

Response to the COVID-19 Pandemic in the Americas

Response Strategy and Donor Appeal
January – December 2021



PAHO



Pan American
Health
Organization



World Health
Organization
REGIONAL OFFICE FOR THE
Americas

Response to the COVID-19 Pandemic in the Americas: Response Strategy and Donor Appeal. January–December 2021

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PRIORITY ACTIONS IN THE AMERICAS



Coordination, Planning, Financing, 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 inclusive whole-of-society approach



Risk Communication, Community Engagement (RCCE) and Infodemic Management: Support participatory development and implementation of RCCE plans and dissemination of risk communication information to all populations and to travelers



Surveillance, Epidemiological Investigation, Contact Tracing, and Adjustment of Public Health and Social Measures: 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, International Travel and Transport, and Mass Gatherings: Support surveillance and risk communication activities at points of entry as well as implementation of appropriate public health measures



Laboratories and Diagnostics: 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), and Protection of the Health Workforce: 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, Clinical Operations, and Therapeutics: Improve local health system capacity and protect healthcare workers to safely deliver equitable healthcare services



Operational Support and Logistics (OSL), and Supply Chain: Establish and implement expedited procedures to facilitate the Organization's support to countries and territories response to COVID-19



Strengthening Essential Health Services and Systems: Support continued operation of equitable health systems based on Primary Health Care, to protect and sustain public health gains, investing in improved response capacity in the first level of care and the health service delivery networks, including the implementation of gender and culturally sensitive actions using human rights based approaches, to overcome barriers to access, especially in populations in conditions of vulnerability.



Vaccination: Support the introduction, deployment, and evaluation of COVID-19 vaccines, ensuring their timely and equitable access, and strengthening vaccine safety surveillance.



FUNDING REQUIREMENTS

US \$239M

Estimated funding requirements to implement priority public health measures for countries in the Region of the Americas to successfully tackle the COVID-19 pandemic during the period 1 January - 31 December 2021.

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Temperature check of a community health worker participating in a COVID-19 case management training in the commune of Arniquet in the South Department, Haiti.

Credit: PAHO/WHO

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. 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.

Within 12 weeks, a localized outbreak of COVID-19 evolved into a global pandemic, marked by a rapid transmission of the virus; increasing severity with age and presence of underlying conditions and massive societal and economic disruptions with deep and prolonged human and socio-economic consequences.

Since the first confirmed cases of COVID-19 until 31 March 2021, a cumulative total of 128,082,043 confirmed cases of COVID-19 have been reported globally, including 2,802,796 deaths. Of the total cumulative confirmed cases and deaths globally, 37% were reported between 29 December 2020 (Epidemiological Week (EW) 53)) and 31 March (EW 13) of 2021. These figures are a reminder that, while much has happened over the past year, the acute phase of the pandemic is not yet over. As social distancing measures, public health measures, and now vaccination campaigns continue to be implemented with different approaches in each country and territory, sustained collective efforts is required to successfully protect and empower populations in situations of vulnerability, suppress the transmission and save lives.

EPIDEMIOLOGICAL UPDATE	
As of 31 March 2021	
<p>GLOBAL</p> <ul style="list-style-type: none"> • 128,082,043 cases • 2,802,796 deaths • 236 countries/areas/territories affected 	<p>REGION OF THE AMERICAS</p> <ul style="list-style-type: none"> • 55,941,329 cases • 1,349,933 deaths • 56 countries/areas/territories affected
<p>The United States of America and Brazil account for 76.4% of the cases reported from the Region.</p>	

On 5 March 2020, PAHO launched its COVID-19 Response Strategy and Donor Appeal to support COVID-19 preparedness and response efforts in the Region of the Americas, seeking US\$94.8 million for an initial six months. This Strategy/ Appeal was updated in August 2020 to align with the 9 pillars of the WHO's 2020 COVID-19 Strategic Preparedness and Response Plan (SPRP 2020) and expand the support to Member States beyond the acute phase of the response and account for the complexity and longer-term impact of the public health response to the pandemic.

While much progress has been achieved over the past year, the Region of the Americas has stubbornly remained the epicenter of this pandemic. As cases in the Brazil and the United States, the two countries with the highest number of cases for several months, are finally stabilizing, cases in many Caribbean and South American countries and territories are surging. Health workers, the majority of whom are women, are increasingly fatigued, and their mental health suffers from months working under extremely challenging circumstances.

Throughout 2020, the COVID-19 pandemic exposed countries' existing weaknesses in preparedness and response to health emergencies and continues to affect a range of social, economic, and ecological systems of the countries of the Americas. It has impacted people's health and the health system itself, eroded human capital, and placed governments under constant pressure to sustain coordinated COVID-19 response efforts, prepare for potential disasters and other health emergencies, ensure continuity in the delivery of essential health services, and manage the recovery and reactivation of economies. The loss of life and the breakdown of basic health-care services demonstrates what occurs when an emergency hits and health systems are not prepared. It underscores critical shortcomings in the health systems related to limited governance by health authorities and fragmented systems resulting in barriers to access of essential services

which disproportionately impact communities living in poverty, those with underlying health conditions, older persons, and other populations in conditions of vulnerability. Amongst these, indigenous and Afrodescendants have been particularly affected, given long histories of structural discrimination.

While the pandemic disrupted health systems, societies, and economies, it also provides an opportunity to emerge stronger by strengthening the foundations of equitable health systems, including improved inclusive governance, increased access to medicines and health services for all, and enhanced country capacities to prevent, prepared for and respond to health emergencies.

This document outlines PAHO's regional strategy for the year 2021 to sustain and scale-up the response to COVID-19 pandemic in the Americas, suppress the community transmission of the virus and mitigate the longer-term health impact of the pandemic. It builds on the work undertaken by national authorities and communities throughout 2020, with the support of PAHO, its donors and partners and the international community as a whole.

PAHO's Regional COVID-19 Response Strategy 2021 is fully aligned with WHO's 2021 COVID-19 SPRP published on 24 February 2021. It builds on the knowledge acquired about the virus and its collective response and incorporates lessons learned over the last year to tackle persistent and newly arising challenges and priorities at national, subnational and regional levels, such as the need to mitigate risks related to new variants and the safe, equitable and effective delivery of diagnostics and vaccines. It includes estimated funding requirements to implement priority public health measures for countries in the Region of the Americas to successfully tackle the COVID-19 pandemic. This strategy covers the 12-month period 1 January to 31 December 2021.



PAHO/WHO Director addressing the media during the weekly Press conference on COVID-19 at PAHO/WHO Headquarters in Washington, D.C.

Credit: PAHO/WHO.

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. Following the introduction of the virus in the Americas, COVID-19 rapidly spread to all 54 countries and territories in the Americas. By April 2020, the Region had been the epicenter of the pandemic. By the end of December 2020, the WHO region of the Americas led globally in the number of confirmed cases and deaths.

Epidemiological situation

Overall, the COVID-19 situation has taken a severe toll on countries in the Americas. As of 8 March 2021, the Region reported a cumulative total of 51,694,320 cases of COVID-19, including 1,242,308 deaths. These figures account for almost 44% of the 116,521,281 cases and 48% of the 2,589,548 deaths reported globally. This Region has the highest number of reported cases and deaths among all six WHO Regions (followed by the European Region, which has reported 39,892,674 cases and 885,846 deaths).

Cases of COVID-19 in the Americas reached a peak during the week of 3 January 2021 when 2,522,305 new cases were reported, primarily from the United States of America (71%). Since then, a declining trend in cases was observed until the week of 21 February 2021, when slight weekly increases were observed again, driven by increasing cases in Brazil. Similarly, the weekly death toll peaked during the week of 24 January 2021 when 47,277 new deaths were reported in the region, mostly from the United States of America (48%), Mexico (19%), and Brazil (16%). Since then, the overall decreasing trend in weekly deaths continues except in Brazil where the weekly number of deaths have also been increasing along with the cases.

Of all COVID-19-reported cases and deaths in the Region as of 8 March 2021, the United States of America accounts for 55% of cases and 42% of deaths, while Brazil accounts for 21% of cases and 21% of all deaths. Together, these two countries account for 76% of all cases and 63% of

deaths currently reported in the Americas. Countries reporting the highest proportions of new deaths between 1 September 2020 and 8 March 2021 are the United States of America (44%, 338,589 deaths); Brazil (19%, 143,497 deaths); and Mexico (16%, 9~91,12 deaths).

The pooled crude case fatality estimate (number of reported deaths divided by the number of reported cases) in the Region is 2.4%.¹ The median country-specific estimate is 1.5%, with an interquartile range of 0.7%-2.5%. Regionally, there is small difference between sexes with regard to the number of cases, with 51% of cases being female. However, in terms of deaths, men are more affected with 60% of deaths. Among 20-59 years, sixty-seven percent of deaths occur in men and for deaths above 60 years of age, 60% of deaths are in men. As of 8 March 2021, according to available information from 31 countries, a total of 1.28 million cases of COVID-19, including 24,592 deaths, have been reported among healthcare workers. Of these, 72% are female, and the age groups with the highest proportions of confirmed cases are 30-39 years and 40-49 years.

In Latin America and the Caribbean, indigenous and Afro-descendant communities have historically faced inequalities. Their lower incomes, lower levels of educational attainment, and other disadvantaged social determinants of health, compounded with their reduced access to health services, geographic barriers, discrimination, and stigma, make these populations particularly vulnerable to COVID-19 infection and mortality.

While precise data on these populations are not always available, reports have shown that the impact on indigenous populations is not homogenous. Since January 2020

until 10 March 2021, there have been 392,646 confirmed cases of COVID19, including 5,605 deaths, reported among indigenous populations in 15 countries in the Region of the Americas for which information was available.² Compared to the data in the 9 February 2021 PAHO/WHO Epidemiological Update on COVID-19³, this represents 53,509 additional confirmed cases including 862 deaths. Available data indicates that the three highest numbers of confirmed cumulative cases in indigenous nations or indigenous communities by country were reported in the United States of America (187,291), followed by Brazil (44,174) and Colombia (37,254).⁴

Many of these already vulnerable populations are employed in the informal economy, which has been hard hit as public health measures, such as lockdowns, have been put in place. The additional stressors on their livelihoods compound food insecurity and impact their access to health, communication, and transportation services. PAHO, through its country offices and in partnership with the national health authorities, is conducting risk assessments and an analysis of vulnerabilities, capacities, and exposures of these vulnerable populations.

The most plausible epidemiological evolution of the pandemic in the coming months may involve recurring epidemic waves interspersed with periods of low-level transmission. This also could include different transmission scenarios simultaneously occurring in non-contiguous areas within the same country⁵. Countries in the Americas should maintain social distancing measures, improve surveillance, and strengthen equitable health systems as three key actions to controlling the COVID-19 pandemic in the Region.

1 Pan American Health Organization. Epidemiological Alert: COVID-19 among health workers - 31 August 2020; available at: <https://www.paho.org/en/documents/epidemiological-alert-covid-19-among-health-workers-31-august-2020>

2 Pan American Health Organization. Epidemiological Update: Coronavirus disease (COVID-19) - 11 March 2021; available at: <https://www.paho.org/en/documents/epidemiological-update-coronavirus-disease-covid-19-11-march-2021>

3 PAHO/WHO. Epidemiological Update: Coronavirus disease (COVID-19). 9 February 2021, Washington, D.C.: PAHO/WHO; 2021. Available at: <http://bit.ly/3aOxZWG>

4 Pan American Health Organization. Epidemiological Update: Coronavirus disease (COVID-19) - 11 March 2021; available at: <https://www.paho.org/en/documents/epidemiological-update-coronavirus-disease-covid-19-11-march-2021>

5 PAHO, Considerations on the adjustments of social distancing and travel related measures, 27 April 2020, found at: <https://www.paho.org/en/documents/considerations-adjustments-social-distancing-and-travel-related-measures>

Early activation of response mechanisms

In mid-January 2020, the Pan American Health Organization (PAHO) 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 provides direct emergency response to Ministries of Health and other national authorities to scale up their readiness and response operations, supporting the improvement of 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 Plan⁶ and PAHO's Response to COVID-19 Outbreak in the Region of the Americas: Response Strategy and Donor Appeal.⁷

Since the very onset of the pandemic, PAHO has developed, published, and disseminated evidence-based technical documents to help guide countries' strategies and policies to manage this public health crisis. The Organization has collaborated with its partners in the Region and across the globe to deliver technical cooperation, evidence-based guidance and recommendations, and to advocate for the Americas on the global stage. The countries rapidly started 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.

Emergence of SARS-CoV-2 variants of concerns

Their occurrence of mutation is a natural and expected event within the spread and evolutionary process of any virus. Mu-

tation refers to any change in the virus genome. In general, a mutated virus is considered a variant of the original virus. Since the initial genomic characterization of SARS-CoV-2, this virus has been divided into different genetic groups or clades. Virus mutations or variants are being monitored from the start of the COVID-19 pandemic through the Global Initiative on Sharing Avian Influenza Data (GISAID) sequencing database.

WHO routinely assesses if variants of SARS-CoV-2 have an impact on virus transmissibility; disease severity or efficacy of diagnostics, therapeutics and vaccines. Although most of the mutations have no impact, some may result in the virus being more transmissible, or facilitating the virus to escape immune response. The variants that may increase the risk to human health have been classified by WHO as variants of concern (VOC) in consultation with the WHO Working Group on the Evolution of SARS-CoV-2. These VOC appears to spread more easily between people⁸.

Since the first notification of each of the three VOCs in December 2020 until 23 March 2021, an increasing number of countries and territories have reported the detection of one or more VOCs. Globally, to date, 141 countries and territories have detected cases of infection by one of the three variants of concern currently recognized by WHO. Of this total, 32 countries and territories are in the Region of the Americas.

One of the reasons for why variants might emerge are the 'selection pressures' brought about by widespread transmission of the virus. In a community, the higher the transmission level, the higher is the likelihood of viral mutations to occur. As such, while vaccination efforts are only just beginning in many countries of the Americas, sustaining and reinforcing the application public health measures and limiting community transmission remains critical to limit the emergence of variants of concerns.

Beyond the public health crisis

Although not yet fully quantifiable, the negative social and economic impact of the COVID-19 pandemic in the short, me-

6 WHO Strategic Preparedness and Response Plan for COVID-19. Available online at: <https://www.who.int/publications/i/item/strategic-preparedness-and-response-plan-for-the-new-coronavirus>

7 Response to COVID-19 Outbreak in the Region of the Americas. Response Strategy and Donor Appeal. August 2020. Available online at: <https://www.paho.org/en/documents/response-covid-19-outbreak-region-americas>

8 https://www.euro.who.int/__data/assets/pdf_file/0003/492177/SARS-CoV-2-VOC-factsheet-eng.pdf

dium, and long term, at local, national, and global levels, is believed to be unprecedented. In the Region, the pandemic 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). In its recent publication of the Social Panorama of Latin America 2020, the Economic Commission for Latin America and the Caribbean has estimated a 7.7% decline in gross domestic product of LAC economies as a result of the effects of the pandemic, and the unemployment rate to climb 2.6 percentage points in 2020⁹. This recession will inevitably result in worsening of living conditions, increases in poverty and inequalities.

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 inclusive 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 with communities participating as equal partners to develop and implement solutions, and include more investment in health security and resilient health systems.

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 health inequities and underlying social inequalities, particularly gender and ethnic inequalities and related structural discrimination and stigmatization, and the social determinants of health including living, working and employment conditions, and social protection coverage 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, families and communities.

An important consideration for countries is the establishment and implementation of policies and programs that mitigate the negative consequences faced by populations in situations of vulnerability, whose pre-existing adverse conditions have worsened because of the non-phar-



Since the beginning of the COVID-19 pandemic, the migrant and refugee populations have faced numerous challenges including loss of livelihoods, evictions and stigmatization.

Credit PAHO/WHO

⁹ Economic Commission for Latin America and the Caribbean (ECLAC), Social Panorama of Latin America, 2020 (LC/PUB.2021/2-P/Rev.1), Santiago, 2021 https://www.cepal.org/sites/default/files/publication/files/46688/S2100149_en.pdf

maceutical measures related to COVID-19. They include, among others, workers without social protection or health insurance (often disproportionately women), 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-descendants. In addition, conditions of confinement have led to 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, gender sensitive and quality health services, which already affected their health outcomes, such as higher maternal mortality and lower life expectancy. Another challenge particularly for indigenous and Afro-Descendant 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 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 and structural 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](#), [Key considerations to promote health equity, gender and ethnic equality, and human rights in COVID-19 responses](#) and [Guidance for implementing nonpharmacological public health measures in populations in situations of vulnerability in the context of COVID-19](#).

Readiness for the introduction of COVID-19 vaccines

Earlier in 2020, PAHO played a critical role in procuring short-supplied PPE to support national efforts to combat COVID-19. Since then, the marketplace for PPE and other critical supplies has stabilized. Meanwhile, global efforts to

find a safe and effective vaccine proved successful and PAHO shifted much of its focus to step up its work with countries to develop national deployment plans for the arrival and distribution of vaccines to their populations. While intense transmission of COVID-19 is still ongoing in many parts of the region, and continues to put enormous pressure on hospitals, intensive care units and health workers, vaccines constitute a critical new tool in the battle against COVID-19. Yet, as many countries race forward with COVID-19 vaccination, concerted efforts were and are required to ensure all countries have equitable access and are ready to receive and deliver COVID-19 vaccines. The Access to COVID-19 Tools (ACT) Accelerator, an integrated solution established to end the COVID-19 pandemic on a global level, includes the COVAX Facility, which is the vaccines pillar of the ACT Accelerator. The COVAX Facility – which is co-led by Gavi, the Coalition for Epidemic Preparedness Innovations (CEPI), UNICEF, and WHO - was launched in June 2020 with the goal to accelerate the development and manufacture of COVID-19 vaccines, and to guarantee fair and equitable access for every country in the world, regardless of income level.

In this context and with the vision to ensure that every eligible person in the Americas receives a COVID-19 vaccine when it is available, PAHO leveraged existing regional advisory bodies, such as the Technical Advisory Group (TAG) on Vaccine-Preventable Diseases to ensure that systems are in place to maintain and strengthen national immunization programs (NIP) in the context of a pandemic and to provide guidance on policy and implementation recommendations for COVID-19 vaccination. In July 2020, PAHO developed and disseminated guidelines to plan for COVID-19 vaccine introduction¹⁰ with the goal to provide guidance to national immunization programs for the development of their respective COVID-19 vaccination plans. In September 2020, as the 58th Directing Council also urged Member States (MS) to continue advancing with their national preparatory plans to introduce COVID-19 vaccines¹¹, a Task Force for COVID-19 Vaccination in the Americas was established within PAHO, under the coordination of the PAHO Assistant Director. Its main purpose is to provide strategic, technical and operational guidance for successful planning and implementation of COVID-19 vaccination in the Americas.

10 <https://iris.paho.org/handle/10665.2/52532>

11 <https://www.paho.org/en/documents/cd58-r9-e-covid-19>



Delivery of the first round of COVID-19 vaccines to El Salvador through the COVAX Facility on 11 March, 2021.

Credit: PAHO/WHO

The [COVID-19 Vaccine Introduction Readiness Assessment Tool \(VIRAT2\)](#), developed by WHO-PAHO, UNICEF, World Bank, Gavi, and other partners is a tool to help prepare countries for the introduction a COVID-19 vaccine. It provides a road-map for introduction and a structured framework for countries to self-assess their readiness and progress against key milestones. The VIRAT implementation is closely monitored by PAHO and information is consolidated and reported in a regional dashboard publicly available on PAHO's website¹². As countries now start rolling out approved COVID-19 vaccines, PAHO is also providing assistance in monitoring safety data; coordinating the delivery of doses and their monitoring; recruiting and training staff so health personnel know how to deliver vaccines; and in implementing public information campaigns to ensure people know where, when and why to receive their doses.

The limited supply of vaccines inevitably requires prioritization of who should receive the vaccine first. WHO's SAGE has issued policy recommendations on population prioritization (November 2020) and issued a values framework (September 2020) to underpin the development of specific policies. PAHO is supporting national governments to use these global policy positions as the basis for developing their national COVID-19 vaccine and immunization policies. Understanding that strong national immunization programs are the foundation for the introduction of COVID-19 vaccines, PAHO is also supporting countries in strengthening their cold chain capacity, information systems, vaccine safety surveillance, and laying the groundwork for demand generation for COVID19 vaccination through community engagement, among others.

PAHO is implementing existing core technical cooperation work as well as leveraging its procurement functions (PAHO Revolving Fund for Access to Vaccines and Strategic Fund for Public Health Supplies) as part of the pandemic response. The 58th Directing Council formally recognized the PAHO Revolving Fund for Access to Vaccines (RF) as the PAHO technical cooperation mechanism most suitable for providing equitable access to COVID-19 vaccines through the Region¹³. As such, with 41 years of experience facilitating vaccine access by MS and advocating for affordable pricing, PAHO RF has been recognized as the procurement agent of the COVAX Facility for the Region.

The effective introduction of the COVID-19 vaccine(s) in the Region of the Americas will take an unprecedented effort. It is anticipated to be PAHO's largest operation to date, and a priority focus of its technical cooperation for at least the next year. To successfully deploy and distribute the COVID-19 vaccine to every eligible person in the Americas when it becomes available represents an immense emergency undertaking that will require both the provision of timely technical cooperation to Member States, and the scaling up of resources at the regional and country levels of the Organization's secretariat. Ensuring equitable and timely access to COVID-19 vaccines to Member States is one of PAHO's priorities, which will require a comprehensive technical package spanning from guiding regulatory and oversight processes, reinforcing immunization policies and vaccines delivery strategies, supporting vaccine procurement, logistics and cold chain challenges, strengthening communication strategies and advocating for fair access and allocation of vaccines.

¹² COVID-19 Vaccine Introduction Readiness Tool (VIRAT) Regional Dashboard: https://ais.paho.org/imm/IM_VIRAT.asp

¹³ <https://www.paho.org/en/documents/cd58-r9-e-covid-19>

Gaps and Priorities for Actions

Pillar 1: Coordination, Planning, Financing, 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 of the Region faced the pandemic at different times, including experiencing different stages of outbreaks at national and subnational levels within one country. What was observed consistently though is that, 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 and while COVID-19 vaccines are being rolled out at different pace throughout the Region, the pattern and magnitude of SARS-CoV-2 virus spread observed are mainly 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, virtually all PAHO 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, has allowed 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



The activation of intersectoral coordination mechanisms has been critical to ensure comprehensive national responses to the COVID-19 pandemic.

Credit: PAHO/WHO

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, in many cases, these measures had a profound negative impact on individuals, communities, and societies by bringing social and economic life to a near stop. Such measures disproportionately affected 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.

Pillar 2: Risk Communication, Community Engagement, and Infodemic Management

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, such as PAHO/WHO, and reliable guidance when they need it.

With the support of PAHO and its partners, health authorities have implemented 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. 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.

With the rollout of COVID-19 vaccination campaigns, strengthening communication efforts to address vaccine hesitancy and build trust in countries' immunization programs is one key challenge. Countries also need to ensure that mes-



PAHO/WHO Representative in Colombia addressing the media for the launch of COVID-19 vaccination campaigns for medical personnel in Cundinamarca, Colombia.

Credit: PAHO/WHO.

sages 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 populations according to their communications needs and preferences and travelers to reduce transmission.

Pillar 3: Surveillance, Epidemiological Investigation, Contact Tracing, and Adjustment of Public Health and Social Measures

As opposed to the historical dichotomy between containment and mitigation, the pandemic response to COVID-19 has brought to the forefront the strategic concept of suppression. As it would have happened for an influenza pandemic, the initial response to the COVID-19 pandemic has been based on mitigation—essentially, the implementation of social and public health measures applied indiscriminately to entire affected communities to slow transmission. However, some countries have shown that, under some circumstances, the characteristics of COVID-19 make interrupting its transmission possible. By complementing other interventions in the community, the cornerstone of this suppression strategy is to zero in on ongoing transmission chains and to circumscribe contagion to patients and their contacts.

To achieve that, public health authorities must bring to scale capacities to detect COVID-19 patients and isolate them as well as to trace the contacts of these patients and quarantine these contacts. This expansion needs to occur in both quantitative and qualitative terms.

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. To ramp up capacities for tracing and quarantine of contacts, PAHO has fostered the adoption of novel tools for outbreak investigation, specifically of Go.Data. This platform streamlines the data collection public health emergencies and integrates functionalities for case investigation, contact follow-up and visualization of chains of transmission. It is designed for flexibility in the field and to be adaptable to the wide range of outbreak scenarios. Spearheaded and managed by the Global Outbreak and Response Network (GOARN, for which WHO is the Secretariat), Go.Data results from the collaboration of several network partners and is a free product that continues benefiting from international technical support. Together with GOARN, PAHO has trained over 30 countries in the Americas and 21 of these countries are already integrating Go.Data in their COVID-19 pandemic response.

PAHO has also developed and published guidelines entitled [Considerations for the Implementation and Management of Contact Tracing for Coronavirus Disease 2019 \(COVID-19\) in the Region of the Americas](#).

Early detection of suspected cases, followed by validated laboratory testing, isolation, contact tracing, and quarantining of contacts, must be the cornerstone of a targeted and sustainable strategy to control and suppress transmission of COVID-19. In most countries, this requires 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.



Early detection of cases and testing has been at the cornerstone of countries' strategies to reduce the spread of COVID-19 and control outbreaks.

Credit: PAHO/WHO

es. 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 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. 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.

As COVID-19 rapidly spread across the globe and more and more countries reported imported cases, international travel-related measures were put in place to prevent further importations. In the absence of a vaccine, the COVID-19 control strategy centered primarily on the use of non-pharmaceutical interventions, including personal protective measures, environmental measures, social distancing, and international travel measures. In the context of the response to the COVID-19 pandemic, the implementation of these non-mutually exclusive measures is strictly intertwined.

The effectiveness of a public health measure depends not just on the measure itself but on the modality and degree of

implementation achieved. Therefore, the process of adapting the measures is crucial, taking the different contexts and needs of the population into account, along with the social and economic impact of a particular measure on groups in situations of vulnerability. Since the beginning of the pandemic, PAHO has developed and published guidelines with this orientation to support countries in adapting measures to the specific groups targeted, including [Recommendations to prevent COVID-19 transmission at food fairs and markets](#) and [Considerations for School-Related Public Health Measures for Populations in Vulnerable Conditions in the Context of COVID-19 and Guidance for implementing non pharmacological public health measures in populations in situations of vulnerability in the context of COVID-19](#).

Pillar 4: Points of Entry, International Travel and Transport, Mass Gatherings and Population Movement

As community transmission grew in the Region, most countries of the Americas implemented 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 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. Virtually all countries and territories in the Americas have maintained essential travels – humanitarian (e.g., repatriation, medical evacuation, transport of supplies for the response), food secu-

rity, maintenance of essential services, and national security. By September 2020, however, most of the countries and territories in the Caribbean sub-region began to resume non-essential travel to reactivate their tourism-dependent economies. Many other countries are in the process of establishing modalities and procedures to do so.¹⁴

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. PAHO issued guidance on resuming non-essential international travel in the context of the COVID-19 pandemic, with

an emphasis on the relevance of requiring testing before or after international travel as a measure to reduce the risk of importing COVID-19 cases. At present, the resumption of international non-essential travel should be based on an iterative risk assessment process.

Pillar 5: Laboratory and Diagnostics

Laboratory-based surveillance, necessary to monitor COVID-19 disease trends, relies on data produced in clinical and/or public health laboratories. The Region of the Americas counts with an established, strong influenza laboratory surveillance network as demonstrated by the presence of 30 National Influenza Centers (NICs) in 26 countries with molecular diagnosis platforms regularly evaluated by the WHO Global Influenza Surveillance and Response System.

Since the onset of the pandemic, PAHO has worked with the countries of the Region to ramp up the preparedness in order to ensure the laboratory timely detection capacities. Building upon the strengths in influenza detection and surveillance, PAHO rapidly trained the NICs in the region, several national public health laboratories, and the Caribbean Public Health Agency (CARPHA) laboratory on the recommended protocol

¹⁴ Pan American Health Organization, Considerations on the Adjustments of Social Distancing and Travel-Related Measures in the Context of the Response to COVID-19 Pandemic, 24 April 2020. Online at: <https://iris.paho.org/handle/10665.2/52407>



Laboratory technicians conducting COVID-19 neutralization assays at the Instituto Conmemorativo Gorgas de Estudios de la Salud (ICGES), the central reference public health laboratory in Panama.

Credit: PAHO/WHO.

to detect SARS-CoV-2 and confirm COVID-19 cases. As a result, thirty-six 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 PAHO. While at least 18 countries and territories have in-country sequencing capacity, all have access to sequencing from selected laboratories outside the country.

As countries closed their borders to contain or prevent outbreaks, it became increasingly difficult to ensure laboratories' access to testing. Throughout 2020, PAHO supported countries to strengthen their capacity to timely access enzymes, critical reagents and testing material for coronavirus. PAHO also continued to donate laboratory reagents and supplies to at least 36 countries and territories in the Region, to maintain the appropriate surveillance and confirmation of SARS-CoV-2.

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 has called for an increased number of trained personnel in national and subnational laboratories, as well as intensified support to maintain availability of reagents and tests and ensure adequate and safe shipping of supplies and samples, as the demand for testing grows.

In spite of the efforts to support the National Public Health Laboratories (NPHL) where the diagnostics have been centralized, the continued increase in the number of cases and associated samples received, has exceeded the capacities in most of the laboratories, driving a significant lag in samples to be processed (more than 30% in some countries). This has significantly affected the turnaround of the results, which are key for the implementation of timely control measures. Additionally, appropriate transport of the samples from remote areas may also affect the quality of the material and increase even more the time to deliver the results.

The limited availability of installed capacity to perform molecular detection (by Polymerase Chain Reaction (PCR) methods) which requires a sound infrastructure, specialized equipment and well-trained staff, is one of the main reasons why the diagnosis capacity has been centralized in the NPHL or in large private laboratories. This laboratory capacity is usually available only in big urban centers, resulting in limited and

unequal access to testing for population in remote location.

In an effort to increase the development and access to appropriate diagnostic platforms in every Region and country, WHO launched the COVID-19 ACT-Accelerator (Access to COVID-19 Tools) Diagnostics Partnership, led by PAHO in the Americas. Aligned with this initiative, PAHO has developed guidelines for the introduction and implementation of alternative virologic diagnostic methods, to complement and scale-up diagnostic capacity and increase access to testing for remote areas and populations in situations of vulnerability, especially remote Indigenous communities, currently uncovered or with no or difficult access to a timely diagnosis.

The rolling-out of antigen-based rapid detection test (Ag-RDT), which have been validated and might offer up to 100% specificity and between 80-90% sensitivity depending on the epidemiological scenario, has allowed countries to decentralize and increase their testing capacity. This kind of test might be performed in any place under minimum requirements, maintaining the biosafety guidelines. Other diagnostic option include the LAMP (Loop-mediated isothermal amplification) methodology, which is a molecular detection-based assay, less complex than the PCR, that can be performed in any basic laboratory facility. Although this option might be easily implemented, more validation support is still needed.

Expanding the diagnosis capacity by implementing alternative methods to complement the more complex molecular diagnosis, will ensure a better testing strategy and a broad national coverage.

Since the first characterization of SARS-CoV-2, PAHO has encouraged its Member States to coordinate genomic surveillance in their national territory, ensure the timely publication of sequences on the GISAID platform, and to immediately notify the first detection of cases of infection by SARS-CoV-2 variants of concerns in accordance with the WHO guidance on genomic sequencing of SARS-CoV-2. Understanding that the detection of SARS-CoV-2 variants is dependent on the capacity that each country has to implement genomic surveillance, since March 2020, PAHO/WHO has accompanied countries to strengthen said surveillance within the framework of the Regional Network for Genomic Surveillance of COVID-19. Through the Network, PAHO is supporting over 20 countries

from all three subregions to generate high quality SARS-CoV-2 genomic sequence data through NGS and share their genomic sequences in a timely fashion with GISAID.

The generation of SARS-CoV-2 genomic data permits an improved understanding in the evolution of the virus in different variants, which has also implications for therapeutics and vaccines research and development. This effort needs 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. This information is also key to strengthen case investigation and fuel evidence-based decision-making processes.

Pillar 6: Infection Prevention and Control, and Protection of Health Workforce

Infection prevention and control (IPC) is critical to prevent or slow the dissemination of a new virus with unclear natural history. Reinforcing the need for compliance with hand hygiene practices, appropriate and rational use of personal protective equipment (PPE), the cleaning and disinfection of medical devices and maintenance of proper water and sanitation conditions (WASH) has been a priority for countries, territories, and for PAHO from the onset of the pandemic.

Activities to reduce human to human transmission have been essential to protect health care workers at all levels, as infections of COVID-19 in hospital settings and among health care workers have been reported in countries of the Region, further straining the capacity of national health systems to care for the overflow of patients during an outbreak. All countries of the Americas have implemented measures to reinforce IPC and, as of 31 December 2020, 33 countries reported having a national IPC program and WASH standards in health care facilities.

All countries must continue to put in place appropriate IPC requirements both at national and facility levels. 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.

Since the beginning of the pandemic, international procurement of essential response goods such as personal protective equipment (PPEs) has been challenged due to increase in global demand, constriction of air freight as well as shipping restrictions and export bans imposed by manufacturing countries. Countries had 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. While the global market for PPE products is somewhat less limited and competitive than earlier in



Healthcare worker wearing personal protective equipment and applying infection prevention and control measures to prevent transmission of the virus in healthcare settings.

Credit: PAHO/WHO

2020, some items remain difficult to procure. PAHO continues to work with Ministries of Health to calculate needs estimates for PPE, essential medicines, and other supplies based on epidemiological trends and projections. Analysis and planning are essential to guide procurement and the subsequent distribution to prioritized areas.

Pillar 7: Case Management, Clinical Operations, and Therapeutics

As COVID-19 emerged as a new disease, little was known about the disease progression, appropriate treatment protocols and therapies to help save patients' lives and protect healthcare workers from acquiring the disease.

Over the past year, much has been learned about the efficacy of therapeutics for treating COVID-19 cases. Throughout 2020, PAHO has continued to share guidance on current evidence-based case management and therapeutics for COVID-19 with all countries and territories through an "Ongoing Living Update of COVID-19 Therapeutic Options: Summary of Evidence."

Timely provision of care is essential in saving lives. Since early 2020, all Member States have taken significant measures to rapidly strengthen their public health systems in the face of the COVID-19 pandemic, including the development of 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 mapped their referral healthcare facilities, their capacities, and gaps for case management and focused on the reorganization and expansion of health services to meet needs created by an exponential increase of patients.

A COVID-19 readiness self-assessment was conducted between January and April 2020 in more than 579 hospitals (public and private) in 19 countries and territories¹⁵. 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.

Health systems have been challenged to expand ICU capacity for almost a year, and as the surge in cases continues, it is increasingly difficult to sustain and further expand capacity: there are reports of burn-out among the health workforce and supplies and emergency medicines for case management (i.e., oxygen, analgesics, sedatives, muscle relaxants, anticoagulants, etc.) are in short supply. The availability and safety of health personnel has been a critical factor in the expansion of health services. Many countries have promulgated legal and normative tools to manage human resources for health (HRH), with some declaring COVID-19 an occupational disease. Travel restrictions provided an additional challenge for countries with the lowest national capacities, as interna-

15 Argentina, Bolivia, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, Guatemala, Haiti, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Suriname, United States of America, and Venezuela.



Delivery of personal protection equipment and other essential health supplies to support COVID-19 response efforts in Guatemala.

Credit: PAHO/WHO

tional emergency medical teams—which can provide essential medical surge functions—could not be deployed.

As of March 17 2021, many countries in the Region reached a breaking point in hospital occupancy rate (at or beyond 80% occupancy rate threshold), particularly ICU, which compromises health systems capacity to cope with the exponential increase in COVID-19 patients and the demand for hospital and critical care for patients with other conditions (essential health services). An analysis of 4 countries (Chile, Colombia, Mexico, and Peru) indicates an increase of 161% in critical care capacity between March 2020 and March 2021, with occupancy rates as high as 93% in January 2021. Brazil reported an increase of 61% in ICU capacity (including the Unified Health System -SUS- and the private sector) between February 2020 and January 2021, with 24 states and the Federal District with occupancy rates for ICU equal or greater than 80% in March. This situation has been maintained for several months despite efforts implemented to expand hospital capacity

Expanding and reorganizing the health network will continue to require important short-term actions and investments to address identified priority gaps and new waves of cases. As countries start to roll out vaccination campaigns, healthcare facilities should remain prepared for large increases in the number of suspected cases of COVID-19, which will continue to put staff, facilities and supplies under pressure for an extended period of time. This requires continuous training of staff and provision of 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 facing vulnerabilities and/or risks, including older persons, patients with chronic diseases, indigenous populations, pregnant and lactating women, and children.

Other challenges to health services at country level include gaps in human resources and a lack of incentives; difficulties in connectivity; shortages of medicines, supplies, medical devices, PPE and logistics to carry out case investigation and contact tracing; testing, triage, home care; among others. Since the beginning of the COVID-19 pandemic, countries

and territories in the Region have particularly experienced challenges in accessing essential health technologies for the response, such as in vitro diagnostics, ventilators, and PPE due to export restrictions imposed by manufacturing countries. Border closures and limited flights have further hindered access and increased the costs of essential supplies. These restrictions have further aggravated disruptions to the supply chain for essential health supplies triggered by the pandemic's impact on manufacturing. Guaranteeing equitable access to treatment and vaccines against COVID-19 remains one of the main challenges of this pandemic.

Pillar 8: Operational Support and Logistics, and Supply Chains

This unprecedented pandemic 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 have been faced with a complex market for procuring supplies and medicines related to COVID-19, requiring permanent quality control of products as the market got flooded with items produced by unscrupulous actors. PAHO has been working tirelessly to support Member States in securing resources needed and necessary logistical arrangement to acquire and deliver essential medical and health supplies and equipment in response to COVID-19.

Throughout 2020 and relying on its network of national, regional and international partners, PAHO has been supporting and advising countries on all matters related to procurement, shipping, freight, logistics, and technical specifications for personal protection equipment (PPE), oxygen concentrators, in vitro diagnostics, and other goods, supplies, and equipment critical to the COVID-19 response in the Americas. PAHO continues to work with countries to develop strategies to meet their procurement needs. The Organization has shared tools to help quantify essential supplies, provide information on the current global market situation and identify qualified suppliers and obtain pricing information for the procurement of medical equipment and supplies.

Considering the multitude of suppliers and concerns about the quality of procured goods, PAHO has made quality assurance a critical component of its technical support to procuring goods, supplies, and equipment. In particular, 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.

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.¹⁶ 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.¹⁷ The facilitation of access to international suppliers in the Region, the mobilization of donor resources, and the reorientation of cooperation funds will be necessary on an ongoing basis to allow the expansion of PAHO's support to countries and territories in need.

Pillar 9: Strengthening Essential Health Services and Systems

The COVID-19 pandemic has created unprecedented pressure on the countries' health systems and services. Many countries have found 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, sexual and reproductive health services, malaria elimination, tuberculosis prevention and control, and programs for noncommunica-

ble diseases. This situation has been worsened by the stress and exhaustion placed on healthcare workers, the majority of whom are women, 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.

COVID-19 has particularly affected the continuity of essential services provided at the first level of care, especially in peri-urban and rural areas, and among indigenous populations, due to the already existing deficit of health teams, social distancing measures, infected staff, and the closure of various primary care facilities. Preliminary results of the second round of the Essential Health Services survey carried out in the region during February-March 2021 indicate important disruptions of essential services. The platforms that have been the most affected by government policies are outpatient and community-based care (71% of countries reporting). The percentage of countries reporting partial or severe disruption of services varies by program areas: 55% for family planning and contraception; 47% antenatal care; 39% and 37% routine immunization services in health facilities and outreach respectively; 47% non-communicable diseases diagnosis and treatment; 47% cancer diagnosis and treatment; 77% mental health services, among others.

20 countries have begun reorganizing their first levels of care to respond to the pandemic. 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

¹⁶ 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)

¹⁷ 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>

(42%), and monitoring of patients with chronic conditions by teleconsultation or home care (71%).

While health systems' priority is to prevent infection, reduce transmission, and provide adequate care and treatment to those with COVID-19, non-communicable diseases (NCDs) continue to pose the greatest health burden. In the Americas, it is estimated that one in four (220 million) people live with at least one NCD, including cardiovascular diseases, diabetes, cancer and chronic respiratory diseases, among others. This population requires access to essential NCD services to ensure the continuity of disease management. Furthermore, people with NCDs and older persons are at higher risk of developing severe COVID-19 disease and dying as a result, making this population highly vulnerable.

According to a 2020 assessment, outpatient services for non-communicable 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 re-

sources 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 continue to 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 continue to 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.

Pillar 10: Vaccination

Since the beginning of the pandemic, PAHO has provided technical cooperation to Member States to maintain national immunization programs as a public health priority, as well as to prepare for the introduction and deployment of COVID-19 vaccines based on the value framework and roadmap established by the WHO SAGE and embraced by PAHO's Technical Advisory Group as well as PAHO's COVID-19 Vaccines Taskforce. PAHO/WHO estimates that, for a typical country in Latin America and the Caribbean, the initial cost burden of the new COVID-19 vaccine could be 12 to 18 times the country's annual national immunization budget, and to acquire the vaccine for 20% of their total population – the volume to cover the groups considered to be at highest risk – it is anticipated that countries will need to invest up to three times their annual immunization budgets in 2021.

To support this extensive regional effort, additional support will be required to scale up technical cooperation, and provide

operational, logistics and procurement support to Member States. Through the COVAX Facility, PAHO is the lead procurement agency for the COVID-19 vaccine for the Region through its Revolving Fund¹⁸. In relation to the operational, logistics, and procurement support, it is anticipated the introduction of the vaccine(s) will increase the volume of vaccine doses that will be procured through the PAHO Revolving Fund in 2021 by 80% compared to its normal annual operation, increase in the volume of syringes by 109%, and increase shipping and related transportation costs by 80%. Associated costs such as freight and insurance for vaccines, as well as procurement of syringes and safety boxes would be additional requirements.

The introduction of the new COVID-19 vaccine has already placed unprecedented fiscal pressures on national budgets of the 27 self-financing countries in the Americas, with the transfer of more than USD\$433 million in down/upfront payments to the COVAX Facility during October 2020 and an additional USD\$660 million in financial guarantees. This must be balanced against the challenges countries are facing in sustaining their essential public health services. Additionally, dependent on vaccine type that becomes available in the Region, there is the ongoing potential regional need for the purchase of ultra-cold chain equipment.

Regionwide PAHO has provided countries with ongoing support and guidance to countries to prepare the development of COVID-19 national vaccination deployment plans as well as strategies related to financing the purchase of vaccines and addressing vaccine hesitancy. It is important to highlight that the national vaccination deployment plans are defined by the country's epidemiological situation, vulnerability assessments (e.g. co-morbidities, access to health services and related inequities and inequalities, poverty, and displaced populations), and characteristics of vaccine products as they become available¹⁹.

In the context of the infodemic and vaccine hesitancy among certain population groups, PAHO is supporting countries to improve population confidence in the immunization program and achieve a high uptake of COVID-19 vaccines through virtual sessions and the development of materials, such as guidance for health workers on vaccination communications, recommendations for the development of crisis communications plans related to vaccine safety, and materials for social media to address questions and concerns in the general public.

¹⁸ For more than 40 years, the PAHO Revolving Fund has supported 42 Member States and Territories to capture forecasted demand of vaccine, syringe and other related immunization supplies across the region and leverage economies of scale to assure access to high-quality vaccines and affordable prices.

¹⁹ See Fair Access and Allocation Framework developed by WHO and endorsed by Member States.

Intensive care
unit health
worker receiving
her first dose
of a COVID-19
vaccine in
Cundinamarca,
Colombia.

Credit: PAHO/WHO





Ensuring equitable and timely access to COVID-19 vaccines to Member States is one of PAHO's priorities to save lives and suppress the transmission of the disease.

Credit PAHO/WHO

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 \(updated SPRP 2021\)](#) and associated [Operational Planning Guidelines](#). The updated SPRP 2021 sets the objectives; the Operational Plan sets out the national and global priority actions to achieve those objectives; and PAHO/WHO provides the regional leadership, and national footprint, to translate that plan into action in solidarity with every community, country, and partner. This document sets out the regional strategy for the Americas and the support we require to fulfill that vital mandate

The current strategy assumes that countries within the Region will continue to experience recurring outbreaks or epidemic waves, interspersed with periods of low-level transmission over the next 24 months. The interplay between the adjustment of public health and social distancing measures and the achievement of coverage at population level of a safe, efficacious, and equitably accessible COVID-19 vaccine will determine the epidemiologic picture at national and subnational levels. Where vaccination first targets older people or people with underlying conditions, we can expect to observe a gradual decrease in severity of the outbreaks and thus of the burden on hospitalizations and deaths. Where vaccination coverage at population level is not homogeneous, we may keep seeing intense localized transmission and ongoing burden in hard-to-reach and groups in situations of vulnerability (e.g. peri-urban populations, indigenous populations).

Countries and territories will need to continue strengthening and supporting equitable, responsive and adaptive health systems in the face of risks from this pandemic, so that the health and well-being of societies and all people, as well as social and economic development in the Region, can be sustained. Alongside the ongoing rollout of COVID-19 vaccination, countries 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 mortal-

ity 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.

In each and every single country and territory, the COVID-19 pandemic is, and will continue to require inclusive national and local 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. Ending the COVID-19 pandemic means suppressing transmission and reducing mortality and morbidity in every country, and in every context; it means reducing exposure by empowering and enabling communities to adopt behaviors that reduce risk; it means countering and building resilience to misinformation and disinformation; and it means accelerating access to new COVID-19 tools including vaccines and rapid diagnostics.

Goal

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, which considers experiences and lessons learnt during 2020, to support the regional response and to scale up activities of individual country readiness and response operations.

PAHO/WHO's strategic regional humanitarian warehouse in Panama has been critical in supporting the distribution of much-needed COVID-19 response supplies and equipment to all countries in the Region of the Americas.

Credit: PAHO/WHO



Priority Actions

Coordination, planning, financing, 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 and tools 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:

- Update country-specific operational plan with estimated resource requirements for COVID-19 preparedness and response, inclusive of vaccine readiness and research and innovation priorities (see Pillar 10 Vaccination), as well as early recovery investments.
- Map the presence of hard to reach populations in situations of vulnerability, assess their specific needs (including those related to gender and cultural diversity), and ensure that they are included as partners in COVID-19 plans.
- Integrate vaccine readiness and deployment coordination into existing country COVID-19 multi-sectoral incident management (or equivalent) system or national coordinating committee.
- Evaluate direct impact of COVID-19 and adapt strategies to different contexts based on local understanding of the pandemic's severity and other health needs, with a focus on reducing health and social inequalities that disproportionately affect at-risk groups and those in situations of vulnerability.
- Update country metrics and monitoring and evaluation systems to assess the effectiveness and impact of planned measures on COVID-19 control 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 setting²⁰
- Develop and participate in multinational research studies assessing vaccines, therapeutics, and diagnostic, as well as contextualized research on COVID-19 actions in low capacity and humanitarian settings.
- 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 gender, cultural, and other 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.
- Conduct Inter-Action Reviews (IAR) and After-Action Reviews (AAR) in accordance with IHR (2005) as well as simulation exercises to examine country response plans and procedures and reinforce COVID-19 readiness and response capacities. d Document lessons learned to inform future capacity development, including for preparedness and response activities.
- Design/update public health policies with appropriate input from diverse trusted community representatives and engage communities as equal partners in the adaptation and implementation of response measures.
- 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, community engagement and infodemic management



- Support countries to develop/update COVID-19 RCCE 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 culturally and gender appropriate ways, and via relevant communication channels.
- Support countries in developing and providing risk communication materials for travelers, particularly for points of entry into the country.
- Work with countries to manage the infodemic to ensure that evidence-based factual information and guidance dispels rumors, misinformation and disinformation.

²⁰ <https://www.who.int/publications-detail/critical-preparedness-readiness-and-response-actions-for-covid-19>

- 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 ensuring 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, including development of social mobilization and community engagement plans, based on existing response mechanisms and contextualized to the setting and its community.
- Provide support to build community capacities for resilience and social cohesion (i.e., health literacy, health mediators, contact tracing volunteers)
- Develop and disseminate guidance and templates for RCCE aspects of the response

Surveillance, epidemiological investigation, contact tracing, and adjustment of public health and social measures



- Track, analyze, forecast, and share epidemiological trends and disaggregated data at national and global levels
- Support countries in integrating COVID-19 surveillance in national surveillance plans and strategies, as well as enhancing or adapting existing respiratory-disease-surveillance systems, including indicator-based surveillance and event-based surveillance and combining contextual data such as community alerts, hospital admission rates and bed occupancy, and overall mortality data to give a more accurate and balanced picture of the incidence of COVID-19 cases and deaths. Support continuity of 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 and existing gender norms.

- 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, socio-economic status, and geography) and use to analyze morbidity and mortality outcomes.
- Support countries to adopt and implement standardized epidemiologic investigation protocols, such as the Unity sero-epidemiology studies, in order to answer questions about what proportion of the population remains at the highest risk, transmission patterns, the presence and duration of any immunity in the population, clinical severity, risk factors for infection and level of adherence to non-pharmacological measures.

Points of entry, international travel and transport, and mass gatherings



- 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 and to ensure that a risk-based approach is applied for decision making on travel related risk mitigation measures in the context of COVID-19.
- Develop joint guidance, training, and statements of support to prevent and manage COVID-19 in the context of international travel and transport, including at ports, airports, and ground crossings.
- Continue to support sharing of lessons and experiences from countries on how to apply a risk-based approach to international travel in the context of COVID-19.
- Support countries and mass gathering organizers to evaluate, mitigate, and communicate risk of SARS-CoV-2 transmission associated with sports, religious, entertainment and other events, including those unplanned/ spontaneous gatherings, with the aim of facilitating the adoption of evidence-based decision-making processes in relation to holding, postponing or adapting such events.

- Continue to develop and disseminate the WHO policy position on the legal, ethical, scientific, and technological considerations related to requirements for proof of COVID-19 vaccination for international travelers, in accordance with relevant IHR provisions.
- Coordinate with relevant stakeholders the development of standards for digital documentation and interoperable digital platforms. This will include the documentation of the vaccination status in preparation for widespread vaccine access.
- Monitor measures taken by governments and private entities that impact international travel and trade, and assess effectiveness of such measures. Also work closely with countries and relevant stakeholders to ensure international travel is always prioritized for emergency and humanitarian actions, essential personnel, repatriations, and cargo transport of essential supplies.

Laboratories and diagnostics



- Continue to provide technical assistance to countries to prepare for the introduction and roll-out of COVID-19 diagnostics, including advising on diagnostic strategies with the view of strengthening laboratory capacities in the long term.
- Provide support to increase access to designated SARS-CoV-2 testing facilities, including integration of diagnostic capacity from other sectors including research, academic or veterinary laboratories, or deployment of rapid response mobile laboratories (RRMLs).
- 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).
- Support countries to increase access to genomic sequencing for SARS-CoV-2, through national capacity building and international referral and to continually monitor and understand variants of concern through the risk monitoring framework.
- Facilitate the sharing of genetic sequence data and virus materials according to established protocols for COVID-19.
- Support development and implementation of surge plans to manage increased demand for testing; consider conservation of lab resources in anticipation of potential widespread COVID-19 transmission.

- Support and conduct implementation research to optimize the use of new or novel tests in different contexts, such as for Ag-RDTs, and contribute to acceleration of equitable access to new COVID-19 tools.
- Assess the potential impact of increasing COVID-19 testing capacities on diagnostics for other diseases in the country, not to endanger other disease control, particularly TB, HIV, viral hepatitis and antimicrobial resistance
- Document lessons learned and build upon laboratory capacities strengthened during the response to improve longer term preparedness.

Infection prevention and control, and protection of the health workforce



- 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.
- Work with stakeholders to rapidly understand and forecast IPC needs related to vaccination, activities with particular emphasis on FCV contexts and other low-capacity settings where PAHO/WHO and partners are likely to fulfill a role as providers of last resort.
- 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.
- Collaborate in the updating of crucial technical specifications on the quality, performance characteristics and related standards of PPE, to be used in the context of COVID-19 as well as in innovative PPE research.
- 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 or updating 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.
- Collect and report standardized data on health worker morbidity and mortality, disaggregated by sex, age and occupational group, at a minimum, and support national authorities to monitor and periodically evaluate IPC and WASH indicators, reflecting adequate infrastructures and implementation of best practices at the point of care in selected healthcare facilities and public spaces, using standardized tools.
- Work with countries to document lessons learned and build on capacities strengthened during the response to improve IPC for longer term preparedness and response functions, as well as for general safety of services delivered through the PHC approach.

Case management, clinical operations, and therapeutics



- Provide guidance for the management and coordination of health networks to ensure appropriate referral of patients and continuity of care, including identification of alternative facilities that may be used to provide treatment, and to set up screening, triage, and isolation areas.
- Facilitate access to a well-trained, rapidly deployable, certified and largely self-sufficient surge emergency health workforce through Emergency Medical Team (EMT) focal points nationwide, to implement and monitor COVID-19 emergency response operations.
- secretariat at WHO throughout 2020 to implement and monitor COVID-19 emergency response operations.
- Support timely equitable access to, and rational use of evidence-informed, safe, quality and cost-effective medicines, other health technologies, and other essential supportive therapies as the cornerstone of management for patients with high risk and/or severe manifestations of COVID-19.
- Train, and refresh knowledge within the health work force (including community health workers, medical, nursing, respiratory therapists, physical therapists, ambulatory teams) in the management of COVID-19, using specific guidance based on international standards and PAHO/WHO clinical guidance.
- Disseminate and support implementation of regularly updated information and guidance based on new evidence available.

- Provide relevant and timely evidence to inform decision-making and bridge the gap between science policy and politics in countries.
- 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 the adaptation of gender and culturally sensitive, evidence-informed recommendations according to the local context and the implementation of strategies that are tailored to local context and to the specific needs of diverse groups of women and men and target actions accordingly.
- 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)
- Provide advice and support for procurement, distribution, and management of quality assured essential pharmaceuticals, biologicals, medical devices, and other health supplies.
- Assess diagnostics, therapeutics, and vaccines for compassionate use and clinical trials, regulatory approval, market authorization, and/or post-market surveillance, as appropriate
- Work with Member States to improve demand forecasts and estimates, ensure timely access, and efficient stock management.
- Provide support to national regulatory authorities for regulatory pathways, oversight and product assessment through prequalification and emergency use listing.
- 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, cultural and gender norms and practices at the community level to formulate adequate approaches for testing and treatment strategies as well as control measures to prevent transmission, especially within populations in situations of vulnerability.
- Support the institutionalization of national capacities for the development and use of evidence for policy and decision making.

Operational support and logistics, and supply chains



- Provide advice to countries on current logistical challenges as well as up to date market intelligence on availability, specification, quality assurance, and potential procurement channels of COVID-19 items, including vaccines, diagnostics and therapeutics, as well as supplies and equipment necessary for continuity of essential health services.
- 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 to enable quick access and shorter lead times to critical supplies and equipment, including COVID-19 PPE kits.
- Support countries to develop strategies to meet their procurement needs and share with them tools and guidance for supply interventions that inform need and demand.
- Support implementation of national supply chain control and management system (quality assurance, stockpiling, storage, security, transportation, and distribution arrangements) for medical and other essential supplies. As and when required, review operational plans, end-to-end logistics set-up, partner mobilization, to ensure the organized flow of supplies (vaccines, diagnostics, PPE, biomedical equipment and therapeutics).
- Support Member States to procure prioritized items through PAHO's Strategic Fund and other joint procurement mechanisms.
- Support Member States to procure vaccines through PAHO's Revolving Fund and the COVAX Facility.
- Provide advice and guidance for ensuring that allocation and prioritization is health response-led and is coherent with overall pandemic response strategy.
- Support health facilities with improved access to oxygen-therapy options by ensuring provision of technical requirements for correct equipment, human capacity, maintenance options and the current state of infrastructure to support.
- 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.
- Continue to 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.²¹ 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.²²

- Based on the COVID-19 supply chain system (CSCS) review, plan and implement key recommendations to define priority actions, including ensuring correct capacity and resources are available for regional OSL management.

Strengthening essential health services and systems



- Work with partners and countries to develop and apply tools to assess and track service readiness, continuity of essential health services, health worker capacities and their protection and community perceptions, barriers to access appropriate health care, and vaccine acceptance.
- 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, and to formulate strategies to bridge identified gaps for other public health issues and priorities, without jeopardizing the fight against COVID-19.
- Provide dedicated support in health service continuity planning at service delivery and sub-national level, in alignment with the principles of the Maintaining essential health services: operational guidance for the COVID-19 context.
- 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.

²¹ 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)

²² 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>

- 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.
- Continue monitoring and disseminating information on disruptions of essential health services, through WHO pulse surveys. Work with partners and countries to support effective monitoring of health system performance to identify bottlenecks to the dissemination of vaccines, diagnostics, therapeutics, and PPE.
- Work with partners and countries to develop tools to assess and track service readiness, continuity of essential health services, health worker capacities and their protection and community perceptions, barriers to access health care, and vaccine acceptance.

Vaccination



Regulation and Oversight

- Support the participation of experts from regulatory authorities of the Americas in WHO prequalification and/or “Emergency Use Listing” of COVID-19 vaccines.
- Coordinate with and support the WHO prequalification program to ensure timely access to quality, safe and effective medicines and other health technologies.
- Support quality assurance of vaccines procured through the PAHO Revolving Fund for Vaccines.
- Support national regulatory authorities to develop and/or improve stringent and efficient regulatory pathways for the introduction of novel COVID-19 vaccines including abridged processes using WHO prequalification processes.
- Support the strengthening of active and passive post-marketing surveillance methodologies to efficiently monitor and report safety and effectiveness of the novel COVID-19 vaccines.
- Support the evaluation of COVID-19 vaccines performance by promoting the implementation of effectiveness and impact studies.

Immunization policies, vaccine delivery strategies and research

- Provide guidance on how to prioritize the population to be vaccinated for the allocation of the vaccine considering the values framework, epidemiological scenario, comorbidities, vulnerabilities, and vaccine availability.
- Provide technical support and operational guidance including technologies (e.g., digital platforms) to countries and territories for the planning and implementation of COVID-19 vaccines, including the development of costed national deployment and vaccination plans using corresponding tools and guidelines.

- Provide technical support and operational guidance for the adjustment of country budgets and Public Financing Management arrangements for COVID-19 vaccination.
- Provide guidance and capacity building to countries in human resources planning and recruitment to rapidly scale up immunization actions.
- Support human resources capacity building for the costing and deployment of COVID-19 vaccine, including training across the vaccine life cycle.
- Provide guidance and capacity building to assist countries to integrate equitable, gender and culturally sensitive, human rights-based approaches within vaccine delivery services.
- Monitor the impact of COVID-19 vaccines in the Americas, including from an equity perspective.
- Maintain technical support to Member States to close gaps in the regular immunization program in the context of the pandemic and monitor the impact of the COVID-19 vaccine roll out on regular immunization and other essential health services.
- Support health care waste management training for emergency situations and vaccination campaigns.
- Support the assessment of the cold chain capacity and other related key supplies for effective distribution and provide support to address any identified gaps.
- Provide guidance to update protocols for infection prevention and control measures including to ensure adequate PPE, and the organization/location of vaccination posts to minimize exposure risk during immunization sessions.
- Support the development and implementation of national information systems and digital platforms to monitor immunization coverage, including vaccine safety monitoring that includes gender, ethnicity, and equity analyses.
- Encourage and support the collection of disaggregated data on diverse population groups, including those in situations of vulnerability, and vaccine access (disaggregated by key variables such as sex, age, ethnicity, income and geography).
- Support increased surge capacity for vaccinators, and public health workers.
- Support access to online training platforms, including the hardware, software and internet.
- Support the identification of populations in vulnerable situations, such as migrants, indigenous and Afro-descendant populations, those without social protection and health insurance, to ensure equitable access for women and men within at-risk groups, to vaccines and inclusion in vaccination programs in a culturally appropriate, gender sensitive, and human rights-based manner.
- Support countries on logistics planning, and transportation for outreach vaccination activities.
- Work with national authorities to develop environmental public health roadmaps to support emergency response, people living in vulnerable situations, and the implementation of vaccine campaigns and the delivery of therapeutics.

- Support incorporation of a gender and culturally sensitive approach in the introduction and deployment of COVID-19 vaccines, including the identification of gender-related barriers to access and acceptability, and strategies to overcome them
- Gather and analyze evidence on variables such as exposure to risk, acceptability, and immunological responses to COVID-19, which may affect equitable uptake of the vaccine; the analyses will be used in decision-making regarding strategies and for monitoring uptake.
- Support national capacities for Events Supposedly Attributable to Vaccination or Immunization surveillance from the local to the national level, including the implementation of sentinel surveillance at hospital units.
- Support demand planning and procurement of vaccines and related key supplies (e.g. syringes, cold chain equipment, vaccinators' PPE), international shipment requirements, custom clearance, claims, nationalization, warehousing and distribution, including through PAHO's Revolving Fund and Strategic Fund for Public Health Supplies.

Communications

- Develop a regional communications strategy on vaccine rollout including risk communication and demand generation for ministries of health and civil society and adapt it to country circumstances as needed.
- Support national and local governments to develop risk communication strategies and establish mechanisms to effectively engage communities and civil society as partners in the design and implementation of culturally appropriate and gender sensitive vaccination campaigns that target key population groups and include assessment of vaccine hesitancy in populations.
- Support countries to develop and implement gender and culturally sensitive communication and social mobilization plans which respond to local realities, to generate confidence, acceptance and demand for COVID-19 vaccines.
- Support countries to manage the vaccine infodemic and to plan, develop and implement crisis communications plans for managing crises related to immunization, including vaccine safety.

Advocacy

- Continue to participate and contribute to global discussions around priority research & development and innovation, including for the equitable access and allocation of novel vaccines.
- Advocate for equitable allocation and distribution of vaccines.
- Support Member States to access resources and tools necessary to carry out their national vaccine responses to COVID-19.



The effective introduction of the COVID-19 vaccines in the Americas is anticipated to be PAHO's largest operation to date, which will require unprecedented support.











Credit PAHO/WHO

Funding Requirements

The following section outlines the estimated funding level required for the period 1 January to 31 December 2021 to implement the priority public health measures above-mentioned in support of countries and territories in the Region of the Americas, to maintain and scale-up their response to the COVID-19 pandemic and address the new challenges of the COVID-19 vaccination roll-out. The estimated financial requirements will be adjusted as the situation evolves.

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

		Amount required (USD)				
Pillar		Caribbean	Central America	South America	Regional	Total
	P1. Coordination, planning, financing, and monitoring	5,721,491	4,210,042	7,548,305	6,902,677	24,382,515
	P2. Risk communication, community engagement, and infodemic management	3,449,615	2,108,867	3,185,427	3,810,995	12,554,903
	P3. Surveillance, epidemiological investigation, contact tracing, and adjustment of public health and social measures	3,995,003	3,467,130	7,825,745	3,757,294	19,045,172
	P4. Points of entry, international travel and transport, and mass gatherings	1,546,278	996,000	3,005,121	653,257	6,200,656
	P5. Laboratories and diagnostics	3,964,156	5,569,198	8,106,005	4,187,974	21,827,333
	P6. Infection prevention and control, and protection of the health workforce	4,800,309	9,012,379	13,918,841	4,695,219	32,426,748
	P7. Case management, clinical operations, and therapeutics	4,651,127	6,394,708	7,330,736	2,942,933	21,319,504
	P8. Operational support and logistics, and supply chains	4,594,616	3,629,310	5,311,213	3,548,803	17,083,941
	P9. Strengthening essential health services and systems	6,863,769	6,690,731	10,935,977	6,385,260	30,875,737
	P10. Vaccination	6,461,714	11,296,220	20,111,245	12,265,672	50,134,851
	Research and Innovation	805,000	277,000	845,986	935,227	2,863,214
	Total	46,853,078	53,651,585	88,124,601	50,085,311	238,714,575



Continued donor support is required to scale up technical cooperation and provide operational, logistics and procurement support to the countries of the Americas to save lives and suppress the transmission of COVID-19.

Credit PAHO/WHO

How to Support this Appeal

Generous donations for the international community allow PAHO to deliver its technical cooperation and deploy its operational and logistics support to address existing and emerging public health challenges impacting the countries and territories of the Americas.

PAHO highly values the donors who have already provided funding to fight COVID-19 in the Region of the Americas. However, in the context of the unprecedented public health crisis confronting Latin American and Caribbean countries and territories, continued support to PAHO's response efforts is needed to help slow down and suppress the spread of COVID-19, save lives, and protect the most vulnerable population groups—including health workers.

The current funding needs for 2021 outlined in this strategy are pivotal to maintain and scale-up ongoing response to the COVID-19 pandemic and address the new challenges of emerging variants and the COVID-19 vaccination roll-out.

PAHO ensures that funding is distributed in the most efficient manner and where it is most needed, in coordination with public health authorities and other UN agencies in every country and territory of the Americas.

Here are some ways how private or public organizations and individuals can contribute to this donor appeal.

Donating directly to the COVID-19 Appeal

Financial contributions from governmental aid agencies, multilateral institutions, foundations and philanthropic organizations and other public and private sector partners are one of the most valuable and effective forms of support to the health emergency response. The main characteristic of a financial donation is its flexibility to support an agile response. The resources

obtained can be used in a fast and efficient way, responding to the most acute needs and ensuring that the actions funded are fully aligned with priority public health actions for countries to successfully tackle the COVID-19 pandemic.

Donating organizations are invited to make cash contributions to support one, several or all priority actions and response pillars highlighted in this strategy. To make a donation to PAHO, Governments, corporations and foundations can email donate@paho.org.

Contributing to the PAHO COVID-19 Response Fund.

As COVID-19 spread to all parts of the world, individual expressions of solidarity have multiplied and many of you have connected over a common objective to provide support to populations and communities in situation of disproportionate vulnerability and need. Individual donation can make a difference and help save lives by supporting the delivery of essential supplies and critical assistance to frontline workers and people in need.

Individuals can contribute to PAHO's COVID-19 Response Fund by online donations at <http://bit.ly/pahocovid-19fund> or by mailing checks to PAHO, 525 23rd St NW, Washington DC 20037.

For corporate and foundation giving, please contact donate@paho.org

Donating in kind resources and services.

PAHO encourages the private and public sectors to align response efforts for the pandemic through the priority action lines outlines in this COVID-19 response strategy. Donations from corporations must comply with PAHO/WHO's guidelines and roadmap for engagement with the private sector.

To make an in-kind donation of good and services, please contact donate@paho.org to guarantee coherent priorities, minimize gaps and duplication in the COVID-19 response and ensure quality assurance of the goods offered.

PAHO appreciates and thanks in advance its donors for their generous contributions to the COVID-19 response efforts in the Americas. Contributions to this Appeal will be reported on PAHO's webpage to acknowledge and give visibility to donors' generosity, report on funding received as well as remaining financial gaps.

Contact Information

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Duration 12 months

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