

## Technical Brief

# Health Campaign Integration Related to Neglected Infectious Diseases in Latin America and the Caribbean: A Landscape Analysis

### Key Messages

- The experience of health campaign integration for neglected infectious diseases (NIDs) is inadequately documented in Latin America and the Caribbean (LAC). This study addresses this gap by describing experiences of integrated health campaigns in the LAC Region related to soil-transmitted helminthiases (STH), trachoma and lymphatic filariasis (LF).
- This landscape analysis describes findings of a literature view and interviews conducted with regional stakeholders at the Pan American Health Organization (PAHO). It highlights the experiences of governments in Honduras, Colombia, and Guyana in implementing integrated campaigns for at least two NIDs with other public health interventions, such as vaccination. Integration started at a small scale, then expanded to other geographic areas and target age groups.
- Guyana and Honduras attained high intervention coverage through integrated campaigns. Guyana achieved over 70% national coverage for target populations using mass drug administration (MDA) of diethylcarbamazine and albendazole (DA) for LF and STH in 2017 and 2018 and triple therapy ivermectin, diethylcarbamazine and albendazole (IDA) for LF and STH in 2019 and 2021. All three countries reported effective implementation of integrated health campaigns at the national and local levels through stakeholder engagement and training and sensitizing local leaders, communities, and line ministries.
- Three main enablers for planning and implementing integrated NID health campaign emerged in this study: 1) high political commitment, inter-programmatic and high-level intersectoral collaboration among local and regional stakeholders; 2) strong country ownership demonstrated by domestic funding for national integrated plans to address NIDs; and 3) extensive community engagement and effective communication strategies.
- Challenges to NIDs campaign integration persist given resource constraints, competing health priorities, insufficient management capacities, weak surveillance systems, and insufficient coordination among line ministries and relevant stakeholders.
- National programs can learn from these experiences to facilitate more integrated approaches, as LAC and other regions explore ways to sustain quality prevention, control, and elimination strategies of NIDs.

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## Purpose

The specific objectives of this brief are to:

- Provide an overview of program experiences with conducting integrated health campaigns in the LAC Region related to three NIDs--soil-transmitted helminthiases (STH), trachoma, and lymphatic filariasis (LF).
- Summarize best practices, successes, gaps, and challenges from past experiences.
- Highlight ways to improve the effectiveness and reach of these integrated NID health campaigns.

## Target Audience(s)

- Regional and country-level stakeholders, policymakers and Ministries of Health counterparts who plan, implement, oversee, or monitor NID mass campaigns.
- Global and regional organizations, partners, and donors with particular interest and active involvement in health campaign integration, both within NID programs and with other health programs.

## Introduction

Globally, health systems and services continually seek more effective and sustainable approaches to meet the health needs of their populations. In the Region of the Americas, health systems strengthening is vital to improve overall health outcomes and to achieve the 2030 Agenda for Sustainable Development and the Sustainable Health Agenda for the Americas 2018-2030. Countries in the LAC Region have reaffirmed the need for collective action to fulfill Sustainable Development Goals (SDG) target 3.3, which calls for ending the epidemics of NIDs, among other communicable diseases (1). The challenges of resource constraints, limited management capacities, and coverage gaps need to be addressed in order to maintain achievements in disease elimination and to continue advancing the integrated response to communicable diseases in the Region (1).

The Integrated Sustainable Framework for the Elimination of Communicable Diseases in the Americas (2), estimates that HIV/AIDS, tuberculosis, malaria, and NIDs\* accounted for 6 percent of the total burden of disability-adjusted life years in all age groups and sexes, and 7% of all deaths in the Americas in 2017 (1). Adopting potentially more efficient integrated versus vertical program strategies can contribute to an estimated worldwide socioeconomic benefit of US\$ 16.6 billion for 2021-2030 from eliminating these diseases. Furthermore, the framework undergirds an ambitious initiative to eliminate more than 30 communicable diseases and related conditions by 2030. The framework emphasizes the importance of integrated efforts to end NID transmission, noting that such efforts will contribute directly to the attainment of SDG 3.3 and, directly or indirectly, nearly all other SDGs. Moreover, this integration can also foster intersectoral and community-centered interventions in the context of poverty reduction, disease elimination, and universal health. Conducting integrated health campaigns may prove to be a promising approach in this regional context.

*\*NIDs (neglected infectious diseases) is the term used for neglected tropical diseases in the Region of the Americas since 2009. This was due to the inclusion of neonatal tetanus and congenital syphilis in the first list of NIDs in the Americas. These two diseases are no longer part of the NIDs, but the original name of the group of diseases remains.*

## Campaigns, Integration, and Interventions

**Health campaigns** are time-bound, periodic activities that address specific epidemiological challenges, expediently fill delivery gaps, or provide surge coverage for health interventions. Campaigns are used to prevent or respond to disease outbreaks, control or eliminate targeted diseases as a public health problem, eradicate a disease altogether, or achieve other health goals (3).

Countries in the region conduct **health campaigns** to complement routine health services within the primary health care structure to increase equitable access to disease prevention and control measures, including for NIDs. Campaigns can serve as an important platform for providing integrated services. Compared with vertical campaign approaches, such integration can prove more cost-effective and efficient to achieve prevention and control targets.

**Integration** should not be seen as “two extremes of integrated or not integrated,” according to the World Health Organization's (WHO) guidance document on integration of other health interventions with immunization (4). Integration can be both between health interventions (such as combining MDA NID medications for school-age children with vaccinations) or within health the same interventions (such as joint STH and LF elimination campaigns). For the purposes of this brief, we are considering **full integration** and **partial integration** along this spectrum.

**Full integration** involves coordinating most or all typical campaign components (microplanning, registration, logistics, implementation, evaluation) to provide two or more health interventions together at point of service. The country examples cited below mostly highlight full integration experiences for NIDs programs.

**Partial integration** involves collaboration or sharing of specific campaign components between vertical health programs without co-delivery of interventions at the same point of service (5).

In the Americas, a number of integrated health campaigns and interventions advance communicable disease elimination, particularly of NIDs. They range from integrated surveillance and monitoring, the single-visit screen-and-treat approach in primary health care settings, integrated preventive chemotherapy, integrated screening, diagnosis, and treatment of NIDs in preschool and school-age children, and combining vaccination campaigns or outreach with other communicable disease elimination interventions, among others (2). Globally, these NIDs-related health campaigns are part of general public health practice and implemented using different scenarios to expand coverage of targeted interventions, particularly to the most vulnerable populations that lack access to quality and reliable health services (3).

What started in 2003 as the Vaccination Week in the Americas has provided a vital platform to integrate other health interventions such as vaccination and deworming (6). In the last decade, some NIDs programs in the Americas have achieved high coverage by using effective strategies in communication, operations, and community engagement. Yet challenges persist in meeting NIDs-related control, elimination, and eradication targets set by the WHO using cross-cutting integrated approaches (7). Those regional targets include reaching five million people in four countries with integrated interventions for the elimination of trachoma; implement MDA for 4.9 million people in two countries to eliminate LF; and deworm 57.9 million children aged 1-14 years for STH in 20 countries.

This technical brief highlights integrated NIDs campaign experiences in Honduras, Colombia and Guyana, and documents the enabling factors, promising practices, and challenges that can inform further regional scale-up.

## Methods

A retrospective analysis was conducted focusing on health campaign integration experiences in Honduras, Colombia, and Guyana with three specific NIDs – STH, trachoma and LF. The criteria for selecting these three countries were geographic representation of the region (Central America, South America and the Caribbean), quantity of information available on integrated health campaigns regarding NIDs, and expert guidance and availability from the Neglected, Tropical, and Vector-borne Diseases Unit in the PAHO headquarters and country offices. This study was a two-step landscape analysis that incorporated a rapid literature review and qualitative key informant interviews (KIIs) to identify emerging issues and trends in the region.

The literature review involved searching for published and grey literature on health campaign integration for NIDs in the last ten years in English or Spanish. Resources were identified on the websites of and through official contacts with the Health Campaign Effectiveness Coalition (HCEC) and the PAHO Neglected, Tropical, and Vector-borne Diseases Unit, and on public databases such as PubMed. Key search terms included health campaign integration, integrated health services, and NIDs in Latin America and the Caribbean, with a particular focus on the three countries of interest.

KIIs were conducted with personnel knowledgeable about NID programs in PAHO country offices in Honduras, Colombia, and Guyana. Three interviews, conducted virtually in July 2021, aimed to address gaps in the literature and better document country experiences with campaign integration. Interview questions, co-developed by the HCEC and PAHO teams, aimed to explore past, current, and future integration plans; and the decision-making processes, successes, gaps, and challenges of planning and conducting NID-related integrated health campaigns in the LAC Region. Data from the KIIs were recorded and organized by specific themes using an unstructured, thematic content analysis approach in Microsoft Word.

## Key Findings

In the last decade, the countries of Honduras, Colombia, and Guyana have consistently used integrated campaigns to address three NIDs: trachoma, STH, and LF.

### *Honduras*

In 2009, countries of the Region adopted PAHO Resolution CD49.R19 to control and eliminate certain NIDs by 2015. In response, Honduras formed a National Steering Committee for NIDs in 2010 and launched the National NIDs Plan 2012-2017 to control and eliminate nine infectious diseases (Chagas disease, leishmaniasis, leprosy, human rabies transmitted by dogs, leptospirosis, congenital syphilis, neonatal tetanus, STH infections, and the taeniasis/cysticercosis complex). The country in fact became the first country in the region to adopt such an integrated approach. The steering committee is comprised of multiple stakeholders and supports the development of integrated NIDs operational plans for ten departments of high priority (8).

In Honduras, an estimated 2.2 million children aged 1-14 years old required preventive chemotherapy for STH in 2019 (9). The country's national NIDs plan aims to treat 75% of targeted children aged 2-14 years by 2022. In following the results of the national survey of prevalence and intensity of infection of STH carried out in 2011, children aged 2-4 years are dewormed once a year and children 5-14 years are dewormed twice a year (10). The Ministry of Health (MOH) of Honduras has partnered with the Ministry of Education, Ministry of Development and Social Inclusion, PAHO, and several non-governmental organizations (NGO) to support these efforts using

anthelmintics donated by WHO.

Approximately half a million children 2-4 years old country-wide benefit each year from a free, integrated and intersectoral deworming campaign that operates during National Immunization Week. Coinciding with the regional Vaccination Week in the Americas, the Honduran Government started a pilot program in 2012 to deliver the anti-parasitic drugs along with vaccinations to children aged 2-4 years in two municipalities. Based on this experience, the pilot was expanded to another six municipalities in 2013, and since 2014 it became a national campaign of integrating deworming for STH with the annual vaccination campaign. Communities, local NGOs, and religious leaders engaged effectively in launching these campaigns, followed by sensitization of the wider community via radio broadcasts and other media.

Honduras still faces significant challenges and barriers to NIDs campaign integration. The country has long struggled with a shortage of human resources for health (HRH) to carry out health campaigns and routine health services adequately. Other challenges include limited financial resources, the lack of proper strategic planning, overall sustainability of the program, and insecurity in some areas. Despite these constraints, Honduras remains committed to continue the integrated deworming and vaccination campaigns to increase operational efficiency and improve access to vulnerable populations.

*Table 1. Honduras – Summary of Country Experiences and Achievements based on Key Informant Interviews*

| Honduras                         |  |
|----------------------------------|--|
| Key Aspect                       | Experiences and Achievements   |
| <b>Interventions integrated</b>  | <ul style="list-style-type: none"> <li>• MDA for elimination of STH as a public health problem and vaccinations in preschool-age children.</li> </ul>  |
| <b>Scale of interventions</b>    | <ul style="list-style-type: none"> <li>• In 2012, a pilot study in one municipality began with a deworming campaign for preschool-age children targeting STH + vaccinations during Vaccination Week in the Americas.</li> <li>• Given its success, by 2013-2014 it became a national integrated health campaign.</li> </ul>                |
| <b>Implementation strategies</b> | <ul style="list-style-type: none"> <li>• Joint planning, implementation, and monitoring of deworming and vaccination for preschool-age children. Including integrated coverage monitoring.</li> <li>• Strong efforts in training and sensitization of parents.</li> <li>• The MOH evaluated its national plan for NIDs in 2019.</li> </ul> |
| <b>Financing</b>                 | <ul style="list-style-type: none"> <li>• The MOH fully finances the implementation of vaccination and deworming campaigns.</li> <li>• WHO donates deworming medicines complemented by seed funding from NGOs and international organizations.</li> </ul>   |
| <b>Coverage</b>                  | <ul style="list-style-type: none"> <li>• Achieved coverage of at least 75% for STH deworming in preschool-age children between 2012 and 2017.</li> </ul>   |

Table 2. Honduras – Summary of Country Enablers, Gaps, and Challenges based on Key Informant Interviews

| Honduras  |  |
|---|--|
| Key Aspect  | Enablers   |
| <b>Effective high-level, multi-sectoral support</b> | <ul style="list-style-type: none"> <li>Establishing a national plan to eliminate NIDs served as a key platform for integrated approaches to eliminate 9 diseases, including the implementation of integrated campaigns.</li> <li>The Office of the First Lady oversees high-level coordination. Excellent collaboration with the education sector (MOE, schools and teachers).</li> <li>Intersectoral Steering Committee for NIDs was formed and remains active. Monthly planning and follow-up meetings.</li> </ul> |
| <b>Extensive community engagement</b>               | <ul style="list-style-type: none"> <li>Acceptance from communities and coordination with local leaders to overcome barriers, including security issues.</li> <li>Community and religious leaders are actively involved.</li> <li>Sensitization through local radio stations to engage the wider community.</li> </ul>  |
| Key Aspect  | Gaps and Challenges  |
| <b>Inadequate coordination at certain levels</b>    | <ul style="list-style-type: none"> <li>Limited coordination in municipalities has affected the implementation of integrated campaigns and the achievement of optimal coverage in school age children.</li> </ul>   |
| <b>Coverage gaps</b>                                | <ul style="list-style-type: none"> <li>Gaps in deworming coverage and variation by age group from year to year.</li> </ul>   |
| <b>Resource constraints</b>                         | <ul style="list-style-type: none"> <li>Limited financial and human resources.</li> <li>Sustainability of the program.</li> </ul>   |
| <b>Insufficient management capacity</b>             | <ul style="list-style-type: none"> <li>Weak strategic planning for effective implementation of interventions.</li> </ul>   |

### Colombia

Colombia has also made remarkable progress in the Region of the Americas when combating NIDs. In 2013, it became the first country in the world to eliminate onchocerciasis. That milestone triggered efforts towards elimination of other NIDs by launching the national plan to control and eliminate STH and trachoma, and to sustain post-elimination surveillance for onchocerciasis from 2013 to 2017. Colombia has 195,175 people living

in areas warranting treatment with antibiotics, facial cleanliness, and environmental improvement in 2021 for elimination of trachoma as a public health problem (11). The country also had 3.2 million children 1 to 14 years old requiring preventive chemotherapy for STH in 2019 (12). The country's national NIDs Strategic Plan 2013-2017 included the following targets: by 2020, zero new cases of blindness due to trachoma; reduce the prevalence of trichomatous trichiasis to half in population 15 years and above; reduce the prevalence of trichomatous inflammation (follicular) to less than 10% in children 1 to 9 years; and reduce the prevalence of STH to less than 20% in school-age children. The coverage goal for MDA for STH is 75% in children aged 1-14 years and 80% in the population living in areas that warrant treatment with antibiotics for trachoma.

As part of its NIDs plan, the country proposed integrated preventive chemotherapy for STH and trachoma in rural and remote communities affected by both diseases, mainly indigenous populations in the Amazon and Orinoco basins. Because it is technically and financially impractical to visit these rural communities for separate treatments at different times, the local government deemed this integrated approach vital to expand coverage. This co-administration was accompanied by integrated actions under the four components of the SAFE Strategy (surgery, antibiotics, facial cleanliness, and environmental improvement) for trachoma elimination.

The MOH has also carried out active searches for trichomatous trichiasis (TT) cases in rural remote communities affected by trachoma (13), integrating screening of other eye health problems such as pterygium and cataracts. Surgical camps offer integrated services to address eye health problems and other health problems. This integration of trachoma activities has served as an opportunity to prioritize care for marginalized indigenous populations in areas with limited access to health services (13). Adoption of an effective strategy of information, education, and communication targeting the indigenous communities affected by trachoma was a critical part of this integrated approach. Culturally appropriate dialogue with indigenous leaders and organizations helped increase acceptability of the interventions.

Colombia has integrated deworming for school-age children into the school system, and for preschool-age children into existing campaign platforms, such as the Expanded Program on Immunization (EPI) in municipalities that are prioritized annually. The MOH and Social Protection established clear guidelines for annual operational plans to include mass anthelmintic deworming activities (14). Additional integrated strategies to increase coverage include offering deworming through health campaigns, house-to-house visits, and integration with school feeding programs. Most recently, the MOH applied a community-centered approach of integrating STH and trachoma campaigns to tackle ectoparasitic diseases (e.g., tungiasis and scabies), which are NIDs affecting the same populations (13).

The MOH demonstrated its commitment to NID programs by financing integrated STH and trachoma initiatives. Subnational health authorities provided support, along with actors within the national health system (including health services and insurance companies), and national and international partners. The MOH also included the integration of health campaigns for NIDs Control and Elimination within its 2012-2021 Ten-Year Public Health Plan; that plan is currently being evaluated and a new ten-year plan is being designed.

Colombia faces challenges to reach and maintain optimal coverage of interventions through integrated campaigns for STH control and MDA for trachoma elimination. The diversity of public-private health actors, decentralization of funding and responsibilities of public health interventions, and an influx of immigrants have delayed or blocked implementation. The program continues to confront a lack of HRH, the high rotation of personnel, competing priorities in the national health plan, limited budget, and complex coordination within the health system.

Table 3. Colombia – Summary of Country Experiences and Achievements based on Key Informant Interviews

| Colombia                  |  |
|---------------------------|--|
| Key Aspect                | Experiences and Achievements   |
| Interventions integrated  | <ul style="list-style-type: none"> <li>• MDA, hygiene, and health education for elimination of STH and trachoma as public health problems.</li> </ul>  |
| Scale of interventions    | <ul style="list-style-type: none"> <li>• In 2012, health campaign integration for STH and trachoma were included in the National NIDs Strategic Plan in populations affected by both diseases.</li> <li>• Deworming for preschool and school-age children was later included in several areas of the country.</li> </ul>   |
| Implementation strategies | <ul style="list-style-type: none"> <li>• The MOH produces national guidelines and norms to guide subnational public health responsible for the implementation of deworming and trachoma campaigns.</li> <li>• Coordination between the national NIDs program and subnational actors of the health system to carry out integrated MDA for STH and trachoma.</li> <li>• Culturally appropriate approaches to increase acceptability of integrated interventions in indigenous communities.</li> </ul>                      |
| Financing                 | <ul style="list-style-type: none"> <li>• The Government finances its National NIDs Strategic Plan with health system resources at various levels and among several actors.</li> <li>• Although limited, departments and municipalities have their own budget for local implementation of integrated campaigns.</li> <li>• WHO donates deworming medicines, while the MOH has a combined mechanism to get antibiotics for trachoma (local purchases and donations from the International Trachoma Initiative).</li> </ul> |
| Coverage                  | <ul style="list-style-type: none"> <li>• The country has reported not achieving optimal MDA coverage of at least 75%. Some challenges are described below.</li> </ul>  |

Table 4. Colombia – Summary of Country Enablers, Gaps, and Challenges based on Key Informant Interviews

| Colombia                                     |  |
|--|--|
| Key Aspect                                   | Enablers   |
| Effective high-level, multi-sectoral support | <ul style="list-style-type: none"> <li>NIDs are a national priority and the national NID plan was key to elevating these diseases to the highest level of the public health agenda.</li> <li>There is also good research capacity and collaboration with academia to carry out interventions.</li> </ul> |
| Extensive community engagement               | <ul style="list-style-type: none"> <li>Close collaboration with the Association of Indigenous Community for wider engagement.</li> <li>Sensitization of communities to maintain sustainability.</li> </ul>   |
| Key Aspect                                   | Gaps and Challenges  |
| Inadequate coordination at certain levels    | <ul style="list-style-type: none"> <li>Complex coordination among actors and levels within the health system that affects sustainability of efforts.</li> </ul>  |
| Coverage gaps                                | <ul style="list-style-type: none"> <li>Gaps in deworming and MDA coverage.</li> </ul>  |
| Resource constraints                         | <ul style="list-style-type: none"> <li>Limited financial and human resources. High rotation of health personnel. Competing health priorities.</li> </ul>   |
| Insufficient management capacity             | <ul style="list-style-type: none"> <li>Insufficient supervision and management capacity. Weak surveillance systems in remote rural areas.</li> </ul>   |
| Other factors                                | <ul style="list-style-type: none"> <li>Influx of immigrants—hinders overall coverage.</li> </ul>   |

### Guyana

In the Americas, Guyana is one of four countries (along with Haiti, Brazil and Dominican Republic) where LF caused by *Wuchereria bancrofti* is targeted for elimination. To this end, WHO recommends annual MDA to achieve at least 65% coverage in all endemic areas (15). In 2019, Guyana developed a strategic plan to achieve the goal of LF elimination as a public health problem by ensuring at least 65% coverage through MDAs using triple therapy IDA (ivermectin, diethylcarbamazine, and albendazole) among 667,601 target populations (16). The triple-drug therapy approach shortens the number of rounds to two and impacts other NIDs such as scabies and intestinal worms. To define strategies to reach the target populations, Guyana implemented a bottom-up microplanning process led by agencies at regional and national levels.

Activities of the MDA program centered around three distinct approaches: distribution at primary and secondary schools, distribution through fixed points in work and public places, and house-to-house distribution.

Distribution was in the form of directly observed therapy (DOT), facilitated by trained pill distributors assigned to all endemic regions in the country. The Ministry of Public Health has revised household data collection forms to identify potential chronic LF patients by line-listing cases of lymphedema (17). In addition, drugs were donated for STH and LF programs via technical cooperation with multiple partners (8).

Guyana applied several other successful strategies to support these integrated MDA activities. The country convened an Elimination of Lymphatic Filariasis Advisory Board composed of representatives from key sectors: education, maternal and child health, health promotion, schools, and businesses, in order to have multi-sectoral engagement in the planning of these interventions. In addition, the Ministries of Public Health and of Education collaborated to implement school-based campaigns to combat LF and STH. This collaboration included the sensitization of education officers, teachers, parents, and children at various forums. Children at schools also took part in competitions and mini-workshops. Education and communication campaigns incorporated documentaries and advertisements in mass media, radio, and television.

Before 2017, the country fell short of achieving the minimum MDA coverage of 65%. After evaluating the program and engaging relevant stakeholders, Guyana has been able to achieve over 70% coverage in 2017 and 2018 with diethylcarbamazine (DEC) and albendazole (ALB), and in 2019 and 2021 with IDA in each of the eight endemic regions that were targeted by these integrated health campaigns. The second round of IDA was postponed to 2021 and adjusted to minimize risk of transmitting SARS-CoV-2 given the COVID-19 pandemic. In addition, improvements in the accuracy, quality, and timeliness of data collection and reporting have played a vital role for informing strategies for eliminating these NIDs. The collaboration between the Ministries of Public Health and of Education along with other entities has helped sustain these integrated campaign successes.

The NID program in Guyana is considering integrated campaigns for other NIDs endemic to the country such as leishmaniasis, Chagas disease, and leprosy, and incorporated these diseases under one National NIDs Strategic Plan for the first time. Challenges that have impeded full integration include inadequate coordination of activities with schools and other line ministries, and engaging teachers and parents for school-based campaigns.

*Table 5. Guyana – Summary of Country Experiences and Achievements based on Key Informant Interviews*

| <b>Guyana</b>                    |  |
|----------------------------------|--|
| <b>Key Aspect</b>                | <b>Experiences and Achievements</b>  |
| <b>Interventions integrated</b>  | <ul style="list-style-type: none"> <li>● MDA and health education for elimination of STH and LF as public health problems.</li> </ul>  |
| <b>Scale of interventions</b>    | <ul style="list-style-type: none"> <li>● Since 2019, the National NIDs Program has implemented MDAs with IDA in all regions endemic to LF.</li> </ul>  |
| <b>Implementation strategies</b> | <ul style="list-style-type: none"> <li>● NIDs team collaborates with other sectors, community leaders, and programs to implement integrated campaigns.</li> <li>● Several tools have been used such as macroplanning and cost and funding gap analysis, microplanning, coverage monitoring, acceptability surveys to increase and sustain MDA coverage.</li> <li>● Strong communication campaigns to address concerns of the communities in the context of the country.</li> <li>● Continuous analysis and recalibration of actions to overcome challenges based on the local contexts.</li> </ul> |
| <b>Financing</b>                 | <ul style="list-style-type: none"> <li>● A cost analysis exercise enabled the mobilization of external funding and partnerships for operationalization of campaigns.</li> <li>● The MOH makes available all the health workers, vehicles, and infrastructure available for the implementation of the campaigns.</li> </ul>   |
| <b>Coverage</b>                  | <ul style="list-style-type: none"> <li>● Surpassed the minimum coverage of 65% MDA coverage in all implementation units by achieving over 70% national coverage in 2017, 2018, 2019, and 2021, and 100% geographical coverage in 2019 and 2021.</li> </ul>   |

Table 6. Guyana – Summary of Country Enablers, Gaps, and Challenges based on Key Informant Interviews

| <b>Guyana</b>                                       |   |
|---|---|
| <b>Key Aspect</b>                                   | <b>Enablers</b>   |
| <b>Effective high-level, multi-sectoral support</b> | <ul style="list-style-type: none"> <li>● The MOH leads LF and STH elimination efforts in the country and conducts the coordination with other national and subnational stakeholders.</li> <li>● Intersectoral collaboration is a critical success factor. Strong collaboration with the Ministry of Education and the Ministry of Community.</li> </ul> |
| <b>Extensive community engagement</b>               | <ul style="list-style-type: none"> <li>● Community leaders serve as influencers to engage the wider community.</li> <li>● Strong communication strategies to engage leaders and communities.</li> </ul>   |
| <b>Key Aspect</b>                                   | <b>Gaps and Challenges</b>  |
| <b>Inadequate coordination at certain levels</b>    | <ul style="list-style-type: none"> <li>● Limited collaboration with local schools and other line ministries at school-level.</li> </ul>   |
| <b>Coverage gaps</b>                                | <ul style="list-style-type: none"> <li>● None since 2017. To assess reported coverage, the country carries out rapid coverage monitoring within the two weeks following the MDA campaign; the data help to identify coverage gaps and plan follow up interventions.</li> </ul>  |
| <b>Resource constraints</b>                         | <ul style="list-style-type: none"> <li>● Limited financial and human resources. Competing health priorities.</li> </ul>   |
| <b>Other factors</b>                                | <ul style="list-style-type: none"> <li>● Campaign fatigue among regions after years. Complicated political climate as Government authorities change.</li> </ul>   |

## ***Cross-Cutting Themes that Emerged***

### **Experiences**

Countries surveyed integrated campaigns covering no more than two health services at a time; two countries integrated within the NID realm (STH, LF, and trachoma), while one included vaccination. All three countries started integration at a small scale then expanded to other geographic areas or target age groups. Both Guyana and Honduras had implementation strategies in place, including integration and collaboration with other sectors and programs. One country relied on external donors for operational costs of the LF and STH campaign integration, while two countries almost fully funded the operation of integrated NID campaigns. The three countries received drug donations for MDA. NID National Strategic Plans and vaccination campaigns are fully financed by their respective Government.

### **Achievements**

Two countries successfully adapted national NID plans to incorporate integrated campaigns, and all three countries effectively launched integrated campaigns. All three countries reported effective implementation of integrated health campaigns at the national and local levels through actively engaging stakeholders and strong efforts in training and sensitization of teachers and parents. One country (Guyana) achieved high coverage when implementing NID integrated health campaigns for LF and STH, while Honduras reported optimal coverage for one of the targeted age groups for STH deworming when integrated with vaccination efforts.

### **Enablers**

All three countries reported effective high-level, multi-sectoral support as a strong enabler for health campaign integration, along with establishing intersectoral committees and working groups to carry out interventions. Consistent, effective communication strategies allowed for better understanding amongst target populations. Community engagement from an intercultural perspective was also a strong enabler to effectively carry out integrated health campaigns.

### **Gaps and Challenges**

The countries reported challenges with coordination among schools, line ministries, and other stakeholders. Honduras and Colombia both reported coverage gaps in deworming despite integrated campaigns. All three countries reported limited financial and human resources, along with insufficient management capacity in the areas of strategic planning and supervision, and weak surveillance systems in remote rural areas. Campaign fatigue, complicated political climate, migration, and insecurity also hindered health campaign effectiveness and coverage.

## Conclusions

Country experiences described in this review suggest that integration of health campaigns can be a successful strategy in combating NIDs in Latin America and the Caribbean Region. The processes, achievements, and challenges of campaign integration efforts should be documented more extensively to inform health policies and programs in the region (7). This technical brief highlighted a number of successful initiatives and identified key enabling factors for integrated NIDs campaigns: effective, high-level, multi-sectoral support; consistent, effective communications; and extensive community engagement. At the same time, countries must confront emerging technical and operational challenges to conducting integrated NID campaigns, including budget constraints, shortage of human resources for health, inefficient allocation of resources, and competing health priorities.

The COVID-19 pandemic has greatly impacted NID services in the Region of the Americas, where 47% of 27 countries reported some type of disruption of NID services and 19% of them reported more than 50% of services were disrupted (18). These disruptions are especially evident in low-and middle-income countries. The burden of COVID-19 threatens the provision of essential health services, including priority diseases control and elimination programs such as those to combat NIDs. Almost all countries endemic for NIDs had to postpone planned MDA, including deworming campaigns for children 1-14 years of age in 2020. At the same time, the pandemic revealed opportunities to establish broader and more comprehensive approaches to tackling NIDs, including through integrated campaigns.

The experiences from Honduras, Colombia, and Guyana may help countries understand the drawbacks to vertical approaches and potential for increasing the impact of health campaigns through integration (19). Ultimately, this will allow countries to expand progress towards universal health and health systems strengthening in the Americas.

## Recommendations

This technical brief is intended to inform regional recommendations for countries in LAC, and to share best practices and lessons learned around health campaign integration. In light of these findings, the authors recommend that countries in the LAC Region consider the following priority actions for integrating NID campaigns:

1. Document NID campaign integration experiences more comprehensively to identify best practices, successes, gaps, and opportunities to improve implementation and coverage.
2. Strengthen intersectoral collaboration and communication strategies related to NID campaigns among local and regional partners, and ensure a consistent approach to community engagement.
3. Design and implement integrated NID Strategic Plans tailored to the context and needs of each country, and include health campaign integration as a pillar to reduce the burden of NIDs. The PAHO initiative for eliminating more than 30 communicable diseases and related conditions by 2030 can serve as a framework for reinforcing integrated approaches towards elimination of NIDs.
4. Strengthen management capacity and planning processes to better execute health campaign integration, with consideration for financial and human resources.
5. Avail resources for coverage surveys and other measures of effectiveness to inform campaign integration, including equity and access by underserved populations.
6. Consolidate leadership and governance at all levels to ensure planning for sustainability of integrated NID programs.

## Contact

For more information on this topic or to discuss further with the Health Campaign Effectiveness team, please visit [www.campaigneffectiveness.org](http://www.campaigneffectiveness.org) or contact the program directly at: [campaigneffectiveness@taskforce.org](mailto:campaigneffectiveness@taskforce.org).

## References

1. Pan American Health Organization. "An Integrated Sustainable Framework for the Elimination of Communicable Diseases in the Americas." IRIS PAHO Home. (2019). Accessed September 1, 2021. <https://iris.paho.org/handle/10665.2/51106>.
2. Pan American Health Organization. PAHO disease elimination initiative: A policy for an integrated sustainable approach to communicable diseases in the Americas. 57th Directing Council 71st Session of the Regional Committee of WHO for the Americas. Resolution CD57.R7. Report. (2019). [https://www.paho.org/hq/index.php?option=com\\_docman&view=download&alias=50598-cd57-r7-e-disease-elimination-initiative&category\\_slug=cd57-en&Itemid=270&lang=en](https://www.paho.org/hq/index.php?option=com_docman&view=download&alias=50598-cd57-r7-e-disease-elimination-initiative&category_slug=cd57-en&Itemid=270&lang=en).
3. Health Campaign Effectiveness Coalition. "Technical Brief: Defining Health Campaigns and Health Campaign Effectiveness." (2020). Accessed July 10, 2021. <https://campaigneffectiveness.org/wp-content/uploads/2020/10/Health-Campaign-Effectiveness-October-2020.pdf>.
4. World Health Organization. "Working together: an integration resource guide for immunization services throughout the life course." (2018). <https://apps.who.int/iris/handle/10665/276546>.
5. Health Campaign Effectiveness Coalition. "Integration Between Health Campaigns: Intervention Co-delivery and Collaboration." (2020). Accessed July 10, 2021. <https://campaigneffectiveness.org/wp-content/uploads/2020/12/Health-Campaign-Integration-Technical-Brief-Nov-13-2020-1.pdf>.
6. Ropero-Álvarez, A. M., Kurtis, H. J., Danovaro-Holliday, M. C., Ruiz-Matus, C., & Tambini, G. "Vaccination week in the Americas: An opportunity to integrate other health services with immunization." *Journal of Infectious Diseases* 205, no. SUPPL. 1 (2012). <https://doi.org/10.1093/infdis/jir773>.
7. Morice, A., Taleo, F., Barogui, Y., Steer, A. C., & Marks, M. "Lessons from the field: Integrated programmes for neglected tropical diseases." *Transactions of the Royal Society of Tropical Medicine and Hygiene* 115, no. 2 (2020):127–128. <https://doi.org/10.1093/trstmh/traa149>.
8. Pan American Health Organization. Regional Meeting to Boost Efforts for the Control of Soil-Transmitted Helminth Infections (Geohelminthiasis) in the Americas. Lima, 1-3 August 2016. Report. (2017). <https://iris.paho.org/handle/10665.2/34577>.
9. World Health Organization. "Soil-transmitted Helminthiasis Data." (2019). Accessed September 10, 2021. [https://apps.who.int/neglected\\_diseases/ntddata/sth/sth.html](https://apps.who.int/neglected_diseases/ntddata/sth/sth.html).
10. Mejia Torres, R. E., Franco Garcia, D. N., Fontecha Sandoval, G. A., Hernandez Santana, A., Singh, P., Mancero Bucheli, S. T., Saboya, M., & Paz, M. Y. "Prevalence and Intensity of Soil-Transmitted Helminthiasis, Prevalence of Malaria and Nutritional Status of School Going Children in Honduras." *PLoS Neglected Tropical Diseases* 8, no. 10 (2014). <https://doi.org/10.1371/journal.pntd.0003248>.
11. World Health Organization. "WHO Alliance for the Global Elimination of Trachoma by 2020: progress report on elimination of trachoma, 2020." *Weekly epidemiological record* no. 31 (2020):353–364. <https://www.who.int/publications/i/item/who-wer9631-353-364>.
12. World Health Organization. "Global Health Observatory." Accessed September 10, 2021. <https://www.who.int/data/gho/data/countries/country-details/GHO/colombia?countryProfileId=1f2a3b86-997a-48d2-a6a6-a7adedec3bd5>

13. Trachoma Coalition. "Colombia – leading the fight on trachoma elimination in the Americas. Eliminating Trachoma: Accelerating Towards 2020." (2016). Accessed July 10, 2021. [https://www.trachomacoalition.org/sites/default/files/content/resources/files/Colombia country profile - Leading the fight on trachoma elimination in the America.pdf](https://www.trachomacoalition.org/sites/default/files/content/resources/files/Colombia%20country%20profile%20-%20Leading%20the%20fight%20on%20trachoma%20elimination%20in%20the%20Americas.pdf).
14. Pan American Health Organization. Fourth Regional Meeting of Managers of National Programs for the Elimination of Trachoma as a Public Health Problem in the Americas. Mexico City, 6-8 September 2016. Report. (2017). <https://iris.paho.org/handle/10665.2/34336>.
15. World Health Organization. "Monitoring and Epidemiological Assessment of Mass Drug Administration in the Global Programme to Eliminate Lymphatic Filariasis: A Manual for National Elimination Programmes." (2011). <https://apps.who.int/iris/handle/10665/44580>
16. Guyana. Ministry of Public Health. Plan for the implementation of MDA using IDA in Guyana, 2019 and 2020. (2019).
17. Gonzalez, D. "Mass Drug Administration." The SAGE Encyclopedia of Pharmacology and Society, 2018. <https://doi.org/10.4135/9781483349985.n236>.
18. World Health Organization. "Second round of the national pulse survey on continuity of essential health services during the COVID-19 pandemic: January-March 2021." (2021). Accessed September 2021. <https://www.who.int/publications/i/item/WHO-2019-nCoV-EHS-continuity-survey-2021.1>
19. Health Campaign Effectiveness Coalition. "Decision Guidance Toolkit for People-Centered Integration of Health Campaigns." (2021). Accessed September 13, 2021. <https://campaigneffectiveness.org/toolkit/>.