PAHO DISEASE ELIMINATION INITIATIVE: A POLICY FOR AN INTEGRATED SUSTAINABLE APPROACH TO COMMUNICABLE DISEASES IN THE AMERICAS

Introduction

1. Countries in the Region of the Americas have committed to the achievement of the goals of the 2030 Agenda for Sustainable Development (1) and the Sustainable Health Agenda for the Americas 2018-2030 (SHAA2030) (2). Toward this end, they have reaffirmed the need for collective action to fulfill Sustainable Development Goal (SDG) target 3.3, which calls for ending the epidemics of AIDS, tuberculosis, malaria, and neglected tropical diseases and combating hepatitis, waterborne diseases, and other communicable diseases, as well as SHAA2030 Goal 10, which seeks to reduce the burden of communicable diseases and eliminate neglected diseases. The Pan American Health Organization (PAHO) prioritizes disease prevention, vaccine coverage expansion and consolidation, access to treatment, an end to communicable disease epidemics, and, ultimately, disease elimination.

2. This policy document considers the Organization’s mandate and existing elimination plans and strategies focusing on various health conditions (3-14). It offers a collective approach and comprehensive strategy for disease elimination, identifies the diseases and related conditions that are potential candidates for elimination in the Region, and indicates common lines of action. The document sets out targets using a novel approach of tackling the four dimensions of elimination, namely: interrupting endemic transmission, ending mortality, ending morbidity, and ending disability, one or more of which may be included in each disease-specific elimination target.

3. The overarching concept promoted by this initiative is that of a common approach toward elimination of those communicable diseases that impose a significant epidemiological burden and whose elimination is feasible using existing tools and technology. Innovative use of existing tools and technologies, as well as the incorporation of newly developed technologies, will have also a major role in achieving the elimination.
The concept of elimination, it should be noted, includes different degrees and modalities of elimination, depending on the communicable disease in question. These include elimination of the disease as a public health problem, elimination of transmission, and eradication (see definitions provided in Annex A).

4. The framework for communicable disease elimination described in this document aligns closely with the health-related SDGs. It relates directly to SDG 3 target 3.3, as noted above, but also to SDG targets 3.1 (reduce maternal mortality), 3.2 (reduce newborn and under-5 mortality), 3.4 (reduce mortality from noncommunicable diseases), 3.7 (ensure access to sexual and reproductive health), 3.8 (achieve universal health coverage), 3.9 (reduce mortality from air, water, and soil pollution), 3.d (strengthen emergency preparedness), and SDG 6 targets 6.1 (ensure access to safe drinking water), and 6.2 (ensure access to sanitation). The initiative will support progress toward these goals and presents an opportunity to move the Region’s public health response to communicable diseases to the next stage, characterized by a robust disease elimination agenda. It facilitates more integration and synergies between public health priority programs and primary health care through its use of a life course, community-centered approach that promotes sustainable health services delivery for all.

Background

5. Throughout its history that spans more than 116 years, PAHO has played a key role in realizing important disease elimination achievements in the Americas and globally. PAHO led the eradication of smallpox and elimination of polio and neonatal tetanus from the Americas and supported countries in the elimination of endemic transmission of measles, rubella, and congenital rubella syndrome (CRS) through the strengthening of existing well-designed and well-implemented vaccination programs. Currently, countries in the Region are approaching the elimination of hepatitis B perinatal and early childhood transmission, following the introduction of the hepatitis B vaccine into routine immunization programs more than 25 years ago. Looking beyond vaccine-preventable diseases, countries of the Region are likewise approaching the elimination of malaria and several neglected infectious diseases, including Chagas disease, leprosy, trachoma, lymphatic filariasis, and onchocerciasis (river blindness). They have achieved substantial reductions in the adverse impact of soil-transmitted helminthiasis, schistosomiasis, and fascioliasis in children and other populations at risk through public health and environmental frameworks and interventions, such as preventive chemotherapy for soil transmitted helminths, and improving water access for human consumption, basic sanitation, and housing quality and safety. The elimination of mother-to-child transmission (EMTCT) of HIV, syphilis, hepatitis B, and Chagas disease in the Americas is also within reach through an innovative, integrated, cost-efficient, and effective approach.

6. These success stories document the experience and comparative advantage of the Region in disease elimination. Much remains to be done, however, and the existing elimination agenda needs to be accelerated in order to maintain gains and continue advancing the response to communicable diseases in the Region. This is urgent in the face of the demographic and epidemiologic transition underway, the existing health inequities
in our Region, the concurrent rising burden of noncommunicable diseases, and the widening resource constraints that are affecting responses at country and regional levels. Together these factors pose a risk of slowing progress or even losing the gains made in the Region toward the elimination of communicable diseases such as lymphatic filariasis, Chagas disease, malaria, tuberculosis, and mother-to-child transmission (MTCT) of HIV.

7. The work ahead can be reinforced by framing a regional Elimination Initiative (EI) fully aligned with the Strategic Plan of the Pan American Health Organization 2020-2025, the SDGs and linked with ongoing United Nations (UN), World Health Organization (WHO), and PAHO global and regional strategies and plans of action for improving health and well-being. These include the WHO joint initiative Towards a Global Action Plan for Healthy Lives and Well-Being for All: Uniting to Accelerate Progress towards the Health-Related SDGs (15), which is expected to contribute significantly to the attainment of the SDGs by 2030. The sustainability of the proposed initiative is supported through alignment with PAHO’s Strategy for Universal Access to Health and Universal Health Coverage (Document CD53/5, Rev. 2) (16), WHO’s Strengthening Health Systems to Improve Health Outcomes framework for action (2007) (17), and PAHO’s Plan of Action on Health in All Policies (Document CD53/10, Rev. 1) (18).

8. The number and scope of communicable diseases and related conditions in the Americas is large and wide. Therefore, the focus will be on a key group of diseases that represent a significant burden and disproportionally affect the more vulnerable populations in the Region, including indigenous and Afro-descendant populations, and migrants, and whose elimination is feasible using available and innovative technical means. These are HIV, including MTCT; syphilis, including congenital syphilis; hepatitis B virus, including perinatal and early childhood transmission; hepatitis C virus; yellow fever; Chagas disease, including congenital Chagas; as well as malaria, leishmaniasis, schistosomiasis, soil-transmitted helminthiasis, onchocerciasis, lymphatic filariasis, fascioliasis, trachoma, leprosy, yaws, tuberculosis, cholera, plague, human rabies, and diphtheria. The initiative also addresses the risk of reintroduction of vaccine-preventable diseases such as rubella, including congenital rubella syndrome, measles, and poliomyelitis, and the control of outbreak-prone diseases such as cholera, plague, and yellow fever through the International Health Regulations. In addition to these communicable diseases, cervical cancer has been recognized as a disease with great potential for elimination as a public health problem, based on the available cost-effective interventions to prevent this common cancer in women. The EI is also targeting certain environmental determinants related to communicable diseases, including the elimination of open defecation and of polluting biomass cooking fuels, both of which are widespread public health problems in certain geographic areas. The diseases and conditions covered under this initiative are presented in Annex B, which indicates elimination goals and targets and the current epidemiological situation.
Economic Justification

9. It is estimated that a core group of communicable diseases, including HIV/AIDS, tuberculosis (TB), malaria, and neglected infectious diseases, accounted for 6 percent of the total burden of disability-adjusted life years (DALYs) in all age groups and sexes in the Americas in 2017. The same group of diseases was responsible for 7% of all deaths. Mortality burden increases to 9% of deaths when viral hepatitis-related cirrhosis and hepatic cancers, as well as cervical cancer, are included (19).

10. Given the economic costs of both DALYs and deaths, along with the monetary costs to the health sector, the financial benefits of this initiative should be considered. For example, the worldwide socioeconomic benefit of eliminating neglected tropical diseases such as leprosy, leishmaniasis, and Chagas disease has been estimated as high as US$ 10.7 billion\(^1\) for 2011-2020 and up to $16.6 billion for 2021-2030. An additional $6.7 billion and $10.4 billion in reduction of out-of-pocket expenses is also estimated for the corresponding periods (20).

11. In addition to economic costs, communicable diseases impose intangible social costs on individuals, families, and communities. In sum, the burden of these diseases, with their health, economic, and social costs, prevents the full achievement of health and highlights the need to step up disease elimination efforts in the Americas.

Proposal

12. This Elimination Initiative (EI) provides a common and sustainable framework with prioritized lines of action to orient and guide countries of the Region as they work toward the elimination of a group of priority communicable diseases and related conditions. The framework is strategic, inclusive, standardized, and multisectoral, and can be adopted, adapted, and implemented in a staged manner by the countries of the Region according to their national and local contexts and priorities. The vision is of a future free of the burden of these diseases in the Americas, beginning no later than 2030.

13. In line with available epidemiological data and information, the EI will benefit populations in conditions of vulnerability. Most of the targeted diseases have their greatest impact on populations that live in situations of vulnerability, are marginalized socioeconomically, and/or experience difficult access to health services, including women and girls, indigenous peoples, Afro-descendants, people living in rural areas, LGBT people, migrants, prisoners, and other marginalized groups. As countries progress toward elimination, focus will have to be maintained on those communities and individuals.

14. Building on a background of pioneering, innovative, and successful interventions, the EI promotes linkages and synergies within the health system and with other sectors. For the successful implementation of the EI, major stakeholders out of the government sphere should also be engaged, including the private (health) sector and organized civil

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\(^1\) Unless otherwise indicated, all monetary figures in this document are expressed in United States dollars.
society. The EI uses a life course approach, emphasizing primary health care (PHC) and leveraging well-established PHC platforms such as Expanded Program on Immunization (EPI) and maternal and child health. It seeks to achieve economies of scale; strengthen disease surveillance and health information systems; boost integration of health services, health systems, and laboratory networks; promote operational research; and facilitate advocacy, community mobilization, and health promotion efforts. Approaching all mentioned areas, operational research and innovation will be crucial in bridging existing gaps and addressing unanswered questions.

15. Relying on and promoting the cross-cutting themes of gender, equity, human rights, and ethnicity, and in line with the principle of leaving no one behind, the EI articulates the following four lines of action.

**Strategic Line of Action 1: Strengthening the Integration of Health Systems and Service Delivery**

16. The availability of a range of comprehensive, integrated, and quality-assured health services is necessary to achieve and maintain the elimination targets. The EI gives an operational focus by identifying, grouping, and analyzing multiple diseases, dimensions, and conditions to determine how they efficiently fit into existing platforms and packages, or how they could fit into new, innovative platforms and packages. With a focus on strengthening of primary health care and a community-based approach, services that could benefit from integration include sexual and reproductive health; women’s health programs; antenatal care; immunization programs; health programs for indigenous and Afro-descendent populations; prevention, care, and treatment for HIV and sexually transmitted infections (STI); zoonoses and vector control and neglected diseases programs; and environmental, water, and sanitation programs. Decentralization of services, especially through primary health care networks, implementation of single visits for multiple health issues, screening and treatment in the same visit, and use of point-of-care technologies will improve linkages between the community and health services, promoting adherence and retention in care. On the environmental side, application of integrated vector and animal reservoir management with community empowerment and participation will create synergies and cost savings.

**Strategic Line of Action 2: Strengthening Strategic Health Surveillance and Information Systems**

17. Strengthening and integrating information systems related to the EI at regional and national levels will create further synergies and cost savings. This requires improving countries’ capacity to enhance and integrate disease surveillance to generate and analyze data that can be used to monitor progress across all programmatic areas involved in the elimination efforts. With technical orientation from PAHO, countries will determine their data needs and availability and adapt existing health information systems to align them with the EI in the areas of disease surveillance; monitoring across the continuum of health promotion, prevention, care, and treatment; and evaluation of progress toward elimination of the diseases and conditions covered by the EI, including robust post-elimination
monitoring and surveillance. In addition, as part of this line of action, technical cooperation will strengthen national capacity to detect, assess, notify, and report events in accordance with the International Health Regulations.

_Strategic Line of Action 3: Addressing the Environmental and Social Determinants of Health_

18. Communicable diseases disproportionately impact resource-constrained communities and are linked to a complex range of overlapping determinants of health. These include availability of safe drinking water and basic sanitation, housing conditions, climate change risks, gender inequity, sociocultural factors, and poverty, among others. As a disease approaches elimination, the remaining burden often becomes more closely tied to the environmental and social determinants of health. Understanding and addressing the complex relationships between these determinants, the spread of diseases, and improved access to health care reinforces people-centered, community-oriented response systems and improves community resilience. Under this line of action, corresponding linkages with the Plan of Action on Health in All Policies (Document CD53/10, Rev. 1 [2014]) and the Strategy and Plan of Action on Health Promotion within the Context of the Sustainable Development Goals 2019-2030 (Document CE164/19 [2019]) will be crucial (18, 21).

_Strategic Line of Action 4: Strengthening Governance, Stewardship, and Finance_

19. Vertically structured health programs and fragmentation may create important barriers to comprehensive, equitable, and high-quality health services. The EI will promote interprogramatic and intersectoral collaboration inside and outside of the government, including dialogue with the private sector and civil society, allowing national health authorities to define clear roles and responsibilities of key actors engaged in the elimination agenda. The leadership of provincial and municipal jurisdictions and of civil society in the decision-making process is crucial to ensure that health initiatives and interventions are adapted to the community context and strengthen governance. In addition, with the gradual shift of international and domestic financial resources to newly identified priorities, the EI provides an opportunity, based on similar diseases and conditions and program synergies, to reshape service delivery and efficiently allocate financial resources to guarantee a people-centered, community-oriented response to prevention, control, and elimination of communicable diseases.

20. The EI will be supported through common activities and packages of integrated health services, tailored to the local context at country and community levels, which can be applied regionally in select phases of the life course. A number of integrated health service activities and packages that support communicable disease elimination are in current use. They include integrated surveillance and monitoring; the single-visit screen-and-treat approach in primary care settings; integrated preventive chemotherapy; integrated screening, diagnosis, and treatment of preschool and school-age children; integrated screening and referral to/by the first level of care for working adults or seniors in rural areas; interventions in maternity hospitals to vaccinate newborns during the first 24 hours of life, and combining vaccination campaigns or outreach with other
communicable disease elimination interventions; and integrating environmental health interventions with communicable disease elimination. Packages and platforms that can be leveraged in the EI include successful immunization programs, the consolidated EMTCT Plus initiative; integrated management strategy for arboviral diseases and other vector-borne and neglected diseases; SAFE\textsuperscript{2} strategy for trachoma; multi-disease WASH (water, sanitation and hygiene) approach; integrated chronic communicable disease management; integrated tropical skin disease model; and One Health focus, among others, including additional activities and packages that may be identified by operational research.

**Action by the Directing Council**

21. The Directing Council is invited to review the PAHO Disease Elimination Initiative: A Policy for an Integrated Sustainable Approach to Communicable Diseases in the Americas, provide the comments it deems pertinent, and consider approving the proposed resolution presented in Annex C.

**Annexes**

**References**


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\textsuperscript{2} A combination of interventions known by the acronym SAFE, which stands for surgery for trichiasis (inturned eyelashes), antibiotics, facial cleanliness, and environmental improvement.


Annex A

Definitions of the Different Levels of Disease Elimination

a) Elimination as a public health problem (EPHP) is defined by achievement of measurable global targets set by WHO in relation to a disease (e.g., for MTCT of syphilis, or for lymphatic filariasis). When these are reached, continued actions are required to maintain the achievements of the targets or to advance toward elimination of transmission. The process of documenting EPHP is called validation.

b) Elimination of transmission is defined as the reduction to zero of the incidence of infection caused by a specific pathogen in a defined geographical area, with minimal risk of reintroduction, as a result of deliberate efforts.

c) Eradication is the permanent reduction to zero of a specific pathogen as a result of deliberate efforts, with no risk of reintroduction.

d) Extinction occurs when the specific infectious agent no longer exists in nature or the laboratory.


It is important to recognize that elimination and eradication are not synonymous, and that elimination is a nuanced concept. There is a biologically real distinction between elimination, eradication, and extinction, although these three words are often confused by members of the media and the public in conversation and writing.
## Annex B

### Communicable Diseases and Related Conditions Targeted for Elimination

<table>
<thead>
<tr>
<th>Disease and related conditions</th>
<th>Goal</th>
<th>Target</th>
<th>Current Epidemiologic Situation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cervical cancer</td>
<td>Elimination as a public health problem</td>
<td>Incidence rate less than 4/100,000 women</td>
<td>Over 72,000 women were diagnosed with cervical cancer and almost 34,000 died from this disease in the Region of the Americas in 2018. Cervical cancer mortality rates are three times higher in Latin America and the Caribbean than in North America, highlighting inequities in health.</td>
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<tr>
<td>Chagas disease</td>
<td>Elimination of transmission (vectoral peri-</td>
<td>Domestic triatome infestation &lt;1%; 100% of blood tested in blood</td>
<td>Chagas disease is endemic in 21 countries in the Americas, with about 70.2 million individuals in living in areas at risk as of 2010. In that year, Chagas affected some six million people, and each year about 30,000 new cases resulting from vector transmission are reported.</td>
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<td>domiciliary, blood-borne, and foodborne)</td>
<td>banks</td>
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<tr>
<td>Chagas disease, congenital</td>
<td>Elimination as a public health problem</td>
<td>90% of cases diagnosed, treated, and monitored</td>
<td>An estimated 1.1 million women of child-bearing age are infected, and an estimated 9,000-15,000 newborns are infected each year during pregnancy (2010).</td>
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<tr>
<td>Cholera</td>
<td>Elimination as a public health problem</td>
<td>90% mortality reduction</td>
<td>In 2018, a total of 3,895 suspected cases of cholera were reported on the island of Hispaniola: 3,777 cases (including 3 deaths) in Haiti, and 118 cases (including 1 death) in the Dominican Republic. Between January and June 2019, a total of 452 suspected cholera cases were reported on Hispaniola, 98% of them in Haiti.</td>
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<tr>
<td>Diphtheria</td>
<td>Elimination of transmission</td>
<td>Zero endemic cases</td>
<td>In 2018, three countries in the Region of the Americas (Colombia, Haiti, and Venezuela) reported confirmed cases of diphtheria, with a total 167 deaths. In 2019, outbreaks are ongoing in Haiti and Venezuela.</td>
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<tr>
<td>Echinococcosis/hydatidosis (caused by infection with Echinococcus granulosus)</td>
<td>Elimination as a public health problem</td>
<td>Endemic countries adapt the WHO validated strategy for control and elimination of the parasite, and scale up control and elimination through 2030</td>
<td>The 2015 WHO Foodborne Disease Burden Epidemiology Reference Group (FERG) estimated echinococcosis to be the cause of 19,300 deaths and around 871,000 DALYs globally each year. At least five countries in South America and five in Central America report cases of cystic echinococcosis in reservoir animals and humans.</td>
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<tr>
<td>Disease and related conditions</td>
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<tr>
<td>Fascioliasis</td>
<td>Elimination as a public health problem</td>
<td>WHO target of 75% of population at risk reached by preventive chemotherapy; morbidity controlled in all endemic countries (by the use of antiparasitic medication and education)</td>
<td>WHO estimates that at least 2.4 million people are infected in more than 70 countries worldwide, with several million more at risk. The Region’s principal endemic areas are in the Andean altiplano of Bolivia and Peru, where an estimated 250,000 people living in indigenous communities are at risk of fascioliasis.</td>
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<tr>
<td>Foot-and-mouth-disease in domestic bovids</td>
<td>Eradication</td>
<td>Zero endemic cases</td>
<td>As of 2017, 82.5% of the Region is considered free of foot-and-mouth disease. Of this area, 77.2% is covered by vaccination and 22.8% is without vaccination. Thus, 94% of the herds of cattle and 94% of total cattle are considered free of disease.</td>
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<tr>
<td>Hepatitis B and C infection and related liver cancer/cirrhosis</td>
<td>Elimination as a public health problem</td>
<td>90% incidence reduction (ref. 2015); 65% mortality reduction (ref. 2015)</td>
<td>In the Americas, more than 125,000 deaths each year are associated with viral hepatitis, 99% of them due to hepatitis B or C. An estimated 3.9 million people are living with hepatitis B and 7.2 million with hepatitis C (2016).</td>
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<tr>
<td>Hepatitis B, mother-to-child and early childhood transmission</td>
<td>Elimination as a public health problem</td>
<td>0.1% prevalence in 5-year-old children</td>
<td>Prevalence of hepatitis B surface antigen (HBsAg) in the Region has decreased in recent decades, mainly as a result of the introduction of the hepatitis B vaccine in the early 1990s. By 2016, the regional prevalence of HBsAg among 5-year-old children was estimated at 0.1%, representing 9,200 children 5 years of age.</td>
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<tr>
<td>HIV</td>
<td>Elimination as a public health problem</td>
<td>Reduce incidence of HIV by 90% and reduce HIV-related annual deaths by 90% (ref. 2010)</td>
<td>An estimated 2 million people in Latin America and the Caribbean live with HIV infection (2017), and 120,000 new HIV infections have occurred in the Region each year since 2008. In 2017, the Region had antiretroviral treatment coverage of 79% among those who know their status, and a 15% reduction in AIDS-related deaths since 2010.</td>
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<tr>
<td>HIV, mother-to-child-transmission</td>
<td>Elimination as a public health problem</td>
<td>Rate of vertical transmission below 2%</td>
<td>The estimated mother-to-child transmission rate of HIV decreased from 17% in 2010 to 12% in 2017, representing an estimated 30,800 HIV infections in children averted due to the elimination of mother-to-child transmission interventions in Latin America and the Caribbean in the period.</td>
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<tr>
<td>Disease and related conditions</td>
<td>Goal</td>
<td>Target</td>
<td>Current Epidemiologic Situation</td>
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<tr>
<td>Leishmaniasis, cutaneous/mucocutaneous</td>
<td>Elimination as a public health problem</td>
<td>70% of all cases detected and at least 90% of all detected cases treated; proportion of children 10 years of age with cutaneous and mucocutaneous forms reduced by 50%</td>
<td>Cutaneous and mucocutaneous leishmaniasis is endemic in 18 countries of the Region, of which 17 (94.4%) reported cases to PAHO/WHO during the period of 2001 to 2017. There were a total of 940,396 reported cases, with an average of 55,317 cases a year.</td>
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<tr>
<td>Leishmaniasis, visceral</td>
<td>Elimination as a public health problem</td>
<td>Prevalence of less than 1 case/10,000 population; lethality rate reduced to &lt;50%</td>
<td>From 2001 to 2017, some 59,769 cases of visceral leishmaniasis (VL) were registered in 12 countries of the Region. Though 96% of these cases (57,582) were reported by Brazil, an increase in the number of reported cases in Argentina, Colombia, and Venezuela, and has been observed since 2013. In 2017, 4,239 cases were registered, of which 338 (7.97%) were co-infections of VL/HIV.</td>
</tr>
<tr>
<td>Leprosy</td>
<td>Elimination as a public health problem</td>
<td>Prevalence of less than 1 case/10,000 population at first subnational level; prevalence of less than 1 case/million population of Grade II disability at time of diagnosis; zero children (up to 15 years of age) diagnosed with leprosy and visible deformities</td>
<td>Between 2010 and 2017, new reported cases of leprosy declined 22.5% (from 37,571 to 29,101). In 2017, the Americas recorded about 29,101 new cases occurring in 27 countries. Brazil is the most affected country, representing about 92% of the cases in the Region.</td>
</tr>
<tr>
<td>Lymphatic filariasis</td>
<td>Elimination as a public health problem</td>
<td>All implementation units in an endemic country have successfully completed the required transmission assessment surveys, and the number of children who tested positive for infection is below the allowed critical cut-off</td>
<td>Over 6.3 million people living in four countries of the Americas required mass drug administration for lymphatic filariasis in 2017. Parts of Brazil, the Dominican Republic, Guyana, and Haiti were affected.</td>
</tr>
<tr>
<td>Disease and related conditions</td>
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<tr>
<td>Malaria (P. falciparum and P. vivax), and malaria epidemics</td>
<td>Elimination of transmission</td>
<td>Zero new local cases; ≥90% reduction in the mortality rate (particularly for imported cases and in places with persistent transmission); prevent reestablishment in countries declared malaria-free</td>
<td>The Region reported a provisional total of about 764,000 confirmed cases of malaria in 2018, with 335 deaths. Approximately 76% of infections are caused by Plasmodium vivax and 24% by Plasmodium falciparum, with less than 0.1% by Plasmodium malariae.</td>
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<tr>
<td>Measles</td>
<td>Elimination of transmission</td>
<td>Absence of endemic transmission for at least 12 months in the presence of a well-performing surveillance system</td>
<td>In 2018, 12 countries in the Americas reported a total of 16,514 confirmed measles cases. Deaths were reported in Brazil (12 deaths) and Venezuela (74 deaths) that year.</td>
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<tr>
<td>Neonatal tetanus</td>
<td>Elimination as a public health problem</td>
<td>Incidence below 1/1,000 live births</td>
<td>The Region has reduced the reported number of neonatal tetanus cases each year, from 1,144 in 2000 to 13 in 2017. Coverage of the vaccine reached an average of 91% in 2017.</td>
</tr>
<tr>
<td>Onchocerciasis (river blindness)</td>
<td>Elimination of transmission</td>
<td>Zero new cases</td>
<td>The number of active foci of onchocerciasis decreased from 12 to just one, located in the Amazonia region of Brazil and Venezuela. In 2015, about 25,000 people needed treatment, all living in the Yanomami indigenous area along the border between Brazil and Venezuela.</td>
</tr>
<tr>
<td>Open defecation</td>
<td>Elimination as a public health problem</td>
<td>Reduction of 95% in people practicing open defecation</td>
<td>In the Americas, 14 million people in rural areas and 5 million people in urban areas practice open defecation. Seven countries reported having more than 1 million people practicing open defecation, with the largest numbers in Bolivia, Brazil, Haiti Mexico, and Peru.</td>
</tr>
<tr>
<td>Plague</td>
<td>Elimination as a public health problem</td>
<td>Zero deaths</td>
<td>In the Americas, five countries are currently considered endemic for plague (Bolivia, Brazil, Ecuador, Peru, and the United States). The United States reported five human cases in 2017, and in Latin America from 2010 to 2017 there were 78 human cases reported; 94.9% of the cases were in</td>
</tr>
</tbody>
</table>

1 New criteria for the elimination of measles and rubella will be established based on recommendations by the Measles and Rubella Regional Monitoring and Re-Verification Commission, established in 2019 to monitor the sustainability of the elimination of measles, rubella, and congenital rubella syndrome in the Region.
<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Poliomyelitis</strong></td>
<td>Elimination of transmission</td>
<td>Zero cases of paralysis due to wild poliovirus</td>
<td>The Region of the Americas registered its last case of poliomyelitis in 1991, and in 1994 became the first region in the world to receive certification as free of the disease. Countries are consolidating measures to maintain elimination and avoid reintroduction.</td>
</tr>
<tr>
<td><strong>Polluting biomass cooking fuels</strong></td>
<td>Elimination as a public health problem</td>
<td>Use of biomass cooking fuels reduced to less than 5% of population in each country by 2030</td>
<td>In five countries in the Region, more than 30% of the population uses household solid fuels (Haiti, Guatemala, Nicaragua, Honduras, and Paraguay). One-third of the total exposed population lives in Mexico and Peru, and another 11% lives in Brazil. Overall, in 14 of the 35 countries in the Region, 10% or more of the population still use polluting cooking fuels.</td>
</tr>
<tr>
<td><strong>Rabies, dog-mediated</strong></td>
<td>Elimination of transmission (dog-mediated, urban)</td>
<td>Zero deaths</td>
<td>Efforts over the last four decades have reduced the human rabies burden in Latin America from 285 cases in 1970 to 18 in 2015.</td>
</tr>
<tr>
<td><strong>Rubella</strong></td>
<td>Elimination of transmission</td>
<td>Absence of endemic transmission for at least 12 months in the presence of a well-performing surveillance system&lt;sup&gt;2&lt;/sup&gt;</td>
<td>In 2003, the countries collectively set the goal of eliminating endemic transmission of rubella by 2010. From 1998 to 2008 an estimated 250 million adolescents and adults in 32 countries were vaccinated against rubella in mass vaccination campaigns. The last cases of endemic rubella and CRS in the Americas were reported in 2009.</td>
</tr>
<tr>
<td><strong>Rubella, congenital</strong></td>
<td>Elimination of transmission</td>
<td>Absence of congenital rubella syndrome cases associated with endemic transmission in the presence of a well-performing surveillance system&lt;sup&gt;3&lt;/sup&gt;</td>
<td>In 2003, the countries collectively set the goal of eliminating endemic transmission of rubella by 2010. From 1998 to 2008, an estimated 250 million adolescents and adults in 32 countries were vaccinated against rubella in mass vaccination campaigns. The last cases of endemic rubella and congenital rubella syndrome (CRS) in the Americas were reported in 2009.</td>
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</tbody>
</table>

<sup>2</sup> Ibid.  
<sup>3</sup> Ibid.
<table>
<thead>
<tr>
<th>Disease and related conditions</th>
<th>Goal</th>
<th>Target</th>
<th>Current Epidemiologic Situation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schistosomiasis</td>
<td>Elimination as a public health problem</td>
<td>Prevalence among school-age children below 1%; regular chemotherapy to at least 75% of all school-age children at risk of morbidity in endemic countries</td>
<td>An estimated 1.6 million people needed treatment for schistosomiasis in the Region in 2017, primarily in Brazil and Venezuela. Suriname and Saint Lucia also reported cases recently, but the prevalence is very low and is limited to a few areas with active transmission.</td>
</tr>
<tr>
<td>Soil-transmitted helminthiasis (ascariasis, trichuriasis and human hookworm)</td>
<td>Elimination as a public health problem</td>
<td>Prevalence among school-age children below 1%; regular chemotherapy to at least 75% of all preschool and school-age children at risk of morbidity in endemic countries</td>
<td>In the Americas, 70.9 million children aged 1-14 years, living in 25 endemic countries, remain at risk of morbidity (e.g., stunting, anemia) from the group of soil-transmitted helminths. More than 7.8 million preschool children in need of preventive chemotherapy were treated by mass drug administration in 2017 in the Region.</td>
</tr>
<tr>
<td>Syphilis, congenital</td>
<td>Elimination as a public health problem</td>
<td>Incidence &lt; 0.5 per 1,000 live births</td>
<td>The incidence rate of congenital syphilis has increased since 2010, reaching 2.1 per 1,000 live births with over 28,800 reported cases in 2017, despite an increase in treatment coverage among pregnant women with syphilis.</td>
</tr>
<tr>
<td>STI: Syphilis and gonorrhea</td>
<td>Elimination as a public health problem</td>
<td>90% reduction in incidence (ref. 2018)</td>
<td>In 2012, there were estimated 471,000 new cases of syphilis in females and 466,000 in males in the Region of the Americas. In 2012, there were estimated 4.6 million new cases of gonorrhea in females and 6.4 million in males in the Region.</td>
</tr>
<tr>
<td>Taeniasis/cysticercosis (caused by infection with Taenia solium)</td>
<td>Elimination as a public health problem</td>
<td>Endemic countries adapt the WHO validated strategy for control and elimination of the parasite, and scale up control and elimination through 2030</td>
<td>Cysticercosis mainly affects the health and livelihoods of subsistence farming communities in Latin America and the Caribbean. It reduces the market value of pigs, and makes pork unsafe to eat. The parasite is a leading cause of deaths from foodborne diseases, resulting in a total of 2.8 million DALYs globally. The total number of people suffering globally from neurocysticercosis, including symptomatic and asymptomatic cases, is estimated at 2.56 million to 8.30 million, based on the range of epilepsy prevalence data available. The parasite is endemic in at least 16 countries in the Region.</td>
</tr>
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<td>--------------------------------</td>
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<tr>
<td>Trachoma</td>
<td>Elimination as a public health problem</td>
<td>Prevalence of trachomatous inflammation-follicular (TF) &lt;5% in children aged 1-9 years; prevalence of trachomatous trichiasis (TT) &lt;1 case/1,000 population in each endemic area</td>
<td>The Americas had a population of about 5 million at risk of trachoma in 2017, living in four countries.</td>
</tr>
<tr>
<td>Tuberculosis</td>
<td>Elimination as a public health problem</td>
<td>90% reduction in TB mortality; 80% reduction in TB incidence with regional target of 5.6 new cases per 100,000 population (ref. 2015)</td>
<td>In 2017 the incidence rate in the Region was estimated at 28 cases per 100,000 population, representing a total of 282,000 new cases. More than half of the incident cases (55%) were concentrated in three countries: Brazil, Mexico, and Peru. The mortality rate was 1.8 per 100,000 population, with 18,000 deaths estimated (excluding TB/HIV deaths).</td>
</tr>
<tr>
<td>Yaws (endemic treponematoses)</td>
<td>Eradication</td>
<td>Zero indigenous cases</td>
<td>PAHO considers yaws to be eliminated in the Americas. However, as part of the WHO process of certification of global eradication by 2020, surveillance or surveys may become necessary to demonstrate evidence of hemispheric eradication.</td>
</tr>
<tr>
<td>Yellow fever epidemics</td>
<td>Elimination of transmission</td>
<td>Prevent yellow fever outbreaks and minimize suffering, damage, and spread through early and reliable detection of outbreaks as well as rapid and appropriate response</td>
<td>In 2018, five countries and territories in the Region of the Americas reported confirmed cases of yellow fever: Bolivia, Brazil, Colombia, French Guiana, and Peru. In Brazil, expansion of the historical area of yellow fever transmission to areas previously considered risk-free led to three waves of transmission: one during the 2016-2017 seasonal period, with 778 confirmed human cases, including 262 deaths; another during the 2017-2018 seasonal period with 1,376 confirmed human cases including 483 deaths; and for the seasonal period 2018-2019, 82 confirmed human cases, including 14 deaths were reported.</td>
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PROPOSED RESOLUTION

PAHO DISEASE ELIMINATION INITIATIVE: A POLICY FOR AN INTEGRATED SUSTAINABLE APPROACH TO COMMUNICABLE DISEASES IN THE AMERICAS

THE 57th DIRECTING COUNCIL,

(PP1) Having reviewed the PAHO Disease Elimination Initiative: A Policy for an Integrated Sustainable Approach to Communicable Diseases in the Americas (Document CD57/7), which articulates and illustrates the Pan American Health Organization’s (PAHO) corporate approach and comprehensive strategy for communicable disease elimination;

(PP2) Considering that this initiative reflects the commitment made by Member States to advance toward meeting the Sustainable Development Goals by 2030 and the goals of the Sustainable Health Agenda for the Americas 2018-2030;

(PP3) Cognizant of the impact that these diseases and conditions have in the Americas, especially among populations in situations of vulnerability;

(PP4) Acknowledging the potential financial benefits of implementing cost-effective public health programs and strategies that consider target diseases and conditions throughout the life course and that take a multisectoral approach across health systems and networks at the country level throughout the Americas;

(PP5) Considering the ongoing work toward achieving universal health as addressed in PAHO’s Strategy for Universal Access to Health and Universal Health Coverage (Resolution CD53.R14 [2014]) and the World Health Organization’s (WHO) Strengthening Health Systems to Improve Health Outcomes framework for action (2007), and recognizing the first level of care as the main pillar of disease elimination;
Considering the numerous PAHO and WHO strategies and plans of action focusing on various health conditions related to this initiative;

Acknowledging PAHO’s historic role in important disease elimination achievements in the Region and globally;

Recognizing that this initiative provides countries in the Americas orientation and direction toward the elimination of communicable diseases through adoption of a common and sustainable approach,

**RESOLVES:**

1. To endorse the *PAHO Disease Elimination Initiative: A Policy for an Integrated Sustainable Approach to Communicable Diseases in the Americas* (Document CD57/7).

2. To urge Member States, according to their national contexts and priorities, to:
   a) adopt and implement the strategic approach of the Elimination Initiative to promote and step up elimination of communicable diseases and related conditions within their national public health agendas;
   b) ensure that the overarching principle of the Elimination Initiative, the life course approach, is realized across all levels of the national health system and network services;
   c) strengthen institutional and community capacity to produce quality data that can be used to monitor progress toward elimination of communicable diseases and related conditions as well as to generate further evidence;
   d) make efforts to promote intersectoral governmental coordination and the participation of civil society and the community toward elimination of communicable diseases and related conditions;
   e) foster better access to quality health services by strengthening primary health care and working to achieve universal health.

3. To request the Director to:
   a) secure political, managerial, administrative, and financial support, including by intensifying external resource mobilization, for successful implementation of the Elimination Initiative;
   b) promote and enhance interprogrammatic, multisectoral collaboration to pursue synergies across all stakeholders expected to contribute to the implementation of the Elimination Initiative;
c) enhance coordination at regional and country levels to improve access to vaccines, medicines, diagnostic tests, and other key commodities, such as bed nets, vector control products, and water/sanitation disinfection equipment, through the PAHO Revolving Fund for Strategic Public Health Supplies and the PAHO Revolving Fund for Vaccine Procurement;

d) measure progress toward elimination of communicable diseases and related conditions by strengthening health information systems that can ensure the availability and analysis of quality robust data throughout the life course from health services including maternal and child health, community health services, specialized clinics, and other facilities;

e) continue to prioritize the Region’s national laboratory networks and supply-chain management (clinical and environmental laboratory services, transport and delivery services) for medicines, diagnostic tests, insecticides, and other public health goods;

f) coordinate, promote, and provide regional-level technical cooperation to countries and territories for integrated health care delivery, especially at the primary health care level, to achieve communicable disease elimination;

g) report periodically to the Governing Bodies on the progress made and challenges faced in implementation of the initiative, through three progress reports in 2023, 2026, and 2029, and a final report in 2031.
**Report on the Financial and Administrative Implications of the Proposed Resolution for PASB**

1. **Agenda item:** 4.5 - PAHO Disease Elimination Initiative: A Policy for an Integrated Sustainable Approach to Communicable Diseases in the Americas

2. **Linkage to PAHO Program Budget 2020-2021:**

   *Outcome 1:* Increased response capacity of integrated health services networks (IHSNs) for prevention, surveillance, early detection and treatment, and care of communicable diseases, including vaccine-preventable diseases (outcome indicators 4.1-4.10)

   *Outcome 17:* Health systems strengthened to achieve or maintain the elimination of transmission of targeted diseases (outcome indicators 17.1-17.7)

   *Outcome 19:* Health promotion strengthened and inequities reduced, using the Health in All Policies approach, health diplomacy, and intersectoral action. (outcome indicators 19.1, 19.2)

   *Outcome 24:* Countries’ capacities strengthened to prevent and control epidemics and pandemics caused by high-impact and/or high-consequence pathogens (outcome indicators 24.1, 24.2)

The implementation of this initiative will also affect other outcome indicators including, 2.1, 2.2, 2.3, 5.3, 8.6, 8.7, 12.2, 18.8, 18.4, 18.5, 21.2, and 26.1.

* The proposed PAHO Strategic Plan 2020-2025 was presented to the 13th Session of the Subcommittee on Program, Budget, and Administration and the 164th Session of the Executive Committee. The 57th Directing Council will review the proposed Strategic Plan in September 2019. Therefore, the final version of the Strategic Plan may have some changes to the outcomes, which will be reflected in this Policy as well.

3. **Financial implications:**

   a) **Total estimated cost for implementation over the lifecycle of the resolution (including staff and activities):**

      The estimated cost for implementation of this initiative is approximately US$ 1,000,000 per biennium. This does not include Member States’ implementation costs, which will vary from country to country.

   b) **Estimated cost for the 2020-2021 biennium (including staff and activities):**

      The estimated cost for the biennium is approximately US$1,000,000. It is estimated that the unit chiefs (P5) from two units involved with this initiative will contribute 10-15% of their time to lead implementation; two technical advisors (P4) will contribute 20% of their time to participate in international dialogue and technical cooperation with countries; and a dedicated specialist (P3) will assist with strategic
information knowledge management and general coordination of initiative implementation.

c) Of the estimated cost noted in b), what can be subsumed under existing programmed activities?

Approximately US$ 350,000, representing existing staff time contribution, will be covered by PAHO regular funds. Also, a portion of the activities can be covered by funds allocated to disease-specific plans of action related to this initiative.

4. Administrative implications:

a) Indicate the levels of the Organization at which the work will be undertaken:

The work will be carried out at the country, subregional, and regional levels.

b) Additional staffing requirements (indicate additional required staff full-time equivalents, noting necessary skills profile):

For the implementation of this initiative, it will be crucial to guarantee the current technical staff at regional level, as well as to ensure a dedicated specialist position (P3).

c) Time frames (indicate broad time frames for the implementation and evaluation):

The Elimination Initiative is linked to the 2030 Agenda for Sustainable Development and the Sustainable Health Agenda for the Americas 2018-2030, and its implementation is intended to cover the period 2019-2030. Evaluations will be reported to EXM and Governing Bodies at the end of each biennium as part of the End-of-Biennium Assessment, with additional periodic reports according to the agenda of specific plans of action related to the Elimination Initiative. Progress reports will be presented to the Governing Bodies in 2023, 2026, and 2029, and a final report will be presented in 2031.
## Analytical Form to Link Agenda Item with Organizational Mandates

1. **Agenda item:** 4.5 - PAHO Disease Elimination Initiative: A Policy for an Integrated Sustainable Approach to Communicable Diseases in the Americas

2. **Responsible unit:** Communicable Diseases and Environmental Determinants of Health (CDE): HIV, Hepatitis, Tuberculosis, and Sexually Transmitted Infections Unit (CDE/HT), Neglected, Tropical and Vector Borne Diseases Unit (CDE/VT)

3. **Preparing officers:** Dr. Massimo Ghidinelli, Dr. Luis Gerardo Castellanos, Dr. Monica Alonso, Dr. Rainier Escalada, Dr. Leandro Sereno

4. **Link between Agenda item and Sustainable Health Agenda for the Americas 2018-2030:**
   - Goal 1: Expand equitable access to comprehensive, integrated, quality, people-, family-, and community-centered health services, with an emphasis on health promotion and illness prevention
   - Goal 10: Reduce the burden of communicable diseases and eliminate neglected diseases

5. **Link between Agenda item and the proposed PAHO Strategic Plan 2020-2025:**
   - **Outcome 4:** Increased response capacity of integrated health services networks (IHSNs) for prevention, surveillance, early detection and treatment, and care of communicable diseases, including vaccine-preventable diseases (outcome indicators 4.1-4.10)
   - **Outcome 17:** Health systems strengthened to achieve or maintain the elimination of transmission of targeted diseases (outcome indicators 17.1-17.7)
   - **Outcome 19:** Health promotion strengthened and inequities reduced, using the Health in All Policies approach, health diplomacy, and intersectoral action. (outcome indicators 19.1, 19.2)
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6. **List of collaborating centers and national institutions linked to this Agenda item:**

The implementation of the Elimination Initiative will require multisectoral, multi-agency, inter-country, and interprogrammatic cooperation and collaboration, as well as the strengthening of alliances with partners at all levels. These include:

- Ministries of health and other national government agencies;
- Joint United Nations Programme on HIV/AIDS (UNAIDS), UNICEF, United Nations Population Fund (UNFPA), and other UN partners; Global Fund to Fight AIDS, Tuberculosis and Malaria; PAHO/WHO Collaborating Centers;
- United States President’s Emergency Plan for AIDS Relief (PEPFAR); United States Agency for International Development (USAID); US Centers for Disease Control and Prevention (CDC);
- Horizontal Technical Cooperation Group; Pan Caribbean Partnership Against HIV/AIDS (PANCAP); Southern Common Market (MERCOSUR); Andean Health Agency–Hipólito Unanue Agreement (ORAS-CONHU); Union of South American Nations (UNASUR); Council of Ministers of Health of Central America (COMISCA); Caribbean Community (CARICOM); Caribbean Public Health Agency (CARPHA);
- Global, regional, and national nongovernmental and community-based organizations; universities; scientific societies; and other partners relevant to specific diseases included in the Elimination Initiative.

7. **Best practices in this area and examples from countries within the Region of the Americas:**

- Of the 21 countries in which Chagas disease is endemic, 17 continued to maintain interruption of domiciliary transmission by vectors—insects of the Triatominae subfamily (reduvid bugs) carrying the *Trypanosoma cruzi* parasite—with a household infestation index of 1% or less in the country or its endemic areas (Argentina, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, El Salvador, Guatemala, Guyana, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, and Uruguay).
- Up to 22 Member States have adopted the WHO-recommended “Treat All” policy to offer antiretroviral treatment to any person with HIV regardless of CD4 count.
- In 2017, 20 countries and territories in the Region of the Americas reported data compatible with the achievement of the goal and targets of EMTCT of HIV, and 15 countries reported data compatible with the elimination of congenital syphilis and the dual EMTCT of HIV and syphilis.
- Brazil, Colombia, and Chile have developed viral hepatitis investment cases for hepatitis C, to support planning and funds allocation.
- The EMTCT Plus initiative, for the elimination of mother-to-child transmission of HIV, syphilis, hepatitis B, and congenital Chagas, is currently being piloted in the Region. In 2018, Colombia and Uruguay developed national strategies to implement the EMTCT Plus recommended interventions, and Paraguay has developed a baseline report for the initiative.

8. **Financial implications of this Agenda item:**

The estimated cost for the implementation of this initiative is approximately US$ 1,000,000 per biennium.