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PLAN OF ACTION FOR THE ELIMINATION OF NEGLECTED INFECTIOUS DISEASES AND POST-ELIMINATION ACTIONS 2016–2022: FINAL REPORT

Background

1. This final report presents progress achieved in implementing the Plan of Action for the Elimination of Neglected Infectious Diseases and Post-Elimination Actions 2016–2022 (Document CD55/15), adopted by the 55th Directing Council of the Pan American Health Organization (PAHO) in 2016 through Resolution CD55.R9 (1, 2). The plan of action provided the framework for Member States, the Pan American Sanitary Bureau (PASB), and other stakeholders to collaborate toward achieving the Region of the Americas' targets for the elimination and control of priority neglected infectious diseases and to carry out interventions to prevent their reintroduction or reemergence. Covering the period 2016–2022, the plan of action is aligned with the PAHO strategic plans of 2014–2019 and 2020–2025 (3, 4) and with the Sustainable Health Agenda for the Americas 2018–2030 (5). Its objective is to reach and maintain disease elimination by 2030 in order to meet the goals set out in two World Health Organization (WHO) road maps for combatting neglected tropical diseases (NTDs), covering 2012–2020 and 2021–2030 (6, 7), and in the United Nations 2030 Agenda for Sustainable Development (8).

2. Neglected infectious diseases (NIDs) are a diverse group of 20 parasitic, bacterial, and fungal diseases. Their risk factors include poverty, income inequality, lack of access to safe drinking water and proper sanitation, and barriers to education and health services, among other social determinants of health. They impose a large burden on marginalized populations globally and in the Region, including ethnic minorities. It is estimated that in 2021, the Region had approximately 201 million people living in poverty and 86 million in extreme poverty. During the COVID-19 pandemic, extreme poverty reached levels previously seen in the Region almost three decades ago. In 2020, at least 25% of the approximately 654 million inhabitants of Latin America and the Caribbean lacked access to safely managed drinking water services, and 66% lacked access to safely managed sanitation facilities (9). Sustainable elimination of prioritized NIDs by 2030 will contribute to the PAHO policy on recovering progress toward the Sustainable Development Goals with equity.

Analysis of Progress Achieved

3. The disruptions caused by the COVID-19 pandemic greatly affected the countries' abilities to achieve their targets for control and elimination of neglected infectious diseases. Countries diverted financial and human resources from NID programs to support their pandemic response. Community-based activities, such as mass drug administration, surveys, and active search for cases of selected NIDs, were cancelled during 2020 and only began to resume gradually during the second half of 2021 (10). Restrictions on mobility and screening during the pandemic also disrupted the early diagnosis and continuous surveillance needed for NID control. Most health services were reduced considerably, and health workers were reassigned to the pandemic response. All of these changes caused an increase in undetected cases of some NIDs, leading in turn to increased disability for patients and continued transmission of disease.

4. Despite the challenges, the Region made progress to varying degrees in meeting the indicator targets of the six strategic lines of action established in the plan of action. According to the latest available information, four of the 26 indicators were fully achieved, 20 were partially achieved, and two were not achieved. The main sources of information used for this final report were the reports that countries submit annually to PAHO and WHO, the reports of technical cooperation activities, and the reports of regional and subregional meetings. For some indicators, health information provided by countries for the year 2019 was used to track progress to avoid bias from underreporting due to the operational impact of the pandemic on health services and disease surveillance in 2020 and 2021. For other indicators the most recent available information, from 2021, was used.

5. The assessment of the indicators follows the criteria for rating outcome and output indicators at regional level as presented in Annex B of Addendum I to the Report of the End of Biennium Assessment of the PAHO Program and Budget 2018–2019/Final Report on the Implementation of the PAHO Strategic Plan 2014–2019 (Document CD58/5, Add. I) (11). A summary of the progress on each strategic line of action, objective, and indicator is presented below.

Strategic Line of Action 1: Strengthen innovative and intensified disease surveillance, diagnosis, and clinical case management of NIDs

6. The pandemic caused a slowdown of progress in this area and a greater effort to safeguard the achievements made to date, which were mostly protected. Six countries reduced lethality due to leishmaniasis; five increased capacities to diagnose and treat cystic echinococcosis cases. The prevention, control, and care of Chagas disease advanced substantially due to cooperative efforts among countries in their subregional initiatives.

Objective 1.1: Reduce the lethality rate of visceral leishmaniasis and the proportion of children with cutaneous leishmaniasis	
Indicator, baseline, and target	Status
<p>1.1.1 Number of endemic countries that have reduced the lethality rate of visceral leishmaniasis by 50%</p> <p>Baseline (2016): 0 Target (2022): 5</p>	<p><i>Exceeded.</i> As of 2021, six countries, one more than the five targeted, had either achieved a 50% decrease in lethality or did not report any deaths from visceral leishmaniasis. Two additional countries decreased the lethality rate but did not reach the 50% target.</p>
<p>1.1.2 Number of endemic countries that have reduced the proportion of children under 10 years old with cutaneous leishmaniasis by 50%</p> <p>Baseline (2016): 0 Target (2022): 8</p>	<p><i>Partially achieved.</i> As of 2021, two countries reached the target. Ten countries presented a decrease in the proportion of infected children under 10 years old, compared to the baseline, but did not meet the 50% target.</p>
Objective 1.2: Accelerate actions to interrupt domiciliary transmission of Chagas disease by the principal vectors	
Indicator, baseline, and target	Status
<p>1.2.1 Number of endemic countries and territories where the entire endemic country or territory, or the endemic territorial subdivision, has a domestic infestation index (either by the principal triatomine vector species or by the substitute vector) of less than or equal to 1%</p> <p>Baseline (2016): 17 Target (2022): 21</p>	<p><i>Not achieved.</i> There has been little progress towards achieving the indicator in the entire endemic country or territory, or in the endemic territorial subdivisions, in the four target countries. The indicator has been maintained in the 17 baseline countries.</p>
Objective 1.3: Further reduce the burden of leprosy	
Indicator, baseline, and target	Status
<p>1.3.1 Number of endemic countries and territories with a high burden of leprosy that have less than one new case per million population with grade 2 disabilities at diagnosis</p> <p>Baseline (2016): 3 Target (2022): 7</p>	<p><i>Achieved.</i> Based on 2019 figures, this objective was sustained and met in all seven target countries and territories (12).</p>
<p>1.3.2 Number of endemic countries that have eliminated leprosy as a public health problem at the first subnational level</p> <p>Baseline (2016): 16 Target (2022): 23</p>	<p><i>Partially achieved.</i> Based on 2019 figures, 19 countries achieved the target. The four remaining countries need to intensify efforts toward this goal, having fallen short due to the disruptions in health systems and health surveillance caused by the COVID-19 pandemic.</p>

Objective 1.4: Implement diagnosis and case management of cystic echinococcosis/hydatidosis patients	
Indicator, baseline, and target	Status
<p>1.4.1 Number of endemic countries that have implemented sensitive serological and ultrasound screening for cystic echinococcosis/hydatidosis in endemic areas</p> <p>Baseline (2016): 2 Target (2022): 7</p>	<p><i>Partially achieved.</i> Five countries are implementing this screening in endemic areas. Instruments have been developed for the diagnosis, treatment, and surveillance of cystic echinococcosis/hydatidosis.</p>
<p>1.4.2 Number of endemic countries that monitor and characterize the number of treated people screened for cystic echinococcosis/hydatidosis in endemic areas</p> <p>Baseline (2016): 2 Target (2022): 7</p>	<p><i>Partially achieved.</i> Five countries are monitoring and characterizing the number of treated people. A Regional Program for the Elimination of Cystic Echinococcosis 2020–2029 and a related action plan were developed to facilitate diagnosis and treatment monitoring and improve surveillance in six countries (13).</p>
Objective 1.5: Strengthen case and event management of human plague in the framework of the IHR through improved clinical and diagnostic protocols	
Indicator, baseline, and target	Status
<p>1.5.1 Number of plague-endemic countries with improved surveillance and clinical and laboratory network diagnostic capabilities</p> <p>Baseline (2016): 1 Target (2022): 5</p>	<p><i>Partially achieved.</i> As of 2022, there was good progress on this indicator, with four of the five countries reaching the target. Three countries updated their intersectoral plague surveillance and control plans.</p>

Strategic Line of Action 2: Strengthen preventive chemotherapy and increase access to basic health care for NIDs

7. Preventive chemotherapy campaigns were postponed during the pandemic in order to avoid mass gatherings and thus protect both communities and health care workers from the risk of COVID-19. These campaigns gradually resumed in 2021 but have not yet reached pre-pandemic performance levels. This had a negative impact on the indicators of this strategic line of action.

Objective 2.1: Increase access to preventive chemotherapy for populations at risk of selected NIDs according to PAHO/WHO recommendations	
Indicator, baseline, and target	Status
<p>2.1.1 Number of endemic countries that have achieved the recommended treatment target coverage of the population at risk of lymphatic filariasis, STH, schistosomiasis, trachoma, and/or onchocerciasis necessary to interrupt transmission, depending on the country's epidemiological situation</p> <p>Baseline (2016): lymphatic filariasis, 2; soil-transmitted helminthiasis, 5; schistosomiasis, 0; trachoma, 2; onchocerciasis, 1</p> <p>Target (2022): lymphatic filariasis, 4; soil-transmitted helminthiasis, 25; schistosomiasis, 2; trachoma, 3; onchocerciasis, 2.</p>	<p>Partially achieved. As of 2022, the situation in terms of the recommended treatment target coverage of the population at risk of selected neglected infectious diseases was as follows:</p> <p>Lymphatic filariasis: Three countries reached the recommended treatment target coverage. Two of them interrupted preventive chemotherapy and started post-treatment surveillance. Considerable progress has been achieved in the fourth endemic country, but the recommended treatment coverage has not yet been achieved nationwide (14).</p> <p>Soil-transmitted helminthiasis: As of 2021, six countries reported data on preventive chemotherapy (15). Due to the pandemic, a reduction in the number of countries reporting data was observed, and none of the countries reporting data reached the recommended coverages.</p> <p>Schistosomiasis: Mass drug administration was required in two countries, but it was not implemented in either of them.</p> <p>Trachoma: One country did not achieve the optimal coverage for trachoma treatment in any of its endemic districts in 2021 (16). A second country reassessed the trachoma epidemiological situation in non-Indigenous areas and found that preventive chemotherapy is likely no longer needed in those populations (17). This country is reassessing the trachoma epidemiological situation in Indigenous populations and will implement interventions accordingly. A third country stopped mass drug administration in 2015, and implementation of trachoma surveillance surveys is pending to confirm whether the country reached the elimination target.</p> <p>Onchocerciasis: Neither of the two remaining endemic countries reached the recommended treatment coverage for the entire at-risk population.</p>

Objective 2.2: Eliminate NIDs that are targeted for preventive chemotherapy, including collection of evidence to support elimination	
Indicator, baseline, and target	Status
<p>2.2.1 Number of endemic countries that have eliminated transmission of onchocerciasis and schistosomiasis and have eliminated lymphatic filariasis and blinding trachoma as a public health problem</p> <p>Baseline (2016): onchocerciasis, 4; schistosomiasis, 0; lymphatic filariasis, 0; blinding trachoma, 0</p> <p>Target (2022): onchocerciasis, 6; schistosomiasis, 4; lymphatic filariasis, 3; blinding trachoma, 4</p>	<p>Partially achieved. The situation with respect to the four diseases is as follows:</p> <p>Onchocerciasis: As of 2022, four countries had eliminated onchocerciasis transmission. Transmission remains active in only two countries (18).</p> <p>Schistosomiasis: No country has eliminated schistosomiasis. There is evidence that some Caribbean countries may have eliminated schistosomiasis, but this has yet to be documented.</p> <p>Lymphatic filariasis: Two countries are close to meeting the criteria for validation of elimination of lymphatic filariasis as a public health problem (14).</p> <p>Trachoma: One country eliminated trachoma as a public health problem in 2017 (19). Two countries may have met the target, but additional surveys are pending implementation. One country still has populations at risk of trachoma that need comprehensive interventions.</p>
Objective 2.3: Increase access of at-risk and exposed people to quality rabies immune globulin (RIG) and rabies human vaccine	
Indicator, baseline, and target	Status
<p>2.3.1 Number of endemic countries with prompt availability of cell culture vaccine and RIG for at-risk and/or exposed people</p> <p>Baseline (2016): 0 Target (2022): 11</p>	<p>Partially achieved. Ten countries are using a cell culture vaccine. Two of these countries do not have enough resources to meet all the demand for human rabies vaccines, which are procured through donations from other countries.</p> <p>Eight target countries have established mechanisms to procure supply to meet the demand and ensure that the required quantity of immunobiologicals is obtained.</p>

Strategic Line of Action 3: Strengthen integrated management of vectors

8. The two indicators for this strategic line of action were achieved in 2019, well before the end of this plan of action. Furthermore, the 56th Directing Council approved in 2018 the Plan of Action on Entomology and Vector Control 2018–2023 (20) to strengthen regional and national capacity for the prevention and control of key vectors.

Objective 3.1: Strengthen integrated management of NID vectors	
Indicator, baseline, and target	Status
<p>3.1.1 Number of NID-endemic countries that have applied strategies related to the integrated management of vectors, according to their epidemiological situation</p> <p>Baseline (2016): 0 Target (2022): 6</p>	<p>Exceeded. As of 2022, 16 countries have trained staff of their national health system or supporting institutions on integrated vector management, entomology surveillance, and vector control interventions.</p>
<p>3.1.2 Number of endemic countries that have strengthened their capacity in terms of NID entomology, according to their epidemiological situation</p> <p>Baseline (2016): 0 Target (2022): 10</p>	<p>Exceeded. As of 2022, 16 countries reported that they have established or strengthened their entomological surveillance systems, databases, and routine analysis of information in accordance with PAHO/WHO guidelines or recommendations.</p>

Strategic Line of Action 4: Strengthen the prevention of select neglected zoonoses through a veterinary public health/One Health approach

9. Elimination of human rabies transmitted by dogs was verified by WHO and PAHO in Mexico in 2017. From 2016 to 2022, cases of dog-mediated human rabies were registered in five countries. Also, four countries started to build capacities to eliminate human taeniasis/cysticercosis, and four more have a plan to fight endemic plague. Five endemic countries have the capacity and processes to control or eliminate cystic echinococcosis/hydatidosis as a public health problem.

Objective 4.1: Strengthen the prevention of prioritized zoonoses through a veterinary public health/One Health approach	
Indicator, baseline, and target	Status
<p>4.1.1 Number of endemic countries with established capacity and processes to control or eliminate human taeniasis/cysticercosis (HT/C) and cystic echinococcosis/hydatidosis (CE/H) through a veterinary public health/One Health approach</p> <p>Baseline (2016): human taeniasis and cysticercosis, 0; cystic echinococcosis/hydatidosis, 1 Target (2022): human taeniasis and cysticercoses, 4; cystic echinococcosis/hydatidosis, 7</p>	<p>Partially achieved. Four countries have established capacities to eliminate human taeniasis/cysticercosis. Five countries, falling short of the target of seven, have capacity and processes to control or eliminate cystic echinococcosis/hydatidosis as a public health problem, as described in the Regional Program. For both diseases, the action taken involved a veterinary public health/One Health approach (13).</p>

Objective 4.1: Strengthen the prevention of prioritized zoonoses through a veterinary public health/One Health approach	
Indicator, baseline, and target	Status
<p>4.1.2 Number of plague-endemic countries and territories that have established a specific cross-sectoral, integrative, and multidisciplinary plan or norm for plague prevention, surveillance, and control</p> <p>Baseline (2016): 1 Target (2022): 5</p>	<p><i>Partially achieved.</i> As of 2022, four of the five countries and territories reached the target and had a plan to fight endemic plague. Three countries updated their intersectoral plague surveillance and control plans. One country revised its plans in 2022.</p>
Objective 4.2: Increase countries' capacity to eliminate dog-mediated human rabies	
Indicator, baseline, and target	Status
<p>4.2.1 Number of endemic countries and territories with established capacity and effective processes to eliminate dog-mediated human rabies</p> <p>Baseline (2016): 28 Target (2022): 35</p>	<p><i>Partially achieved.</i> Of the 35 endemic countries and territories, 32 achieved the target. From 2016 to 2022, cases of dog-mediated human rabies were registered in five of the 35 target countries and territories (21). Moreover, one of these five registered its last case in 2017. Mass vaccination of dogs, availability of high-quality vaccine for humans, and strengthening of diagnosis and surveillance capacities have been strategically applied in these countries, and the results are likely to be visible soon.</p>
<p>4.2.2 Number of endemic countries and territories that can provide evidence confirming they had no autochthonous canine rabies cases in the last two years</p> <p>Baseline (2016): 0 Target (2022): 9</p>	<p><i>Not achieved.</i> The nine targeted countries and territories have had reports of autochthonous canine rabies cases in the last two years. The regional surveillance system for rabies (SIRVERA) has been updated to better support the countries, and direct assistance has been implemented to strengthen their capacities (21).</p>

Objective 4.3: Strengthen cross-border coordination to improve surveillance and control	
Indicator, baseline, and target	Status
<p>4.3.1 Number of endemic countries that work collaboratively to strengthen cross-border surveillance of animal sources of rabies, cystic echinococcosis/hydatidosis (CE/H), brucellosis, and visceral leishmaniasis</p> <p>Baseline (2016): rabies, 0; cystic echinococcosis/hydatidosis, 0; brucellosis, 0; visceral leishmaniasis, 0</p> <p>Target (2022): rabies, 12; cystic echinococcosis/hydatidosis, 7; brucellosis, 12; visceral leishmaniasis, 4</p>	<p>Partially achieved. Six countries work collaboratively through yearly actions to strengthen cross-border surveillance of animal sources of rabies in vulnerable regions along their shared borders. Another six countries apply yearly actions in border regions but without any collaboration or coordination between them. The experience obtained in the six successful countries will be applied to improve collaboration in the other countries.</p> <p>As of 2022, six countries are collaborating to strengthen cross-border monitoring of cystic echinococcosis/hydatidosis, and four collaborate on monitoring of brucellosis.</p> <p>As of 2021, five countries carry out cross-border surveillance for visceral leishmaniasis.</p>

Strategic Line of Action 5: Adopt intersectoral approaches to reduce the risk of NID transmission through increased access to safe water, basic sanitation, hygiene, and improved housing conditions

10. Two countries established new networks to support intersectoral actions to tackle NIDs. However, this is an area of work where accelerated and much stronger efforts are needed to reach the elimination goals.

Objective 5.1: Develop new partnerships and networks of partners and stakeholders in NID-endemic countries to tackle the social determinants of health and improve living conditions	
Indicator, baseline, and target	Status
<p>5.1.1 Number of NID-endemic countries that establish new networks or groups of partners and stakeholders to support the development and implementation of interprogrammatic and/or intersectoral actions designed to improve living conditions (e.g., potable water, basic sanitation and hygiene, improved housing) in communities at high risk of transmission of NIDs, depending on the country's epidemiological situation</p> <p>Baseline (2016): 0 Target (2022): 17</p>	<p>Partially achieved. Only two countries met the target. Interprogrammatic and intersectoral advocacy and action to fight NIDs by tackling the social determinants of health continues to be a challenge. It requires coordinated actions and interventions from programs and sectors beyond the health sector, at national, subnational, and local levels.</p>

Objective 5.1: Develop new partnerships and networks of partners and stakeholders in NID-endemic countries to tackle the social determinants of health and improve living conditions	
Indicator, baseline, and target	Status
<p>5.1.2 Number of endemic countries that have socio-ecologically characterized human plague in their plague-endemic areas</p> <p>Baseline (2016): 1 Target (2022): 5</p>	<p><i>Partially achieved.</i> As of 2022, two countries have characterized their human plague-endemic areas. Three qualitative and quantitative studies were conducted on the social and ecological determinants of plague in one country, and one qualitative and quantitative outbreak investigation was conducted in the other country.</p>
Objective 5.2: Adopt the WHO WASH-NTDs strategy (2015), as adapted for NID-endemic countries in the Region	
Indicator, baseline, and target	Status
<p>5.2.1 Number of NID-endemic countries that use the framework of the WHO WASH-NTDs strategy as part of national or subnational approaches to tackling NIDs</p> <p>Baseline (2016): 0 Target (2022): 6</p>	<p><i>Partially achieved.</i> Only two countries made progress on this indicator. Efforts must be intensified to make water, sanitation, and hygiene part of national programs for NID control and elimination.</p>

Strategic Line of Action 6: Incorporate innovative approaches supported by operational research and implementation science to eliminate disease transmission and address NID post-elimination actions and new priorities

11. All countries that have eliminated Chagas disease, onchocerciasis, lymphatic filariasis, and dog-mediated rabies have established measures to prevent the resurgence or reintroduction of these diseases.

Objective 6.1: Develop and implement actions to monitor and sustain the achievement of control and elimination of NIDs in countries that have reached specific elimination goals	
Indicator, baseline, and target	Status
<p>6.1.1 Number of NID-endemic countries that have achieved the goals of elimination of one or more NIDs and have developed and put in place measures to prevent disease resurgence or reintroduction of Chagas disease, onchocerciasis, lymphatic filariasis, blinding trachoma, dog-mediated human rabies, or cystic echinococcosis/hydatidosis (CE/H)</p> <p>Baseline (2016): Chagas disease, 9; onchocerciasis, 3; lymphatic filariasis, 3; trachoma, 0; dog-mediated human rabies, 28; cystic echinococcosis/hydatidosis, 0</p> <p>Target (2022): Chagas disease, 16; onchocerciasis, 6; lymphatic filariasis, 6; trachoma, 4; dog-mediated human rabies, 35; cystic echinococcosis/hydatidosis, 3</p>	<p><i>Partially achieved.</i> The situation with respect to the six diseases is as follows:</p> <p>Chagas disease: The 17 countries where transmission of Chagas disease by the main vector has been interrupted have reported and successfully implemented measures to prevent its resurgence or reintroduction.</p> <p>Onchocerciasis: Four countries met the elimination targets for this disease and introduced measures to prevent its resurgence or reintroduction.</p> <p>Lymphatic filariasis: Three countries met the elimination targets and introduced measures to prevent its resurgence or reintroduction.</p> <p>Trachoma: The only country that eliminated trachoma carried out post-elimination surveillance actions in the formerly endemic populations (19).</p> <p>Human rabies: Thirty-one countries have developed and put in place measures to prevent the resurgence or reintroduction of rabies. Only two countries still reported cases of human rabies transmitted by dogs in 2021–2022. Actions have been taken to prevent reintroduction, particularly in border areas between countries with different health status. The REDIPRA network¹ has been used regularly since the pandemic to support national rabies programs for strengthening of communication and standardization of procedures.</p> <p>Three countries are conducting integrated serosurveillance using multiplex bead assay as a complementary surveillance tool for communicable diseases elimination (22). Two additional countries included the collection of blood samples for integrated serosurveillance as part of national NID surveys.</p> <p>Cystic echinococcosis/hydatidosis: No country has eliminated cystic echinococcosis/ hydatidosis as a public health problem. The objective of the Regional Program (2020–2029) is to reduce the incidence and prevalence of cystic echinococcosis/hydatidosis to near-zero levels in six endemic countries (13).</p>

¹ REDIPRA (Spanish acronym) is the Meeting of Directors of National Programs for Rabies Control in the Americas. More information available at: <https://www.paho.org/en/redipra>

Objective 6.1: Develop and implement actions to monitor and sustain the achievement of control and elimination of NIDs in countries that have reached specific elimination goals	
Indicator, baseline, and target	Status
<p>6.1.2 Number of NID-endemic countries that have established and implemented cross-border initiatives to carry out joint prevention, control, and elimination actions related to onchocerciasis, lymphatic filariasis, and blinding trachoma in affected populations living in border areas</p> <p>Baseline (2016): onchocerciasis, 1; lymphatic filariasis, 2; blinding trachoma, 0</p> <p>Target (2022): onchocerciasis, 2; lymphatic filariasis, 5; blinding trachoma, 4</p>	<p><i>Partially achieved.</i> Two countries established cross-border onchocerciasis initiatives, and two established lymphatic filariasis initiatives.</p> <p>Trachoma: No cross-border initiatives were carried out for trachoma. Cross-border collaboration between two countries was agreed and planned in 2018 but was not implemented.</p>
Objective 6.2: Develop and implement actions to address new NID priorities	
Indicator, baseline, and target	Status
<p>6.2.1 Number of NID-endemic countries that have mapped or documented the epidemiological situation and baseline capacities for other NIDs of national importance</p> <p>Baseline (2016): Buruli ulcer, 0; brucellosis, 0</p> <p>Target (2022): Buruli ulcer, 4; brucellosis, 12</p>	<p><i>Partially achieved.</i> As of 2022, three countries had documented the epidemiological situation of brucellosis. No country documented the epidemiological situation of Buruli ulcer.</p> <p>The epidemiological situation of tungiasis and yaws in the Region was documented (23, 24). A road map for ectoparasitic diseases, including tungiasis and scabies, was published to support integrated approaches for NIDs affecting the skin (25). An informal consultation with experts on tungiasis was co-hosted by PAHO and WHO (26), and actions to produce treatment guidelines and operational guidance have started with the support of experts and delegates from countries and PASB.</p>

Objective 6.3: Compile evidence of the epidemiological status of other NIDs that affect population groups living in vulnerable conditions	
Indicator, baseline, and target	Status
<p>6.3.1 Number of former endemic countries and territories that compile evidence to support the elimination of yaws, lymphatic filariasis, and schistosomiasis</p> <p>Baseline (2016): yaws, 0; lymphatic filariasis, 0; schistosomiasis, 0</p> <p>Target (2022): yaws, 26; lymphatic filariasis, 6; schistosomiasis, 6</p>	<p><i>Partially achieved.</i> In 2017, 31 countries reported data to WHO on yaws (27). One country updated serological data for yaws in children in a former endemic area and found no transmission (24). This country is compiling information to support the interruption of yaws transmission. As of 2022, two countries reported data to WHO on lymphatic filariasis and two on schistosomiasis.</p>
<p>6.3.2 Number of countries and territories where blinding trachoma has been suspected to occur and/or occurs in groups of people living in vulnerable conditions that compile evidence to update their current epidemiological status</p> <p>Baseline (2016): 0</p> <p>Target (2022): 12</p>	<p><i>Partially achieved.</i> Three countries achieved the target. One country documented a trachoma focus for the first time in 2017 (28) but has not yet started interventions. A second country completed trachoma rapid assessments and has identified several districts where trachoma baseline surveys should be implemented (29). A third country completed trachoma rapid assessments and found no trachoma-affected communities (30). In another two countries, implementation of trachoma rapid assessments is pending (31).</p> <p>A prioritization of municipalities for surveillance of trachoma in 22 countries was completed (32). In two countries, serological studies were conducted for multiple diseases including trachoma, and no significant serological signals were detected.</p> <p>Planning for trachoma surveillance was carried out with countries of the Amazon region (31), and a toolbox to support trachoma elimination in the Region was published (32).</p>

Lessons Learned

12. The COVID-19 pandemic had a large negative impact on interventions to tackle neglected infectious diseases, slowing progress toward the control and elimination of NIDs in the Region and globally. Strong efforts are needed to safeguard the Region's achievements, restore the operational capacity of national programs to at least pre-pandemic levels, and intensify interventions to further advance toward the elimination goals.

13. Recent experience demonstrates the operational and strategic importance of maintaining technical cooperation with NID-endemic countries aiming at control and elimination of NIDs, in spite of the difficulties resulting from the pandemic. The use of informatics and technology tools can help increase the scope of PASB's cooperation and technical support through online courses, virtual technical cooperation missions, virtual workshops and courses, virtual meetings on specific subjects, and frequent communication with focal points.

14. The successful implementation of interventions for the control and elimination of NIDs is feasible even under the restrictions imposed by the COVID-19 pandemic, provided steps are taken to ensure appropriate planning, microplanning, organization, and follow-up. Investment in comprehensive, people-focused approaches and strengthening of primary health care are the best ways to reduce morbidity, mortality, and disabilities from NIDs and eventually interrupt their transmission in the affected communities (7).

Action Needed to Improve the Situation

15. In light of the achievements and challenges described in the present report, the following actions are presented for consideration by the Member States:

- a) Continue resource mobilization efforts, regionally and in the countries, to ensure adequate allocation of human and financial resources, medicines, diagnostics, and supplies.
- b) Continue advocacy with civil society, subnational and local governments, and other stakeholders to promote social mobilization and community participation toward elimination and control of NIDs.
- c) Foster and strengthen collaboration between the health sector and other relevant sectors to implement the intersectoral collaboration required to address the social determinants of health (water, sanitation and hygiene, housing, education, etc.) in communities at risk of NIDs.
- d) Provide integrated packages of services to at-risk populations living in vulnerable conditions, with an emphasis on the first level of care. This approach is in line with the PAHO Disease Elimination Initiative, approved by the 57th Directing Council in 2019, which seeks to eliminate more than 30 communicable diseases and related conditions (33).
- e) Promote the inclusion of NIDs patients in existing social protection systems in the countries to offer them comprehensive, high-quality prevention and health care services. Continue working toward universal access to health and universal health coverage aimed at "leaving no one behind."
- f) Ensure continuous availability of and access to diagnostic tests and medicines at the primary health care level, making use of available drug donations and procurement options through the PAHO Regional Revolving Fund for Strategic Public Health Supplies. The aim is to provide patients with early diagnosis and timely treatment of NIDs, contributing to the overall objectives of disease control and elimination.

- g) Improve and strengthen the countries' capacities in entomological surveillance and vector control interventions. Promote intersectoral synergies between national authorities, partners, and stakeholders involved in the implementation of work plans and activities related to the integrated vector management strategy.
- h) Reinforce collaboration between animal and health sectors in the countries to advance toward the control and elimination of zoonotic neglected tropical diseases. This collaboration should align with the PAHO One Health policy, which fosters coordination between the different governance frameworks of human, animal, plant, and environmental health (34), and with the One Health companion document to the WHO neglected tropical diseases road map 2021–2030 (35).

Action by the Directing Council

16. The Directing Council is invited to take note of this report and make any comments it deems pertinent.

References

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