The multi-disease elimination approach:

Ending more diseases together

Acknowledgements

This document was developed under the leadership of the World Health Organization (WHO) Director General, who mandated the Division of Universal Health Coverage (UHC)Communicable and Noncommunicable Diseases and Mental Health (UCN) to oversee the development of a global approach to the elimination of diseases, building on the Pan American Health Organization (PAHO) initiative to create an Integrated Sustainable Framework for the Elimination of Communicable Diseases in the Americas. The development process has involved each of WHO Headquarters Divisions, as well as each WHO Regional Office, and at least one Country Office per Region.

The initial concept for a Multi-Disease Elimination (MDE) approach was first presented to Member States at an Information Session in November 2020. Following their strategic guidance, the concept was further elaborated at meetings of WHO Strategic and Technical Advisory Groups (STAGs) and expert groups, including those for: NTDs; leprosy; encephalitis; HIV/Hepatitis/STIs; maternal and neonatal tetanus elimination, hepatitis elimination validation; and Immunization, vaccines and biologicals.

The approach and related terminology (lexicon) have been developed based on a synthesis of existing WHO/PAHO strategies, frameworks, approaches for disease programmes and health systems.
Country practices were extracted from WHO/PAHO reports, and country plans identified in the grey literature (including that identified during open consultation). The approach, lexicon and country practices, has been peer reviewed by NTD and HHS STAGs

Meanwhile, the MDE approach was taken forward in practical ways by Member States, some of which began to report on their plans at the World Health Assembly. The good practices emerging from these country experiences served to further inform the approach, as now laid out in this document, which is being made available for public consultation.

Summary

The Sustainable Development Goals call for countries to end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases by 2030. As of 2024, WHO targets 32 diseases or conditions for elimination or eradication.

The multi-disease elimination (MDE) approach offers a pathway to achieving these ambitious goals more efficiently, effectively and equitably.

MDE is a **people-centred approach** to the delivery of service and intervention packages towards elimination. It can be understood as an application of the **Primary Health Care** (PHC) approach to disease elimination. The PHC approach builds on three pillars: integrated health services with an emphasis on primary care and essential health functions; empowered people and communities; and multisectoral policy and action.

The MDE approach calls for harmonizing terminologies, processes, tools and structures across disease elimination programmes. It seeks alignment with the PHC approach, leveraging **common platforms** within the health system, across sectors and in communities to address multiple diseases targeted for elimination, at the same point, close to where the need is.

Under an MDE approach, disease elimination programmes are jointly responsible for **shared functions** such as people-centred delivery of services, inclusive governance, pooled financing, and collaborative surveillance. **Shared outputs** include multi-programme strategies and plans, consolidated guidelines, and harmonized standards for confirmation of elimination.

This involves balancing the needs related to single-diseases and multiple diseases throughout the phases of disease elimination and based on country context. This is seen within the context of a PHC-oriented health system that caters to the needs of the population, including the need for optimal responses to diseases.

This document provides guidance intended for national level policy and decision makers and health programmes for implementing the MDE approach, drawing on a common lexicon and good practices from regions and countries already moving in this direction. In so doing, it helps to build a practical bridge between disease elimination and wider efforts on PHC-oriented health systems.

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Purpose and audience

The purpose of this document is to summarize the current state of disease elimination; define a multi-disease elimination (MDE) approach; propose harmonized elimination definitions; document good MDE practices and provide guidance for countries developing MDE approaches.

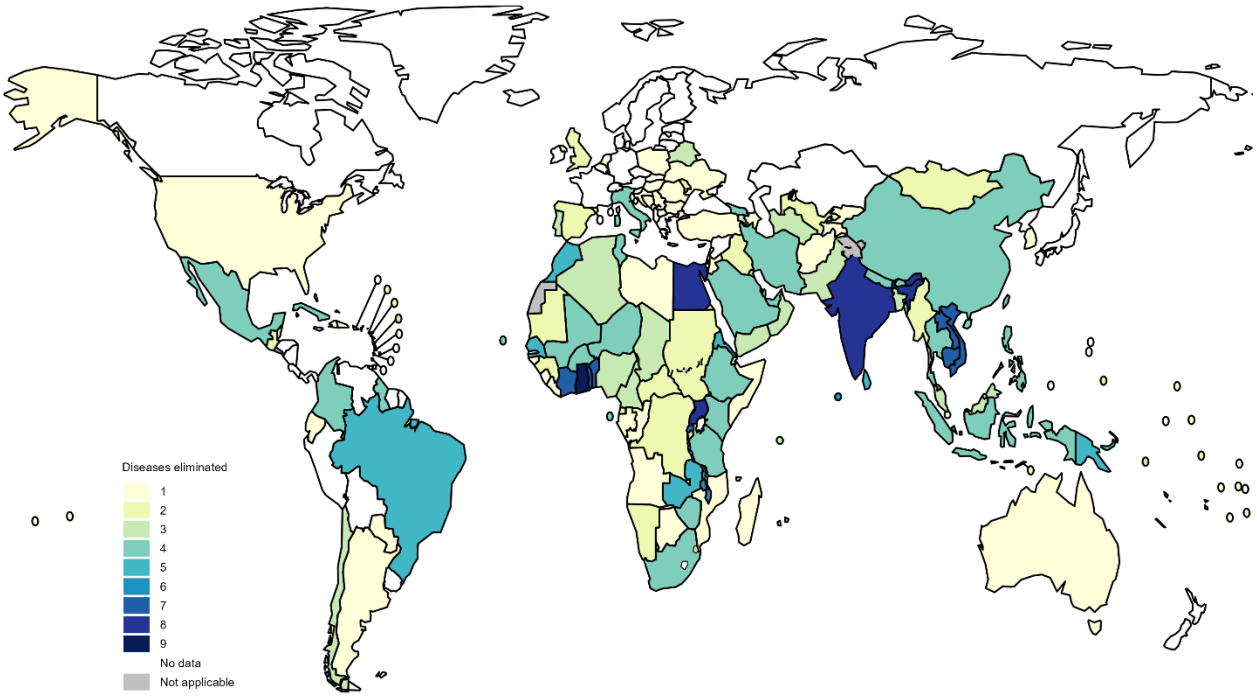
The target audience for this document is country level policy and decision makers, disease programmes, implementing partners and multilateral and bilateral donors/financial institutions that fund communicable disease programmes.

The status of disease elimination

The Sustainable Development Goals (SDGs) call for countries to end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases (NTDs) by 2030, as well as combat hepatitis, and water-borne and other communicable diseases (target 3.3.). As of 2024, WHO targets elimination or eradication of 32 diseases or conditions, including also a non-communicable disease—cervical cancer. At least one risk factor—industrial trans fats—has a global elimination target.

Annex 1 gives an overview of all diseases, conditions and risk factors with global elimination or eradication targets, with links to related WHO resolutions and strategies. It also provides additional targets adopted by at least one WHO Region. **Figure 1** maps out the countries that have achieved at least one global elimination target by the end of 2023.

Figure 1. Countries that have achieved at least one global elimination target as of February 2025.

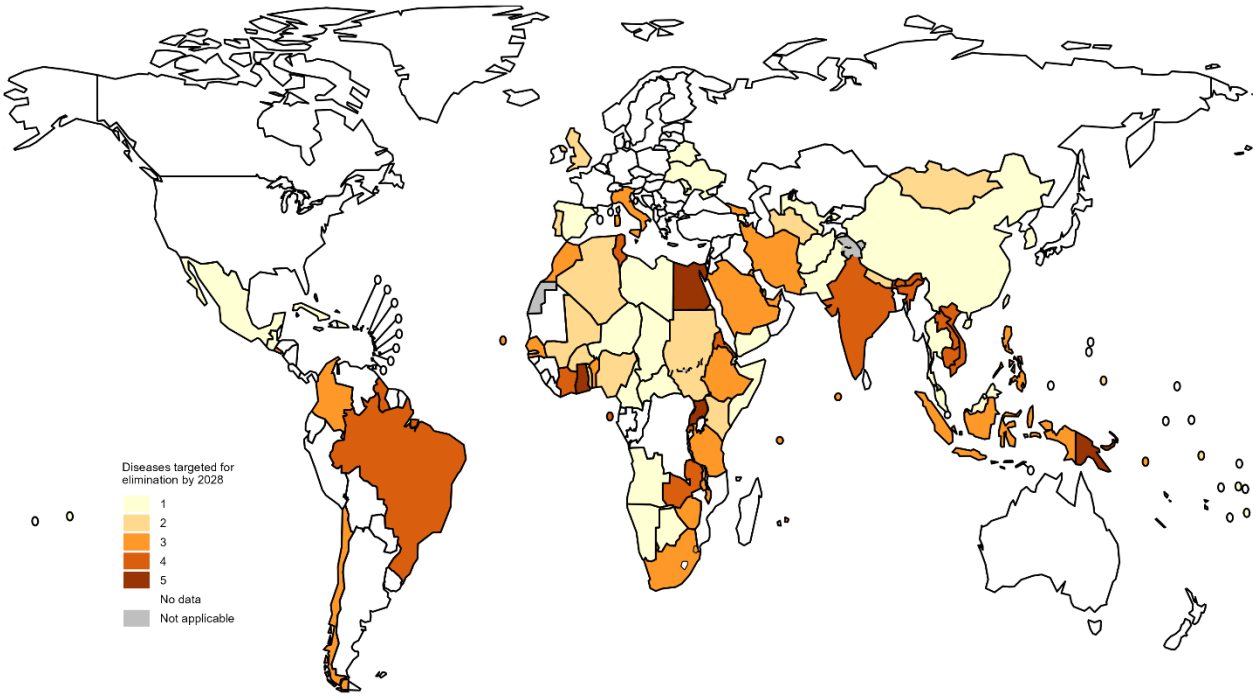


Map includes data for the following diseases: Acquired immunodeficiency disease (HIV) (MTCT), Guinea worm disease, hepatitis B (MTCT), hepatitis C, Human African Trypanosomiasis (gambiense and rhodesiense), leprosy, lymphatic filariasis, malaria, maternal and neonatal tetanus, meningitis A, onchocerciasis, rabies, syphilis (MTCT), trachoma, visceral leishmaniasis and Yaws. The map does not include data on smallpox which was eliminated in every country of the world nor polio which has been eliminated in all countries except for Afghanistan and Pakistan. Source: World Health Organization; 2025.

In 1980, smallpox became the first and only human disease to be eradicated.[1] More than four decades later, poliomyelitis and guinea worm disease are now close to that target. Over 100 countries have eliminated malaria, and 50 countries have eradicated at least one neglected tropical disease (NTD). The 26 nations within Sub-Saharan Africa's meningitis belt have managed to eliminate meningitis A as an epidemic threat. Additionally, 17 countries have eradicated mother-to-child transmission of HIV and/or syphilis. As of Nov 2024, 49 (83%) of the 59 maternal and neonatal tetanus high-burden countries have been validated for elimination.

As depicted in **Figure 2**, 84 countries could reach additional WHO targets for disease elimination, by 2028. These targets include elimination of transmission (e.g. malaria, NTDs), of a transmission pathway (e.g. mother-to-child transmission of HIV, hepatitis B, syphilis) or of an acute public health event (e.g. meningitis outbreak). The 10 countries that are yet to achieve the elimination of the maternal and neonatal tetanus are likely to do so by 2028. 29 countries could achieve elimination targets for two or more of the multiple diseases that are endemic there. Many more will make measurable progress on the path towards longer-term elimination goals.

Figure 2. Countries that could achieve at least one additional elimination target by 2028.



Map includes data for the following diseases: Acquired immunodeficiency disease (HIV) (MTCT), Guinea worm disease, hepatitis B (MTCT), hepatitis C, Human African Trypanosomiasis (gambiense and rhodesiense), leprosy, lymphatic filariasis, malaria, maternal and neonatal tetanus, meningitis A, onchocerciasis, rabies, syphilis (MTCT), trachoma, visceral leishmaniasis and Yaws. The map does not include data on smallpox which was eliminated in every country of the world nor polio which has been eliminated in all countries except for Afghanistan and Pakistan. Source: World Health Organization; 2025.

There are several challenges, however, that threaten progress: environmental factors including climate change; socio-political factors such as conflict and insecurity, inequity, stigma and discrimination, lack of political will; biological factors such as drug and insecticide resistance, disease reservoirs in animals or the environment; lack of effective tools to address specific diseases (i.e. diagnostics, treatments, preventive

[1] In terms of animal diseases, rinderpest was successfully eradicated in 2011.

measures such as vaccines), as well as health system weaknesses, especially human and financial resources that are stretched too thinly.[2]

In this context, a country's commitment to eliminating multiple diseases is both ambitious and pragmatic, recognizing that these challenges require a cross-programmatic approach within the broader health system.

What is multi-disease elimination (MDE)?

Multi-disease elimination (MDE) is an integrated approach to reducing the incidence, prevalence, morbidity, or mortality of multiple diseases, conditions or risk factors towards existing elimination targets.

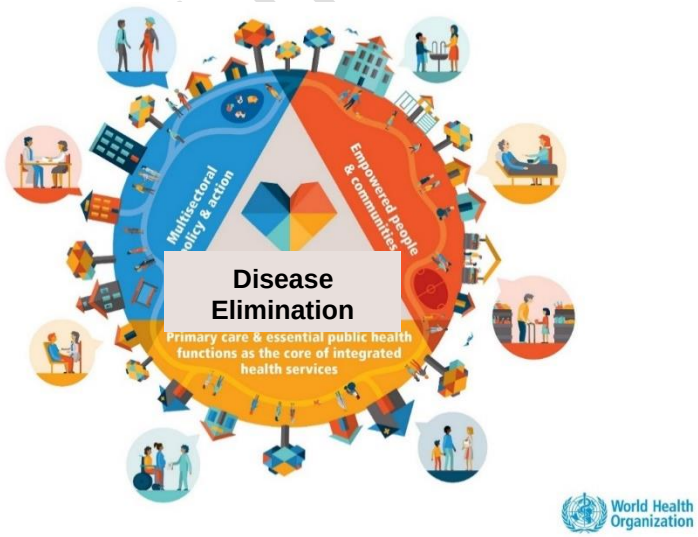
MDE begins with a harmonized approach to how we refer to regional or global elimination **targets** and **confirmation** processes (see the **MDE lexicon**). Driven by epidemiology, the elimination **endpoints** nonetheless remain specific to individual diseases, conditions, or risk factors.

But MDE is more than the pursuit of multiple targets at the same time. MDE is a **people-centred approach** to disease elimination, leveraging **common platforms** within the **health system**, across **sectors** and in **communities.**

In this sense, the MDE approach can be understood as an application of the **Primary Health Care (PHC) approach to disease elimination**. The MDE approach operationalizes the three core components of the PHC operational framework, as depicted in **Figure 3,** based on:

- Primary care and essential public health interventions like surveillance as the core of integrated health services
- Multisectoral policy and action, including for WASH and vector control interventions
- Empowered people and communities, including for community-led surveillance and interventions

Figure 3. Multi-disease elimination as an application of the Primary Health Care approach to disease elimination



Source: adapted from https://www.who.int/teams/primary-health-care/conference/communications-materials

[2] "Ending the neglect to attain the Sustainable Development Goals: a road map for neglected tropical diseases 2021–2030"

As such, the MDE approach provides an **entry point for disease programmes** to engage constructively in broader health systems strengthening, including a reorientation towards PHC. In turn, MDE demonstrates how the PHC approach can be applied even to time-bound programmes.

Disease elimination requires an application of the PHC approach to **non-linear pathways** and **major programmatic shifts**. These shifts may occur within the short- to medium-term (3- to 6-year) cycles that characterize the mandates, plans and budgets of governments, as supported by donors and Global Health Initiatives, such as The Global Fund to end AIDS, Tuberculosis, and Malaria or the Global Vaccine Alliance (GAVI).

As an application of the PHC approach, the MDE approach extends beyond primary care. It prioritizes essential **packages of services and interventions** including primary prevention at primary care level, with seamless onward referral to disease specialists when needed.

It includes interventions to address the **environmental and social determinants** of health, including access to water, sanitation and hygiene, through both multisectoral policy and action, and empowerment of people and communities.

The prioritized packages of services and interventions are **integrated** in the sense that they are **comprehensive**, **coordinated and continuous** (across sectors, programmes and levels and over time).

Annex 2 outlines the main categories of **services or interventions** recommended by WHO to address **multiple diseases targeted for elimination**. This list does not cover disease-specific services or interventions. Details on all relevant services and interventions for diseases targeted for elimination, including links to relevant guidelines, are available through the UHC Compendium.

The MDE approach is also consistent with a **life course approach**, recognizing that different diseases and conditions may be more prevalent or have different impacts at various life stages: pregnancy and neonatal period, childhood and adolescence, working adult, and senior.

It recognizes that these stages entry points for the delivery of services and interventions, such as: antenatal care for pregnant women, school health programs for children and adolescents, workplace health initiatives for working adults, and community-based health services for seniors.

Annex 3 lists **platforms for the delivery of services and interventions within the health sector, across other sectors, and within communities**.

The MDE approach focusses on packages of services and interventions for diseases, conditions and risk factors for which elimination targets have been set. Entry points can nonetheless serve other public health priorities, including control of co-infections, co-morbidities, and mental health, neurological, and substance use conditions.

Moreover, the MDE approach does not apply only to delivery of services and interventions by the health sector. Platforms can be leveraged **across building blocks** of the health system, **across sectors** and **within communities**.

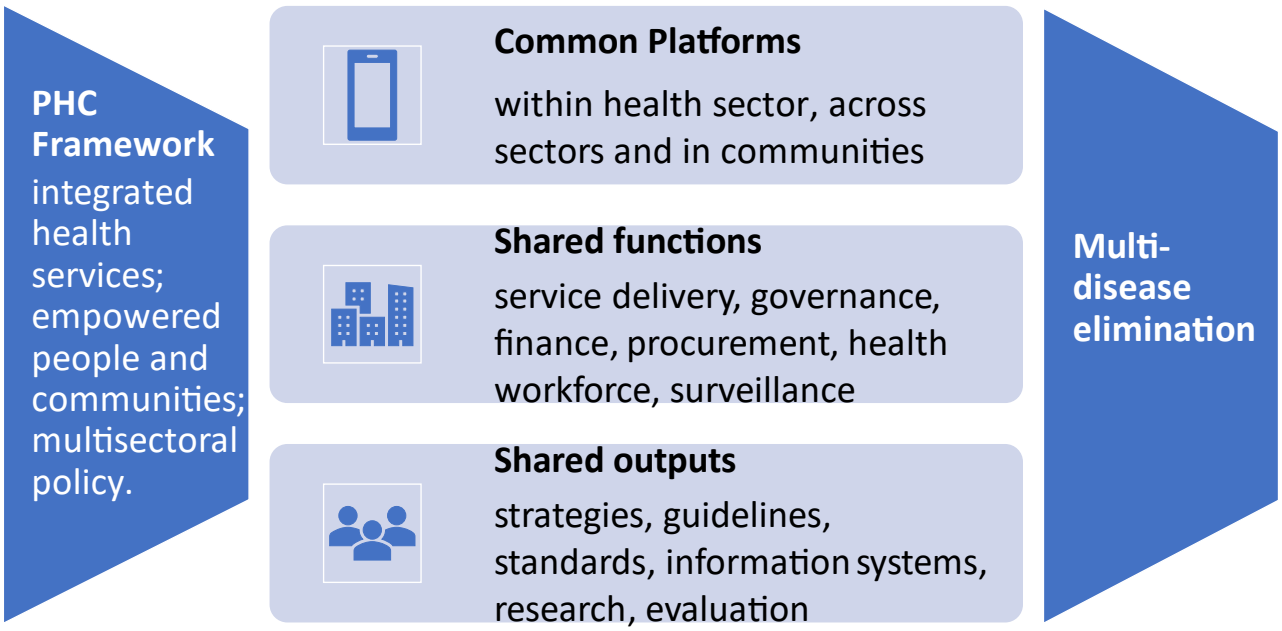
Figure 4 puts these platforms at the centre of the MDE approach, through the following **shared functions**[3]:

- People-centred delivery of services and interventions, including laboratory services
- Inclusive governance and stewardship
- Pooled financing and strategic purchasing

[3] These shared functions are largely consistent with the “lines of action” proposed in The Pan American Health Organization’s (PAHO) “Integrated Sustainable Framework for the Elimination of Communicable Diseases in the Americas”. However, PAHO emphasizes “Addressing the Environmental and Social Determinants of Health” as a dedicated function or “line of action”. While recognizing its importance, the MDE approach mainstreams multi-sectoral engagement and environmental and social determinants throughout the six shared functions of disease elimination programmes, from service delivery to collaborative surveillance.

- Joint procurement, integrated supply and surveillance of medical products and technologies
- Multidisciplinary workforce development
- Collaborative surveillance and information management

Figure 4. Shared functions and outputs of programmes under the MDE approach



In line with the PHC approach, leverage platforms within the health sector, across sectors and in the community to deliver shared functions and outputs to eliminate multiple diseases

Resulting from the functions, **shared outputs** of programmes under the MDE approach include:

- Acceleration scenarios and pathways for disease elimination
- Coherent mid- and end-points on the path to elimination
- Multi-programme elimination strategies and plans
- Consolidated guidelines for elimination
- Harmonized standards for confirmation of elimination
- Integrated or interoperable information systems
- Joint operational / implementation research
- Cross-programme evaluation and efficiency analysis

Shared functions and outputs are further described below, with examples of good practices from countries.

The aims of an MDE approach

Earlier, in the era of the Millenium Development Goals (MDGs), measurable progress towards the control of a limited number of diseases was driven by disease-specific services and interventions delivered mostly through single-disease programmes. [4] Coordination across those programmes was often limited at the global and regional levels, which did not facilitate the national level. As elimination or eradication targets were adopted, programmes developed duplicative and sometimes misaligned terminologies, processes, and structures.[5]

Now, well into the era of the SDGs, with more than 30 diseases and conditions targeted for elimination, WHO is supporting at least five global and 10 regional disease elimination committees. The committees have overlapping mandates, but there are also gaps. A different approach is needed – one that preserves a focus on measurable and time-bound elimination targets at global, regional and national levels, while actively supporting **efficiency, effectiveness, and equity** all the way to the community level.

The MDE approach aims to enhance the **efficiency** of programmes, leveraging economies of scale and scope, avoiding **duplication** in their inputs and outputs. An integrated approach to a group of skin-related NTDs has been shown to be feasible through outreach at primary level in at least two countries.[6,7] In another, mass triple-drug administration lowered costs by 40% compared to three separate rounds.[8]

The MDE approach does not assume that integration will automatically result in efficiency gains but seeks to find them where they are most likely to exist.

The MDE approach aims to improve the **effectiveness** of programmes by avoiding **gaps and misalignment** in their expected outcomes. Multiplex serological and PCR-based screening could mean increased and earlier detection and response, including more appropriate management of co-infections and co-morbidities. Antimicrobial resistance emerging through cracks in one programme negatively impact on another and requires a holistic approach that extends beyond human health.[9,10]

The MDE approach anticipates that disease-specific interventions alone are usually insufficient to eliminate a disease and that it is more effective when programmes work together, especially in engaging other sectors, all within the context of a PHC-oriented health system.

The MDE approach also aims to promote **equity** in the distribution of programme outcomes, by targeting diseases and conditions with common risk factors and social determinants that are strongly associated with **stigma and discrimination**. Integrated delivery of services could reduce cost and time barriers for the hardest to reach. Political resolve to eliminate mother-to-child transmission of diseases such as HIV, hepatitis B and syphilis can create a policy space more inclusive of sex workers and people who inject drugs.

The MDE approach acknowledges that no disease can be eliminated without the empowerment of all affected communities, including in overcoming stigma and discrimination.

In short, the MDE approach aims to enhance programme efficiency, effectiveness and equity by addressing at the same point, close to the user, multiple diseases, condition or risk factors, that would not be adequately addressed if separate visits to a health or other social service providers were required. Together, increased

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[4] World Health Organization. (2015). Health in 2015: from MDGs, Millennium Development Goals to SDGs, Sustainable Development Goals. World Health Organization.

[5] Molyneux DH, Hopkins DR, Zagaria N. Disease eradication, elimination and control: the need for accurate and consistent usage. Trends Parasitol. 2004;20(8):347-51.

[6] Barogui YT, Diez G, Anagonou E, et al. Integrated approach in the control and management of skin neglected tropical diseases in Lalo, Benin. PLOS Neglected Tropical Diseases 2018; 12: e0006584.

[7] Koffi AP, Yao TAK, Barogui YT, et al. Integrated approach in the control and management of skin neglected tropical diseases in three health districts of Côte d'Ivoire. BMC Public Health 2020; 20: 517.

[8] Evans D, Mcfarland D, Adamani W, *et al.* Cost-effectiveness of triple drug administration (TDA) with praziquantel, ivermectin and albendazole for the prevention of neglected tropical diseases in Nigeria. *Ann Trop Med Parasitol* 2011; **105**: 537–47

[9] AMR already poses a threat to many disease elimination programmes, including Bacterial meningitis, cholera, gonorrhoea, HIV, syphilis, TB. Antimicrobial resistance also observed for HBV, HCV, leprosy, malaria*, visceral leishmaniasis*, yaws, and documented in helminths that infect domestic animals. Interventions for trachoma and yaws include mass treatment with the antibiotic azithromycin, which has been associated with increased AMR in non-target potentially pathogenic bacteria (e.g. Streptococcus Pneumoniae).

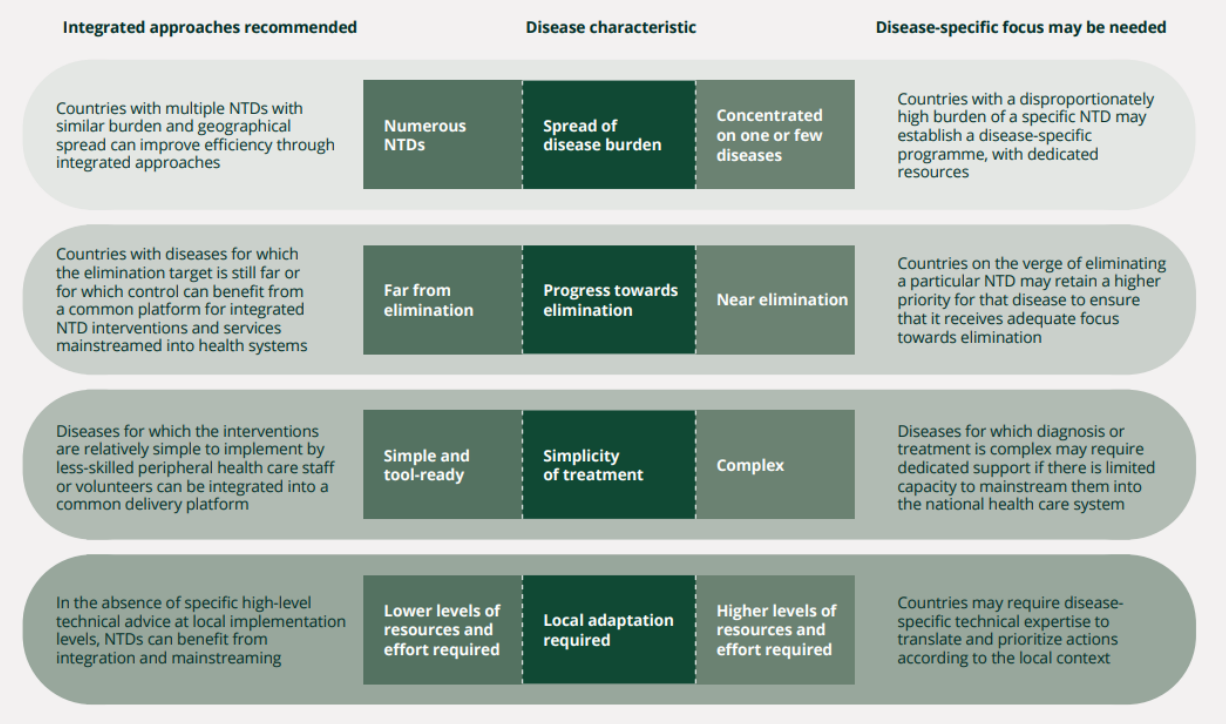
[10] At the human-animal-ecosystem interface, the 'One Health' approach is particularly relevant to the elimination of zoonoses (including a range of neglected tropical diseases, tuberculosis and influenza), and vector-borne diseases.

efficiency, effectiveness and equity contribute to the **sustainability** of elimination progress – **programmatic**, **financial** and **political** sustainability.

The **integration of programmes** is not without risks, however. It can increase complexity in program management and implementation, with a loss of focus and expertise. The initial costs of integrating can be high, and modern technologies may alleviate the need for integration by facilitating collaboration between multiple systems.

Based on its unique context, every country needs to strike the right balance, over time, of single-disease and multi-disease approaches. These should be considered along a spectrum rather than as a binary choice and seen within the context of the drive for a PHC-oriented health system that meets the holistic needs of people. Some considerations for the elimination of NTDs are provided in **Table 1**.

Table 1. Balancing disease-specific and integrated approaches in the elimination of Neglected Tropical Diseases



Source: Ending the neglect to attain the Sustainable Development Goals: A road map for neglected tropical diseases 2021–2030 [Internet]. World Health Organization; 2020.

To ensure the continuity and quality of essential services and interventions, MDE is a **phased approach** to the **integration of *programme functions***, including service delivery, not necessarily the integration of *programmes*. For example, HIV, TB and malaria programme structures may continue to exist, even though functions such as procurement and supply management, monitoring and evaluation are shared within the health system.

The MDE lexicon

As more disease elimination strategies have been developed, there has been a proliferation of associated terminologies. As seen in **Annex 1**, targets have been variably referred to as “elimination as a public health problem” or “threat” or “issue”, “ending the epidemic”, “elimination of transmission”. Assessment processes have been inconsistently referred to as “validation”, “verification” or “certification”. Elimination and eradication have been used interchangeably to describe country-level outcomes.

The MDE approach seeks to **harmonize** these terminologies, in line with previous efforts within the NTD space.[11] It does not call for the immediate standardization of terminology and does not supersede the terminology that is already in use by programmes. Rather, it aims to promote harmonization in new and updated disease elimination strategies and plans.

[11] World Health Organization. (2016). Generic Framework for Control, Elimination and Eradication of Neglected Tropical Diseases. Geneva: WHO.

Control is defined as the reduction in incidence, prevalence, morbidity or mortality of a disease, condition, or risk factor to a locally acceptable level within a defined geographical area. When reached, continued action is required to maintain the reduction. There is no formal WHO process for confirmation of control. This document (including **Annex 1**) does not cover control programmes.

Elimination as a public health problem (EPHP) is the sustained reduction in incidence, prevalence, morbidity or mortality of a disease, condition, or risk factor to a target level at which the public health burden is considered negligible within a defined geographical area. The target level is absolute or relative to a baseline and must be sustained for a certain number of years, as defined globally or regionally by WHO. Countries and regions meeting the criteria for EPHP can undergo **validation** by WHO Headquarters or Regional Office, as appropriate.

EPHP can be defined according to a subpopulation or other sub-category. Some of the existing EPHP targets are defined by either:

- **a subpopulation** (e.g., in children, in new cases)
- **a pathway** (e.g., mother-to-child transmission of HIV, hepatitis B, syphilis, Chagas disease; transmission of Chagas disease through blood transfusion)
- **a risk factor** (e.g., industrial trans-fatty acids)
- **an acute event**, such as outbreak or epidemic (e.g., yellow fever, meningitis)

Some strategies, such as for HIV and hepatitis C, refer to elimination as a public health threat. Elimination of public health threats, challenges or issues can be considered as a subset of EHPH. However, these less commonly used terminologies are not preferred. There are no standard processes to classify the importance or urgency of a public health problem, apart from those of the International Health Regulations (e.g. a Public Health Emergency of International Concern).

The Pan American Health Organization's (PAHO's) Integrated Sustainable Framework for the Elimination of Communicable Diseases in the Americas focusses on special cases of EPHP, summarized succinctly as "no mortality, no morbidity, no disability". Indeed, under the MDE approach, it is considered good practice to set absolute EPHP targets.

Elimination of transmission (EOT) is the sustained reduction to zero incidence of infection caused by a specific pathogen in a defined geographical area, with minimal risk of reintroduction. Surveillance and zero incidence must be sustained for a certain number of years, as defined globally or regionally by WHO.[12] Countries and regions meeting the criteria for elimination of transmission can undergo **verification** by WHO Headquarters or Regional Office. Verified countries/regions may then be considered "free" from infection**.**

PAHO's framework refers to elimination of transmission as well as elimination of mother-to-child transmission as "no transmission". However, it is important to note that there are differences between verification of the elimination of transmission and validation of the elimination of mother-to-child transmission.

Interruption of transmission is less formal than elimination of transmission, referring to a reduction to zero incidence that is temporary or not yet verified. We refer to the period after the last reported case and before verification as **pre-elimination**. **Post-elimination** refers to the period following verification.

Currently only nine diseases —dracunculiasis (guinea worm disease), *gambiense* HAT, leprosy, malaria, measles, onchocerciasis, polio, rubella, and yaws—have a target of elimination of transmission of the causative pathogen(s) in at least some countries. Elimination of transmission of infections that cause other diseases is not currently considered feasible, due to inadequate interventions (e.g., a vaccine for HIV), presence in the environment (e.g., soil-transmitted helminths), or other factors.

[12]Any cases detected during the required minimum period must have been imported from outside of the defined geographic area.

Elimination of transmission applies only to communicable diseases but can be an important component in the elimination of non-communicable diseases as public health problems: e.g., cervical cancer resulting from HPV infection, or hepatic cancer and liver cirrhosis due to infection with hepatitis B or C viruses.

Validation of EPHP and verification of elimination of transmission can be **reversed** when the disease, condition or risk factor is re-established. For example, WHO validated that measles had been eliminated as a public health problem from the Americas Region in 2016. However, measles became re-established in Venezuela and subsequently other countries in the region following an outbreak that began in 2017.[13]

Eradication is the sustained reduction to zero of the worldwide incidence of infection by a specific pathogen in humans and all potential reservoirs, with no risk of reintroduction, barring escape of the pathogen from containment laboratories. Eradication is the special case of elimination of transmission in all countries. Countries meeting the criteria for elimination of transmission in the context of a target for eradication can undergo **certification** by WHO Headquarters.

For convenience, in this document we refer generally to the group of processes of validation, verification and/or certification as **confirmation** of elimination.

To declare eradication, WHO must certify every individual country even if no transmission has ever been recorded in that country. Eradication of a human disease has been officially declared only once, with the eradication of smallpox in 1980. Currently, only three diseases have a target for elimination of transmission in all countries—dracunculiasis, polio and yaws.

Although no target year has been set for malaria eradication, the programme pursues “certification” of countries for the elimination of transmission.

The MDE approach in (good) practice

Regions and countries are already moving in the direction of leveraging common platforms, such as those of Annex 3. From their experience, some **good practices** of the MDE approach are beginning to emerge, that will be added to and further refined over time. We present these good practices in terms of the **shared functions** and **outputs** of programmes following the MDE approach.

This is not a systematic review of the evidence. It provides a framework for analysis, and some examples, to encourage further sharing and eventually a more formal review of practices.

Shared functions

People-centred delivery of services and interventions

The MDE approach promotes integrated, people-centred services and interventions to cover multiple diseases targeted for elimination. Delivery of multi-disease services and interventions (**Annex 2**), leverages common delivery platforms (**Annex 3**). In alignment with the PHC approach, it leverages platforms within communities, and in sectors beyond health, such as education, social services, and agriculture.

For decades now, Community-Directed Intervention (CDI) for onchocerciasis control in Africa has integrated other NTD and malaria control.[14] Ministries of Health have collaborated with Ministries of Education to deliver integrated health services for multiple NTDs, including soil-transmitted helminthiasis (STH) and schistosomiasis, to children in schools, like in Ethiopia’s Health Extension Program.[15]

[13] Pan American Health Organization/World Health Organization. Epidemiological Update: Measles. 18 June 2019. Washington, D.C.: PAHO/WHO; 2019

[14] Amazigo, U. V., et al. (2012). Community-directed interventions for priority health problems in Africa: results of a multicountry study. Bulletin of the World Health Organization, 90, 376-385.

[15] https://documents.worldbank.org/en/publication/documents-reports/documentdetail/356621468032070256/ethiopia-the-health-extension-program-in-ethiopia

More recently, Madagascar integrated MDA for lymphatic filariasis (LF) into immunization campaigns, achieving 100% geographical coverage for the first time and at significant cost savings compared to prior LF-only MDA.[16] Integrated community teams carried out MDA alongside polio and routine immunization with vitamin A supplementation. The entire operations structure was shared, including supervision, data reporting, monitoring, recording and responding to adverse events.

Meanwhile, Papua New Guinea integrated MDA for LF and yaws elimination in West New Britain Province.[17] Azithromycin was administered five days after combination treatment with ivermectin, diethylcarbamazine DEC, and albendazole (known as IDA or triple-therapy) by integrated distribution teams. These teams also conducted skin screening for multiple skin diseases including yaws, scabies, lymphedema and leprosy.

Such experiences and learnings from integrated, people-centred services and interventions need to be better documented and shared across countries. Operational research would help to find out what approaches work best or do not work well in specific contexts (see **Operational Research**).

Inclusive governance and stewardship

The MDE approach mobilizes and coordinates all relevant stakeholders in elimination across all levels, including **people with lived experience**, at the **community** level. The MDE approach to partnership can be particularly helpful for a "health in all policies", with engagement of the **private sector** and other **multi-sectoral stakeholders** for the delivery of services and interventions, including water and sanitation, vector control, animal health, school health, occupational health, or the health of migrants, people in correctional facilities and other key populations.

To ensure that MDE is country-led, governance is centred on **national** and **subnational structures**. Many countries may adapt existing national/subnational structures, whether these are specific to disease elimination, or broader health sector and interministerial bodies.

Normally, a **national/subnational MDE secretariat** convenes and coordinates stakeholders from across a number of structures, from the initial stocktake and acceleration scenario planning to preparation of the disease elimination dossier for validation or verification. The secretariat is often established in the Ministry of Health, with the support of the WHO Country Office, but in some countries, the office of the Head of State or Cabinet of Ministers provides higher-level visibility and coordination across ministries.

A **national or subnational MDE advisory committee** of external experts from health and other sectors advises the secretariat, endorses strategies and plans, reviews progress, and convenes disease-specific subcommittees to assess elimination dossiers before submitting them to regional and global bodies. Membership varies by country needs and is determined through an open, transparent process that ensures due diligence and avoids conflicts of interest.

In the Philippines, a Technical Working Group (TWG) is composed of Disease Prevention and Control Bureau technical staff representing the 13 diseases prioritized for elimination, representatives from other Department of Health offices, other sectors and academia. The TWG oversees the implementation of the MDEP which includes activities addressing the environmental and social determinants. A scientific technical advisory group (STAG), composed of experts from international partners and professional societies, provides technical advice and serves as an external auditor.

Across the WHO Regions, established **regional structures** can be used to mobilize and coordinate partners for MDE. PAHO has established an independent Strategic and Technical Advisory Group on Disease Elimination to prioritize and guide their support to countries. In the Western Pacific Region, an Alliance of Technical Advisory Groups connects the Chairpersons of seven disease-specific advisory groups. Specialized expert committees guide elimination of NTDs, mother-to-child transmission and vaccine-preventable diseases.

[16] WHO Country Office Madagascar. Implementation of mass drug administration of lymphatic filariasis – the progress, effectiveness and financial savings of integrating into an existing Polio campaign.
[17] Global programme to eliminate lymphatic filariasis: progress report, 2023. Weekly Epidemiological Record, 4 October 2024, vol. 99, 40 (pp. 565–576).

Typically, regardless of its designation, a **regional MDE secretariat** (or focal point) within each WHO Regional Office enhances internal coordination across various disease elimination and health systems programmes and supports country-level capacities. It gathers national and (sub)regional dossiers and conducts initial quality assessments. This secretariat also brings together a relevant group of disease elimination committees, and/or assists a dedicated regional MDE advisory committee.

A **regional MDE advisory committee** (or network of disease elimination committees), established by the WHO Regional Office, offers region-specific guidance and recommendations on elimination, conducts field evaluations, and evaluates national or (sub)regional dossiers for validation or verification. It provides recommendations to WHO Regional Directors for formal recognition of national or (sub)regional elimination.

The **global MDE secretariat** sits within WHO Headquarters. It convenes relevant disease and health systems programmes, regional secretariats, and global agencies and programmes, including those of the United Nations. It develops global norms and standards and builds regional and national capacities as required. In the case of an eradication programme, it receives national and/or (sub)regional dossiers. It also supports exchanges between relevant WHO networks, committees, advisory groups and taskforces involved in disease elimination, with a view to greater sharing of practices and lessons learned.

Global disease elimination committees managed by individual programmes support regional advisory committees with their recommendations to Regional Directors and the Director General on validation or verification of national or regional elimination and certification towards global eradication. Some of these committees are multi-disease. For example, the Global Validation Advisory Committee (GVAC) provides independent advice to the WHO global secretariat on countries' progress toward elimination of mother-to-child transmission (EMTCT) of HIV, syphilis and/or hepatitis B virus.

Pooled financing and strategic purchasing

The MDE approach requires specific financing considerations to address the unique challenges and opportunities of eliminating multiple diseases simultaneously, particularly those affecting the poorest communities.

National and international financing for MDE should promote integration rather than fragmentation. Projects like HANSA in the Lao Peoples' Democratic Republic demonstrate how external donors can collaborate on pooled financing to support integrated, people-centered services. Meanwhile, Country Coordination Mechanisms give voice to communities and multi-sector stakeholders in decision-making about funding from the Global Fund to Fight AIDS, Tuberculosis and Malaria.

The **costing** of MDE strategies should be integrated into broader national health strategy costing, using tools like the Integrated Health Tool (IHT) that allow for comprehensive planning, costing, and impact analysis across the health sector. The implications of health impacts on education, employment, productivity and economic growth should also be considered, with other sectors.

MDE **investment cases** can help convince both domestic and international partners of the value of an integrated approach to disease elimination, potentially unlocking additional funding and allowing for more flexible use of existing resources across disease programs and sectors.

When expanding national **benefit packages**, policymakers should consider efficiency, effectiveness and equity of services and interventions under the MDE approach. By leveraging common delivery platforms, the MDE approach can potentially make a larger package of services and interventions for disease elimination more viable for inclusion.

Services for targeted diseases should be provided **free of charge at the point of care** to address market failures for rare diseases confined to the poorest communities. Fees or co-payments, if there are any at all, should be transparent, simple and low. In some contexts, transport vouchers and other **enablers** may be needed.

Payment of MDE service providers may require a mix of methods, including fee-for-service, case-based payment, and capitation, to incentivize both general care and the specific services required for disease elimination. Efficiency gains from the MDE approach should be partially reinvested in MDE service providers.

In some countries, **results-based financing** (RBF) has helped to sharpen the focus of providers on MDE objectives and generate better data. However, it should complement rather than replace core funding and align with broader health financing strategy.

MDE budgets should be formulated and executed in line with national **public financial management** (PFM) systems while maintaining the flexibility to adapt to changing disease epidemiology and elimination progress.

These should allow for joint budgeting mechanisms with non-health sectors for health-related interventions. To the extent that they exist, participatory budgeting processes at local levels should allow for multi-disease, multi-sector programming.

Joint procurement and integrated supply chains

The MDE approach seeks to leverage economies of scale and scope in joint procurement and integrated supply chain management and surveillance across multiple disease programs, including those that depend on in-kind donations and community distributors. That said, given the importance of timely response to disease resurgence or reintroduction, these systems need to be agile.

Joint procurement starts with conducting **integrated training** for supply chain personnel across disease programs to foster a workforce capable of managing diverse product portfolios. **Joint forecasting** of products common to multiple elimination programs. Examples include multiplex diagnostic platforms, and multi-purpose drugs including antiparasitics and antibiotics, as well as antivirals such as tenofovir, which is used for treatment in both HIV and hepatitis B programmes.

By establishing or utilizing existing **pooled procurement** platforms that span multiple disease programs, countries can increase bargaining power to reduce prices while maintaining quality and environmental standards, especially for the lower volumes needed in late elimination stages. PAHO's Revolving Fund for Vaccine Procurement and Revolving Fund for Strategic Public Health Supplies involves multiple sectors to jointly procure medical products for several diseases targeted for elimination.

Integrated inventory management and distribution systems using shared transportation and storage channels across multiple programs and in collaboration with the transport and infrastructure sectors can improve overall supply chain. By aligning delivery schedules and routes across programmes, countries ensure efficient distribution, particularly in hard-to-reach areas. As previously described, community drug distributors are involved in last-mile distribution and stock monitoring for mass drug administration targeting multiple NTDs.

Harmonized quality assurance processes across disease programmes ensures consistency and reduces duplication of efforts. National **pharmacovigilance systems**—established to prevent, monitor, and respond to adverse effects from medicines and vaccines—are of particular importance when entire communities are receiving an intervention.

Implementing **interoperable supply chain information systems** that track procurement, storage, and distribution across multiple disease programs enables real-time decision-making and responsive supply management. There is more on this under Interoperability of Information Systems more broadly, below.

Multidisciplinary workforce development

The MDE approach should be considered within strategies, plans and guidelines for health workforce, including community-based health workers, from education and training to supervision, mentoring and remuneration. Human resources are not, however, limited to the health workforce. The One Health approach involves training professionals from health, veterinary, and environmental sectors.

In the context of MDE, **role optimization** means that delivery of multi-disease services and interventions is shared across integrated, multidisciplinary teams, comprising specialists, generalists and primary care and community health workers.

An effective approach to **skill mix** entails coupling reforms of scope of practice, with inclusion of relevant competencies in pre-service education and in-service training of primary care and community health workers on diagnosis and treatment of a broader range of diseases and conditions. As progress is made towards elimination, needs may evolve and expertise in disease-specific treatment and care may shift back to secondary and tertiary referral centres.

Joint supportive supervision enables flexible integration of services and interventions across multiple diseases, responsive to the changing demands of an elimination programme. Some countries have designed integrated supervisory tools that any supervisor can use for multi-programme supervision. Others prefer joint supervisory missions.

Fair remuneration and **incentives** (including but not limited to financial incentives) are provided at all levels of the health workforce, commensurate with education level, roles performed and broader labour market conditions to enable the adequate delivery of services across MDE priorities. Funding through Global Health Initiatives must not create separate cadres with better pay, which is duplicative and may cause tensions.

Before the post-elimination stage, plans are made for **re-deployment** of health workforce to other disease control programmes or for full integration within general health services. For instance, in Ghana, community volunteers used to eliminate dracunculiasis (guinea worm disease) were successfully redeployed to eliminate trachoma.

Collaborative surveillance and information management

All activities to prevent and mitigate the impact of disease targeted for elimination depend on surveillance capabilities to generate real-time, actionable intelligence to inform public health decisions. These decisions often require the triangulation[18] of multiple data sources, curated by multiple stakeholders (including endemic communities) across multiple sectors, both public (including agriculture, environment, and education sectors) and private, to accurately describe the epidemiological situation, assess risks, and guide targeted interventions.

The **collaborative surveillance** approach calls on countries and other stakeholders to strengthen surveillance capacity and build intentional collaboration across diseases and threat surveillance systems, sectors, geographic levels, and health emergency cycles – outlining critical objectives, capabilities, and enablers needed in all settings to respond to all public health hazards.[19] Moreover, this approach builds on and shares common objectives to disease-specific strategies, including the Global Strategy on Comprehensive Vaccine-Preventable Disease Surveillance.[20]

Under an MDE approach, surveillance systems and associated capabilities must be maintained during the pre- and post-elimination phases to continuously inform the epidemiological situation of all diseases targeted for elimination within national systems, even when the number of cases has dropped to zero. These systems must be interlinked with public health response mechanisms prepared to mount a **rapid response** to the detection of resurgence or reintroduction.

In Colombia's indigenous communities, successful integration of multiple NTD interventions was achieved through two key practices: participatory decision-making with local authorities and communities, and implementation of collaborative health information systems for real-time monitoring. This experience from the River Cubiyú region demonstrates how community engagement and robust information systems can support integrated disease elimination efforts in indigenous and remote populations.[21]

National and regional advisory committees monitor countries in the pre- and post-elimination phases, and raise alerts when that status is in danger based on defined criteria. Elimination programmes need to establish clear criteria for **reversal** of elimination status. These criteria will often be disease-specific, based on epidemiology, and sometimes country-specific, based on the quality of surveillance. For example, reversal of malaria elimination occurs after three or more indigenous malaria cases of the same species in the same geographic area, for three consecutive years. Under an MDE approach, it can be beneficial to harmonize the criteria across diseases, within a given country.

Shared outputs

Acceleration scenarios and pathways for disease elimination

A **delivery stocktake** is a structured and inclusive process bringing together group of stakeholders to review the status of epidemiological and programmatic indicators of existing disease programmes and consider scenarios to accelerate progress.

[18] Triangulation for improved decision-making in immunization programmes (working draft), WHO, UNICEF and US CDC; 2020. https://www.dropbox.com/sh/nk2ovw3jtazpp1w/AACSRJdHnSxCo44xhFnMEM7ma?dl=0
[19] Defining collaborative surveillance: a core concept for strengthening the global architecture for health emergency preparedness, response, and resilience (HEPR). Geneva: World Health Organization; 2023. https://www.who.int/publications/i/item/9789240074064
[20] Global Strategy on Comprehensive Vaccine-Preventable Disease Surveillance. Geneva: WHO; 2020. https://www.who.int/publications/m/item/global-strategy-for-comprehensive-vaccine-preventable-disease-(vpd)-surveillance
[21] https://campaigneffectiveness.org/promising-practices/

In the context of the MDE approach, it builds consensus on which diseases and conditions should be prioritized around which platforms for the delivery of which services and interventions. It should include analysis of how non-health sectors impact disease elimination efforts and incorporate community-led assessments of the burden of diseases and of the barriers to its elimination.

In 2022, the Philippines' Disease Prevention and Control Bureau reviewed 36 diseases for elimination, including assessment of challenges and gaps, and identified 13 priorities based on criteria that included disease burden and the feasibility of elimination by 2030. These 13 diseases became the focus of a Multi-Disease Elimination Plan (see **Multi-programme strategies and plans**)

WHO has adopted and supports Member States with a Delivery for Impact approach that emphasizes setting clear goals and objectives, identifying measurable targets, and then closely monitoring progress, problem solving and course correction throughout the implementation lifecycle.

Elimination endpoints are set based on the epidemiological characteristics of each disease or condition. However, for coherence, the MDE approach emphasises *impact indicators* (incidence, prevalence, mortality, or morbidity) and *absolute* rather than relative targets.

These targets should apply across major subgroups (e.g., subnational) to ensure equity. Targets must be sustained for a *minimum period*, depending on disease epidemiology and the reliability of the surveillance system. Under MDE, programmes may wish to define a common minimum period (e.g. 3 years).

An **elimination pathway** can also lay out **midpoints** to incentivize and guide progress towards complex or distant endpoints. For example, the pathway to elimination of MTCT of hepatitis B is marked by bronze, silver and gold tiers. Midpoints are usually based on process and coverage indicators, but outcome and impact indicators are also possible at a subgroup level.

In the context of MDE, the benefits of formal recognition of progress past midpoints must be balanced against the burden that it can place on programmes and communities (for example, in the cost of measurement). Communities and relevant sectors beyond health should be involved identifying meaningful midpoints (e.g., improved sanitation) on the path to elimination.

Multi-programme strategies and plans

An MDE strategy does not duplicate existing single-disease strategies but brings them together under a shared vision and goal, with coherent mid- and endpoints, and a results framework structured by common platforms, services or interventions, and shared functions. These should be aligned with sectoral strategies and plans, including relevant sectors beyond health, such as education, water and sanitation, and social protection.

Integrated Vector Management (IVM) of dengue vectors in Latin America and the Caribbean is being tackled under PAHO's Integrated Management Strategy for Dengue Prevention and Control in the Americas (IMS-dengue model), which includes clinical diagnosis and treatment, laboratory, and patient management.

In 2023, Philippines launched its Multi-Disease Elimination Plan for 2023-2030, targeting the elimination of 13 diseases including lymphatic filariasis, schistosomiasis, leprosy, rabies, and tuberculosis. The MDEP supports the DOH's sectoral primary health care strategic plan for 2023-2028 and the integrated disease prevention and control through primary care strategic plan 2023-2028, emphasizing shared approaches across diseases and sectors, such as integrated vector management and joint community engagement.

In 2024, Brazil launched a comprehensive program aimed at eliminating and controlling "socially determined diseases" such as malaria, tuberculosis, and HIV/AIDS by 2030. This program recognizes the shared social determinants of these diseases and demonstrates how countries can evolve their multi-disease elimination strategies to include major infectious diseases with significant social and economic impacts.

An inclusive development process ensures the necessary buy-in of national stakeholders and their external partners. National strategic planning is not sufficient, however. Both the Philippines and Brazil have emphasized the importance of local planning, with Brazil developing municipal-level action plans that adapt the national strategy to local contexts. Integrated tools for microplanning, such as those for immunization service delivery and preventive chemotherapy, can support participatory planning with communities.

Consolidated guidelines

Guidelines should be developed with a focus on integrated, people-centred services and interventions**,** which might involve multi-sectoral action. WHO's Consolidated HIV guidelines already cover the integration of services for other diseases that commonly affect people living with HIV, such as tuberculosis (TB), hepatitis, and sexually transmitted infections (STIs). In 2023, to support joint elimination of LF and yaws, WHO initiated guideline development for recommendations on the co-administration of IDA plus azithromycin.

Global guidelines should facilitate **consolidation** at regional, national and subnational levels. Even when single-disease, guidelines should be structured as much as possible according to common standards and in digital formats to facilitate updating, consolidation and adaptation. The Philippines provides an example of adaptation including consolidation of global guidelines within its Omnibus Health Guidelines. Organized according to different life stages, the guidelines support high-quality health services across diverse levels, ranging from local to national, and within varied healthcare settings, including primary healthcare facilities, hospitals, and both government and private healthcare sectors.

WHO's SMART guidelines (Standards-based, Machine-readable, Adaptive, Requirements-based, and Testable) are a comprehensive set of reusable digital health components (e.g., interoperability standards, code libraries, algorithms, technical and operational specifications) that transform the guideline adaptation and implementation process to preserve fidelity and accelerate uptake. SMART Guidelines provide a five-step pathway to advance the adoption of best clinical and data practices, even if a country is not yet fully digital.

Harmonized standards for confirmation of elimination

Disease elimination programmes require independent structures to monitor progress past mid- and end-points. Confirmation of elimination is called validation, verification and certification depending on the endpoint, but the processes are similar, involving:

- **Desk review** of the direct and indirect evidence of impact and programmatic indicators
- **Assessment of the surveillance system**, including field evaluation if needed
- **Dossier preparation**, making the case for validation/verification/certification, based on findings of the desk review and surveillance assessment
- **Dossier submission** to the appropriate body for approval, conditional approval subject to further information, or rejection
- **Advisory committee report**, in case of approval of the dossier**,** to the appropriate level of the WHO secretariat
- **WHO acknowledgement** with a letter and certificate, publication in the WHO Weekly Epidemiological Record and WHO statistics.

These processes require disease-specific expertise and are typically managed by disease-specific elimination programmes and/or committees, which may be cross-sectoral in their composition (see **Inclusive governance and stewardship**). Community-led confirmation processes criteria may complement official processes. That said, the processes that these structures follow can be harmonized, such as in the assessment of the surveillance system, using standardized tools.

Common quality standards for routine surveillance systems should apply to all diseases targeted for elimination. These standards must be rigorous but not so burdensome that they deter countries from seeking validation or verification. When surveys assess the quality of surveillance data, they should include other diseases under the MDE approach, not just those awaiting validation. Additionally, these surveys should yield results that guide programming, with findings shared with all stakeholders and mechanisms in place to coordinate actions based on those findings.

For example, the integrated Transmission Assessment Survey (iTAS) of lymphatic filariasis and onchocerciasis provides a standardized platform for joint assessment.[2] The iTAS platform helps to maximize resources and coordinate decisions on stopping treatment in known or suspected co-endemic areas. Integrated serosurveillance can be a particularly powerful way to drive efficiencies for NTDs while providing meaningful information for other disease programmes.[3],[4],[5]

Interoperable information systems

A health information system covering multiple diseases helps to assess the efficiency, effectiveness and equity of programmes in delivering people-centred services and interventions.

At a minimum, disease- or programme-specific health information systems should capture co-infections and co-morbidities. Depending on the epidemiology and presentation patterns for the disease under consideration, routine information on diseases targeted for elimination might be able to be integrated into facility-based information systems (e.g. DHIS2), sentinel site and/or population-based surveys (e.g. DHS).

In any case, health information systems should be interoperable to enable sharing, comparison and analysis of data across them, and with other sectors. Information systems should also facilitate two-way processes. Frontline workers must benefit from facility-specific feedback based on information submitted.

Some country programs have started automated feedback loops that gives instant, real-time feedback as soon as information is submitted, thereby giving instant gratification and motivation to the frontliners besides supporting them in better decision making and patient care. User-friendly interfaces allow for community-level data entry and access.

The Philippine Integrated Disease Surveillance and Response (PIDSR) framework monitors both notifiable disease and other health related events of public health importance, to guide the implementation at all levels of the health care delivery system in both public and private sectors. It aims to have information at all levels as soon as they are encoded in the system, regardless of its entry point.

MDE can leverage both global and regional tools and standards, such as the WHO SCORE for Health Data Technical Package, to enhance national capabilities in generating, analyzing, and utilizing health data across multiple programmes. WHO will be releasing standardized digital surveillance guidelines along with digital adaptation kits. These kits detail the business workflows, user profiles, scenarios, data dictionary, decision support, scheduling logic, and the functional and non-functional requirements for digitalized surveillance. These should also help with interoperability with the information systems of other sectors.

Operational research and modelling

Operational research (OR) plays a crucial role in supporting learning and innovation across different disease elimination programmes. In the context of a MDE approach, joint OR evaluates the relative costs and benefits of integrated versus disease-specific approaches to elimination. It can also inform good practices for the engagement of sectors and communities.

In the Philippines, the MDEP aims to evolve towards a unified approach that identifies research requirements spanning various bureaus and agencies. By embracing an integrated method for identifying research needs, the MDEP ensures that the collective expertise of various entities is harnessed to pinpoint the most pertinent research areas.

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[2] Anagbogu IN, Saka YA, Surakat OA, Okoronkwo C, Davies E, Oyale P, Ekpo UF, Amazigo UV, Barbre K, Igbe M, Nyior A, Jacob SM, Gideon Nteun U, Abubakar Umar Z. Integrated transmission assessment surveys (iTAS) of lymphatic filariasis and onchocerciasis in Cross River, Taraba and Yobe States, Nigeria. Parasit Vectors. 2022 Jun 13;15(1):201.

[3] Handley BL, Butcher R, Taoaba R, Roberts CH, Cama A, Muller A, et al. Absence of Serological Evidence of Exposure to Treponema pallidum among Children Suggests Yaws Is No Longer Endemic in Kiribati. Am J Trop Med Hyg. 2019. doi:10.4269/ajtmh.18-0799

[4] Cooley GM, Feldstein LR, Bennett SD, Estivariz CF, Weil L, Bohara R, et al. No Serological Evidence of Trachoma or Yaws Among Residents of Registered Camps and Makeshift Settlements in Cox's Bazar, Bangladesh. Am J Trop Med Hyg. 2021;104(6):2031-7. doi:10.4269/ajtmh.21-0124.

[5] Chan Y, Martin D, Mace KE, Jean SE, Stresman G, Drakeley C, Chang MA, Lemoine JF, Udhayakumar V, Lammie PJ, Priest JW, Rogier EW. Multiplex Serology for Measurement of IgG Antibodies Against Eleven Infectious Diseases in a National Serosurvey: Haiti 2014-2015. Front Public Health. 2022 Jun 9;10:897013.doi: 10.3389/fpubh.2022.897013.

OR focuses on identifying and addressing barriers to implementing integrated approaches, including challenges in cross-sector coordination and community acceptance of combined interventions. Engaging communities and multiple sectors in the research process itself, from question formulation to data collection and analysis, can provide valuable insights and increase the relevance and uptake of findings.

For example, the Neglected Tropical Disease Support Center supports operational research on integrated approaches to multiple NTDs, often incorporating multi-sectoral and community-based strategies. Studies have examined the effectiveness of integrated mass drug administration campaigns that leverage education sector infrastructure and community health workers to address multiple diseases simultaneously.

The Health Campaign Effectiveness Coalition's implementation research across multiple countries has identified key drivers of successful integration including: standardized tools and logistics, harmonized incentive structures, pooled funding mechanisms, and coordinated community engagement strategies.[22]

More complete modelling (including of the complex interactions between multiple diseases) can improve operational effectiveness and efficiency across elimination programmes. Advanced models can also incorporate multi-sectoral data and community-level factors to provide a more comprehensive understanding of disease dynamics and intervention impacts.

Cross-programme evaluation and efficiency analysis

Programme reviews present an opportunity to course-correct (mid-term reviews) or develop new targets and plans (end-term reviews). Programme review should be based on harmonized methodology, with a core, programme-agnostic module, and additional modules to cover programme specificities. Implementing joint, multi-disease programme reviews can help to identify common bottlenecks, as well as areas of fragmentation, duplication or misalignment across the main functions of the health system. The analysis of efficiency of programmes must be done jointly, including community perspectives.

WHO's step-by-step guide for **cross-programmatic efficiency analysis** is a diagnostic approach used to identify key inefficiencies within and across health programmes and the overall health system in a country as a basis for targeted realignment, consolidation and integration.[23] It uses applied health systems analysis to unpack disease-specific programmes by their functional components (governance, financing, service delivery, inputs) to identify areas of duplication or misalignment and where a system-level approach is needed to meet sustainable coverage goals.

Lessons from joint programme reviews in South Africa, Lao PDR and Indonesia point to the importance of ensuring stakeholder involvement with representatives of affected populations from each disease; embedding health systems experts within programme review teams; actively engaging health systems departments (e.g. finance, human resources) in reviews; embedding these reviews and analyses in broader health policy discussions; and including system-wide approaches in surveys and field visit assessments.

[22] https://campaigneffectiveness.org/promising-practices/
[23] https://www.who.int/publications/i/item/9789240044982

Conclusion

The multi-disease elimination (MDE) approach represents a shift from earlier, disease-specific strategies towards a more people-centered approach to achieving elimination targets, based on core levers of the PHC approach applied across the life course. It aims to increase efficiency, effectiveness, and equity in health interventions by addressing multiple diseases simultaneously.

Key aspects of MDE implementation include:

1. Balancing single-disease and multi-disease approaches based on country context.
2. Leveraging common platforms within the health system, across sectors, and in communities.
3. Harmonizing terminologies, processes, and structures across disease elimination programmes.

- Implementing shared functions such as inclusive governance, pooled financing, multidisciplinary teams, and collaborative M&E/surveillance.

4. Developing shared outputs including multi-programme strategies, consolidated guidelines, and interoperable information systems.

The document acknowledges that MDE is not without risks, such as increased complexity in program management and potential loss of focus and expertise. It emphasizes that every country needs to strike the right balance, over time, of single-disease and multi-disease approaches. It also highlights that this should be seen in the context of a PHC-oriented health system that meets the holistic needs of people.

The document provides guidance for countries and global health practitioners to consider and adopt MDE approaches. It draws on experiences and good practices from regions and countries already moving in this direction, offering practical insights for implementation.

As the global health community moves towards MDE, continued documentation and sharing of experiences will be crucial for refining and improving the approach. It will thereby accelerate progress towards the elimination of multiple diseases while strengthening health systems and contributing to the achievement of Universal Health Coverage and the Sustainable Development Goals.

Annex 1. Global targets, resolutions and strategies for elimination

Disease/ Condition/ Risk factor	Global target on incidence, prevalence, morbidity or mortality	World Health Assembly Resolution; WHO Strategy
Eradication		
Dracunculiasis	***By 2030***: 194 countries certified free of **transmission**	WHA73 (33); Ending the neglect to attain the Sustainable Development Goals: A road map for neglected tropical diseases 2021–2030
Poliomyelitis	***By 2023***: **Interrupt transmission** of all wild poliovirus; Stop circulating vaccine-derived poliovirus outbreaks within 120 days of detection; ***By 2026***: Certify **eradication**	WHA76.13; Polio Eradication Strategy 2022-2026: Delivering on a Promise
Yaws	***By 2030***: 194 countries certified free of **transmission**	WHA73 (33); Ending the neglect to attain the Sustainable Development Goals: A road map for neglected tropical diseases 2021–2030
Elimination of transmission		
Human African trypanosomiasis (gambiense)	***By 2030:*** **Zero cases** reported	WHA73 (33); Ending the neglect to attain the Sustainable Development Goals: A road map for neglected tropical diseases 2021–2030
Leprosy	***By 2030:*** 120 countries with **zero new indigenous cases**	WHA73 (33); Ending the neglect to attain the Sustainable Development Goals: A road map for neglected tropical diseases 2021–2030
Onchocerciasis	***By 2030:*** 12 Countries **verified** for **interruption of transmission**	WHA73 (33); Ending the neglect to attain the Sustainable Development Goals: A road map for neglected tropical diseases 2021–2030
Elimination as a public health problem (EPHP)		
Cervical cancer	***By 2030***: every country must achieve: 90% coverage of HPV vaccination of girls (by 15 years of age); 70% coverage of screening (70% of women are screened with high-performance tests by the ages of 35 and 45 years); 90% treatment of precancerous lesions; and 90% management of invasive cancer cases. Elimination is defined as **<4 cases/100,000 women.**	WHA73.2; Global strategy to accelerate the elimination of cervical cancer as a public health problem
Chagas disease	***By 2030***: 15 countries achieving **interruption of transmission through four transmission routes** (vectorial, transfusional, transplantation and congenital)	WHA73 (33); Ending the neglect to attain the Sustainable Development Goals: A road map for neglected tropical diseases 2021–2030
Cholera	***By 2030***: 90% reduction in **deaths**; eliminate disease **transmission** in 20 countries	WHA71.4; Ending Cholera—A Global Roadmap to 2030
Gonorrhoea	**By 2030:** 90% reduction in *N. gonorrhoea* **incidence** among people 15-49 years old (baseline 2020)	WHA75.2; Global health sector strategies on, respectively, HIV, viral hepatitis and sexually transmitted infections for the period 2022-2030
Hepatitis B[1]	**By 2030**: 0.1% Hepatitis B surface antigen **prevalence** among children younger than 5 years; 2 per 100,000 population **new Hepatitis B infections** /year; 4 per 100,000 population people **dying** from Hepatitis B per year. **By 2030:** 95% reduction in **incidence** of chronic Hepatitis B infections; ≤0.1% prevalence HBsAg in children ≤5 years old; ≤2% mother-to-child transmission (MCTC) rate for countries using targeted timely Hepatitis B birth dose.	WHA75.2; Global health sector strategies on, respectively, HIV, viral hepatitis and sexually transmitted infections for the period 2022-2030
Hepatitis C	**By 2030**: 5 per 100,000 population **new Hepatitis C infections**/year; 2 per 100 **new Hepatitis C infections** among people who inject drugs per year; 2 per 100,000 population people **dying** from Hepatitis C per year.	WHA75.2; Global health sector strategies on, respectively, HIV, viral hepatitis and sexually transmitted infections for the period 2022-2030
HIV[1]	**By 2030**: 0.025 people **newly infected** with HIV per 1000 uninfected population per year; 15,000 children younger than 15 years old **newly infected** with HIV per year; <240,000 people **dying** from HIV-related causes per year; 55,000 people living with HIV **dying** from tuberculosis, hepatitis B and hepatitis C. **By 2030**: Zero **new infections** among infants and young children. A **population case rate** of paediatric HIV infections due to mother-to-child transmission (MCTC) of ≤50 cases per 100,000 live births; <2% in non-breastfeeding populations; <5% in breastfeeding populations.	WHA75.2; Global health sector strategies on, respectively, HIV, viral hepatitis and sexually transmitted infections for the period 2022-2030

Disease/ Condition/ Risk factor	Global target on incidence, prevalence, morbidity or mortality	World Health Assembly Resolution; WHO Strategy
Human African trypanosomiasis (rhodesiense)	**By 2030**: 8 countries **validated** for 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 five year period)	WHA73 (33); Ending the neglect to attain the Sustainable Development Goals: A road map for neglected tropical diseases 2021–2030
Leishmaniasis (visceral)	**By 2030**: 75 countries **validated** for elimination as a public health problem (defined as <1% **case fatality rate** due to primary disease)	WHA73 (33); Ending the neglect to attain the Sustainable Development Goals: A road map for neglected tropical diseases 2021–2030
Lymphatic filariasis	**By 2030**: 58 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 with known patients)	WHA73 (33); Ending the neglect to attain the Sustainable Development Goals: A road map for neglected tropical diseases 2021–2030
Malaria	**By 2030**: reduce malaria **mortality** rates and **case incidence** globally by at least 90% (2015 as baseline); Eliminate malaria from at least 35 countries where malaria was transmitted in 2015; **prevent re-establishment** of malaria in all countries that are malaria-free	WHA74.9; Global technical strategy for malaria 2016-2030, 2021 update; WHO A Framework for malaria elimination.
Maternal and neonatal tetanus	**By 2015**: Eliminate neonatal tetanus **cases** in the remaining 40 countries	WHA65.17; Global Vaccine Action Plan 2011-2020
Measles	**By 2020:** Eliminate measles in at least five World Health Organization regions; elimination defined as the absence of **endemic transmission** in a defined geographical region or country for ≥12 months, documented by a well-performing surveillance system; furthermore, achieve at least 95% coverage with both the first and second routine doses of measles vaccine (or measles- rubella-containing vaccine as appropriate) in each district and nationally	WHA65.17; Global Vaccine Action Plan 2011-2020; Global Measles and Rubella Strategic Plan 2012–2020
Meningitis	**By 2030**: Eliminate meningitis **epidemics**; reduce **cases** and **deaths** from vaccine-preventable meningitis by 80%; decrease the impact of **sequelae** by 50%	WHA73.9; Defeating meningitis by 2030: a global road map
Rabies	**By 2030**: 155 countries having achieved zero human **deaths** from rabies	WHA73 (33); Ending the neglect to attain the Sustainable Development Goals: A road map for neglected tropical diseases 2021–2030
Rubella (including congenital rubella syndrome)	**By 2020**: Achieve measles and rubella elimination in at least five WHO regions; elimination defined as the absence of **endemic transmission** in a defined geographical region or country for ≥12 months, documented by a well-performing surveillance system; furthermore, achieve at least 95% coverage with both the first and second routine doses of measles vaccine (or measles- rubella-containing vaccine as appropriate) in each district and nationally; establish a target date for the global **eradication** of rubella and **congenital rubella syndrome**	WHA65.17; Global Vaccine Action Plan 2011-2020; Global Measles and Rubella Strategic Plan 2012–2020
Schistosomiasis	**By 2030**: 78 countries validated for elimination as a public health problem (defined as <1% proportion of **heavy intensity** infections)	WHA73 (33); Ending the neglect to attain the Sustainable Development Goals: A road map for neglected tropical diseases 2021–2030
Soil transmitted helminths	**By 2030**: 96 countries validated for elimination as a public health problem (defined as <2% proportion of soil-transmitted helminth **infections** of **moderate and heavy intensity**)	WHA73 (33); Ending the neglect to attain the Sustainable Development Goals: A road map for neglected tropical diseases 2021–2030
Syphilis[1]	**By 2030**: 0.71 million **new cases** of syphilis among people 15-49 years old per year; <50 **cases** of congenital syphilis per 100,000 live births per year. **By 2030:** ≤50 **cases** of congenital syphilis per 100,000 live births in **80% of countries**.	WHA75.2; Global health sector strategies on, respectively, HIV, viral hepatitis and sexually transmitted infections for the period 2022-2030
Trachoma	**By 2030**: 64 countries validated for elimination as a public health problem (defined as (i) a **prevalence** of trachomatous trichiasis "unknown to the health system" of < 0.2% in ≥ 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 trachomatous trichiasis cases, using defined strategies, with evidence of appropriate financial resources to implement those strategies)	WHA73 (33); Ending the neglect to attain the Sustainable Development Goals: A road map for neglected tropical diseases 2021–2030
Tuberculosis	**By 2030**: 90% reduction in number of TB **deaths** compared with 2015; 80% reduction in TB **incidence rate** compared with 2015; **By 2035**: 95% reduction in number of TB **deaths** compared with 2015; 90% reduction in TB **incidence rate** compared with 2015; elimination defined as 1 TB **case** per million population	WHA67.1; The end TB strategy; Towards TB Elimination an action framework for low-incidence countries
Vector-borne diseases[2]	**By 2030**: Reduce **mortality** due to vector-borne diseases by at least 75% (baseline 2016); Reduce **case incidence** due to	WHA70.16; Global Vector Control Response 2017–2030; WHA73 (33); Ending the neglect

Disease/ Condition/ Risk factor	Global target on incidence, prevalence, morbidity or mortality	World Health Assembly Resolution; WHO Strategy
	vector-borne diseases by at least 60% (baseline 2016); Prevent **epidemics** of vector-borne diseases in all countries; 0% Dengue **case fatality rate**	to attain the Sustainable Development Goals: A road map for neglected tropical diseases 2021–2030 (Dengue)
Yellow Fever	**By 2026**: Reduce yellow fever **outbreaks** to zero.	A Global Strategy to Eliminate Yellow Fever Epidemics 2016-2026; WHA70.16; Global Vector Control Response 2017–2030
Industrially produced trans fats	By 2023: **Eliminate** industrially-produced trans-fatty acids (TFA) from the global food supply	REPLACE Trans-Fat Free; Validation Programme for Trans Fat Elimination

[1] The Hepatitis B, HIV and syphilis targets for mother-to-child transmission are collectively referred to as triple elimination of mother-to-child transmission (EMTCT),

[2] The following 6 diseases are already included elsewhere in the table: Chagas disease, leishmaniasis, lymphatic filariasis, malaria, onchocerciasis, and schistosomiasis. The following 5 diseases are not included elsewhere in the table: chikungunya, dengue, Japanese encephalitis, yellow fever and Zika virus disease.

Regional targets, resolutions and strategies for elimination (to be completed by regions)

Disease/ Condition / Risk factor	Regional target on incidence, prevalence, morbidity or mortality	Regional Resolution; Regional Strategy
PAHO		
Elimination as a public health problem (EPHP)		
Cystic echinococcosis		
Fascioliasis		
Human T-lymphotropic virus		
Plague		
Open defecation		
Polluting biomass cooking fuels		

Annex 2. Multi-disease services and interventions

Service or intervention	ICHI* Code and Description	Diseases or conditions targeted
Health Promotion and Education		
Comprehensive sexuality education	PZA.AA.ZZ: Education about sexual health	Cervical cancer hepatitis B and C, HIV, STIs (including syphilis),
Social mobilization and community engagement	VFS.PM.ZZ Education about improving health literacy; SMH.PM.ZZ Education in looking after one's health; VD1.PM.ZZ Education to influence health service-related behaviours, unspecified; UCE.VC.ZZ Public health surveillance concerning support from acquaintances, peers, colleagues, neighbours and community members; PZA.PM.ZZ: Education about environmental health	HIV, malaria, NTDs, polio, TB
WASH promotion	PZA.AD.ZZ: Education about hygiene; SMB.PM.ZZ Education about washing oneself	Chagas disease, cholera, dracunculiasis, HAT, leprosy, lymphatic filariasis, maternal and neonatal tetanus, polio, rabies, schistosomiasis, soil-transmitted helminths, strongyloidiasis, trachoma, yaws
Food safety and nutrition education	PZA.AB.ZZ: Education about nutrition UAB.VB.ZZ Awareness raising concerning food safety and security	Soil-transmitted helminths, schistosomiasis, lymphatic filariasis, visceral leishmaniasis
Prevention		
Vaccination	PZC.BA.HA: Administration of vaccine for viral disease; PZC.BA.HB: Administration of vaccine for bacterial disease	Cholera, dengue, Hepatitis B, HPV (cervical cancer), Japanese encephalitis, leprosy, measles, meningitis, polio, rabies, rubella, tetanus, TB, yellow fever
Mass drug administration / seasonal chemoprevention	PZC.BL.ZZ: Administration of prophylactic systemic pharmacotherapy	Cysticercosis, lymphatic filariasis, malaria, onchocerciasis, schistosomiasis, soil-transmitted helminths, strongyloidiasis, taeniasis, trachoma, yaws
Vector control	PCA.PM.ZZ: Control of disease vectors; UBQ.RD.ZZ Providing goods to reduce exposure to animal vectors of disease	Chagas disease, chikungunya, dengue, lymphatic filariasis, malaria, schistosomiasis, yellow fever, Zika,
Provision of male and female condoms	PZC.BK.ZZ: Provision of contraceptive device	Hepatitis B and C, HIV, HPV (cervical cancer), STIs
Pre- and post-exposure prophylaxis	PZC.BL.ZZ: Administration of prophylactic systemic pharmacotherapy	HIV (for PrEP and PEP), rabies (for PEP)
Harm reduction	PZC.BF.ZZ: Blood safety procedure	Hepatitis B and C; HIV, Septicemia
Blood/injection safety	PZC.BF.ZZ: Blood safety procedure	Chagas disease, hepatitis B and C, HIV
Immunoglobulin therapy	PZC.BM.ZZ: Immunoglobulin therapy	Hepatitis B, Rabies, tetanus
Environmental health hazard mitigation	PCA.RT.ZZ: Environmental health hazard mitigation	Vector-borne diseases (Chagas disease, dengue, malaria, schistosomiasis, yellow fever)
Screening and Diagnosis		
Point-of-care testing		Hepatitis B and C; HIV, HPV, malaria, syphilis
Contact investigation		Leprosy, TB
Cervical cancer screening	PZB.BD.ZZ: Other specified diagnostic imaging	Cervical cancer
Integrated skin examination	LZZ.AE.AH Inspection of the skin and subcutaneous cell tissue, not elsewhere classified	Buruli ulcer, cutaneous leishmaniasis, Leprosy, onchocerciasis, yaws
Xray and other imaging	BF.BA.BA X-ray of lung, not elsewhere classified; JBF.BA.BB Radiography of lung with contrast medium	TB
Environmental surveillance	UBU.VC.ZZ Public health surveillance concerning water pollution; UB1.ZZ.ZZ Other and unspecified interventions targeting unspecified aspects of the natural environment and human-made change	Cholera, polio, vector borne diseases
Mental health assessment	PZB.AC.ZZ: Assessment of mental health and behavior	Filariasis, HIV, leprosy, TB and other chronic conditions or conditions with associated stigma
Substance use assessment	PZB.AC.ZZ: Assessment of substance use	Hepatitis B and C, HIV
Digestive system specimen examination	PZB.BK.ZZ: Laboratory examination of specimen from digestive system	Cholera schistosomiasis, soil-transmitted helminths,
Urinary system specimen examination	PZB.BM.ZZ: Laboratory examination of specimen from urinary system	Lymphatic filariasis, schistosomiasis
Treatment and Care		
Patient support for treatment adherence	PTZ.OA.ZZ: Management of medication regime	Hepatitis B, HIV, leprosy, TB

Morbidity management and disability prevention	PZZ.ZZ.ZZ: Therapeutic support and guidance	Cervical cancer, HIV, leprosy, lymphatic filariasis, TB
Surgery	PTE.JH.AE: Excision procedure on cervix; PTL.BG.AE: Excision of lesion of lymphatic structure; PTC.DK.AE: Excision of lesion of eye	Cervical cancer, lymphatic filariasis, trachoma
Wound care	PTM.DL.ZZ: Wound management	Buruli ulcer, filariasis, leprosy, tetanus, yaws
Rehabilitation services	PZE.PE.ZZ: Therapeutic exercise	Leprosy, lymphatic filariasis, trachoma
Mental health and psychosocial support	PZZ.ZZ.ZZ: Therapeutic support and guidance	All chronic conditions and conditions associated with stigma
Palliative care	PZZ.ZZ.ZZ: Therapeutic support and guidance	Cervical cancer, hepatitis B and C HIV,
Respiratory support	PTF.DF.ZZ: Respiratory support	Severe cases of COVID19, TB
Dietary management	PZC.AA.ZZ: Dietary management	HIV, TB, visceral leishmaniasis
Skills training for self-care	PZD.AA.ZZ: Skills training	Leprosy, lymphatic filariasis
Case management	PZX.ZZ.ZZ: Case management	All treatable diseases targeted for elimination
Isolation precautions	UAA.AC.ZZ: Isolation precaution	Cholera, COVID19, TB and other highly infectious diseases
Specialized medication administration	PZC.BJ.ZZ: Administration of medication, other specified	Various diseases requiring specific medication regimens

***** International Classification of Health Interventions (ICHI)

Annex 3. Common platforms to deliver services and interventions for MDE

Platform	Services and interventions delivered (based on Annex 2)	Diseases or conditions targeted
Within the health sector		
Primary care facilities	Comprehensive sexuality education; social mobilization and community engagement; WASH promotion; Food safety and nutrition education; vaccination; mass drug administration/seasonal chemoprevention; provision of male and female condoms; pre- and post-exposure prophylaxis; harm reduction; immunoglobulin therapy; point-of-care testing; contact investigation; cervical cancer screening; integrated skin examination; Mental health assessment; Substance use assessment; patient support for treatment adherence; morbidity management and disability prevention; wound care; rehabilitation services; - mental health and psychosocial support; palliative care; dietary management; skills training for self-care; case management	Virtually all diseases targeted for elimination
Secondary/tertiary health facilities	Blood injection safety; point of care testing; cervical cancer screening; integrated skin surveillance, digestive system specimen examination; urinary system specimen examination; morbidity management and disability prevention; surgery; wound care; rehabilitation services; mental health and psychosocial support; palliative care; respiratory support; case management; Isolation precautions; specialized medication administration	Cervical cancer, Complicated cases of HIV, lymphatic filariasis, malaria, NTD, trachoma, TB,
Reproductive/sexual health clinics	Comprehensive sexuality education; social mobilization and community engagement; provision of male and female condoms; pre- and post-exposure prophylaxis; point-of-care testing; contact investigation; cervical cancer screening; urinary system specimen examination	Cervical cancer, female genital schistosomiasis, hepatitis B, HIV, STIs,
Antenatal and postnatal clinics	Pre- and post-exposure prophylaxis; point-of-care testing, vaccination; vector control	Chagas, hepatitis B, HIV, malaria, maternal and neonatal tetanus, rubella, syphilis
Community health workers	Social mobilization and community engagement, WASH promotion food safety and nutrition education, vaccination, mass drug administration / seasonal chemoprevention, vector control, provision of male and female condoms, harm reduction, environmental health hazard mitigation, point of care testing, contact investigation, integrated skin examination, patient support for treatment adherence, morbidity management and disability prevention, wound care, rehabilitation services, skills training for self-care, case management	HIV, leprosy, lymphatic filariasis malaria, NTDS, TB
Mobile clinics	Comprehensive sexuality education; social mobilization and community engagement; WASH promotion; food safety and nutrition education; vaccination; mass drug administration/seasonal chemoprevention; provision of male and female condoms; pre- and post-exposure prophylaxis; harm reduction; immunoglobulin therapy; point-of-care testing; contact investigation; cervical cancer screening; integrated skin examination; Xray and other imaging, patient support for treatment adherence; morbidity management and disability prevention; wound care; skills training for self-care; case management	Buruli ulcer, cervical cancer, HIV, leprosy, malaria, NTDs, STIs, vaccine-preventable diseases, yaws,
Digital health platforms	Comprehensive sexuality education, social mobilization and community engagement, WASH promotion, food safety and nutrition education, contact investigation, integrated skin examination, mental health assessment, substance use assessment, patient support for treatment adherence, morbidity management and disability prevention, rehabilitation services, mental health and psychosocial support, dietary management, skills training for self-care, case management	Cervical cancer, HIV, malaria, NTDs, STIs, TB
Integrated surveillance systems	Contact investigation, cervical cancer screening, integrated skin examination, digestive system specimen examination, urinary system specimen examination, environmental surveillance, case management	All targeted diseases, especially polio
Supply chain management systems	Vaccination, mass drug administration/seasonal chemoprevention, vector control, provision of male and female condoms, pre- and post-exposure prophylaxis, harm reduction, blood injection safety, immunoglobulin therapy, point of care testing, cervical cancer screening, Xray and other imaging, digestive system specimen examination, urinary system specimen examination, respiratory support, case management, specialized medication administration	All targeted diseases
Across other sectors		
Schools	Comprehensive sexuality education, social mobilization and community engagement, WASH promotion, food safety and nutrition education, vaccination, mass drug administration / seasonal chemoprevention, vector control, environmental health hazard mitigation, skills training for self-care	HPV, malaria, soil-transmitted helminths, schistosomiasis, trachoma

Workplaces	Social mobilization and community engagement, environmental health hazard mitigation, point-of-care testing, skills training for self-care	Hepatitis B, HIV, TB, vector-borne diseases
Prisons	Point-of-care testing, Xray and other imaging, vaccination, mental health and psychosocial support, case management, Isolation precautions	Hepatitis B and C HIV, TB,
Water and sanitation sector	Social mobilization and community engagement, WASH promotion, vector control, environmental health hazard mitigation, environmental surveillance	Cholera, diarrheal diseases, NTDs, polio, schistosomiasis, trachoma, vector-borne diseases
Agriculture sector	Social mobilization and community engagement, WASH promotion, food safety and nutrition education, vector control, environmental health hazard mitigation, environmental surveillance	Zoonotic diseases (e.g., rabies, echinococcosis)
Urban planning and housing	Vector control, environmental health hazard mitigation	Chagas, dengue, malaria
Social welfare services (labor, justice, population and migration sectors)	Social mobilization and community engagement, point-of-care testing, mental health and psychosocial support, Referrals to health services, health education and counseling	Hepatitis B and C, HIV, mental health conditions associated with chronic diseases, NTDs, STIs, TB,
Within communities		
Community centers	Social mobilization and community engagement, mental health and psychosocial support, skills training for self-care	HIV, leprosy, lymphatic filariasis NTDs, TB,
Places of worship	Social mobilization and community engagement, mental health and psychosocial support	HIV, leprosy, NTDs TB
Markets and other public spaces	Social mobilization and community engagement, WASH promotion, food safety and nutrition education, provision of male and female condoms	Waterborne diseases, HIV, malaria, NTDs, STIs
Households	Contact investigation, vector control, environmental health hazard mitigation	Chagas, dengue, HIV, leprosy, malaria, NTDs, STIs, TB
Outreach services for sex workers	Comprehensive sexuality education, social mobilization and community engagement, provision of male and female condoms, pre- and post-exposure prophylaxis, harm reduction, point of care testing, mental health assessment, substance use assessment, patient support for treatment adherence, mental health and psychosocial support, case management,	Hepatitis B and C, HIV, STIs, TB
Harm reduction centers for people who inject drugs	Comprehensive sexuality education, social mobilization and community engagement, provision of male and female condoms, pre- and post-exposure prophylaxis, harm reduction, point of care testing, mental health assessment, substance use assessment, patient support for treatment adherence, mental health and psychosocial support, case management, blood/injection safety	Hepatitis B and C, HIV, STIs
LGBTQ+ community centers	Comprehensive sexuality education, social mobilization and community engagement, provision of male and female condoms, mental health assessment, substance use assessment, patient support for treatment adherence, mental health and psychosocial support	Hepatitis B, HIV, STIs
Refugee/migrant health services	Comprehensive sexuality education; social mobilization and community engagement; WASH promotion; food safety and nutrition education; vaccination; mass drug administration/seasonal chemoprevention; provision of male and female condoms; pre- and post-exposure prophylaxis; harm reduction; immunoglobulin therapy; point-of-care testing; contact investigation; cervical cancer screening; integrated skin examination; mental health assessment; substance use assessment,; patient support for treatment adherence; morbidity management and disability prevention; wound care; rehabilitation services; mental health and psychosocial support; dietary management; skills training for self-care; case management	HIV, TB, malaria, vaccine-preventable diseases
Support groups for people with disabilities	Skills training for self-care, rehabilitation services, mental health and psychosocial support	Leprosy, lymphatic filariasis, onchocerciasis, trachoma