exposure prophylaxis. Technical guidance. Geneva: World Health Organization; 2020 (https://apps.who.int/iris/handle/10665/336679, accessed 19 September 2022)
	Leprosy/Hansen disease: management of reactions and prevention of disabilities. Technical guidance Geneva: World Health Organization; 2020 (https://apps.who.int/ iris/handle/10665/332022, accessed 19 September 2022)
	Global Leprosy Strategy 2016–2020. Accelerating towards a leprosy-free world. Monitoring and evaluation guide. New Delhi: WHO Regional Office for South-East Asia; 2017 (https://apps.who.int/iris/handle/10665/254907, accessed 19 September 2022)
	Guidelines for the diagnosis, treatment and prevention of leprosy. New Delhi: WHO Regional Office for South-East Asia; 2018 (https://apps.who.int/iris/ handle/10665/274127, accessed 19 September 2022)
	Towards zero leprosy. Global leprosy (Hansen's disease) strategy 2021–2030. Geneva: World Health Organization; 2021 (https://apps.who.int/iris/ handle/10665/340774, accessed 19 September 2022)
Type of indicator	Road map 2030

## Lymphatic filariasis

## Number of countries implementing post-mass drug administration or post-validation surveillance

Alternative indicator name	
Indicator ID	NTDFIL0000159
M&E framework	Input
Domain	Health system
Subdomain	Health information systems
Public health target	Elimination as a public health problem
Definition	Countries reporting results from surveillance activities after reducing infection below target thresholds and stopping mass drug administration nationwide or after validation criteria have been met
Unit measurement	Member State
Rationale	Measure of progress with surveillance established to ensure infection remains below target thresholds
Numerator	Number of countries implementing post-mass drug administration or post-validation surveillance
Denominator	
Disaggregation	WHO region, post-mass drug administration and post-validation surveillance
Method of measurement	Post-validation surveillance protocols are being developed.
Method of estimation	
Frequency of reporting by national level to WHO	Annual
Preferred datasource	National surveillance systems, Population-based surveys
Other datasources	Validation dossier
Primary level of data collection	Household/community/school/health facility
Timing of primary data collection	Annual
Further information and related links	Monitoring and epidemiological assessment of mass drug administration in the global programme to eliminate lymphatic filariasis: a manual for national elimination programmes. Geneva: World Health Organization; 2011 (https://apps.who.int/iris/handle/10665/44580, accessed 19 September 2022)
Type of indicator	Road map 2030

## Lymphatic filariasis

## Number of countries validated for elimination as a public health problem

Alternative indicator name	Number of countries validated for elimination as a public health problem (defined as infection sustained below transmission assessment survey thresholds for at least 4 years after stopping mass drug administration; availability of minimum package of care in all areas of known patients)
Indicator ID	NTDFIL0000153
M&E framework	Impact
Domain	Health status
Subdomain	Improved health outcomes and equity
Public health target	Elimination as a public health problem
Definition	Infection sustained below transmission assessment survey thresholds for at least 4 consecutive years after stopping mass drug administration; availability of minimum package of care in all areas of known patients
Unit measurement	Member State
Rationale	WHA50.29 on elimination of lymphatic filariasis as a public health problem (1997)
Numerator	Number of countries validated for elimination as a public health problem
Denominator	
Disaggregation	By WHO region
Method of measurement	The Member State submits the completed dossier to WHO. An ad hoc regional Reviewing Authority collectively discusses each dossier received, via video conference, teleconference or at a face-to-face meeting. Country visits are not required unless requested by the Reviewing Authority. The Reviewing Authority decides by consensus and within one year of receipt of the dossier to either (i) validate the claim of elimination as a public health problem or (ii) postpone such decision until more evidence is provided in the dossier to demonstrate that this has occurred. Determined by WHO.
Method of estimation	
Frequency of reporting by national level to WHO	Ad hoc
Preferred datasource	World Health Organization
Other datasources	
Primary level of data collection	Member State
Timing of primary data collection	Ad hoc
Further information and related links	Monitoring and epidemiological assessment of mass drug administration in the global programme to eliminate lymphatic filariasis: a manual for national elimination programmes. Geneva: World Health Organization; 2011 (https://apps.who.int/iris/handle/10665/44580, accessed 19 September 2022)
Type of indicator	Road map 2030

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## Lymphatic filariasis

## Population requiring mass drug administration

Alternative indicator name	Population requiring preventive chemotherapy for lymphatic filariasis
Indicator ID	NTDFIL0000151
M&E framework	Outcome
Domain	Health status
Subdomain	Improved health outcomes and equity
Public health target	Elimination as a public health problem
Definition	Total population living in all districts identified as requiring preventive chemotherapy for lymphatic filariasis
Unit measurement	People
Rationale	
Numerator	Total population living in all districts identified as requiring preventive chemotherapy for lymphatic filariasis
Denominator	
Disaggregation	Age group; gender
Method of measurement	Projections based on prevalence thresholds and population census data.
Method of estimation	Census:projection, estimates
Frequency of reporting by national level to WHO	
Preferred datasource	Civil registration and vital statistics, Health management information system, Population-based surveys
Other datasources	
Primary level of data collection	
Timing of primary data collection	
Further information and related links	Monitoring and epidemiological assessment of mass drug administration in the global programme to eliminate lymphatic filariasis: a manual for national elimination programmes. Geneva: World Health Organization; 2011 (https://apps.who.int/iris/handle/10665/44580, accessed 19 September 2022)
Type of indicator	Road map 2030

#### Mycetoma, chromoblastomycosis and other deep mycoses

#### Chromoblastomycosis and other deep mycoses

# Number of countries in which chromoblastomycosis, sporotrichosis and/or paracoccidioidomycosis are included in national control programmes and surveillance systems

Indicator ID	NTDMYC0000172
M&E framework	Input
Domain	Health system
Subdomain	Control
Public health target	Control
Definition	Number of countries in which chromoblastomycosis, sporotrichosis and/or paracoccidioidomycosis are included in national control programmes, surveillance systems and implementing active case-finding with early diagnosis and treatment by:
	<ul> <li>including mycetoma in national surveillance systems and establishing a registry in affected countries;</li> </ul>
	<ul> <li>integrating mycetoma detection within integrated approaches to controlling and managing skin-related neglected tropical diseases to enhance early case detection;</li> </ul>
	<ul> <li>improving access to diagnostics and medicines and refining protocols for case-management;</li> </ul>
	$\cdot$ strengthening preventive measures (e.g. wearing shoes) to reduce incidence; and
	<ul> <li>reinforcing awareness among affected communities and building capacities of health staff.</li> </ul>
Jnit measurement	Country
Rationale	Mycetoma, chromoblastomycosis and other deep mycoses were included in the group of neglected tropical diseases in resolution WHA69.21 on addressing the burden of mycetoma (2016). The burden of these diseases is currently not known as it is absent from national neglected tropical disease programmes and surveillance systems in most countries. Countries in which these diseases are known to be endemic should include them in their surveillance systems in order to better assess their epidemiology and design national control programmes to offer adequate services to affected persons.
Numerator	Number of countries where chromoblastomycosis, sporotrichosis and/or paracoccidioidomycosis are included in national control programmes and surveillance systems
Denominator	Not applicable
Disaggregation	
Method of measurement	Every 2 years, WHO conducts a global survey on mycetoma, chromoblastomycosis and other deep mycoses to monitor health systems indicators and number of cases reported.
Nethod of estimation	
Frequency of reporting by national evel to WHO	
Preferred datasource	Health ministry
Other datasources	
Primary level of data collection	
Timing of primary data collection	

## Mycetoma, chromoblastomycosis and other deep mycoses Chromoblastomycosis and other deep mycoses (continued)

Further information and related links	Ending the neglect to attain the sustainable development goals: a strategic framework for integrated control and management of skin-related neglected tropical diseases. Geneva: World Health Organization; 2022 (https://apps.who.int/iris/handle/10665/355448, accessed 19 September 2022)
	Hay R, Denning DW, Bonifaz A, Queiroz-Telles, Beer K, Bustamante B, et al. The diagnosis of fungal neglected tropical diseases (fungal NTDs) and the role of investigation and laboratory tests: an expert consensus report. Trop Med Infect Dis. 2019;4(4):122. doi:10.3390/tropicalmed4040122
	Mycetoma, chromoblastomycosis and other deep mycoses. In: WHO/Health topics [website]. Geneva: World Health Organization; 2022 (https://www.who.int/health-topics/mycetoma-chromoblastomycosis-and-other-deep-mycoses#tab=tab_1, accessed 19 September 2022)
Type of indicator	Road map 2030

## Mycetoma, chromoblastomycosis and other deep mycoses Mycetoma

# Number of countries in which mycetoma is included in national control programmes and surveillance systems

Alternative indicator name	
Indicator ID	NTDMYC0000160
M&E framework	Input
Domain	Health system
Subdomain	Control
Public health target	Control
Definition	
Unit measurement	Country
Rationale	Mycetoma, chromoblastomycosis and other deep mycoses were included in the group of neglected tropical diseases in resolution WHA69.21 on addressing the burden of mycetoma (2016). The burden of these diseases is currently not known as it is absent from national NTD programmes and surveillance systems in most countries. Countries in which these diseases are known to be endemic should include them in their surveillance systems in order to better assess their epidemiology and design national control programmes to offer adequate services to affected people.
Numerator	Number of countries where mycetoma is included in national control programmes and surveillance systems
Denominator	Not applicable
Disaggregation	
Method of measurement	Global reporting: every year. WHO conducts a global survey for mycetoma, chromoblastomycosis and other deep mycoses in order to monitor health systems indicators and number of cases reported.
Method of estimation	
Frequency of reporting by national level to WHO	
Preferred datasource	Health ministry
Other datasources	
Primary level of data collection	Country
Timing of primary data collection	Ad hoc
Further information and related links	Ending the neglect to attain the sustainable development goals: a strategic framework for integrated control and management of skin-related neglected tropical diseases. Geneva: World Health Organization; 2022 (https://apps.who.int/iris/handle/10665/355448, accessed 19 September 2022)
	Hay R, Denning DW, Bonifaz A, Queiroz-Telles, Beer K, Bustamante B, et al. The diagnosis of fungal neglected tropical diseases (fungal NTDs) and the role of investigation and laboratory tests: an expert consensus report. Trop Med Infect Dis. 2019;4(4):122. doi:10.3390/tropicalmed4040122
	Mycetoma, chromoblastomycosis and other deep mycoses. In: WHO/Health topics [website]. Geneva: World Health Organization; 2022 (https://www.who.int/health-topics/mycetoma-chromoblastomycosis-and-other-deep-mycoses#tab=tab_1, accessed 19 September 2022)
Type of indicator	Road map 2030

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#### Onchocerciasis

# Number of countries that have stopped mass drug administration for 100% of the population requiring preventive chemotherapy for onchocerciasis

Alternative indicator name	
Indicator ID	NTDONC0000270
M&E framework	Outcome
Domain	Service coverage
Subdomain	Coverage of intervention
Public health target	Elimination
Definition	Number of countries that have stopped mass drug administration for 100% of the population requiring preventive chemotherapy for onchocerciasis
Unit measurement	Member State
Rationale	Only for elimination of river blindness; the Pan American Health Organization adopted CD48.R12 towards the elimination of onchocerciasis (river blindness) in the Americas in 2008
Numerator	Number of countries that have stopped mass drug administration for 100% of the population requiring preventive chemotherapy for onchocerciasis
Denominator	
Disaggregation	By WHO region
Method of measurement	Country reports using the WHO Joint Application Package
Method of estimation	
Frequency of reporting by national level to WHO	Annual
Preferred datasource	Health ministry
Other datasources	
Primary level of data collection	Community
Timing of primary data collection	Determined by the health ministry depending on the number of years of mass drug administration and its coverage
Further information and related links	Conceptual and operational framework of onchocerciasis elimination with ivermectin treatment. Ouagadougou: African Programme for Onchocerciasis Control; 2010 (https://apps.who.int/iris/handle/10665/275466, accessed 19 September 2022)
	Ending the neglect to attain the sustainable development goals: a strategic framework for integrated control and management of skin-related neglected tropical diseases. Geneva: World Health Organization; 2022 (https://apps.who.int/iris/handle/10665/355448, accessed 19 September 2022)
	Guidelines for stopping mass drug administration and verifying elimination of human onchocerciasis: criteria and procedures. Geneva: World Health Organization; 2016 (https://apps.who.int/iris/handle/10665/204180, accessed 19 September 2022)
Type of indicator	Road map 2030

#### Onchocerciasis

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# Number of countries that have stopped mass drug administration for 50% of the population requiring preventive chemotherapy for onchocerciasis

Alternative indicator name	
Indicator ID	NTDONC0000268
M&E framework	Outcome
Domain	Service coverage
Subdomain	Improved health outcomes and equity
Public health target	Elimination
Definition	Number of countries that have stopped mass drug administration for onchocerciasis for 50% of the population requiring preventive chemotherapy for onchocerciasis
Unit measurement	Member State
Rationale	Only for elimination of river blindness; the Pan American Health Organization adopted CD48.R12 towards the elimination of onchocerciasis (river blindness) in the Americas in 2008
Numerator	Number of countries that have stopped mass drug administration for 50% of the population requiring preventive chemotherapy for onchocerciasis
Denominator	
Disaggregation	By WHO region
Method of measurement	Country reports using the WHO Joint Application Package
Method of estimation	
Frequency of reporting by national level to WHO	Annual
Preferred datasource	Health ministry
Other datasources	
Primary level of data collection	Community
Timing of primary data collection	Determined by the health ministry depending on the number of years of mass drug administration and its coverage
Further information and related links	Conceptual and operational framework of onchocerciasis elimination with ivermectin treatment. Ouagadougou: African Programme for Onchocerciasis Control; 2010 (https://apps.who.int/iris/handle/10665/275466, accessed 19 September 2022)
	Ending the neglect to attain the sustainable development goals: a strategic framework for integrated control and management of skin-related neglected tropical diseases. Geneva: World Health Organization; 2022 (https://apps.who.int/iris/handle/10665/355448, accessed 19 September 2022)
	Guidelines for stopping mass drug administration and verifying elimination of human onchocerciasis: criteria and procedures. Geneva: World Health Organization; 2016 (https://apps.who.int/iris/handle/10665/204180, accessed 19 September 2022)
Type of indicator	Road map 2030
## Onchocerciasis

## Number of countries that have stopped mass drug administration in at least one focus

Indicator ID	NTDONC0000266
M&E framework	Outcome
Domain	Health status
Subdomain	Improved health outcomes and equity
Public health target	Elimination
Definition	Number of countries that have stopped mass drug administration for onchocerciasis in at least one focus
Unit measurement	Member State
Rationale	Only for elimination of river blindness; the Pan American Health Organization adopted CD48.R12 towards the elimination of onchocerciasis (river blindness) in the Americas in 2008
Numerator	Number of countries that have stopped mass drug administration in at least one focus
Denominator	
Disaggregation	By WHO region
Method of measurement	Country reports using the WHO Joint Application Package
Method of estimation	
Frequency of reporting by national level to WHO	
Preferred datasource	Health ministry
Other datasources	
Primary level of data collection	Community
Timing of primary data collection	Determined by the health ministry depending on the number of years of mass drug administration and its coverage
Further information and related links	Conceptual and operational framework of onchocerciasis elimination with ivermectin treatment. Ouagadougou: African Programme for Onchocerciasis Control; 2010 (https://apps.who.int/iris/handle/10665/275466, accessed 19 September 2022)
	Ending the neglect to attain the sustainable development goals: a strategic framework for integrated control and management of skin-related neglected tropical diseases. Geneva: World Health Organization; 2022 (https://apps.who.int/iris/handle/10665/355448, accessed 19 September 2022)
	Guidelines for stopping mass drug administration and verifying elimination of human onchocerciasis: criteria and procedures. Geneva: World Health Organization; 2016 (https://apps.who.int/iris/handle/10665/204180, accessed 19 September 2022)
Type of indicator	Road map 2030

## Onchocerciasis

## Number of countries verified for interruption of transmission

Alternative indicator name	
Indicator ID	NTDONC0000265
M&E framework	Impact
Domain	Health status
Subdomain	Improved health outcomes and equity
Public health target	Elimination
Definition	Number of countries verified by WHO as having interrupted transmission of onchocerciasis nationwide
Unit measurement	Member State
Rationale	Only for elimination of river blindness; the Pan American Health Organization adopted CD48.R12 towards the elimination of onchocerciasis (river blindness) in the Americas in 2008
Numerator	Number of countries verified for interruption of transmission
Denominator	
Disaggregation	By WHO region
Method of measurement	Step 1: The health ministry establishes an oversight committee independent from the national programme to address matters concerning onchocerciasis elimination.
	Step 2: The committee advises the country to stop mass drug administration according to the recommendations contained in the guidelines. It considers the status of treatment for lymphatic filariasis and/or any recrudescence issues in each focus, including cross-border risk with neighbouring countries, to determine the length of post-treatment surveillance that can extend the 3–5 year period. Only the entomological PCR-0150 DNA test should be used to make such a decision. However, the Ov-16 serology test could be used if insufficient black flies are collected.
	Step 3: The committee advises the national programme to prepare the country report once all the foci have completed the post-treatment surveillance period. Step 4: The country submits its report to WHO through the appropriate WHO regional office. After receipt of the report, WHO constitutes an international verification team to conduct the verification of elimination according to the format included in Annex 6 of the <i>Guidelines</i> <i>for stopping mass drug administration and verifying elimination of human onchocerciasis:</i> <i>criteria and procedures for elimination of onchocerciasis</i> .
Method of estimation	
Frequency of reporting by national level to WHO	
Preferred datasource	World Health Organization
Other datasources	
Primary level of data collection	Community
Timing of primary data collection	Determined by the health ministry depending on the number of years of mass drug administration and its coverage
Further information and related links	Conceptual and operational framework of onchocerciasis elimination with ivermectin treatment. Ouagadougou: African Programme for Onchocerciasis Control; 2010 (https://apps.who.int/iris/handle/10665/275466, accessed 19 September 2022)
	Ending the neglect to attain the sustainable development goals: a strategic framework for integrated control and management of skin-related neglected tropical diseases. Geneva: World Health Organization; 2022 (https://apps.who.int/iris/handle/10665/355448, accessed 19 September 2022)
	Guidelines for stopping mass drug administration and verifying elimination of human onchocerciasis: criteria and procedures. Geneva: World Health Organization; 2016 (https://apps.who.int/iris/handle/10665/204180, accessed 19 September 2022)
Type of indicator	Road map 2030

## Rabies

## Number of countries having achieved zero human deaths from rabies

Alternative indicator name	
Indicator ID	NTDRAB0000178
M&E framework	Impact
Domain	Health status
Subdomain	Improved health outcomes and equity
Public health target	Elimination as a public health problem
Definition	Number of countries reporting zero deaths due to dog-transmitted rabies by the end of 2030 (2019: 104 countries with dog-mediated rabies, 89 with human rabies cases due to transmission by dogs). "Zero human deaths" is defined as interruption of transmission of rabies from dogs to humans and no human deaths.
Unit measurement	Deaths
Rationale	WHA66.12 on neglected tropical diseases (2013)
	Global Strategic Plan to end deaths from dog-mediated rabies by 2030 (2018)
Numerator	
Denominator	
Disaggregation	By WHO region
Method of measurement	National reporting and future implementation of procedures for validation of elimination as a public health problem as outlined in the WHO Expert Consultation on rabies (2018)
Method of estimation	
Frequency of reporting by national level to WHO	Annual
Preferred datasource	Health ministry, National surveillance systems, Civil registration and vital statistics
Other datasources	Regional road maps, WHO collaborating centres
Primary level of data collection	Community
Timing of primary data collection	Daily
Further information and related links	Global elimination of dog-mediated human rabies: report of the rabies global conference, 10–11 December 2015. World Health Organization, Food and Agriculture Organization of the United Nations and World Organisation for Animal Health; 2016 (https://apps.who.int/iris/handle/10665/204621, accessed 19 September 2022)
	Strategic framework for elimination of human rabies transmitted by dogs in the South-East Asia Region. New Delhi: WHO Regional Office for South-East Asia; 2012 (https://apps.who.int/iris/handle/10665/205920, accessed 19 September 2022)
	WHO expert consultation on rabies: third report. Geneva: World Health Organization; 2018 (WHO Technical Report Series, No. 1012 (https://apps.who.int/iris/ handle/10665/272364, accessed 19 September 2022)
Type of indicator	Road map 2030

## Rabies

## Number of countries having reached 70% vaccination coverage of dogs in high-risk areas

Alternative indicator name	
Indicator ID	NTDRAB0000187
M&E framework	Outcome
Domain	Risk factor
Subdomain	Risk factor and behaviour
Public health target	Elimination as a public health problem
Definition	Number of countries controlling rabies at source by implementing mass dog vaccination programmes and targeting high-risk areas of dog rabies transmission to break the cycle (currently 104 countries have rabies cases in dogs). High-risk areas for transmission are defined as described in Wallace et al (2017).
Unit measurement	Country
Rationale	Intermediate step towards WHA66.12 on neglected tropical diseases (2013) and the goal of the Global strategic plan to end deaths from dog-mediated rabies by 2030 (2018)
Numerator	Number of countries having reached 70% vaccination coverage in high-risk areas
Denominator	Dog population in high-risk areas
Disaggregation	By WHO region
Method of measurement	Country reports on number of dogs vaccinated and dog population in high-risk areas.
Method of estimation	
Frequency of reporting by national level to WHO	
Preferred datasource	Information systems used by other sectors (animal health/One Health)
Other datasources	International animal health databases, Regional road maps
Primary level of data collection	Community
Timing of primary data collection	
Further information and related links	Global elimination of dog-mediated human rabies: report of the rabies global conference, 10–11 December 2015. World Health Organization, Food and Agriculture Organization of the United Nations and World Organisation for Animal Health; 2016 (https://apps.who.int/iris/handle/10665/204621, accessed 19 September 2022)
	Strategic framework for elimination of human rabies transmitted by dogs in the South-East Asia Region. New Delhi: WHO Regional Office for South-East Asia; 2012 (https://apps.who.int/iris/handle/10665/205920, accessed 19 September 2022)
	Wallace RM, Mehal J, Nakazawa Y, Recuenco S, Bakamutumaho B, Osinubi M, et al. The impact of poverty on dog ownership and access to canine rabies vaccination: results from a knowledge, attitudes and practices survey, Uganda 2013. Infect Dis Pov. 2017;6:97 (https://doi.org/10.1186/s40249-017-0306-2, accessed 19 September 2022)
	WHO expert consultation on rabies: third report. Geneva: World Health Organization; 2018 (WHO Technical Report Series, No. 1012 (https://apps.who.int/iris/ handle/10665/272364, accessed 19 September 2022)
	Zero by 30: the global strategic plan to end human deaths from dog-mediated rabies by 2030. World Health Organization, Food and Agriculture Organization of the United Nations & World Organisation for Animal Health; 2018 (https://apps.who.int/iris/handle/10665/272756, accessed 19 September 2022)
Type of indicator	Road map 2030

## Rabies

## Number of countries having reduced mortality due to dog-transmitted human rabies by 50%

Alternative indicator name	
Indicator ID	NTDRAB0000186
M&E framework	Impact
Domain	Health status
Subdomain	Mortality
Public health target	Elimination as a public health problem
Definition	Number of countries having reduced the number of human cases due to dog-transmitted rabies by 50% since the first road map for neglected tropical disease (2012). (Limited baseline data available)
Unit measurement	Cases
Rationale	Intermediate step towards WHA66.12 on neglected tropical diseases (2013) and the Global strategic plan to end deaths from dog-mediated rabies by 2030 (2018)
Numerator	Number of countries having reduced mortality due to dog-transmitted human rabies by $50\%$
Denominator	
Disaggregation	By WHO region
Method of measurement	Calculate reduction in reported number of human deaths due to dog-transmitted human rabies for the year comparing with baseline reported number of human deaths due to dog-transmitted rabies in 2012. Determine countries that reach 50% reduction in mortality rate.
Method of estimation	
Frequency of reporting by national level to WHO	Annual
Preferred datasource	National surveillance systems, Civil registration and vital statistics
Other datasources	Regional road maps, WHO collaborating centres
Primary level of data collection	Household/community/school/health facility
Timing of primary data collection	
Further information and related links	Global elimination of dog-mediated human rabies: report of the rabies global conference, 10–11 December 2015. World Health Organization, Food and Agriculture Organization of the United Nations and World Organisation for Animal Health; 2016 (https://apps.who.int/iris/handle/10665/204621, accessed 19 September 2022)
	Strategic framework for elimination of human rabies transmitted by dogs in the South-East Asia Region. New Delhi: WHO Regional Office for South-East Asia; 2012 (https://apps.who.int/iris/handle/10665/205920, accessed 19 September 2022)
	Wallace RM, Mehal J, Nakazawa Y, Recuenco S, Bakamutumaho B, Osinubi M, et al. The impact of poverty on dog ownership and access to canine rabies vaccination: results from a knowledge, attitudes and practices survey, Uganda 2013. Infect Dis Pov. 2017;6:97 (https://doi.org/10.1186/s40249-017-0306-2, accessed 19 September 2022)
	WHO expert consultation on rabies: third report. Geneva: World Health Organization; 2018 (WHO Technical Report Series, No. 1012 (https://apps.who.int/iris/ handle/10665/272364, accessed 19 September 2022)
	Zero by 30: the global strategic plan to end human deaths from dog-mediated rabies by 2030. World Health Organization, Food and Agriculture Organization of the United Nations & World Organisation for Animal Health; 2018 (https://apps.who.int/iris/ handle/10665/272756, accessed 19 September 2022)
Type of indicator	Road map 2030

## Scabies and other ectoparasitoses Scabies

# Number of countries having incorporated scabies management in the universal health coverage package of care

Alternative indicator name	
Indicator ID	NTDSCA0000253
M&E framework	Output
Domain	Health system
Subdomain	Intervention access and service readiness
Public health target	Control
Definition	Scabies management incorporated and maintained in the universal health coverage package of care with: oral antimicrobials for scabies, topical scabicide and decontamination of clothing during treatment.
Unit measurement	
Rationale	
Numerator	Number of countries having incorporated scabies management into the universal health coverage package of care
Denominator	
Disaggregation	
Method of measurement	Assess the number of countries in which scabies management (oral antimicrobials for scabies, topical scabicide and decontamination of clothing during treatment) is included in the universal health coverage package of care. Data will be collected through an annual survey of neglected tropical diseases.
Method of estimation	
Frequency of reporting by national level to WHO	Annual
Preferred datasource	Health ministry
Other datasources	
Primary level of data collection	Country
Timing of primary data collection	Annual
Further information and related links	Ectoparasitic diseases in the Region of the Americas: developing a roadmap to determine the regional epidemiological situation and identify actions to reduce the impact. Washington (DC): Pan American Health Organization; 2020 (https://iris.paho.org/bitstream/handle/10665.2/52428/PAHOCDEVT200032_eng.pdf, accessed 19 September 2022).
	Ending the neglect to attain the sustainable development goals: a strategic framework for integrated control and management of skin-related neglected tropical diseases. Geneva: World Health Organization; 2022 (https://apps.who.int/iris/handle/10665/355448, accessed 19 September 2022)
	Scabies. In: WHO/Fact sheets. Geneva: World Health Organization; 2022 (httpss://www.who.int/news-room/fact-sheets/detail/scabies, accessed 19 September 2022)
Type of indicator	Road map 2030

## Scabies and other ectoparasitoses Scabies

#### Number of countries using mass drug administration intervention in all endemic districts

Alternative indicator name	
Indicator ID	NTDSCA0000148
M&E framework	Output
Domain	Service coverage
Subdomain	Coverage of Intervention
Public health target	Control
Definition	Number of countries conducting mass drug administration intervention for scabies in endemic districts requiring mass drug administration.
Unit measurement	
Rationale	No
Numerator	Number of countries using mass drug administration intervention in all endemic districts
Denominator	
Disaggregation	
Method of measurement	
Method of estimation	
Frequency of reporting by national level to WHO	
Preferred datasource	Health ministry, Disease-specific programme
Other datasources	
Primary level of data collection	Community
Timing of primary data collection	
Further information and related links	Ectoparasitic diseases in the Region of the Americas: developing a roadmap to determine the regional epidemiological situation and identify actions to reduce the impact. Washington (DC): Pan American Health Organization; 2020 (https://iris.paho.org/bitstream/handle/10665.2/52428/PAHOCDEVT200032_eng.pdf, accessed 19 September 2022).
	Ending the neglect to attain the sustainable development goals: a strategic framework for integrated control and management of skin-related neglected tropical diseases. Geneva: World Health Organization; 2022 (https://apps.who.int/iris/handle/10665/355448, accessed 19 September 2022)
	Scabies. In: WHO/Fact sheets. Geneva: World Health Organization; 2022 (httpss://www.who.int/news-room/fact-sheets/detail/scabies, accessed 19 September 2022)
Type of indicator	High-level indicator
	Road map 2030

## Schistosomiasis

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## Number of countries validated for elimination of schistosomiasis as a public health problem

Alternative indicator name	
Indicator ID	NTDSCH0000188
M&E framework	Impact
Domain	Health status
Subdomain	Improved health outcomes and equity
Public health target	Elimination as a public health problem
Definition	Number of countries validated by the ad hoc review committee as having achieved prevalence of < 1% heavy intensity infections measured by Kato-Katz or urine filtration.
Unit measurement	Member State
Rationale	This indicator is used as a first step towards the assessment of interruption of transmission
Numerator	Number of countries validated for elimination of schistosomiasis as a public health problem
Denominator	
Disaggregation	By WHO region
Method of measurement	To be defined
Method of estimation	
Frequency of reporting by national level to WHO	
Preferred datasource	World Health Organization
Other datasources	
Primary level of data collection	Health ministry
Timing of primary data collection	
Further information and related links	Schistosomiasis (Bilharzia). In: WHO/Fact sheets. Geneva: World Health Organization; 2022 (https://www.who.int/health-topics/schistosomiasis#tab=tab_1, accessed 19 September 2022)
	WHO guideline on control and elimination of human schistosomiasis. Geneva: World Health Organization; 2022 (https://apps.who.int/iris/handle/10665/351856, accessed 19 September 2022). https://www.who.int/news-room/fact-sheets/detail/schistosomiasis
Type of indicator	Road map 2030

## Schistosomiasis

#### Number of countries where absence of infection in humans has been validated

Alternative indicator name	
Indicator ID	NTDSCH0000190
M&E framework	Impact
Domain	Health status
Subdomain	Elimination
Public health target	Not applicable
Definition	Number of countries where absence of infection in humans has been validated
Unit measurement	Member State
Rationale	This indicator is used as first step on the assessment of interruption of the transmission
Numerator	Number of countries where absence of infection in humans has been validated
Denominator	
Disaggregation	By WHO region
Method of measurement	Survey in humans. Details will be provided in the new schistosomiasis guideline. Determined by WHO
Method of estimation	
Frequency of reporting by national level to WHO	
Preferred datasource	World Health Organization
Other datasources	
Primary level of data collection	Health ministry
Timing of primary data collection	Ad hoc
Further information and related links	https://www.who.int/news-room/fact-sheets/detail/schistosomiasis
Type of indicator	Road map 2030

# Snakebite envenoming

## Minimum number of WHO-recommended poly-specific antivenom products in each region

Alternative indicator name	WHO recommended products
Indicator ID	NTDSNK0000205
M&E framework	Input
Domain	Health system
Subdomain	Leadership/governance/Programme management
Public health target	Control
Definition	Number of products that WHO has endorsed as suitable for procurement
Unit measurement	Integer
Rationale	
Numerator	
Denominator	
Disaggregation	By WHO region
Method of measurement	Analysis of reports and confirmed by surveys/audits
Method of estimation	WHO programme reports
Frequency of reporting by national level to WHO	
Preferred datasource	World Health Organization
Other datasources	
Primary level of data collection	Country
Timing of primary data collection	Annual
Further information and related links	Snakebite envenoming: a strategy for prevention and control. Geneva: World Health Organization; 2019 (https://apps.who.int/iris/handle/10665/324838, accessed 19 September 2022)
Type of indicator	Road map 2030

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# Snakebite envenoming

## Number of countries achieved reduction of mortality and morbidity by 50%

Alternative indicator name	50% reduction achievement
Indicator ID	NTDSNK0000192
M&E framework	Impact
Domain	Health status
Subdomain	Improved health outcomes and equity
Public health target	Control
Definition	Number of countries having achieved reduction of mortality and morbidity by 50%
Unit measurement	Integer
Rationale	
Numerator	Estimated burden at future time (e.g. 2030)
Denominator	Estimated burden in 2019
Disaggregation	By age group, gender, occupation, demographic factor (rural, periurban, urban)
Method of measurement	Analysis of reports and confirmed by surveys/audits
Method of estimation	Data reported by national programmes
Frequency of reporting by national level to WHO	
Preferred datasource	Country reports
Other datasources	Surveys or audits
Primary level of data collection	National or subnational reports
Timing of primary data collection	Annual
Further information and related links	Snakebite envenoming: a strategy for prevention and control. Geneva: World Health Organization; 2019 (https://apps.who.int/iris/handle/10665/324838, accessed 19 September 2022)
Type of indicator	Road map 2030

## Snakebite envenoming

## Number of effective treatments for snakebite envenoming available worldwide

Alternative indicator name	Treatment availability
Indicator ID	NTDSNK0000194
M&E framework	Output
Domain	Health system
Subdomain	Service utilization and access
Public health target	Not applicable
Definition	Number of effective treatments available to treat cases
Unit measurement	Treatment
Rationale	
Numerator	Number of treatments at future time (e.g. 2030)
Denominator	Estimated number of available treatments in 2019
Disaggregation	Country, By WHO region
Method of measurement	Analysis of reports and confirmed by surveys/audits
Method of estimation	Market sector surveys and data reported by national authorities
Frequency of reporting by national level to WHO	
Preferred datasource	Health ministry
Other datasources	Surveys or audits
Primary level of data collection	Country
Timing of primary data collection	Annual
Further information and related links	Snakebite envenoming: a strategy for prevention and control. Geneva: World Health Organization; 2019 (https://apps.who.int/iris/handle/10665/324838, accessed 19 September 2022)
Type of indicator	Road map 2030

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# Snakebite envenoming

## Percentage of new antivenom producers joining market by 2030

Alternative indicator name	Growth in manufacturing
Indicator ID	NTDSNK0000193
M&E framework	Process
Domain	Health system
Subdomain	Health systems: access to essential medicines
Public health target	Not applicable
Definition	Number of new manufacturers entering the market as a proportion of current number
Unit measurement	Integer
Rationale	
Numerator	Number of manufacturers at future time (e.g. 2030)
Denominator	Number of manufacturers in 2019
Disaggregation	National
Method of measurement	Analysis of reports and confirmed by surveys/audits
Method of estimation	Market sector surveys and data reported by national authorities
Frequency of reporting by national level to WHO	
Preferred datasource	National regulatory authorities
Other datasources	Surveys or audits
Primary level of data collection	National
Timing of primary data collection	Annual
Further information and related links	Snakebite envenoming: a strategy for prevention and control. Geneva: World Health Organization; 2019 (https://apps.who.int/iris/handle/10665/324838, accessed 19 September 2022)
Type of indicator	Road map 2030

#### Soil-transmitted helminthiases

# Number of countries including ivermectin in preventive chemotherapy in all areas endemic for *Strongyloides stercoralis*

Alternative indicator name	
Indicator ID	NTDSTH0000208
M&E framework	Output
Domain	Service coverage
Subdomain	Service utilization and access
Public health target	Not applicable
Definition	Number of countries with soil-transmitted helminth infections ( <i>Ascaris lumbricoides</i> , <i>Trichuris trichiura</i> , hookworm) that also control <i>S. stercoralis</i> in school-aged children. This indicator provides a measure of efforts to control <i>S. stercoralis</i> .
Unit measurement	Member State
Rationale	
Numerator	Number of countries including ivermectin in preventive chemotherapy in all areas endemic for <i>S. stercoralis</i>
Denominator	
Disaggregation	WHO region
Method of measurement	The number of children requiring preventive chemotherapy for strongyloidiasis is estimated and updated periodically. Managers of neglected tropical disease control programmes from health ministries in endemic countries are requested to report the number of people receiving preventive chemotherapy for strongyloidiasis to WHO using the Joint Reporting Form. Where subnational data on treatment coverage are available, the analysis is conducted at subnational level.
Method of estimation	Mathematical/economic models predicting the progressive start of strongyloidiasis control in endemic countries
Frequency of reporting by national level to WHO	
Preferred datasource	
Other datasources	
Primary level of data collection	Country
Timing of primary data collection	Annual
Further information and related links	Soil-transmitted helminth infections. In: WHO/Fact sheets. Geneva: World Health Organization; 2022 (https://www.who.int/news-room/fact-sheets/detail/soil-transmitted- helminth-infections, accessed 19 September 2022)
Type of indicator	Road map 2030

## Soil-transmitted helminthiases

## Number of countries validated for elimination as a public health problem

Alternative indicator name	Number of countries validated for elimination of soil-transmitted helminthiases as a public health problem (defined as < 2% proportion of soil-transmitted helminth infections of moderate and heavy intensity)
Indicator ID	NTDSTH0000206
M&E framework	Impact
Domain	Health status
Subdomain	Improved health outcomes and equity
Public health target	Not Applicable
Definition	Number of countries with soil-transmitted helminth ( <i>Ascaris lumbricoides, Trichuris trichiura</i> , hookworm) infections of moderate and heavy intensity of < 2%. Defined as < 2% proportion of soil-transmitted helminth infections of moderate and heavy intensity due to <i>Ascaris lumbricoides, Trichuris trichiura, Necator americanus</i> and <i>Ancylostoma duodenale</i> .
Unit measurement	Member State
Rationale	
Numerator	Number of countries validated for elimination as a public health problem
Denominator	
Disaggregation	WHO region
Method of measurement	Managers of neglected tropical disease control programmes from health ministries in endemic countries are requested to conduct impact assessment surveys at least every 5 years from the start of control activities and to report the results to WHO using specific (epidemiological) reporting forms. These surveys measure the prevalence of infection and the prevalence of infection of moderate/heavy intensity. The prevalence of infection of moderate/heavy intensity is the indicator selected by WHO to measure the morbidity caused by soil-transmitted helminthiases, if < 2% morbidity is considered eliminated in the age group investigated.
Method of estimation	Mathematical models predicting the decrease in prevalence of soil-transmitted helminthiases and intensity of infection under preventive chemotherapy
Frequency of reporting by national level to WHO	
Preferred datasource	World Health Organization
Other datasources	
Primary level of data collection	District
Timing of primary data collection	Baseline and after 5 years of preventive chemotherapy
Further information and related links	Soil-transmitted helminth infections. In: WHO/Fact sheets. Geneva: World Health Organization; 2022 (https://www.who.int/news-room/fact-sheets/detail/soil-transmitted- helminth-infections, accessed 19 September 2022)
Type of indicator	High-level indicator
	Road map 2030

# Taeniasis and cysticercosis

## Number of countries with intensified control for Taenia solium in hyperendemic areas

Alternative indicator name	Number of countries conducting intensified control for <i>T. solium</i> in hyperendemic areas
Indicator ID	NTDTAE0000210
M&E framework	Outcome
Domain	Risk factor
Subdomain	Coverage of intervention
Public health target	Control
Definition	Countries with hyperendemic areas implementing intensified control. Intensified control means the implementation of at least one core "rapid impact" intervention, i.e. treatment of human taeniasis or intervention in pigs (vaccination plus antheliminthic treatment).
Unit measurement	Country
Rationale	Populations affected by foodborne trematode infections and taeniasis/cysticercosis frequently have no access to adequate assistance. This neglect is related to the scarce information on their geographical distribution and the lack of resources for their control. WHO has defined a new set of indicators at country and global level for <i>T. solium</i> and is developing reporting systems to guide and assist the countries on data collection and reporting. At global level, the indicators are 1- Number of endemic countries for <i>T. solium</i> , and 2- Number of countries with intensified control in hyper endemic areas for <i>T. solium</i> . Intensified control means implementation of core "rapid impact" interventions (treatment of human taeniasis and/or vaccination and mass treatment of pigs) as described on the Report of the WHO Expert Consultation on Foodborne Trematode Infections and Taeniasis/Cysticercosis
Numerator	Number of countries with intensified control in hyperendemic areas for T. solium
Denominator	
Disaggregation	By WHO region
Method of measurement	Data reported by national programmes
Method of estimation	
Frequency of reporting by national level to WHO	
Preferred datasource	Health ministry, One health
Other datasources	
Primary level of data collection	Varies
Timing of primary data collection	Annual
Further information and related links	Expert consultation to accelerate control of foodborne trematode infections, taeniasis and cysticercosis, Seoul, Republic of Korea, 17–19 May 2017: meeting report. Manila: WHO Regional Office for the Western Pacific; 2017 (https://apps.who.int/iris/handle/10665/260007, accessed 19 September 2022)
	Guideline for preventive chemotherapy for the control of <i>Taenia solium</i> taeniasis. Washington, D.C.: Pan American Health Organization; 2021 (https://iris.paho.org/ handle/10665.2/54800, accessed 19 September 2022)
Type of indicator	High-level indicator Road map 2030

# Trachoma

## Number of countries validated for elimination as a public health problem

Alternative indicator name	Number of endemic countries validated as having eliminated trachoma as a public health problem
Indicator ID	NTDTRA0000230
M&E framework	Impact
Domain	Health status
Subdomain	Elimination as a public health problem
Public health target	Not applicable
Definition	All endemic countries validated as having eliminated trachoma as a public health problem (defined as (i) a prevalence of trachomatous trichiasis "unknown to the health system" of < 0.2% in $\ge$ 15-year-olds in each formerly endemic district; (ii) a prevalence of trachomatous inflammation—follicular in children aged 1–9 years of < 5% in each formerly endemic district; and (iii) written evidence that the health system is able to identify and manage incident cases of trachomatous trichiasis, using defined strategies, with evidence of appropriate financial resources to implement those strategies).
Unit measurement	Member State
Rationale	
Numerator	Number of endemic countries validated as having eliminated trachoma as a public health problem
Denominator	
Disaggregation	
Method of measurement	To be defined
Method of estimation	
Frequency of reporting by national level to WHO	
Preferred datasource	World Health Organization
Other datasources	
Primary level of data collection	Health ministry
Timing of primary data collection	Ad hoc
Further information and related links	Trachoma. In: WHO/Fact sheets [website]. Geneva: World Health Organization; 2022 (https://www.who.int/news-room/fact-sheets/detail/trachoma, accessed 19 September 2022)
Type of indicator	Road map 2030

#### Trachoma

# Number of people at risk requiring A, F and E of SAFE [surgery, antibiotics, facial cleanliness, environmental improvement] for trachoma elimination purposes

Alternative indicator name	Population in areas that warrant treatment with antibiotics, facial cleanliness and environmental improvement for elimination of trachoma as a public health problem
Indicator ID	NTDTRA0000223
M&E framework	Outcome
Domain	Health status
Subdomain	Morbidity
Public health target	Not applicable
Definition	Number of people living in districts in which the most recent estimate of prevalence of trachomatous inflammation—follicular in 1–9-year-olds is $\geq 5\%$
Unit measurement	People (counted at national level)
Rationale	
Numerator	Number of people at risk requiring A, F and E of SAFE for trachoma elimination purposes
Denominator	
Disaggregation	By trachomatous inflammation—follicular prevalence category; age group; gender
Method of measurement	Country reporting systems (to be expanded)
Method of estimation	
Frequency of reporting by national level to WHO	
Preferred datasource	Health ministry
Other datasources	
Primary level of data collection	Evaluation units (usually loosely termed "districts"), which are generally populations of 100 000–250 000 people
Timing of primary data collection	
Further information and related links	Trachoma. In: WHO/Global Health Observatory [website]. Geneva: World Health Organization; 2022 (https://apps.who.int/neglected_diseases/ntddata/trachoma/ trachoma.html?indicator=i1, accessed 19 September 2022)
Type of indicator	Road map 2030

#### Trachoma

Number of people requiring management of trachomatous trichiasis; S of SAFE [surgery, antibiotics, facial cleanliness, environmental improvement]

M&E frameworkCDomainHSubdomainNPublic health targetN	NTDTRA0000225 Outcome Health status Morbidity Not applicable Number of people estimated to have trachomatous trichiasis People (counted at national level; sub-national estimates also possible but likely to have low reliability)
M&E frameworkCDomainHSubdomainNPublic health targetN	Outcome Health status Morbidity Not applicable Number of people estimated to have trachomatous trichiasis People (counted at national level; sub-national estimates also possible but likely to
DomainHSubdomainNPublic health targetN	Health status Morbidity Not applicable Number of people estimated to have trachomatous trichiasis People (counted at national level; sub-national estimates also possible but likely to
Subdomain N Public health target N	Morbidity Not applicable Number of people estimated to have trachomatous trichiasis People (counted at national level; sub-national estimates also possible but likely to
Public health target	Not applicable Number of people estimated to have trachomatous trichiasis People (counted at national level; sub-national estimates also possible but likely to
•	Number of people estimated to have trachomatous trichiasis People (counted at national level; sub-national estimates also possible but likely to
<b>Definition</b>	People (counted at national level; sub-national estimates also possible but likely to
	5.
Rationale	
Numerator	Number of people requiring management of trachomatous trichiasis; S of SAFE
Denominator	
Disaggregation	
Method of measurement	Population-based prevalence surveys (to be expanded)
Method of estimation	
Frequency of reporting by national level to WHO	
Preferred datasource V	World Health Organization
Other datasources	Tropical Data
	Evaluation units (usually loosely termed "districts"), which are generally populations of 100 000–250 000 people
Timing of primary data collection	
Further information and related links	
Type of indicator	Road map 2030

#### Yaws

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#### Number of countries certified free of transmission

Alternative indicator name	Number of countries certified free of yaws transmission
Indicator ID	NTDYAW0000232
M&E framework	Impact
Domain	Health status
Subdomain	Eradication
Public health target	Eradication
Definition	Two criteria for the eradication of diseases were established in 1960 by the WHO Expert Committee on Venereal Infections and Treponematoses; the same criteria were recommended by the Morges Strategy in 2012 when molecular testing was added.
Unit measurement	Member States
Rationale	WHA66.12 on neglected tropical diseases (2013)
Numerator	Number of countries certified free of yaws transmission
Denominator	
Disaggregation	By WHO region
Method of measurement	The Member State submits the completed dossier to WHO. An International Commission collectively discusses each dossier received, via video conference, teleconference or at a face-to-face meeting. The Commission then visits the country. The Reviewing Authority decides by consensus and within one year of receipt of the dossier to either (i) certify the country in the process towards eradication or (ii) postpone such decisions until more evidence has been provided in the dossier to demonstrate that this has occurred. WHO summarizes the comments and decision of the Reviewing Authority. If the claim of eradication is accepted, the summary is forwarded to the WHO Director-General. If the claim of eradication is postponed, WHO requests the country to provide any further evidence needed to enable certification by the Reviewing Authority.
Method of estimation	
Frequency of reporting by national level to WHO	
Preferred datasource	World Health Organization
Other datasources	
Primary level of data collection	Health ministry
Timing of primary data collection	Ad hoc
Further information and related links	Ending the neglect to attain the sustainable development goals: a strategic framework for integrated control and management of skin-related neglected tropical diseases. Geneva: World Health Organization; 2022 (https://apps.who.int/iris/handle/10665/355448, accessed 19 September 2022)
Type of indicator	Yaws. In: WHO/Fact sheets. Geneva: World Health Organization; 2022 (https://www. who.int/news-room/fact-sheets/detail/yaws, accessed 19 September 2022) High-level indicator
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	Road map 2030
	Note map 2000





