



Response to COVID-19 Outbreak *In the Region of the Americas*

PAHO



Pan American
Health
Organization



World Health
Organization
REGIONAL OFFICE FOR THE Americas

Response Strategy and Donor Appeal

Version 3 | 28 August 2020

Priority Lines of Action *in the Region of the Americas*

- **Country-level Coordination, Planning, and Monitoring:** Support activation and operation of national public health emergency management mechanisms, as well as COVID-19 planning and response, based on a whole-of-government and whole-of-society approach
- **Risk Communication and Community Engagement (RCCE):** Support development and implementation of RCCE plans and dissemination of risk communication information to populations and to travelers
- **Surveillance, Rapid Response Teams, and Case Investigation:** Strengthen the capacity of surveillance systems to detect COVID-19 cases, while ensuring continued surveillance of other diseases epidemic and pandemic potential
- **Points of Entry:** Support surveillance and risk communication activities at points of entry as well as implementation of appropriate public health measures
- **National Laboratories:** Enhance laboratory capacity to detect COVID-19 cases as well as to manage large-scale testing for COVID-19 domestically or through arrangements with international reference laboratories
- **Infection Prevention and Control (IPC):** Support efforts to reduce human-to-human transmission within health facilities and the community, including through development and implementation of national IPC plans
- **Case management:** Improve local health system capacity and protect healthcare workers to safely deliver healthcare services
- **Operational support and logistics:** Establish and implement expedited procedures to facilitate the organization's support to countries and territories response to COVID-19
- **Maintaining Essential Health Services during the Pandemic:** support continued operation of health systems at the needed levels to protect and sustain public health gains

PAHO/WHO Appeal
1 February to 31 December 2020

US \$200M

Estimated funding requirements to implement priority public health measures in support of countries and territories in the Region of the Americas to prepare for and respond to COVID-19.

Introduction

Daily regional updates are made on PAHO/WHO's COVID-19 website (<https://bit.ly/39qia6q>).

Following the initial outbreak of a novel Coronavirus (COVID-19) in Wuhan City, Hubei Province of China, rapid community, regional and international spread has occurred with an exponentially growing number of cases and deaths worldwide. As of 26 August 2020, 23,878,392 cases have been confirmed from 216 countries/areas/territories across the world. On 30 January 2020, the Director-General (DG) of WHO declared the COVID-19 outbreak a public health emergency of international concern (PHEIC) under the International Health Regulations (IHR) (2005) following advice from the Emergency Committee. The outbreak was characterized as a pandemic by the DG on 12 March 2020, with calls for countries to take urgent and aggressive action.

| EPIDEMIOLOGICAL UPDATE | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| As of 26 August 2020 | |
| GLOBAL | REGION OF THE AMERICAS |
| <ul style="list-style-type: none"> • 23,878,392 confirmed cases • 819,136 deaths • 216 Countries/areas/territories | <ul style="list-style-type: none"> • 12,734,213 confirmed cases • 450,814 deaths • 54 Countries/ areas/territories |
| The United States of America and Brazil account for 74% of the cases reported from the Region. | |

Within 12 weeks a localized outbreak of COVID-19 evolved into a global pandemic with three defining characteristics:

Speed and scale: the disease has spread quickly to all corners of the world, and its rapid transmission has overwhelmed even the most resilient health systems.

Severity: overall 20% of cases are severe or critical, with a crude clinical case fatality rate (CFR) currently of over 3% on a global scale, increasing in older age groups and in those with certain underlying conditions.

Societal and economic disruption: the disease has impacted both health and social care systems and has exposed and exacerbated

existing inequalities in health. Additionally, the public health measures taken to control its transmission have resulted in deep socio-economic consequences

This document outlines the regional strategy to respond to COVID-19 in the Americas. It is aligned with WHO's COVID-19 Strategic Preparedness and Response Plan (dated 3 Feb 2020) and Strategy Update (dated 14 April) and Operational Planning Guidelines (dated 22 May 2020).

It includes estimated funding requirements to implement priority public health measures for countries in the Region of the Americas to prepare for and respond to COVID-19 for the period of 1 February to 31 December 2020.

Situation in the Region of the Americas

The first case of COVID-19 in the Americas was confirmed in the USA on 20 January 2020, followed by Brazil on 26 February 2020, and since early April 2020, the Region has been the epicenter of the COVID-19 pandemic. As of 26 August 2020, the Region includes six (Brazil, Colombia, Chile Mexico, Peru, United States of America) of the 10 countries reporting the highest number of cases and deaths globally, with two of those (Brazil and United States of America) ranking in the top three. All 54 countries and territories in the Region have reported COVID-19 cases, millions of people have been infected, and hundreds of thousands of people have died. The countries are implementing public health measures to control the pandemic, according to their capacity and the epidemiological situation. These measures have shown varying levels of implementation and success in countries and territories in the Region.

Although not yet fully quantifiable, the negative social and economic impact of the COVID-19 pandemic in the short, medium, and long term, at local, national, and global levels, is believed to be unprecedented. In the Region, the pandemic has highlighted and exacerbated long standing inequalities in universal access to health and social protection mechanisms, disproportionately impacting population groups living in situations of vulnerability. Many of the traditional social, economic and public health safety nets people rely on in times of hardship have been put under tremendous strain combined with low levels of economic growth and high levels of labor informality (54% for LAC). The Economic Commission for Latin America and the Caribbean projects a 9.1% decline in gross domestic product as a result of the effects of the pandemic, and the poverty rate to climb 7.0 percentage points in 2020 to 37.3%, reflecting an increase of 45 million people (for a total of 231 million people).

This nonetheless presents an opportunity for national authorities to strengthen, restart, and rebuild institutions, capitalizing on successes and lessons learned through innovation, intersectoral action, whole-of-government, and whole-of-society engagement in responding to the pandemic. Particularly in countries and territories that have succeeded in responding without exceeding the capacity of their health services, there is increasing pressure to resolve the tension between public health and economic priorities in a manner that does not compromise the gains achieved thus far. Adaptation to a new reality must protect public health achievements, promote equity, equality and human rights in access to health, and include more investment in health security and resilient health systems.

On 17 January 2020, PAHO/WHO activated an organization-wide response to provide technical cooperation to all its countries and territories to address and mitigate the impact of the COVID-19 pandemic. Working through its regional and country incident management system teams (IMST) in Latin America and the Caribbean, PAHO/WHO is providing direct emergency response to Ministries of Health and other national authorities to scale up their readiness and response operations by, among others, supporting their surveillance, testing and laboratory capacity; preparing and strengthening health care services; infection prevention control; clinical management; and risk communication, in alignment with the WHO COVID-19 Strategic Preparedness and Response Plan and Strategy Update, the public health component under the Global Humanitarian Response Plan, and PAHO's priority lines of action.

Country-level Coordination, Planning, and Monitoring

PAHO has been liaising with other UN agencies within countries to lead the health sector response and ensure that the UN system follows a holistic approach in supporting national authorities to tackle this pandemic and its repercussions. To mount a comprehensive response, all 35 Member States activated intersectoral coordination mechanisms in response to the COVID-19 pandemic. These involve the highest political leadership, including officials in key sectors, and the active engagement of local governments and authorities, as well as the activation of crisis management plans and emergency response mechanisms. PAHO's country office teams worked directly alongside government counterparts to develop national plans of action based on countries' transmission and risk levels at the time. Most countries in the Americas have already developed and are implementing their COVID-19 preparedness and response plans, with guidance and support from PAHO.

Countries are at different stages of national and subnational outbreaks. Where there has been strong political leadership, early action, and implementation of comprehensive public health measures – such as case identification, widespread and rapid testing and isolation, contact tracing and quarantine – countries and subnational regions have suppressed the spread of COVID-19 below the threshold at which health systems become unable to prevent excess mortality. In the absence of a specific treatment or vaccine for COVID-19, the pattern and magnitude of SARS-CoV-2 virus spread observed in most of the Region up to the beginning of May 2020 is attributable to the adoption of nationwide non-pharmaceutical interventions. Non-pharmaceutical interventions include personal protective measures, environmental measures, physical distancing measures, and international traffic-related measures.

From 2 March 2020 onward, all but one (Nicaragua) of the 35 Member States adopted community-wide measures to drastically restrict

the movement of the population in an effort to slow COVID-19 transmission by limiting contact between people. The flattening of the epidemic curve and the delaying of its peak, allow for (i) enhancing case detection; as well as for buying time (ii) to enhance health services and public health services capacity and re-organize them as needed; (iii) to enhance the protection of settings that might constitute amplifiers of SARS-CoV-2 virus transmission (e.g., nursing homes, detention centers); (iv) to re-engineer public services, public spaces, and work places to safely resume their activities and functions; (v) to nurture the dialogue among governmental institutions, different levels of government, the private sector, and representatives of all population groups within society for shaping equitable, gender, and culturally sensitive, response interventions; (vi) for specific pharmaceutical measures to become available (e.g. specific safe, efficacious, and equitable access to treatment and vaccine for COVID-19).

However, these measures can have a profound negative impact on individuals, communities, and societies by bringing social and economic life to a near stop. Such measures disproportionately affect groups facing disadvantage and discrimination, including women and girls (especially those confronting the risks of gender based violence in the home and/or facing a disproportionate burden of unpaid care and paid work), people in poverty, informal sector workers, indigenous and Afro-Descendant populations, migrants, internally displaced people and refugees, who most often live in overcrowded and under resourced settings, depend on daily labor for subsistence, and may face cultural or gender related barriers to safe compliance with mitigating policies and actions. The latter calls for adaptation of the measures to the local context and for implementing mitigating policies and actions, such as expanding and deepening access to social protection measures to address the specific needs of certain population groups. For countries that have introduced widespread physical distancing measures and movement restrictions, there is an urgent need to plan for the transition away from such restrictions in a manner that will enable the sustainable

suppression of transmission at a low-level whilst enabling the resumption of some parts of economic and social life, prioritized by carefully balancing socio-economic benefit and epidemiological risk.

For countries that currently have few reported cases, there is no time to lose in learning and applying the lessons of others to specific national contexts and capacities. Chronic health systems challenges to be addressed include fragmentation, inequitable access to

comprehensive, gender and culturally sensitive health services, weaknesses related to human resources for health, inequitable access to health technologies, limited capacities for essential public health functions (EPHF), underfunded infection prevention and control (IPC) programs, and limited compliance with IPC practices. These have become a priority for immediate action to rapidly scale up and expand public health and individual health care services to respond to the COVID-19 pandemic, while maintaining other essential services.



Risk Communication and Community Engagement

The COVID-19 outbreak and response has been accompanied by an over-abundance of information – some accurate and some not – that makes it hard for people to find trustworthy sources and reliable guidance when they need it. Health authorities must implement risk communication campaigns to massively disseminate to the general population conceptually accessible and trusted information on COVID-19 outbreak and simple public health advice on how to protect themselves from the virus. PAHO has been developing and distributing risk communication strategies and tools for health care workers, media communicators, and leaders, to countries and territories in the Region. However, countries must continue to strengthen or maintain a consistent risk communication approach regarding measures introduced, adjusted, or discontinued, while maintaining a high degree of individual risk awareness. They also need to ensure that messages are adapted to the specific context (e.g. providing alternative messages for handwashing in absence of water), are culturally sensitive and are delivered in an effective manner. It is therefore imperative that risk communication capacity continues to be improved to ensure evidence-based information is regularly shared with the populations and travelers to reduce transmission.

Surveillance, Rapid Response Teams, and Case Investigation

PAHO conducts event-based surveillance (EBS), complementary to countries' indicator-based surveillance (IBS). This joint approach provides the Region with a better grasp of the epidemiological situation in the Americas. An overall decreasing trend in the incidence of COVID-19 cases has been observed in the Region since 30 July, when the 7-day average of daily cases reached a peak of 147,210 cases. As of 27 August, the regional 7-day average of daily cases was 120,100 cases – an 18% decrease compared to the peak on 30

July. A decreasing trend in deaths has been observed for the past two weeks – from a 7-day average of 4,227 deaths on 14 August to 3,408 deaths as of 27 August, representing a 19% decrease. The crude mortality rate varies by country depending on the populations affected, where the country is in terms of its outbreak, and the availability of testing. The regional pooled crude case-fatality rate (number of reported deaths divided by number of reported confirmed cases) is 3.5%. The median country-specific estimate is 2.2%, with an interquartile range from 0.7% to 3.2%.

An essential part of PAHO's response has been to work with countries to strengthen the capacity of surveillance systems to detect COVID-19 cases. Early detection of suspected cases, followed by their laboratory testing, isolation, contact tracing, and quarantining of contacts, must be the cornerstone of a targeted and sustainable strategy to control COVID-19 in the medium term. In most countries, this will require a significant scaling up of human resources, greater financial investment, and innovative tools, as well as the maintenance of mechanisms to ensure surveillance of COVID-19 and other communicable diseases. Novel approaches and tools are also necessary for contact tracing and quarantine, adapted to the legal, social, economic, cultural, and epidemiological context of each country or territory, and respecting human rights. Additionally, countries are



Screening activities in Haiti.
Photo credit: PAHO/WHO. August 2020

recommended to implement a combination of strategies for COVID-19 surveillance, such as universal and nominal surveillance based on a suspected case definition; sentinel surveillance of severe acute respiratory infections (SARI) and influenza-like illness (ILI); and event-based surveillance (i.e., systematic collection and assessment of media reports and rumors).

Active case finding, and SARI/ILI sentinel surveillance are critical to enhanced detection and monitoring of COVID-19 transmission in the community. Accordingly, efforts are underway to enable all countries in the Americas to integrate COVID-19 into routine severe acute respiratory illness / influenza-like illness (SARI/ILI) surveillance systems. Twenty countries have already done so. Event-based surveillance strengthening is particularly critical to address the challenges of early detection in populations in vulnerable situations, including indigenous and Afro-descendant populations, whose lack of access to culturally appropriate, quality health, communication, and transportation services and inadequate living conditions related to poverty increases their vulnerability to SARS-CoV-2 virus.

Continued surveillance of influenza viruses and other epidemic-prone diseases, such as yellow fever, dengue and zika, should be ensured, given their epidemic and pandemic potential. Ongoing work is necessary to collect and analyze surveillance data disaggregated by key variables such as age, sex, ethnicity, geography, socio-economic status, etc.), including supporting the establishment and maintenance of situation rooms within the Ministries of Health.

Points of Entry

Actions to respond to the COVID-19 pandemic at points should be framed in the context of non-pharmaceutical interventions, including personal protective measures, environmental measures, social distancing measures, and international travel related measures. In the context of the response to the COVID-19 pandemic, the implementation of these non-mutually exclusive measures is strictly intertwined.

All but two of the 35 countries in the Americas – Mexico and Nicaragua – had or continue to implement measures drastically limiting the flow of incoming international travelers and conveyances, or completely prohibiting the incoming and outgoing flow. In anticipation of adjustments to social distancing and travel-related measures (either tightening or lessening them), PAHO provided national authorities with a framework of considerations to inform their decision-making process concerning the adjustment of social distancing and travel-related measures. PAHO has worked with national authorities to disseminate risk communication materials in spaces where incoming travelers can find clear and evidence-based information, including IPC measures that should be taken to reduce the risk of infection. The organization has also worked closely with national governments to advocate for ensuring that travel-based measures do not adversely impact the flow of essential and humanitarian goods and supplies throughout the Americas.

Countries will need to continue making relevant operational and administrative arrangements, especially those highly dependent on tourism, for resuming non-essential international travel by air and sea. This will involve measures by operators of conveyances, at points of entry, and in the hospitality industry. Arrangements must be based on scientific evidence; on global, regional, and national epidemiological situations; and, most importantly, on the capacity of the national health system. Given that the risk of further introductions of SARS-CoV-2 virus cannot be eliminated, resuming non-essential international travel in a progressive, orderly, and fluid manner requires utmost harmonization of policies and practices among countries worldwide, as well as timely and clear communication of those policies and practices in the public domain. At present, the resumption of international non-essential travel should be based on an iterative risk assessment process.

National Laboratories

There has been an established and strong influenza laboratory surveillance network in the region of the Americas as demonstrated by the

presence of 29 National Influenza Centers (NICs) in 32 countries with molecular platforms regularly evaluated by the WHO Global Influenza Surveillance and Response System. Building upon their strengths in influenza detection and surveillance, PAHO has trained the NICs in the region, several national public health laboratories, and Caribbean Public Health Agency (CARPHA) laboratory on the recommended protocol to detect SARS-CoV-2 and confirm COVID-19 cases. As of 24 August 2020, PAHO has also provided primers, probes, controls, and/or PCR kits to support approximately 6,200,000 reactions/tests and supported countries in the procurement of over 10 million PCR tests through the PAHO Regional Revolving Fund for Strategic Public Health Supplies. As a result, thirty-four countries and territories have each implemented molecular diagnostic methods for the detection of SARS-CoV-2 virus in at least one National Public Health and Reference Laboratory with support from PASB. While at least 18 countries and territories have in-country sequencing capacity, all have access to sequencing from selected laboratories outside the country.

Unlike surveillance of influenza or other respiratory viruses, which is based on sentinel sites and selective testing of a limited number of samples, COVID-19 surveillance requires testing a large number of suspect cases. This calls for an increased number of trained personnel in national and subnational laboratories. Other challenges include ensuring availability of reagents and tests, adequate and safe shipping of supplies and samples, to ensure continuity of services as the demand for testing grows.

As countries close their borders to contain or prevent outbreaks, it has become increasingly difficult to ensure laboratories' access to testing, as the tests provided to countries are currently sourced from Europe. The procurement of supplies for in vitro diagnostics has also been hindered by the shortage of products available on the market and a range of newly developed rapid diagnostic tests, with varying levels of sensitivity and accuracy, have flooded commercial markets. With these constraints, it

becomes more urgent to strengthen the capacities of laboratories in the Region to produce necessary enzymes, reagents and tests for coronavirus, in order to maintain testing capacity as the outbreak continues its exponential growth. National labs also need to be able to access and implement various guidance including considerations and criteria on diagnostic tests, their use, and their efficacy released by PAHO.

PAHO is currently coordinating the COVID-19 Genomic Surveillance Regional Network Project and supporting 13 countries to share their genomic sequences in a timely fashion with GISAID. This effort will need to be sustained to ensure increased representation of the strains circulating in the Americas in this global effort to sequence SARS-CoV-2 to monitor how the virus evolves and whether mutations will change how the virus behaves.

Infection Prevention and Control

Reinforcing the need for compliance with hand hygiene practices, proper use of personal protective equipment (PPE) and the cleaning and disinfection of medical devices has been a priority for countries, territories, and for PAHO from the onset of the pandemic. Activities to reduce human to human transmission are essential to protect health care workers at all levels, and indeed infections of COVID-19 in



Demonstration in the proper use of PPE during a training of healthcare workers in Guatemala City Photo credit: PAHO/WHO. June 2020

health care workers have been reported in countries in the Region, further straining the capacity of national health systems to care for the overflow of patients during an outbreak. As of 24 August 2020, 33 countries and territories reported having a national IPC program and water, sanitation, and hygiene (WASH) standards in health care facilities. In addition to development and updating of guidelines, PASB has organized a total of 64 virtual information/training sessions with over 80,000 participants on IPC related topics.

All countries will need to continue to put in place appropriate IPC requirements both at national and facility level. Healthcare services will need to be reorganized with a focus on improving triage and isolation to reduce human-to-human transmission in healthcare facilities. Countries will need continued support to strengthen IPC programs, considering governance, leadership, and resource allocation, to contain endemic or epidemic pathogens. IPC activities will need to be integrated with other related programs, such as those on HIV, tuberculosis, viral hepatitis, and with immunization.

The global market for PPE products is limited and extremely competitive as global demand has surged while production has dropped, resulting in limited supply and higher prices both locally and globally. International procurement of goods has been challenged due to shipping restrictions for these essential items, and countries will have to look to develop local sources of production, including converting factories of other goods to produce their own PPE and essential medical devices. PAHO has been and will continue the sourcing of PPEs to countries and territories as well as strengthen capacity in countries in planning to guide procurement and distribution to priority areas. This shortage of available PPE for procurement led PAHO to issue technical and regulatory considerations for governments on the extended use, reuse, and reprocessing of N95 masks and equivalent respirators.

Water, sanitation and hygiene (WASH) is an important component of reducing the risk of infection. PAHO issued recommendations for

communities, healthcare facilities, and institutions responsible for WASH at different levels of government and is working with health and WASH authorities and local governments, communities and civil society to develop and implement measures across the Americas.

Case management

As this is a new disease, information on the disease progression and possible treatments for COVID-19 is not yet fully known but research and studies are shedding new light on appropriate protocols, therapies, essential medical devices, and PPE to help patients and protect healthcare workers from acquiring the disease.

Timely provision of care is essential in saving lives, which means countries must rely on or develop new referral systems to bring patients to ICUs which are designated for the COVID-19 response and have appropriate medical equipment for treatment. Most countries have mapped their referral healthcare facilities, their capacities, and gaps for case management including whether they have appropriate life-saving medical equipment in their ICUs.

A COVID-19 readiness self-assessment was conducted between January and April 2020 by more than 500 hospitals (public and private) in 18 countries and territories. Results indicated moderate levels of preparedness in some key areas such as laboratory capacity for diagnosis of SARS-CoV-2, isolation, and case management. Scores were lowest for areas related to the care of patients requiring critical care and the availability of equipment for medical care, including personal protective equipment (PPE) and ventilators.

Expanding and reorganizing the health network will continue to require important short-term actions and investments to address identified priority gaps. Healthcare facilities should be continuously prepared for large increases in the number of suspected cases of COVID-19, which will put staff, facilities and supplies under pressure. This requires ongoing training of staff and provision on guidance on various areas of

case management, including new protocols on COVID-19, how to manage mild cases in self-isolation and deliver the appropriate care pathway. Special considerations and programs should be implemented for high risk and vulnerable populations, including older persons, patients with chronic diseases, pregnant and lactating women, and children.

Since the beginning of the COVID-19 pandemic, countries and territories in the Region have experienced challenges in accessing essential health technologies for the response, such as in vitro diagnostics, ventilators, and PPE. Manufacturing countries have imposed export restrictions on PPE, ventilators, and diagnostics, and manufacturers are prioritizing certain markets above others. Border closures and limited flights have further hindered access and increased the costs of essential supplies. The involvement of multiple intermediaries is also affecting the transparency and timeliness of the acquisition process, as well as the ability to monitor the quality of products. These restrictions have further aggravated disruptions to the supply chain for essential health supplies triggered by the pandemic's impact on manufacturing. The challenges experienced in accessing medical supplies due to increased demand during the current pandemic may predict a similar struggle to equitable access COVID-19 therapeutics and vaccines once these become available.

Operational support and logistics

This unprecedented pandemic has created severe interruptions to regular supply chains for medical supplies and equipment, as well as the commercial flights that PAHO has relied upon in the past to deploy its experts and ship medicines, supplies, and equipment. Countries face a complex market for procuring supplies and medicines related to COVID-19. Quality must always be verified, as the market is flooded with products produced by

unscrupulous actors. PAHO continues to support Member States by advising them on current logistical challenges and the market situation regarding stocks of medical supplies and PPE. The critical need for PPE requires quality assurance processes to ensure that procured items meet necessary specifications. PAHO is applying criteria developed to guide the procurement of PPE and in vitro diagnostic (IVD) tests for COVID-19. PAHO's warehouse for emergency stocks of supplies and equipment continues to assemble COVID-19 PPE kits.

PAHO also works with countries to develop strategies to meet their procurement needs. The Organization shares tools to help quantify essential supplies and provide information on the current global market situation. Additionally, it helps countries to identify qualified suppliers and obtain pricing information for the procurement of medical equipment and supplies. PAHO also support its Member States to procure prioritized items through PAHO's Strategic Fund and other joint procurement mechanisms. Additionally, PAHO is working tirelessly with other UN agencies, partners, international NGOs, and donors to secure the resources needed to enable countries to prevent infections and mitigate deaths.

The need to accelerate the development and availability of essential health technologies has spurred several global collaborative initiatives. These include the Access to COVID-19 Tools (ACT) Accelerator, a global collaboration to accelerate the development, production, and equitable access to new COVID-19 diagnostics, therapeutics, and vaccines.¹ Another example is the Solidarity Call to Action, an initiative spearheaded by Costa Rica that promotes equitable global access to COVID-19 health technologies through pooling of knowledge, intellectual property, and data.² The facilitation of access to international suppliers in the Region, the mobilization of donor resources, and the reorientation of cooperation funds will be

¹ World Health Organization. Access to COVID-19 Tools (ACT) Accelerator. Available at:

[https://www.who.int/publications/m/item/access-to-covid-19-tools-\(act\)-accelerator](https://www.who.int/publications/m/item/access-to-covid-19-tools-(act)-accelerator)

² World Health Organization. Solidarity Call to Action. Available at:

<https://www.who.int/emergencies/diseases/novel-coronavirus-2019/global-research-on-novel-coronavirus-2019-ncov/covid-19-technology-access-pool/solidarity-call-to-action>

necessary on an ongoing basis to allow the expansion of PAHO's support to countries and territories in need.

Particular attention also needs to be paid to the establishment and implementation of expedited procedures to facilitate the organizations response to COVID-19 (e.g. surge staff deployments, procurement of essential supplies, staff payments).

Maintaining Essential Health Services during the Pandemic

The COVID-19 pandemic has created unprecedented stress on the countries' health systems and services. Many countries are finding that they do not have enough health workers to manage the uptick in cases. Meanwhile, the priority given to managing the pandemic has interrupted other routine health services and programs, including vaccination campaigns, maternal, child, and reproductive health services, malaria elimination, HIV/AIDS and tuberculosis (TB) prevention and control, and programs for noncommunicable diseases, such as diabetes, hypertension, and mental health. This situation is worsened by the stress and exhaustion placed on healthcare workers who are at high risk of burnout; further straining

the capacity of local health systems to attend urgent health needs. In addition, the impact of the pandemic on supply chains has hampered efforts to secure medicines and supplies for other health issues. PAHO has prioritized the development of guidance and tools to inform countries on how to assess existing resources and formulate strategies to bridge identified gaps without jeopardizing the fight against COVID-19.

In reports for 24 countries, 20 confirmed the incorporation of the first level of care into the health response to COVID-19. Actions taken included education and communication (67%), case investigation and contact tracing (63%), triage (63%), testing (42%), referral (54%), and follow-up of cases and contacts in the community (54%). Main actions undertaken for the continuity of essential health services relate to the care of pregnant women (58%) and newborns (54%), immunizations (63%), dispensing of medications (42%), and monitoring of patients with chronic conditions by teleconsultation or home care (71%).

According to a recent assessment, outpatient services for noncommunicable diseases (NCDs) continue to be maintained, with limited access in 18 countries (64%) and full access in 7 countries



(25%). The main reasons for NCD services disruption include cancellation of elective care services (14 of 24 countries, or 58%), reallocation of clinical staff to the COVID-19 response (12/24, 50%), and patients not presenting (12/24, 50%). Since April 2020, through its Country Offices, PAHO conducted four surveys on routine immunization (IM) services covering 39 countries. It was found that routine IM services were maintained in 31 (79%) countries; however, 8 countries (21%) experienced partial suspension of services. Sixty percent of countries have reallocated TB resources to COVID-19, and there is a reduction in the frequency of outpatient visits for drug susceptible TB treatment, up to 86% amongst MDR TB patients. HIV treatments have continued uninterrupted despite shortages, thanks to mitigation measures implemented by countries and territories, including support from PAHO through its Strategic Fund.

The continuity of essential health services provided at the first level of care has been especially affected in peri-urban and rural areas and among indigenous populations. This relates to the already existing deficit of health workers along with social distancing measures, infected health workers, and the closure of various primary care facilities in these areas. The main limitations faced by the first level of care include the human resources gap as well as the lack of incentives; difficulties in connectivity; shortages of medicines, supplies, medical devices, and PPE; and the logistics for conducting case investigation and contact tracing, testing, triage, home care, management of call centers, and teleconsultations.

When health systems are overwhelmed, both direct mortality from an outbreak and indirect mortality from preventable and treatable conditions increase dramatically. While countries tackle the pandemic, it is critical to minimize healthcare disruptions caused by COVID-19 and ensure continuity of essential health services to address other pressing health needs. Countries will need to make difficult decisions to balance the demands of responding directly to COVID-19, while simultaneously engaging in strategic planning and coordinated

action to maintain essential health service delivery, mitigating the risk of system collapse. With fiscal revenues diminishing, governments face significant resource constraints to address the pandemic while maintaining essential health services. PAHO is working with Ministries of Health and other stakeholders to assess how health systems can continue to operate at the needed levels to protect and sustain public health gains achieved since the turn of the millennium.

COVID-19 and Populations in situations of vulnerability

The impacts and implications of COVID-19 affect diverse populations differently, and disproportionately affect those groups which were already living in conditions of vulnerability. In addition, while some populations may not have been considered 'vulnerable' at the outset of the pandemic, they have become affected based on the policy response and its adequacy to meet their specific needs. Existing inequities and underlying inequalities, particularly gender and ethnic inequalities, and social determinants of health (including living, working and employment conditions, and social protection coverage) as well as structural discrimination and stigmatization must therefore be considered when addressing COVID-19. Moreover, multiple factors, such as gender, socioeconomic status, and ethnicity among others, are overlapping, and can compound negative health impacts on individuals.

An important consideration for countries is the establishment and implementation of policies and programs that mitigate the negative consequences faced by populations in situation of vulnerability, whose pre-existing adverse conditions have worsened because of the non-pharmaceutical measures related to COVID-19. They include, among others, workers without social protection or health insurance, people living in crowded spaces, people in institutions, migrants, the homeless, older persons, people with disabilities, women and girls at risk of gender based violence, and indigenous and Afro-descendant communities living in

precarious conditions. For many populations in the Region, the implementation of and adherence to non-pharmaceutical measures has been challenging. Among them are workers in the informal economy, dependent on a daily income, who must comply with stay-at-home orders; families living in overcrowded housing with increased risk of interfamily violence and little space for physical distancing; and persons without access to running water and soap to practice frequent hand washing. Mitigating policies should be tailored to the local context and include amongst others, permanent and temporary social protection measures to ensure that people can adhere to the measures, alternative housing, and provision of basic services. Extreme stressors generated by the physical distancing, self-isolation, quarantine, job loss, economic burden, working from home situation as well as discrimination and stigma towards persons who have been infected and those treating and caring for people with COVID-19 have triggered isolation, loneliness, fear, depression and anxiety among large number of people worldwide, and induced or

exacerbated pre-existing mental health conditions and substance use disorders.

Certain population groups have been particularly disadvantaged, especially those that faced challenges to access essential health services and social protection even before COVID-19, among them women, girls, migrants, workers with precarious employment conditions and their families, persons with disabilities, older persons and indigenous and Afro-Descendant populations. These groups historically have limited access to culturally appropriate and quality health services, which already affected their health outcomes, such as higher maternal mortality and lower life expectancy. Another challenge for these populations is the lack of access to specific, necessary health information, which must be culturally appropriate and consider their world views and cultural practices.

One particularly important aspect is the fact that existing gender inequalities have been exacerbated by COVID-19 and are impacting



A Muisca nurse who works at the Bogotá Health Secretariat in a day of extramural care with an ethnic focus, in the town of Suba, in the north of Bogotá.
Photo credit: PAHO/WHO. May 2020

girls and women in different ways to men and boys. Women's and girls' exposure is likely to be affected by social norms and expectations around their caregiving roles, both in terms of caring for sick in the homes as well as in the health work force. Women are at the frontlines of the COVID-19 response, making up 70 per cent of the health workforce in the Region, and the majority of health service industry workers, thus playing a key role in ensuring the well-being and resilience of their communities. With school closures, women's childcare responsibilities are added to this burden. Therefore, in addition to being more exposed to the virus, these women also face the risk of exhaustion and burn out. The COVID-19 outbreak has also worsened the already high prevalence of gender-based violence (GBV), including domestic violence and trafficking, physical and emotional violence, intimate partner violence, contracting sexually transmitted infections, and having unplanned pregnancies. Stress, economic and financial insecurity, as well as distancing measures and stay at home orders put in place have exacerbated domestic conflicts and the risk of violence against women while the disruption of social and protective networks and decreased access to services have reduced protection measures. In Latin America and the Caribbean,

reports indicate a 25-35% increase in emergency calls related to violence against women during lock downs due to COVID-19, leading to a greater demand for shelter and support services.

It is important to ensure the response addresses the social determinants of health of populations in situations of vulnerability to mitigate the disproportionate health impact on those groups, minimize the increase in inequalities and to enable these populations to take preventive and protective actions. It is necessary to adjust the public health measures and risk communication to local realities and to ensure that policies and programs promote universal access to health, and access to social protection, labor rights, food security, safe drinking water, and connectivity, among others. In this regard, countries and territories can be guided by and supported to implement PAHO developed guidance, including [Considerations on Indigenous Peoples, Afro-Descendants, and Other Ethnic Groups During the COVID-19 Pandemic](#), [Key Considerations for Integrating Gender Equality into Health Emergency and Disaster Response: COVID-19](#), and [Key considerations to promote health equity, gender and ethnic equality, and human rights in COVID-19 responses](#).



Response Strategy in the Region of the Americas

PAHO/WHO's strategy for the Region of the Americas is aligned with WHO's Strategic Preparedness and Response Plan (dated 3 Feb 2020) and Strategy Update (dated 14 April).

The current strategy assumes that the Region will experience recurring epidemic waves and outbreaks interspersed with periods of low-level transmission over the next 24 months, pending development of a safe, efficacious, and equitably accessible COVID-19 vaccine and achievement of appropriate population coverage.

Countries and territories will need to strengthen and support responsive and adaptive health systems in the face of risks from this pandemic so that the health and well-being of societies, as well as social and economic development in the Region, can be sustained. The rapid transmission of the virus and the closure of international traffic pose a unique challenge for the response, as international procurement of essential supplies such as PPE, medical devices, or laboratory tests may not always be a viable option. In addition to strengthening their health systems, protecting their healthcare workers, and putting in place measures to slow transmission, countries may also have to strengthen their national production capacities to provide the appropriate supplies to respond to this outbreak.

Every country should continue to implement a comprehensive set of measures, according to their capacity and context, to slow down transmission and reduce COVID-19 associated mortality with the aim of reaching and/or maintaining a steady state of low-level or no transmission. This is important as the public health and socio-economic impacts have been profound in the Region, disproportionately affecting the populations in vulnerable situations. Appropriate strategies at the national level and subnational level must balance measures that address the direct mortality attributable to COVID-19, the indirect mortality caused by the overwhelming of health systems and the interruption of other essential health and social services, and the acute and long-term detrimental effects on health and wellbeing of the socioeconomic consequences of certain response measures.

The risk of re-introduction and resurgence of the disease will continue and will need to be sustainably controlled through the rigorous application of public health interventions as the virus circulates between and within countries. Ultimately, the development and delivery of a safe and effective vaccine or vaccines and therapeutics may enable a transition away from some of the measures necessary to maintain this state of low-level or no transmission. At the same time, experiences and lessons learned at national level in response to the COVID-19 pandemic are shaping a context in which decisions related to the adjustment of non-pharmaceutical interventions³ can progressively move away from a “trial and error” basis. In particular, evidence has accumulated about the effectiveness of non-pharmaceutical interventions in slowing the transmission of SARS-CoV-2 virus.

In each and every single country and territory, the COVID-19 pandemic is, and will be, requiring inclusive national leadership and responsibility, close coordination between different levels of government, as well as an intersectoral whole-of-government and a whole-of-society commitment to sustain a consistent, equitable, and robust response, mitigation, and recovery efforts over the medium and long terms.

³ Non-pharmaceutical interventions include personal protective measures, environmental measures, social distancing measures, and international traffic-related measures

The overall goal of the response strategy is to support countries and territories in the Region of the Americas to control the pandemic by slowing down the transmission and reducing COVID-19 associated mortality.

Specific objectives:

1. Save lives and protect those individuals and populations facing the severest vulnerabilities, including healthcare workers
2. Limit human-to-human transmission, including reducing secondary infections among close contacts, to slow down the spread of the disease.

These objectives are expected to be achieved through a combination of interventions to support the regional response and to scale up activities of individual country readiness and response operations.



Priority Lines of Action

Country-level coordination, planning, and monitoring

At regional level

- Establish and maintain international coordination and operational support through existing mechanisms, strategic partnerships, and linkages with the global community.
- Maintain formal communication channels with Member States (through the national IHR focal points) to facilitate information sharing.
- Participate in global coordination of subject matter expertise to gather real-time information and update available guidance
- Provide technical expertise and updated guidance to Member States
- Support surge capacity for human resources and deployments related to the response
- Coordinate with global supply chains for additional resources (e.g. PPE, laboratory kits) to be distributed at country level
- Participate and contribute to global discussions around priority research, development and innovation, including for a safe and efficacious vaccine and its equitable distribution.

At country level

Support national authorities to:

- Develop national COVID-19 preparedness and response plan, building upon existing public health emergency contingency, preparedness and response plans, including for pandemic influenza.
- Activate existing national emergency response committee(s) to take the lead in coordination of these functions, and to provide an inclusive representative forum for partners to be involved in response operations.
- Conduct initial risk analysis and capacity assessment, including mapping of populations in situations of vulnerability, specific to the setting, territory, and cultural/social contexts, to inform the operational plan, with a focus on reducing health and social inequalities that disproportionately affect vulnerable and at risk groups.
- Establish metrics and monitoring and evaluation systems to assess the effectiveness and impact of planned measures and barriers to their application.
- Determine and monitor the adequacy of the response to be taken by transmission scenario, level of government and/or low-capacity or humanitarian setting⁴
- Develop and participate in multinational research studies assessing vaccines, therapeutics, and diagnostic.
- Prepare for regulatory approval, market authorization and post-market surveillance of COVID-19 products (e.g. laboratory diagnostics, therapeutics, vaccines), when available
- Implement and issue guidance on public health and social measures, including addressing barriers faced by specific populations and communities in situations of vulnerability
- Consult with neighboring countries, other countries and regional bodies on planning and management of the COVID-19 pandemic across sectors and apply lessons learned from countries that are successfully reopening their societies.

⁴ <https://www.who.int/publications-detail/critical-preparedness-readiness-and-response-actions-for-covid-19>

- Conduct Inter-Action Reviews (IAR) and After-Action Reviews (AAR) in accordance with IHR (2005)
- Use the COVID-19 outbreak to test existing plans, and document lessons learned to inform future capacity development, including for preparedness and response activities.
- Develop and implement medium- and long-term strategies for enhanced intersectoral action to address social determinants of health to prevent similar future situations and to reduce health inequities

Risk communication and community engagement (RCCE)

- Support countries to develop COVID-19 risk communication and community engagement plans and materials, adjusted for specific populations in situations of vulnerability as appropriate, and to communicate rapidly, regularly, and transparently with their populations in local languages, in a culturally and gender appropriate way, and via relevant communication channels
- Support countries in developing and providing risk communication materials for travelers, particularly for points of entry into the country.
- Manage the infodemic to ensure that evidence-based factual information and guidance dispels rumors, misinformation and disinformation
- Support countries to strengthen and maintain information and communication technology (ICT) infrastructure, networks and staff, and prepare for surges in demand across sectors and levels
- Support countries to establish campaigns and other behavioral change strategies, involving communities, to effect social and behavior change based on evidence and needs, creating supportive environments and ensure that all engagement is culturally pertinent and gender sensitive
- Monitor the effectiveness of the RCCE plan and document lessons learned to inform future preparedness and response activities
- Support countries to foster community engagement and inclusive governance for the co-creation of local solutions and responses to the pandemic and its consequences

Surveillance, rapid response teams, and case investigation

- Track, analyze, forecast, and share epidemiological trends and disaggregated data at national and global levels
- Support countries in enhancing or adapting existing respiratory-disease-surveillance systems, including indicator-based surveillance and event-based surveillance and continuing influenza-like illness (ILI) and severe acute respiratory infection (SARI) surveillance and/or other syndromic surveillance.
- Reinforce active case-finding and enhance existing surveillance systems to enable monitoring of COVID-19 transmission
- Disseminate updated case definitions, reporting forms and surveillance guidelines to countries.
- Train and equip multidisciplinary rapid response teams (community-based and culturally/gender sensitive) to immediately investigate cases and clusters, scale up case

management, and conduct individual isolation of cases, scale up contact tracing and quarantine of contacts, with appropriate consideration of local cultural contexts

- Support countries to establish a national system of contact tracing (including contact database) through a whole-of-society approach
- Support countries to implement surveillance strategies to actively monitor and report disease trends, impacts, and population perspectives to global laboratory/epidemiology systems, such as the Global Influenza Surveillance and Response System.
- Provide robust and timely epidemiological and social science data analysis to relevant stakeholders to continuously inform risk assessment and support operational decision making for the response
- Collect disaggregated data on how different population groups (particularly groups in situations of vulnerability) access health services (disaggregated by key variables such as sex, age, ethnicity, income and geography) and use to analyze morbidity and mortality outcomes.

Points of entry, international travel, and transport

- Support countries to prepare rapid health assessment and isolation facilities to manage ill passenger(s) and identified contacts, conduct active case finding at points of entry in coordination with stakeholders and make provisions to safely transport patients or contacts to designated health facilities.
- Support countries to develop, adjust and implement a points of entry public health emergency plan

National laboratories

- Support standardized systems for molecular testing across the region
- Provide updated guidelines (including for sample collection and shipment, biosafety and biosecurity, laboratory protocols), reagents, and training for the molecular detection of SARS-CoV-2
- Continue ensuring availability of laboratory supplies, reagents and COVID-19 tests including external quality assurance assay panels when available. This can be through procurement or through supporting countries to ramp up national production.
- Carry out further training or refresher courses as the situation evolves.
- Guide countries' decisions to procure different kinds of tests – support for implementation of guidelines (PAHO released considerations and criteria on diagnostic tests, their use, and their efficacy)
- Facilitate the sharing of genetic sequence data and virus materials according to established protocols for COVID-19
- Support development and implementation surge plans to manage increased demand for testing; consider conservation of lab resources in anticipation of potential widespread COVID-19 transmission

Infection prevention and control

- Support rapid assessment of IPC capacity at all levels of healthcare system, including public, private, traditional practices and pharmacies, as well as in public places and community spaces where risk of community transmission is considered high
- Support national authorities in reorganizing their health services, particularly for triage and isolation, to limit human-human transmission within health facilities, with consideration for gender inequalities within health services.
- Provide updated information to countries, including guidelines and recommendations, such as for appropriate use of personal protective equipment and IPC guidance for home and community care providers
- Support procurement, distribution, and management of appropriate PPE and essential medical devices or supplies where possible, and support countries in ramping up capacity of national production if procurement is not possible.
- Support development of national IPC plans, including for PPE supply management, IPC surge capacity needs, and the management and monitoring for respiratory illness of health workers exposed to confirmed cases of COVID-19
- Ensure critical WASH products are prioritized in global and regional supply chain support initiatives; support local production of critical hygiene and prevention items
- Advocate for the inclusion of WASH services in economic response packages to support vulnerable and crisis-affected households
- Advocate for and support access to WASH services in public places and community spaces most at risk, with special considerations for common sites with population groups facing specific vulnerabilities and risks (e.g homeless people, indigenous peoples, women and girls facing gender-based violence, those displaced by violence, migrants, and long-term care populations) and community isolation centers
- Support development of mortuary plans to manage increased numbers of corpses due to COVID-19 deaths, and measures for safe burial respectful of the local traditions and customs
- Carry out further training or refresher courses as the situation evolves

Case management

- Support national authorities in mapping referral facilities including ICU and bed capacities in countries, to identify alternative facilities that may be used to provide treatment, and to set up screening, triage, and isolation areas.
- Support implementation of timely, effective, and safe supportive therapies (oxygen, antibiotics, hydration & fever / pain relief) as the cornerstone of therapy for patients with severe manifestations of COVID-19
- Disseminate regularly updated information, train, and refresh the health work force (including community health workers, medical, nursing, respiratory therapists, physical therapists, ambulatory teams) in the management of COVID-19, using specific protocols based on international standards and WHO clinical guidance.
- Provide guidance for the care of all patients with COVID-19, including self-care for those with mild COVID-19 (if self-isolation is the correct care pathway) and acute care for those with severe disease
- Support national authorities to improve the availability, accessibility, adaptability and acceptability of evidence-informed contextualized guidance.

- Support countries through trainings and refreshers for medical facility and ambulance staff to manage severe acute respiratory infections (SARI).
- Support establishment of dedicated pre-hospital COVID-19 care pathways, with equipped teams and ambulances to safely transport suspected and confirmed cases (including safe transfer of severe and critically ill patients) to designated treatment areas
- Facilitate participation in the WHO global clinical network knowledge exchange platform to aid in the clinical characterization of COVID-19, address challenges and share best practices in clinical care, and foster global collaboration (optional based on country capacity)
- Support procurement, distribution, and management of essential medicines, equipment, and supplies.
- Assess diagnostics, therapeutics, and vaccines for compassionate use and clinical trials, regulatory approval, market authorization, and/or post-market surveillance, as appropriate
- Collaborate with countries to evaluate implementation and effectiveness of case management procedures and protocols (including for pregnant women, children, elderly patients, and immunocompromised patients).
- Conduct an analysis of existing social and cultural norms and practices at the community level to formulate adequate approaches for testing and treatment strategies as well as control measures to prevent transmission (vulnerable population group)
- Support the institutionalization of national capacities for the development and use of evidence for policy and decision making.

Operational support and logistics

- Provide advice to countries on current logistical challenges and the market situation regarding stocks of medical supplies and PPE.
- Support countries to identify qualified suppliers and obtain pricing information for the procurement of medical equipment and supplies. Facilitate their access to international suppliers in the Region
- Apply established criteria to guide the procurement of PPE and in vitro diagnostic (IVD) tests for COVID-19 on behalf of countries and territories.
- Maintain operations of PAHO's warehouse for emergency stocks of supplies and equipment, including assembling of COVID-19 PPE kits.
- Support countries to develop strategies to meet their procurement needs and share tools to help quantify essential supplies.
- Support its Member States to procure prioritized items through PAHO's Strategic Fund and other joint procurement mechanisms.
- Prepare staff surge capacity and deployment mechanisms; health advisories (guidelines and SOPS); pre-deployment and post-deployment packages (briefings, recommended/mandatory vaccinations, enhanced medical travel kits, psychosocial and psychological support including peer support groups) to ensure staff wellbeing.
- Advocate for and where relevant facilitate participation in global collaborative initiatives to accelerate the development and availability of essential health technologies, e.g. the Access to COVID-19 Tools (ACT) Accelerator, a global collaboration to accelerate the development, production, and equitable access to new

COVID-19 diagnostics, therapeutics, and vaccines.⁵ Another example is the Solidarity Call to Action, an initiative spearheaded by Costa Rica that promotes equitable global access to COVID-19 health technologies through pooling of knowledge, intellectual property, and data.⁶

Maintaining essential health services and systems

- Develop guidance and tools to inform countries how to assess existing resources and formulate strategies to bridge identified gaps for other public health issues and priorities without jeopardizing the fight against COVID-19.
- Engage with national authorities and other stakeholders to assess how health systems can continue to operate to sustain health gains, including at primary health care level.
- Provide guidance on the rights and responsibilities of health workers, including measures needed to protect occupational safety and health, with special consideration for the needs of female health workers.
- Support countries to identify context-relevant essential health services and establish simplified purpose-designed governance, finance and coordination mechanisms to complement response protocols, including setting up of coordination mechanism between finance and health authorities for financing essential health services
- Support establishment of outreach mechanisms as needed to ensure delivery of essential health services in an equitable, gender, and culturally sensitive manner within a human rights framework.
- Support countries to identify mechanisms to maintain availability of essential medications, equipment, and supplies
- Support procurement, distribution, and management of essential medicines, equipment, and supplies for essential health services, including through PAHO's Strategic Fund and other joint procurement mechanisms
- Carry out further training or refresher courses, including for key capacities, such as diagnosis, triage, clinical management, and essential infection prevention and control, as the situation requires

⁵ World Health Organization. Access to COVID-19 Tools (ACT) Accelerator. Available at: <https://www.who.int/publications/m/item/access-to-covid-19-tools-act-accelerator>

⁶ World Health Organization. Solidarity Call to Action. Available at: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/global-research-on-novel-coronavirus-2019-ncov/covid-19-technology-access-pool/solidarity-call-to-action>

Funding Requirements

The following section outlines the estimated funding level required for an initial 11 months (1 February to 31 December 2020) to implement the priority public health measures above-mentioned in support of countries and territories in the Region of the Americas, to prepare for and respond to COVID-19. The estimated financial requirements will be adjusted as the situation evolves.

| Pillar | FUNDING REQUIREMENT (USD) | | | | |
|----------------------------------------------------------------|---------------------------|-------------------|-------------------|-------------------|--------------------|
| | Caribbean | Central America | South America | Regional | Total |
| P1. Country-level coordination, planning, and monitoring | 5,619,809 | 3,056,655 | 5,025,809 | 1,206,369 | 14,908,643 |
| P2. Risk communication and community engagement | 3,549,758 | 1,029,915 | 1,580,873 | 832,755 | 6,993,301 |
| P3. Surveillance, rapid response teams, and case investigation | 5,948,771 | 3,144,335 | 7,958,580 | 3,371,176 | 20,422,862 |
| P4. Points of entry | 1,817,957 | 581,460 | 756,906 | 700,305 | 3,856,628 |
| P5. National laboratories | 3,534,390 | 4,489,670 | 5,254,703 | 1,074,284 | 14,353,046 |
| P6. Infection prevention and control | 19,765,236 | 18,259,835 | 17,040,800 | 1,569,211 | 56,635,082 |
| P7. Case management | 9,941,707 | 5,268,401 | 19,456,031 | 2,201,888 | 36,868,028 |
| P8. Operational support and logistics | 2,409,505 | 2,186,681 | 3,288,137 | 1,749,741 | 9,634,063 |
| P9. Maintaining essential health services during an outbreak | 5,616,158 | 4,155,971 | 19,314,325 | 2,925,987 | 32,012,440 |
| Leadership, Management, Research and Innovation | | | | 4,315,906 | 4,315,906 |
| Total | 58,203,290 | 42,172,923 | 79,676,165 | 19,947,623 | 200,000,000 |

Countries included in each subregion:

- **Caribbean:** Antigua and Barbuda, Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Trinidad-Tobago
- **Central America:** Costa Rica, Cuba, Dominican Republic, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama
- **South America:** Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Paraguay, Peru, Uruguay, Venezuela

CONTACT INFORMATION

| | |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Organization | Pan American Health Organization/World Health Organization Dr. Ciro Ugarte 525 Twenty-third Street, N.W., Washington, D.C. 20037 202-974-3469 ugarteci@paho.org |
| Cost | US\$ 200,000,000 |
| Duration | 11 months |



**Pan American
Health
Organization**



**World Health
Organization**
REGIONAL OFFICE FOR THE
Americas

+1 (202) 974 3531 • FAX: +1 (202) 775 4578

emergencies@paho.org

www.paho.org/emergencies