



PAHO

PAN AMERICAN HEALTH ORGANIZATION RESPONSE TO COVID-19 IN THE AMERICAS



17 January
to 31 May 2020

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Introduction

Following an outbreak of a novel Coronavirus (COVID-19) in Wuhan City, Hubei Province of China, rapid community, regional and international spread has occurred across the globe, with exponential growth in the number of cases and deaths. On 30 January 2020, the Director-General (DG) of the World Health Organization (WHO) declared the COVID-19 outbreak a public health emergency of international concern (PHEIC), under the International Health Regulations (IHR) (2005). The first case in the Americas was confirmed in the USA on 20 January 2020, followed by Brazil on 26 February 2020.

COVID-19 has now spread to all 54 countries and territories in the Americas. By 26 May 2020, cases and deaths in Latin America surpassed Europe and the United States in the daily number of reported coronavirus infections. By June, two of the three countries with the highest number of reported cases are in the Americas, making this region the epicenter of the COVID-19 pandemic.

On 17 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 has been providing direct emergency response to Ministries of Health and other national authorities to scale up their readiness and response operations by, among others, supporting their surveillance, testing,

and laboratory capacity; preparing and strengthening health care services; infection prevention control; clinical management; and risk communication, in alignment with the WHO COVID-19 [Strategic Preparedness and Response Plan](#) and PAHO's priority lines of action.

PAHO has developed, published, and disseminated evidence-based technical documents to help guide countries' strategies and policies to manage this pandemic. It 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.

This report presents an overview of PAHO's response to the COVID-19 pandemic. It begins in January 2020, when PAHO rapidly mobilized its experts and shipped needed laboratory supplies for molecular detection of the virus through 31 May 2020. It provides an analysis of the epidemiological situation in the Americas and the impact of the spread of the virus on health systems in Latin America and the Caribbean. It includes selected highlights of PAHO's work in the countries and territories of the Americas. Epidemiological data is presented as of 12 June 2020 (unless indicated otherwise) to more accurately reflect this rapidly evolving situation. Meanwhile, PAHO's work to stem the spread of the SARS-CoV-2 virus is presented up to 31 May.

Epidemiological Situation Analysis

The epicenter of the COVID-19 pandemic has shifted to the Region of the Americas, which reports 3,638,525 cases and 196,440 deaths of COVID-19 as of 12 June 2020. These figures account for almost 49% of the 7,488,444 cases and 46% of deaths reported globally. The Region of the Americas has the highest number of cases and deaths reported by any of the six WHO Regions (followed by the European Region, which has

reported 2,378,958 cases and 187,468 deaths). There is an overall increasing trend in incidence and deaths from the Region of the Americas. Five countries in this Region (Brazil, the United States of America, Chile, Mexico, and Peru) are among the ten countries of the world reporting the highest number of confirmed cases and/or deaths globally.

Americas Region Reporting of COVID-19 as of June 12, 2020



3,638,525 cases

49 % of the 7,488,444 cases globally

196,440 deaths

46 % of deaths reported globally

Region

Of all COVID-19-reported cases and deaths in the Region, the United States of America accounts for 55% of cases and 58% of deaths, while Brazil accounts for 22% of cases and 21% of all deaths. Together, the two countries account for 77% of all cases and 79% of deaths currently reported in the Region. Countries reporting the highest new increases in the number of deaths at the time of the preparation of this report include Brazil (1,239 additional deaths, 3% increase); the United States of America (947 additional deaths, 1% increase); Mexico (587 additional deaths, 4% increase); Chile (222 additional deaths, 8% increase); and Peru (206 additional deaths, 3% increase). The pooled crude case fatality estimate (number of reported deaths divided by the number of reported cases) in the Region is 5.4%. The median country-specific estimate is 3.1%, with an interquartile range of 0.8%-7.3%. Table 1 shows the ten countries in the Region reporting the highest number of cases. Regionally, with regard to the number of cases, there is no difference between sexes. However, in terms of deaths, men are more affected (64% in the age group of 60-69 years old). Eighty percent of cases occur in people aged 20-59 years old and 82% of deaths occur in the group aged 60 and over.

In the LAC Region, indigenous and Afro-descendant communities have historically faced inequalities. Their lower incomes, lower level 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 during this COVID-19 pandemic.

While precise data on these populations is not always available, reports have shown that the impact on indigenous populations is not homogenous. In Brazil, 54% (2,895) of the 5,364 suspected COVID-19 cases have been confirmed in the 34 Special Indigenous Health Districts (DSEI) as of 13 June 2020. Certain DSEI reported significantly higher rates than the average of all 34 DSEI; the incidence rate in Alto Rio Solimões is 2,289.2 cases per 100,000 inhabitants compared to overall incidence rate of 12.8 cases per 100,000 inhabitants of the 34 DSEI.



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 is compounding food insecurity and impacting 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 population.

Table 1: Cumulative cases, deaths, and crude case fatality rates (CFR%) among the ten PAHO countries/territories reporting the highest number of cumulative cases as of 12 June 2020.

Country/Territory	Cases	Deaths	CFR (%) ¹
United States	2,010,391	113,757	5.7%
Brazil	802,828	40,919	5.1%
Peru	214,788	6,109	2.8%
Chile	160,846	2,870	1.8%
Mexico	133,974	15,944	11.9%
Canada	97,530	7,994	8.2%
Ecuador	45,778	3,828	8.4%
Colombia	45,212	1,488	3.3%
Argentina	27,373	772	2.8%
Dominican Republic	22,008	568	2.6%

¹ The crude fatality rate (CFR) is calculated as the proportion of deaths as compared to the total number of diagnosed cases. It is calculated by dividing the number of reported deaths by the number of reported cases.

North America subregion

While cases and deaths in the United States of America and Canada are showing a declining trend, Mexico's incidence of cases is increasing, and is currently at its highest level since the start of the pandemic (22 cases per 100,000 population as of 11 June). With respect to sex distribution in the subregion, there is no difference in the number of cases. The highest proportion of cases is in the age group of 20 to 59 years olds (65% of total cases). With respect to the deaths, the most affected age group (66%) is over 70 years old, with the same proportion by sex. However, in the second-most affected age group, 60-69 years olds, there is a higher proportion (64%) of men dying.

Central America subregion

The incident rates of cases continue to increase in all countries in the subregion, with the highest rates being reported in Panama – 76 cases per 100,000 population as of 11 June. The most affected age group for cases is 20 to 59 years old, which represents 78% of the cases, with a higher proportion reported in men (60%). With respect to deaths, the most affected age-sex group is the over 70-year-olds (47%); 62% of them are male.

South America subregion

Reported cases continue to increase in the South American subregion and are currently at or near

the highest levels observed since the start of the pandemic in all countries. Brazil continues to report increasing numbers of cases and deaths, reporting an incident rate of 89 cases per 100,000 as of 11 June. In Chile, cases are accelerating, with 187 cases per 100,000 population reported on 11 June 2020. A slight decrease in cases has been reported in recent days in Peru and Ecuador, who both rely on Rapid Diagnostic Tests (RDTs) in addition to PCR tests to confirm cases. Seventy eight percent of the cases in this subregion occurred in the age group between 20 to 58 years old, with no significant difference in the proportion of men and women. The majority of deaths due to COVID-19 (70%) occurred in the age group 60 to 70+ years old; however 60% of these deaths in this age group occurred in men.

Caribbean subregion

While an overall decreasing trend in incidence rates can be seen in most Caribbean countries, notable

increasing trends are being reported in French Guiana, Haiti, and the Dominican Republic. Positive cases reported in French Guiana have increased 7.5-fold since May 10 (144 total cases) to June 10 (865 total cases reported), with much of the recent increase driven in the regions along the border with Brazil. Haiti and the Dominican Republic continue to report increasing trends in cases, reporting their highest or near highest incidence rates since the start of the outbreak (29 cases per 100,000 in the Dominican Republic and 11 cases per 100,000 in Haiti). In the subregion, the majority (68%) of cases were reported in the age group between 20 to 59 years old; however, in all age groups, there were no significant differences in number of cases reported by sex. Most deaths (68%) corresponded to the demographic group of 60 to 70+ year-olds. When comparing men and women in the same age groups, it was found that 71% of deaths occurred in men.



Health Systems Situation Analysis

PAHO supported more than 500 hospitals (public and private) in 15 countries² to carry out a 'COVID-19 Readiness' self-assessment. The results indicated a moderate level of preparedness in some key areas, such as laboratory diagnosis of SARS-CoV-2 virus, isolation, and case management. Scores were lowest in areas related to the care of patients requiring critical care and the availability of equipment and supplies for medical care (including Personal Protective Equipment and ventilators). Epidemiological projections indicated that countries were still facing the threat of their health systems network reaching maximum capacity for care. Preparedness activities, therefore, have focused on the reorganization and expansion of health services to meet needs created by an exponential increase of patients. Travel restrictions have provided an additional challenge, as international emergency medical teams—which can provide essential medical surge functions—could not be deployed.

Countries have begun reorganizing their first levels of care to respond to the pandemic. In the Region, 20 of 24 countries reporting have incorporated the first level of care into the response to COVID-19.³ The COVID-19-related actions carried out by the first level of care have 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%).⁴ In

addition, the key actions⁵ carried out for the continuity of essential services have been the care of pregnant women (58%) and newborns (54%); immunizations (63%); dispensation of medications (42%); and monitoring of patients with chronic conditions by tele-consultation or home care (71%). Routine immunization services were maintained in 22 (67%) of 33 countries reporting to the PASB Immunization survey. However, 10 countries experienced partial suspension of services. Despite shortages, there has been no interruption of treatment for HIV, thanks to mitigation measures implemented by countries and territories, including support from the PAHO through the Strategic Fund.

[According to a PAHO report](#), COVID-19 has affected the continuity of essential services provided at the first level of care, especially in peri-urban, 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. Outpatient services for non-communicable diseases (NCD) continue to be maintained, but with limited access in 18 count, and completely open in seven count.

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

2 Argentina, Bolivia, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, Guatemala, Haiti, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Suriname, Trinidad and Tobago, and Venezuela.

3 Mexico, Guatemala, Belize, El Salvador, Honduras, Costa Rica, Panama, Colombia, Ecuador, Venezuela, Guyana, Surinam, Bolivia, Peru, Chile, Brasil, Argentina, Paraguay, Uruguay, Bahamas, Cuba, Dominican Republic, Jamaica, Trinidad and Tobago. PAHO office reports in 24 LAC countries on first level of care during COVID-19, carried out in May 2020.

4 Op. cit., dated in May 2020.

5 Op. cit., dated in May 2020.

to carry out case investigation and contact tracing; testing, triage, home care; management of call centers and teleconsultations. The main reasons for disruption of services related to non-communicable diseases include cancellation of elective care services (58%), clinical staff being re-allocated to the COVID response (50%), and patients not presenting (50%).⁶ To date, all Member States have put in place measures to reorganize and expand hospital capacity to respond to COVID-19, including decisions to integrate national capacity for critical care; the centralized management of beds (repurposing, retrofitting, and upgrading); strengthening clinical management within the network for the continuity of care; and efficient use of hospital resources. In addition, 14 countries reported 176 national EMTs deployed; nine are on stand-by; and 71 alternative medical care sites (AMCS) are operational, providing a total of 7,522 inpatients beds and 372 critical care beds. Initiatives that focused on using stadiums and mobile hospitals as AMCS, which in some cases have prioritized increasing the number

of beds over the capacity for patient care, has resulted in a shortage of qualified staff and in limited self-sufficiency for the effective delivery of clinical care.

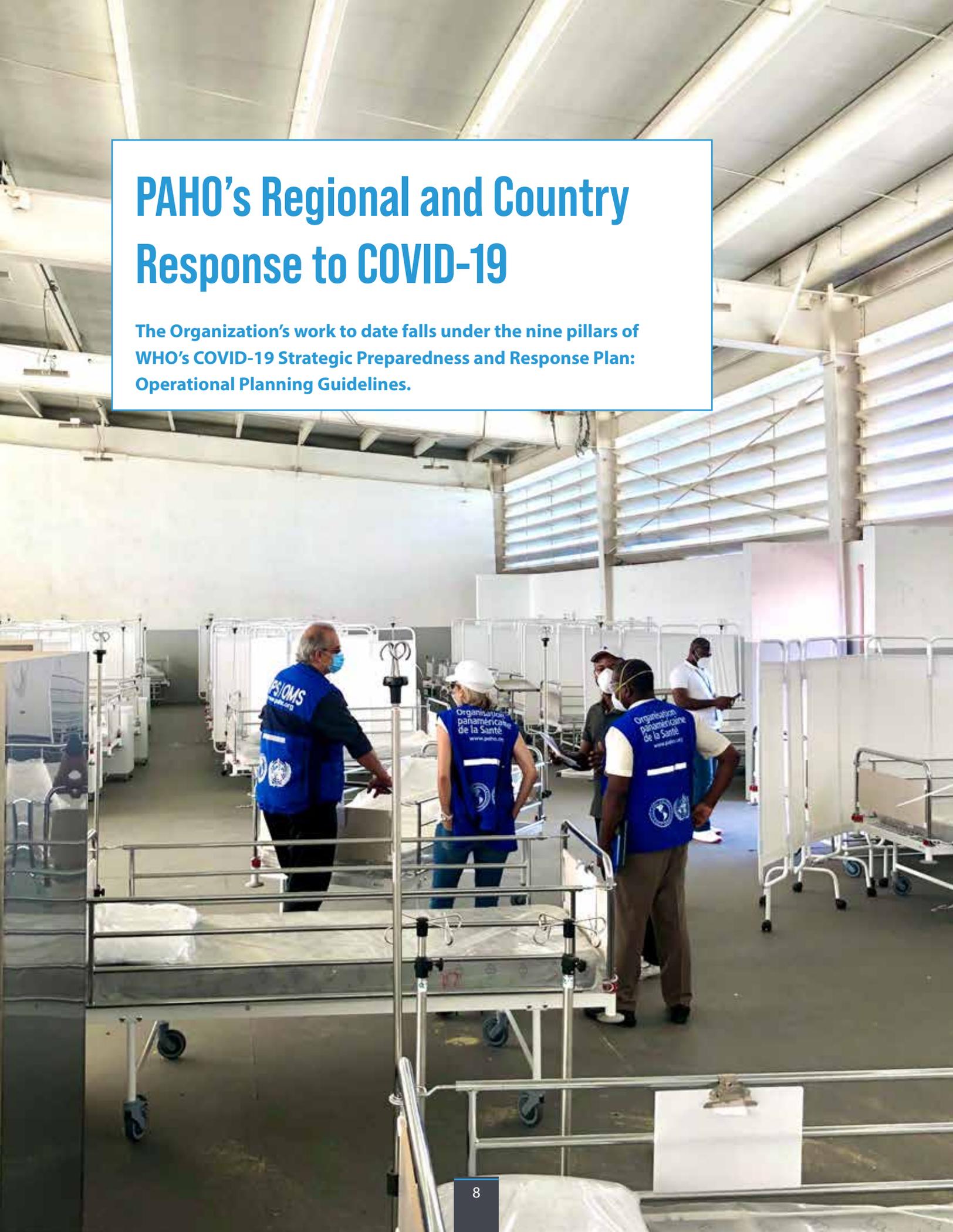
The availability and safety of health personnel has been a critical factor in the expansion of health services. Many countries have promulgated legal and normative tools to manage human resources for health (HRH), with some declaring COVID-19 an occupational disease. Approaches to expand HRH capacities included: using health sciences students to support contact tracing; issuing temporary contracts and increasing the number of permanent contracts; establishing bilateral arrangements with other countries; authorizing temporary licensing, on an exceptional basis, for health professionals who received their degree in another country; and accelerating the graduation of residents and students in their final years studies. Some countries have also provided economic and non-economic incentives for personnel responding to the pandemic.

6 Op. cit., dated May 2020.



PAHO's Regional and Country Response to COVID-19

The Organization's work to date falls under the nine pillars of WHO's COVID-19 Strategic Preparedness and Response Plan: Operational Planning Guidelines.





Pillar 1. Country-level Coordination, Planning, and Monitoring

This pillar of the response to the global COVID-19 pandemic calls for the activation of national public health emergency management mechanisms, with the engagement of all relevant ministries, such as health, education, travel and tourism, public works, environment, social protection, and agriculture, to provide coordinated management of COVID-19 preparedness and response.

Activated Mechanisms for PAHO's Response

The Pan American Health Organization (PAHO) activated its Incident Management Support Team (IMST) on 17 January 2020. PAHO rapidly mobilized 71 regional-level technical staff and convened technical subgroups to provide additional technical and analytical support. PAHO's 27 country offices established country-level IMSTs to provide immediate

and rapid technical guidance and support to the health authorities across Latin America and the Caribbean (LAC).

PAHO's Incident Management Support Team was structured around three broad response pillars:

- **Epidemic intelligence**, critical to ensuring that surveillance systems are in place to detect cases of COVID-19; that people have access to timely and accurate testing; and that decision makers have the analysis they need to formulate policies and strategies to stem the spread of the virus.
- **Public health measures**, to guide Member States in reducing the number of infections through public health and travel-related measures that help reduce the likelihood of infection while ensuring that systems are in place to detect new cases coming from abroad.⁷

⁷ These measures are in compliance with the International Health Regulations (IHR 2005). Early projections demonstrated that the COVID-19 virus had the potential to result in an extraordinary rise in cases, which could rapidly overwhelm health systems.

- **Strengthening health systems**, ensuring they are prepared to manage outbreaks of COVID-19 with adequate staffing levels, protected health workers, evidence-based treatment protocols, and the appropriate supplies and equipment of good quality.

Since its activation, the Organization's IMST has been engaging actively with Member States. The Director of PAHO has provided the highest possible level of representation, advice, and support to all requests from Member State groupings such as CARICOM, SICA, MERCOSUR, as well as the OAS and other regional multilateral organizations to support and finance the response. The PAHO Director convenes regular meetings with Ministers of Health and, together with the PAHO Secretariat, provides Member States the best available advice, based on all available evidence and science, as it becomes available.

Rapid Deployments and a New Approach for Technical Cooperation

In the early stages of the pandemic, PAHO deployed 25 missions of technical experts to 20 countries between February and 15 March 2020 to ensure they were prepared to conduct laboratory molecular testing for COVID-19 and implement contact tracing. They were armed with country assessments on readiness to manage COVID-19 cases, including infection prevention and control measures.

Once borders closed, PAHO rapidly adapted to a new, mostly virtual modus operandi. PAHO delivered 49 regional and national virtual trainings and webinars to more than 1,000 health professionals across the Americas on estimating needs for PPE and hospital and ICU beds; identifying alternative medical care sites, given overburdened health systems; molecular

diagnostics for COVID-19; surveillance; and other essential areas.

Supporting Multisectoral and National Action to Respond to COVID-19

PAHO's support is aligned with the global [Strategic Preparedness and Response Plan for COVID-19](#) (SPRP), published on 3 February 2020 and subsequently updated 14 April 2020. This plan outlines the support that WHO and the international community stand ready to provide to enable all countries to respond to COVID-19. On 12 February 2020, WHO issued Operational Planning Guidelines, with an updated version released 22 May 2020 to support the development of Country Preparedness and Response Plan for COVID-19.

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. By 31 May 2020, 32 of 35 countries in the Americas had already developed and were implementing their COVID-19 preparedness and response plans, with guidance and support from PAHO.

All 35 Member States activated intersectoral mechanisms in response to the COVID-19 pandemic, involving the highest political leadership, and including key sectors to provide a comprehensive response. PAHO liaised with other UN agencies within countries to lead the health sector response and ensure that the UN system followed a holistic approach to tackling this pandemic and its repercussions.

It is important that governments revisit these plans considering that transmission situations and resource

needs have changed significantly for many countries since the early days of the pandemic. This is important for those now facing community transmission (20 countries and territories as of 14 June 2020).

Partnerships that Save Lives

WHO launched the COVID-19 Partners' Platform, a tool to facilitate coordination and governance between countries, UN Country Teams, donors, and partners. The Platform facilitates joint resource planning, the identification of funding gaps, and the monitoring of progress against the National Action Plans. To date, PAHO, in coordination with WHO, has supported and trained 33 countries in LAC to access the Partners Platform. Twenty countries are now using this web-based tool and the information collected through

the portal has helped inform the global allocation of resources.

Guidance for Decision-Makers

PAHO has published 47 evidence-backed [publications](#) and [guidelines](#) geared toward an effective response to the COVID-19 pandemic. These resources are the result of extensive consultations with global and regional experts as well as exhaustive reviews of existing and emerging evidence. They have facilitated the work of national governments and health authorities by allowing them to adapt the recommendations, protocols, and considerations to create national strategies, policies, and protocols. Examples of the guidance PAHO has developed include:



- Considerations on [health equity, gender, ethnic equality, and human rights](#) as national authorities plan and implement their response to COVID-19.
- Considerations on [Indigenous peoples, Afro-descendants, and other ethnic groups](#) for planning health services delivery during the pandemic while bearing in mind existing inequities that have affected these populations.
- [Guidance for establishing shelters in the Caribbean](#) in the context of COVID-19 (in light of the upcoming Atlantic hurricane season), including spacing for beds and cots, recreation areas, ventilation, and other key factors.
- A Common Public Health Policy (joint work with CARICOM, CARPHA, UWI and CDEMA) to develop to address the COVID-19 pandemic, including principles surrounding testing, joint procurement of supplies (pharmaceuticals PPE), testing protocols, and sourcing of additional medical personnel.

PAHO also has played an essential role in helping countries and partners in the Americas to share technical knowledge. For example, recognizing the strength of the national reference laboratories in Chile, PAHO made it possible for laboratory experts from Chile’s national laboratory to provide live virtual

demonstrations and training to Uruguay molecular diagnostics for COVID-19.

Mobilizing Resources for the Americas

On 2 April 2020, PAHO launched a US\$95 million appeal (through to 31 August 2020) to support and scale-up public health preparedness and response efforts in LAC countries facing the 2019 COVID-19 pandemic. This was subsequently revised to US\$200 million through the end of 2020.

Generous contributions received and/or pledged from the following donors enabled PAHO to reach 47% of the total appeal, as of 18 June 2020: Azerbaijan, Belize; Brazil; Canada; Confederation of Caribbean Credit Unions; Corporacion Andina de Fomento; European Commission; Fundacion Yamuni Tabush; Germany, Japan; Inter-American Development Bank, PAHO COVID-19 Response Fund; Spain, Switzerland, United Kingdom; United States of America, UN Agencies; UN Multi-Partner Trust Fund; and the World Bank.

PAHO also received generous in-kind contribution from Direct Relief, Mary Kay Cosmetics and Twitter, and engaged in strategic partnership with Salomon Beda, Sony Latin Music and Global Citizen to help fight the pandemic.

PAHO Response	 85 Technical guidelines and recommendations developed or adapted from WHO	 4.4M COVID-19 Tests using molecular detection sent to 36 countries and territories	 >90 Virtual / in-person regional and country trainings on testing, tracking, care, and more	PAHO has sent 54 PPE shipments to 26 countries and territories	
	 1.3M Gloves	 403k Gowns	 1M Surgical & N95 Masks	 42k Goggles	
Regional Readiness	 32/35 # Countries with national COVID-19 Preparation and Response Plans	 37/51 # Countries and territories with molecular detection capacity to diagnose COVID-19	 20/35 # countries using existing SARI/ILI surveillance systems to monitor COVID-19	 17/22 # Reporting countries where at least 50% of health facilities have triage capacity	 29/31 # Reporting countries with national IPC / WASH plans for health facilities



Pillar 2. Risk Communication and Community Engagement

[In a situation report earlier this year](#), WHO stated that the “2019 novel Coronavirus outbreak and response has been accompanied by an ‘infodemic:’ an over-abundance of information — some accurate and some not — that makes it hard for people to find trustworthy sources and reliable guidance when they need it. With the popularity of social media, managing the COVID-19 pandemic and the related ‘infodemic’ requires ever more swift, regular and coordinated action from across government and society.”

During this pandemic, governments must provide quick, sensitive and trustworthy responses to a public eager to know the current situation, how the government will respond, and what they can and should do. Risk communication, which includes developing risk communication and community engagement (RCCE) plans and materials tailored to the population, is an integral component of a national response to COVID-19. PAHO has developed [guidance on risk communication](#) for Member States.

Technical Cooperation on Risk Communication

Risk communication strategies and tools for health care workers, media communicators, and leaders were developed and distributed to Member States. This helped to develop and implement national risk communication and community engagement (RCCE) plans that consider all segments of countries’ populations.



Facilitating Online Training on COVID-19

The [PAHO/WHO Virtual Campus for Public Health](#) hosts six online WHO courses, which PAHO has translated into Spanish and Portuguese (349,838 enrolled as of 15 June 2020):

- General COVID-19 considerations;
- Operational planning;
- Infection prevention and control;
- Occupational health;
- Clinical management;
- Design of treatment facilities.

The Virtual Campus also features the [Caribbean Node](#), a dedicated space for COVID-19 resources such as webinars, public information, and lessons learned (currently from Grenada). PAHO also collaborated with CARICOM and PANCAP (the Pan Caribbean Partnership Against HIV and AIDS) to:

- Provide ten webinars on COVID-19 to Caribbean countries and territories;
- Broadcast key messages on infection prevention and control (IPC); delivery of HIV services; and psychosocial aspects for health care workers and adolescents.

Communicating to the Public

PAHO produced infographics, social media cards, and videos (many with sign language interpreters) that offer guidance on protecting health workers, the elderly, and other populations vulnerable to infection. These materials tackle the correct use of masks, handwashing without wasting water, vaccination during the pandemic, domestic violence, and other priority issues. Its Facebook Live events allow the public to directly “Ask the Experts” questions

about COVID-19. PAHO participated in Univision’s #Juntosencasa show and at the World Economic Forum (WEF).

The Director of PAHO holds weekly virtual press conferences to inform and update the public, issue calls for action, and share recommendations to stem the spread of COVID-19. These virtual press conferences have reached 1.2 million persons from across the globe.

PAHO developed a COVID-19 manual for use by reporters to better grasp and report on the key issues around the pandemic. More than 200 journalists have participated in training on the recommendations from its publication, “[An informative guide. Advice for journalists.](#)”

Partnering with Artists to Combat COVID-19

Colombian singer Salomón Beda is donating the royalties of his musical theme, “Pa’alante,” to PAHO COVID-19 response activities. Artists from Argentina, Chile, Colombia, Ecuador, Mexico, Peru, Puerto Rico, the United States, and Venezuela joined forces to record a new version of the song, called “Pa’alante,” with the aim of raising funds under an initiative called #Volveranlosabrazos (the hugs will return).

Joining forces in the fight against COVID-19, Sony Music Latin and international advocacy organization Global Citizen collaborated to release a brand-new version of [Diego Torres’ “Color Esperanza \(The Color Hope\).”](#) The song’s record label net proceeds benefit PAHO’s COVID-19 relief efforts. PAHO also collaborated with Sony Music Latin-Iberia to disseminate messages on fighting COVID-19 during the [Made in: Casa](#) concert.



Pillar 3. Surveillance, Rapid Response Teams, and Case Investigation

COVID-19 surveillance data are essential to calibrate appropriate and proportionate public health measures. In addition to active case finding in communities, health facilities, and at points of entry/exit, it will be necessary to enable the general population to practice self-surveillance, in which individuals are asked to self-report as a suspected case as soon as they have symptoms or signs and/or if they are a contact of a confirmed case.

All countries are encouraged to adopt international R&D Blueprint efforts and research protocols such as the Unity studies to investigate additional epidemiological, virologic, and clinical characteristics.

In a scenario in which community transmission is occurring, it is essential to monitor the geographical spread of the virus, transmission intensity, disease trends, characterize virological features, and assess impacts on health-care services.

Source: WHO Operational Guidelines to Support Country Preparedness and Response for COVID-19

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. PAHO conducts event-based surveillance (EBS),

complementary to countries' indicator-based surveillance (IBS). This joint approach provides the Region with a better grasp of the epidemiological situation in the Americas.⁸

⁸ **Event-based public health surveillance** looks at reports, stories, rumors, and other information about health events that could be a serious risk to public health (1). Such information may be described as unstructured information because the information obtained is non-standardized or subjective. **Indicator-based public health surveillance** is a more traditional way of reporting diseases to public health officials. **Indicator-based surveillance** involves reports of specific diseases from healthcare providers to public health officials.

Surveillance Systems Ready to Detect COVID-19

Efforts are underway to enable all countries in the Americas to integrate COVID-19 into routine severe acute respiratory illness / influenza-like illness (SARI/ILI) surveillance systems. Twenty countries have already done so. PAHO shared case definitions, reporting forms, and surveillance guidelines with countries and coordinates with health authorities to collect the line list of nominal COVID-19 cases. To date, 73% of the 2.22 million cases reported in the Americas are captured in the Global and Regional COVID-19-line list database.

Monitoring and Projecting the Spread of the Pandemic in the Americas

Tracking, analyzing and forecasting epidemiological trends is key to an effective response. PAHO closely monitors the pandemic in the Americas, looking also at healthcare workers, indigenous populations, Afro-descendants, and other population segments. It publishes weekly reports with SARS-CoV-2 surveillance indicators, as well as influenza and other respiratory viruses. It developed simulation models to aid local-level preparedness and response by forecasting regional response needs.

PAHO launched a [hub](#) with COVID-19 data for the Americas, produced in collaboration with WHO-HQ and ESRI. It includes a dashboard and epidemiological data updated daily. The public can also consult [PAHO's interactive map](#) showing cumulative cases reported by countries and territories. This real-time information has been crucial in supporting countries with their preparation and response. This data also promotes international coordination and awareness of the situation in our Region.

GIS data is invaluable in identifying the scope and scale of the spread of COVID-19. PAHO supported eight countries (Argentina, Belize, Chile, Costa Rica, Guyana, Nicaragua, Suriname, and Venezuela) to establish their own GIS hubs to better monitor COVID-19 cases. To have a clearer understanding of the dynamic of the COVID-19 epidemic in the current context, PAHO partnered with WHO, Harvard University, and the Epimos GmbH and ExploSYS BmbH projects to further develop tools that enable countries to analyze and visualize the effective reproductive rate of the virus and make projections as to the number of new infections; the number of individuals who become sick; or who will require hospitalization or admission to an intensive care units. Eight countries are being supported to use this methodology: Argentina, Bolivia, Chile, Colombia, Dominica, Guatemala, Guyana, and Saint Lucia.

Countries face the challenge of understanding the scale of the pandemic's impact while armed with incomplete data on COVID-19. Recognizing this reality, PAHO developed [guidelines for conducting excess of mortality analyses](#). Using mortality data from Ecuador and Peru, PAHO conducted case studies on both countries' excess mortality considering COVID-19 and non-COVID-19 deaths (with disaggregation by sex, age group, marital status, education, and place of occurrence).

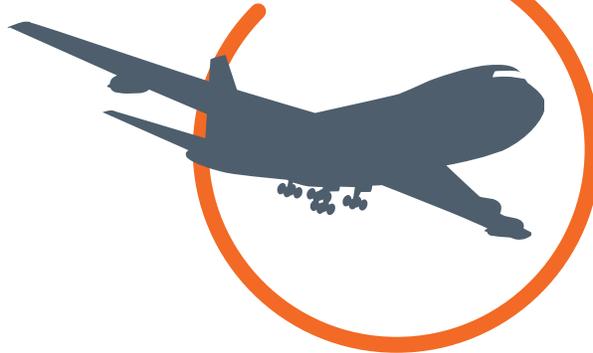
PAHO and other health partners collaborated with Vital Strategies, a health NGO, to finalize a methodology and criteria for estimating excess mortality from the COVID-19 pandemic. This collaboration has yielded a web-based [Excess Mortality Calculator](#), a tool to help countries to produce analysis and graphs on the current situation. Virtual meetings will commence soon to create capacity across the Americas to apply this methodology.

Tools for Contact Tracing

PAHO has supported countries to ramp up capacities for tracing and quarantine of contacts. Grounded on the early detection and confirmation of COVID-19 patients, contact tracing and quarantine required the implementation of novel approaches and tools. [Go.Data](#), WHO's contact tracing tool, was designed to help health authorities follow up on cases and possible

contacts to rapidly identify and isolate possible cases before they can spread the virus further. Collaborating with Global Alert and Response Network (GOARN), PAHO's training has allowed 20 countries in the Americas to use this tool, many of which now utilize PAHO's servers to host their data.





Pillar 4. Points of Entry

Efforts and resources at points of entry should focus on supporting surveillance and risk communication activities. Appropriate public health measures at points of entry may include: entry and exit screening; education of travellers on responsible travel behaviours before, during, and after travel; case finding; contact tracing; isolation; and quarantine. Risk of imported cases can be managed through: an analysis of the likely origin and routes of importations; measures put in place at points of entry to rapidly detect and manage suspected cases among travellers, including the capacity to quarantine individuals arriving from areas with community transmission; and cleaning and disinfection of the environment at points of entry and onboard conveyance. It is critical that countries enable essential travel needed for pandemic response, humanitarian relief, repatriation, and cargo operations.

Source: WHO Operational Guidelines to Support Country Preparedness and Response for COVID-19

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

COVID-19 was quickly introduced into countries and territories throughout the world. As more

countries reported imported cases of COVID-19, international travel-related measures to prevent further importations were implemented, including enhanced surveillance at points of entry. Following the WHO Director General's declaration of COVID-19 as a Public Health Emergency of International Concern (PHEIC), countries in the Region of the Americas initially implemented measures to restrict the entry of international travelers originating from specific countries experiencing COVID-19 transmission.

Coinciding with the spread of COVID-19 to Europe

at the end of February 2020 and, subsequently, with WHO's declaration of the pandemic associated with COVID-19, all but two of the 35 countries in the Americas – Mexico and Nicaragua – are implementing measures drastically limiting the flow of incoming international travelers and conveyances, or completely prohibiting the incoming and outgoing flow (as of 12 June 2020). Generally, international travelers and conveyances on missions with the following purposes – humanitarian (e.g., repatriation, medical evacuation, transport of supplies for the response), food security, maintenance of essential services, national security – are exempted from the above-mentioned measures and subject to *ad hoc* procedures.

PAHO provided guidance to Member States regarding the temporary recommendations communicated by the WHO Director General as part of the [Statement from the Third Meeting of the International Health Regulations \(2005\) Emergency Committee](#) (held on 30 April 2020) regarding the outbreak of coronavirus disease (COVID-19).

Shortly after countries began closing their borders, PAHO and WHO issued [considerations on a range of social distancing and travel-related measures](#) based on the global, regional, and national circumstances. 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. It was indicated that these considerations should not nullify efforts and sacrifices incurred.

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. It has 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.



Pillar 5. National Laboratories

Countries should prepare laboratory capacity to manage large-scale testing for COVID-19 — either domestically, or through arrangements with international reference laboratories. If COVID-19 testing capacity does not exist at national level, samples should be sent to a regional or international reference laboratory with appropriate capacity. In the event of widespread community transmission, surge plans should be activated to manage the increased volume of samples from suspected cases. WHO can provide support to access relevant reference laboratories, protocols, reagents, and supplies.

Source: WHO Operational Guidelines to Support Country Preparedness and Response for COVID-19

Ready for Testing Since the Onset of the Pandemic

Laboratory-based surveillance, necessary to monitor COVID-19 disease trends, relies on data produced in clinical and/or public health laboratories. The Americas was the first WHO Region to provide its Member States with laboratory diagnostic kits. Starting 17 January, 56 test kits to implement the WHO-approved Charité protocol were ordered and distributed to 21 Member States. WHO donated an additional 130 kits to support the diagnostic capacity in the Americas on 21 February. PAHO has continued purchasing additional laboratory supplies and distributing them to countries.

With these supplies in hand, during February and March, PAHO focused on building diagnostic capacity in the Region's National Influenza Centers (NICs) and SARI (Severe Acute Respiratory Infection) Laboratory network. PAHO held two subregional trainings, in Brazil and in Mexico, where 18 Central and South American countries were trained and received reagents. PAHO also deployed experts and reagents to nine additional countries to carry out trainings on-site in their laboratories. By mid-February, capacity for molecular diagnostic testing for SARS-CoV-2 was successfully implemented in all 35 Member States. Following border closures throughout March and

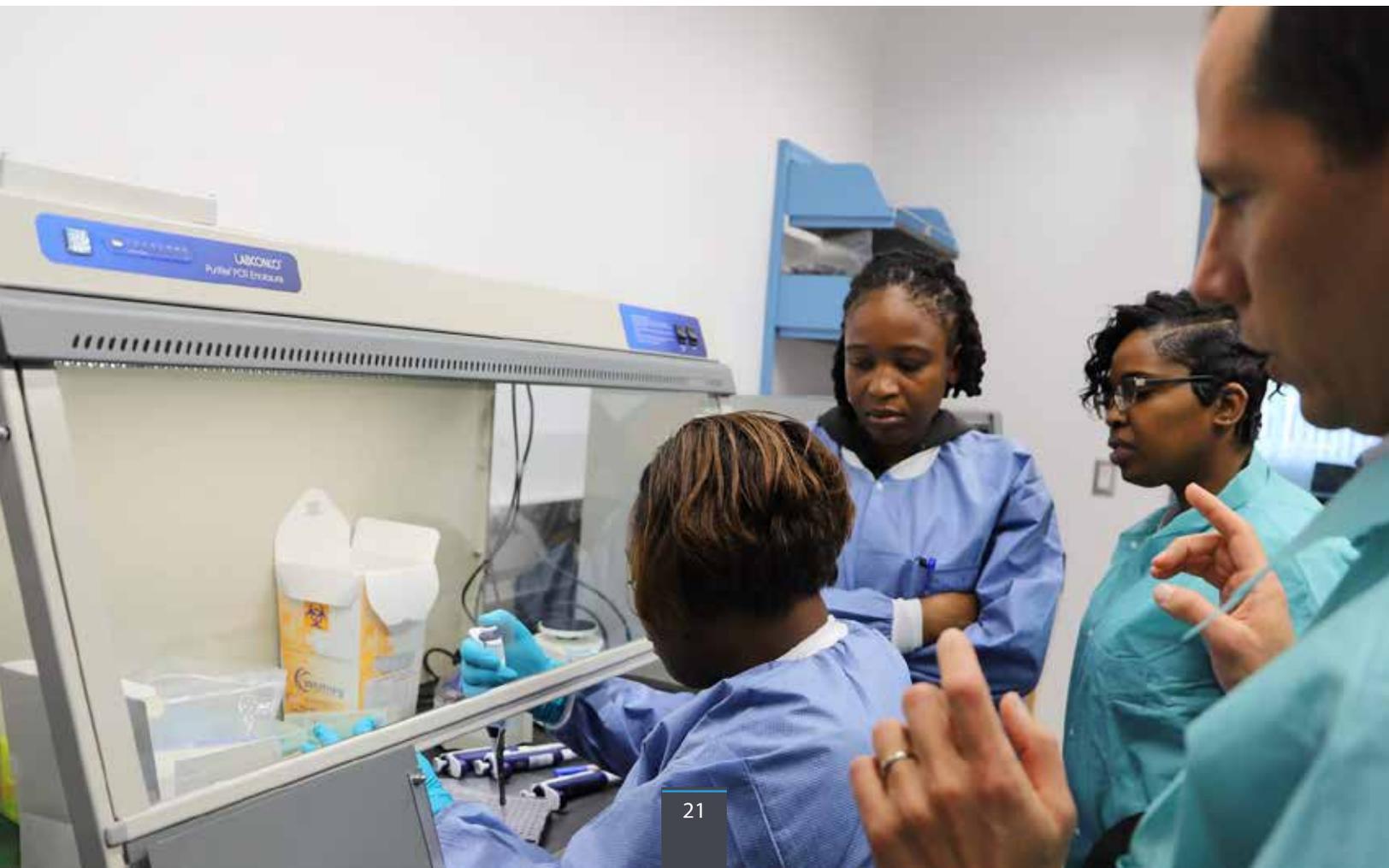
April, PAHO continued to follow up with countries via virtual trainings and calls to ensure appropriate implementation of the protocols.

PAHO also collaborated with countries to establish a clear algorithm for testing for SARS-CoV-2, building upon the existing influenza systems of routine surveillance of severe acute respiratory infections (SARI). PAHO continued to provide guidance on testing strategies, quality assurance procedures, and genomic epidemiology. Technical guidance on the [interpretation of laboratory results for COVID-19 diagnosis](#) was developed and shared. Further, PAHO has released revised guidelines on the detection and diagnosis of COVID-19 virus infections to take into account new case definitions for suspected cases and updated WHO guidance for laboratory testing.

Throughout the pandemic, PAHO has continued to donate laboratory reagents and supplies to countries to support their capacity to detect and confirm SARS-CoV-2. As of 14 June, PAHO has provided enough lab reagents and supplies (reagents, primers, probes, extraction kits and enzymes to cover 4.4 million tests in 36 countries and territories in the Region. In addition, countries were enabled to procure more than 10 million PCR tests through PAHO's Strategic Fund, a regional technical cooperation mechanism for pooled procurement of essential medicines and strategic health supplies.

Expanding Testing for the Americas

The emergence of SARS-CoV-2 led to an unexpected surge in global demand for laboratory supplies,



causing product scarcity in the market and adding complexity to maintain the supply chain for *in vitro* diagnostics (IVDs) using polymerase chain reaction (PCR), which is considered to be the most reliable diagnostic test recommended by WHO. Conversely, a range of newly developed rapid diagnostic tests, with varying levels of sensitivity and accuracy, have flooded commercial markets. To guide countries' decisions to procure different kinds of tests, PAHO released [considerations and criteria on diagnostic tests](#), their use, and their efficacy. The Organization continues to identify prioritized IVD tests for potential procurement to deploy across the Americas once supplies are available.

The surge of COVID-19 cases in the Region is highlighting challenges for laboratories to process exponentially increasing numbers of samples. PAHO is continuing to explore possible collaborations with the World Organization for Animal Health (OIE) to expand lab capacity. Two webinars have already been held with veterinary laboratories from 22 countries to explore how these animal laboratories could

supplement existing human laboratory capacity to detect and confirm COVID-19.

There is a global effort to sequence SARS-CoV-2 to monitor how the virus evolves and whether mutations will change how the virus behaves. Sequenced genomes from all over the globe are shared on WHO's Global Initiative on Sharing All Influenza Data Platform (GISAID), an open-access database that shares data freely to researchers to promote better understanding of the virus and potentially contribute to vaccine development. Initially, only three countries in the Region (Brazil, Chile, and Mexico) were sharing sequences of the strains circulating in their countries. To ensure increased representation of the strains circulating in the Americas, PAHO is coordinating the COVID-19 Genomic Surveillance Regional Network Project and supporting 13 countries to share their genomic sequences in a timely fashion with GISAID. In addition to the original three countries, Argentina, Canada, Colombia, Costa Rica, Ecuador, Jamaica, Peru, Panama, the United States of America, and Uruguay have also begun to upload sequences.



Pillar 6. Infection Prevention and Control

Infection prevention and control (IPC) practices in communities and health facilities should be reviewed and enhanced to prepare for treatment of patients with COVID-19, and prevent transmission to staff, all patients/visitors, and in the community.

Source: WHO Operational Guidelines to Support Country Preparedness and Response for COVID-19

Infection Prevention and Control (IPC) is critical to prevent or slow the dissemination of a new virus with unclear natural history. Since the onset of the pandemic, PAHO has worked closely with health authorities to reiterate the need for fostering good hand hygiene practices, appropriate and rational use of PPE, the cleaning and disinfection of medical devices, and water and sanitation (WASH).

All countries have implemented measures to reinforce IPC and, as of 31 March 2020, 23 countries reported having a national IPC program and WASH standards in health care facilities. In addition to developing and updating of guidelines, PAHO organized a total of 31 virtual informative/training sessions with 6,192 participants.

Keeping Health Workers and Patients in the Americas Safe

Health workers are at the frontlines of medical care for possible and confirmed COVID-19 patients, where, in the process, they put their own safety on the line. PAHO has issued interim [guidelines on care for health workers exposed to COVID-19](#) in health facilities and provided in-person and virtual training to Ministries of Health and health workers on:

- the proper use of personal protective equipment (PPE);
 - infection prevention and control (IPC);
- transmission-based measures that health workers can take to reduce the likelihood of infection from COVID-19 while managing possible and confirmed

cases. This includes in isolation areas in acute healthcare settings and in nontraditional settings such as hotels, motels, shelters, dormitories, and home care.

IPC Outside the Health Sector

In addition to reducing the risk of infection to health workers, PAHO developed recommendations for countries and territories to reduce risk of infection for persons living in long-term care facilities, workers at points of entry, and the general population seeking guidance on how to avoid COVID-19.

In collaboration with the United Nations Office on Drugs and Crime (UNODC), PAHO trained 200 maritime law enforcers from African countries, the Caribbean, and the USA on considerations for preventing infection while conducting operations against maritime crime.

Recommendations on the management of dead bodies were distributed to guide health authorities in ensuring protocols are in place for the safe and respectful management of fatalities in the context of COVID-19.

WASH in the Context of COVID-19

Water, sanitation and hygiene (WASH) is an important component of reducing the risk of infection. PAHO issued [recommendations](#) for communities, healthcare facilities, and institutions responsible for WASH at different levels of government, and is working with health and WASH authorities to develop and implement measures across the Americas.

Securing PPE in a Competitive Global Marketplace

The global market for PPE products is limited and extremely competitive. PAHO has delivered 54 shipments of PPEs to 26 countries and territories, ensuring fewer COVID-19 infections among health workers and patients. Meanwhile, it has trained Ministries of Health to calculate needs estimates for PPE, essential medicines, and other supplies based on epidemiological trends and projections. Such analysis and planning is essential to guide procurement and the subsequent distribution to prioritized areas.

This shortage of PPE available 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.



Pillar 7. Case management

Healthcare facilities should prepare for large increases in the number of suspected cases of COVID-19. Staff should be familiar with the suspected COVID-19 case definition, and able to deliver the appropriate care pathway. Patients with, or at risk of, severe illness should be given priority over mild cases. A high volume of cases will put staff, facilities and supplies under pressure.

Guidance should be made available on how to manage mild cases in self-isolation, when appropriate. Plans to provide business continuity and provision of other essential healthcare services should be reviewed. Special considerations and programmes should be implemented for vulnerable populations (elderly, patients with chronic diseases, pregnant and lactating women, and children).

Thirty-two Member States have succeeded in strengthening their public health system in the face of the COVID-19 pandemic. These measures include increasing the availability of beds in health facilities; provision of essential equipment and human resources to health facilities; expansion of testing and treatment for COVID-19 in laboratories and health facilities; provision of hygiene kits to governments; provision of PPE to healthcare providers and patients; establishment of respiratory clinics; and ensuring continuity of essential health services, among others.

Therapeutics for COVID-19 Cases

Much is still unknown about the efficacy of therapeutics for treating COVID-19 cases. Amidst this uncertainty, PAHO has shared guidance on current evidence-based case management and therapeutics for COVID-19 with all countries and territories. It has conducted webinars on case management and therapeutics with networks of health professionals within the Member States. It trained 430 participants on recommended practices for intensive care delivery for COVID-19 in hospital settings. In the Eastern Caribbean, 175 health professionals were trained in clinical management.

PAHO issued guidelines for the [critical care of seriously ill adult patients](#) with COVID-19 and interim recommendations on the initial care of persons with acute respiratory illness in the COVID-19 context in healthcare facilities. Considering the increased severity of the virus in older persons, PAHO delivered a webinar to facilitate the exchange of experiences in caring for adults with COVID-19 in middle and low-income countries (86 participants from 12 countries).

With regard to the need for continued blood supplies, PAHO convened a meeting with authorities to provide recommendations on donor eligibility, blood collection, roles and responsibilities, and existing scientific evidence. It reached 610 participants from 17 Spanish-speaking countries and Guyana. PAHO organized a session with local authorities to explain regulatory considerations on the authorization of the use of convalescent plasma to address the COVID-19 emergency. PAHO shared recommendations on blood availability, blood collection, national health authority responsibilities, and existing evidence on the use of convalescent plasma with the Andean Health Organization (ORAS).

PAHO held a webinar with more than 70 head radiologists, medical physicists, and radiographers from English-speaking Caribbean countries. It focused on the role of imaging for diagnosis and for monitoring the clinical course of patients with COVID-19 infection, as well as current IPC practices of radiology departments to reduce cross-infection and protect medical professionals and patients.

Estimating Needs to Manage COVID-19 Cases

Simulated numbers have been provided for mild, severe, and critical cases during the first two months

after the virus is introduced into a given country, as well as the required hospital beds and ICU beds to manage each scenario. PAHO combined this with a hospital capacity progressive expansion tool, which helps estimate needs for beds and health workers. This was complemented with a tool to support needs estimates of PPE, supplies and medicines; 800 people throughout the region have been trained.

These steps gave countries valuable information to guide urgent preparations as they readied surveillance and health systems for the arrival of COVID-19 cases in their territories. The Organization also supported 12 countries to complete needs estimates for hospital capacity expansion and essential medicines for the management of patients admitted to intensive care units with suspected or confirmed COVID-19 diagnosis.

Medical Surge Capacity

The COVID-19 pandemic has created significant stress on countries' health systems. Health workers are disproportionately becoming infected; many are reluctant to work without appropriate PPE and health facilities may not have the resources and infrastructure to manage highly contagious cases. PAHO issued recommendations for countries to prepare pre-hospital emergency medical services (EMS) to manage suspected COVID-19 cases and transport them safely to designated hospital facilities if necessary.

[Emergency Medical Teams](#) (EMTs) can play a critical role in expanding the capacities of a country's health system to respond to an emergency. PAHO issued recommendations to facilitate the medical surge capacity through the deployment of Emergency Medical Teams (EMT) and the selection and set up of

[alternative medical care sites](#) (AMCS). PAHO provided training and technical support to develop the local capacity of EMTs, improve medical coordination using the CICOM methodology, and in setting up AMCS. The Organization also developed a community of practice for pre-hospital emergency care and a technical discussion group has been created on the EMT Americas platform. Surge personnel have been activated at all levels of the Organization and deployed to countries to strengthen established in-country and local technical expertise.

Regulatory Considerations for COVID-19 Therapeutics, Supplies, and Equipment

National regulatory agencies are critical to ensuring that robust mechanisms are in place to adapt to a rapidly changing panorama in which new products will become available for treatment, diagnostics, and other COVID-19-related uses. Given the exhaustive resources needed to build strong regulatory agencies, PAHO has facilitated access to information and assessments produced by regulatory agencies from the European Union, Australia, and other countries to guide LAC countries in assessing the use of certain products. PAHO maintains a platform on regulatory matters and good regulatory practices in response to the pandemic, updated weekly and available on the [Regional Platform on Access and Innovation for Health Technologies](#) (PRAIS, by its Spanish acronym). Forty-four health technology assessments (HTA) related to COVID-19 are available in the regional database of HTA reports, BRISA.

With WHO participation, PAHO convened its 7th COVID-19 Regulatory Update virtual meeting

to provide regulatory authorities with updated information on improving access to vaccines, therapeutics, diagnostics, and medical devices. PAHO conducted a meeting tailored to local authorities involved in regulatory aspects related to the use of ventilators in the COVID-19 context (82 participants). PAHO launched a network of regulatory focal points for COVID-19 to improve information sharing and enable potential collaborations for the approval and oversight of new products. One hundred country representatives and experts participated and the focal points hold virtual meetings biweekly to discuss relevant issues such as reliance practices during emergencies and clinical trials of COVID-19 products. The Organization released recommendations on [crisis management](#) during this pandemic, tailored primarily to regulatory authorities.

Ethics and the Allocation of Scarce Life-Saving Resources

The pandemic has brought bioethics to the forefront because of the challenges in prioritizing scarce resources in the delivery of critical care (e.g. ventilators). [Ethics guidance](#), including the [use of scarce resources](#) in the delivery of critical health care during the COVID-19 pandemic, was developed. Advancing justice between countries in the distribution of therapeutics and vaccines that are now in the pipelines is an upcoming challenge, which includes elucidating what exactly justice entails in this unprecedented scenario.



Pillar 8. Operational support and logistics

In light of the situation facing countries in the Region due to the COVID-19 pandemic, particular attention must be paid to:

- Logistical arrangements to support incident management and operations should be reviewed.
- Expedited procedures that may be required in key areas (e.g. surge staff deployments, procurement of essential supplies, staff payments).

Logistics During a Global Pandemic

This unprecedented pandemic has created severe interruptions to regular supply chains for medical supplies and equipment, as well as the commercial flights that PAHO has relied upon in the past to deploy its experts and ship medicines, supplies, and equipment. Countries face a complex market for procuring supplies and medicines related to COVID-19. Quality must always be verified, as the market is flooded with products produced by unscrupulous actors. PAHO is working tirelessly with other UN agencies, partners, international NGOs, and donors to secure the resources needed to enable countries to prevent infections and mitigate deaths. Through

its network and logistical hubs, 36 countries and territories have received tests for molecular detection of COVID-19 and 26 countries and territories received life-saving personal protection equipment (PPE).

Procurement in a Challenging Marketplace

PAHO works with countries to develop strategies to meet their procurement needs. The Organization shares tools to help quantify essential supplies and provide information on the current global market situation. Additionally, it helps countries to identify qualified suppliers and obtain pricing information for the procurement of medical equipment and supplies. PAHO will support its Member States to procure

prioritized items through PAHO's Strategic Fund and other joint procurement mechanisms.

PAHO collaborated with the Caribbean Community (CARICOM) and the Caribbean Disaster Emergency Management Agency (CDEMA) to develop a procurement protocol for the consolidated purchase of prioritized medical devices and supplies in the context of COVID-19 in the Caribbean.

PAHO continues to support Member States by advising them on current logistical challenges and the market situation regarding stocks of medical supplies and PPE. The critical need for PPE requires

quality assurance processes to ensure that procured items meet necessary specifications. PAHO is applying criteria developed to guide the procurement of PPE and in vitro diagnostic (IVD) tests for COVID-19. PAHO's warehouse for emergency stocks of supplies and equipment continues to assemble COVID-19 PPE kits.

These efforts are made in close coordination with WHO, UNICEF, UNDP, UNOPS, UNFPA, and other agencies in the COVID-19 Supply Chain Interagency Coordination Cell. As an example, PAHO supported the review of technical specifications for UNICEF's procurement of PPE.





Pillar 9. Maintaining Essential Health Services during the Pandemic

When health systems are overwhelmed, both direct mortality from an outbreak and indirect mortality from preventable and treatable conditions increase dramatically. Countries will need to make difficult decisions to balance the demands of responding directly to COVID-19, while simultaneously engaging in strategic planning and coordinated action to maintain essential health service delivery, mitigating the risk of system collapse. For more in-depth information, consult the WHO publication: [COVID-19: Operational guidance for maintaining essential health services during an outbreak](#).

The COVID-19 pandemic has created unprecedented stress on the countries' health systems and services. Many countries are finding that they do not have sufficient 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, malaria elimination, tuberculosis prevention and control, and programs for non-communicable diseases. 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.

Reorganization and Progressive Expansion of Health Services

PAHO has developed technical guidance and provided technical support on the reorganization and progressive expansion of health services for the response to the COVID-19 pandemic, particularly for triage, isolation, and intensive care in adults. Within days of the confirmation of the COVID-19 outbreak by WHO, and to enhance health services preparedness at country level, several technical guidance documents

and tools were developed, shared and provided onsite and through online trainings to Member States.

PAHO/WHO has published the following documents to support the response to the pandemic.

- [Hospital Readiness Checklist for the COVID-19 Response](#)
- [Adapting the First Level of Care in the Context of the COVID-19 Pandemic: Interventions, Modalities, and Scope, Reorganization and Progressive Expansion of Health Services for the Response to the COVID-19 Pandemic](#)
- [Recommendations for Reorganization and Expansion of Hospital Services in Response to COVID-19.](#)

PAHO worked with countries to assess the readiness of health facilities in more than 500 hospitals (public and private) in 15 countries, using the COVID-19 Hospital Readiness Self-Assessment Checklist. This checklist

helped to identify their level of preparedness for imminent emergency response and to address and prioritize identified gaps. In addition, PAHO supported needs assessments considering epidemiological models to support health services expansion for an increased numbers of cases, including human resources and hospital beds estimates. Considering the need for sustaining and expanding a health workforce, PAHO has developed a checklist for managing human resources for health to respond to COVID-19. PAHO presented three webinars on health systems, with 23 countries from all the subregions participating and sharing their experiences and practices.

Vaccination programs require continued investments to build upon the significant progress made to date in the Americas. [As the Director of PAHO stated in a press briefing](#), three countries in the Americas - Argentina, Brazil, and Mexico - are currently battling measles outbreaks, as well as dealing with COVID-19



cases. PAHO published guidance on the [operation of immunization programs](#) in the context of the COVID-19 pandemic and country teams worked in tandem with health authorities to devise strategies for vaccinating high-risk people against influenza and other diseases.

Maintaining Essential Services

With fiscal revenues diminishing, governments face significant resource constraints to address the pandemic while maintaining essential 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 sustain health gains achieved since the turn of the millennium.

While the 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. PAHO conducted a rapid assessment on how the pandemic might affect this population.

The Caribbean Subregional Program Coordination convenes bi-weekly virtual meetings on mental health and psychosocial support for trained mental health providers, national health authorities, and relevant stakeholders and institutions including CARICOM, CARPHA, CANPA (Caribbean Alliance of National Psychologists Association), and Public Health England. These sessions have touched on topics ranging from alcohol abuse to violence against women and girls in the context of COVID-19.

Research, Innovation, and Development

Much remains unknown about the SARS-CoV-2 coronavirus. Clinical studies are ongoing across the globe and scientific papers are being published at a rapid pace, many without the needed peer review to validate methodologies and the validity of conclusions. Recognizing the flood of information, PAHO has prioritized the assessment of evidence coming from research studies and has synthesized emerging evidence to help Ministries of Health to make decisions based on available evidence. With WHO leading three global studies, Unity, Solidarity I, and Solidarity II, PAHO is working with Ministries of Health and regulatory agencies to ensure that countries are prepared to undertake these studies.

Helping Countries Navigate Emerging Evidence

An area of concern is that of normative guidance on standard treatment guidelines for COVID-19, which includes pharmaceutical and other supportive care treatments. Currently, no intervention(s) has proven effective in targeting the etiological cause of COVID-19; the same can be said about prophylaxis. However, some clinical management guidelines from Member States recommend interventions based on expert consensus, very low quality of evidence, and contradictory research. The use of unproven interventions (which may be not be beneficial and may even harm patients) outside of research raises ethical concerns. PAHO provided specific guidance for COVID-19 patients safety and the use of medicines without scientific evidence of their benefit.

PAHO has provided Member States with updated guidance, information, and technical advice on scientific evidence, advancements in laboratory diagnosis, clinical management, and therapies as new studies are published. As such, PAHO has conducted rapid reviews of literature on key topics to contribute to an evidence base to combat the virus. PAHO has launched a [COVID-19 Technical Database](#), to further support countries and territories in the Americas and international partners with evidence-based information on science and technologies. This is the result of partnerships with WHO, Cochrane, McMaster University, Epistemonikos, and other partners. This database is regularly updated with published technical guidelines, scientific publications, and ongoing research protocols, and is available to the public.

PAHO continuously reviews emerging evidence and information in order to build an evidence base to help governments to combat this virus. It maintains an updated document on [potential COVID-19 therapeutics](#), the product of a series of rapid systematic reviews on the use of Chloroquine and Hydroxychloroquine to treat COVID-19 cases (concluding that more evidence is still needed and that governments should take steps to ensure the continued availability of these medicines for treatments for other diseases and conditions), as well as other topics including COVID-19 patients with hypertension and risk of death, corticosteroid therapy, convalescent plasma, IL-6 and lung disease, Interferon- β -1a for patients with moderate to severe acute respiratory distress syndrome, and potential

drug treatments (Remdisevir, Gavipavir, Umifenovir, Danoprevir, Nelfinavir, Darunavir, Meplazumab, and Siltuximab).

Considering the breadth of knowledge and evidence related to COVID-19, PAHO produced an [interactive infographic](#) to help external partners navigate PAHO and WHO's technical material and compilations of evidence from the Americas and around the globe.

Ethics and COVID-19 Research

In the context of the COVID-19 pandemic, Member States had to establish procedures for rapid ethics reviews, which were almost entirely absent in the Region in early 2020. PAHO provided specific guidance with strategies to streamline the [ethics review and oversight of COVID-19 research](#), along with a template and operational [guidance for ethics review committees](#), which are being widely implemented by Member States with PAHO support.

The Americas in Global Clinical Research Studies

From the start, PAHO and its Member States integrated research and development into the pandemic response. A coordinated Global Research Roadmap was created to

accelerate research that can lead to evidence needed to strengthen the response. The scientific community has focused on developing and/or repurposing medicines that can target SARS-Cov 2 and help control the pandemic. Member States are funding and promoting research from a variety of disciplines to address the COVID-19 pandemic. Countries are also conducting a vast amount of studies that are not clinical trials and thus not registered in WHO's International Clinical Trials Registry Platform (ICTRP).

The Solidarity Trial

Early on, the global scientific community quickly launched efforts to find effective treatment for COVID-19. In support of this, on 18 March 2020 WHO launched an international clinical trial (known as "Solidarity") to help find such a treatment for COVID-19. PAHO provided support in the development of Seroepidemiology Study Solidarity II and in the country implementation of sero-epi investigations (known as WHO "Unity Studies") in a number of countries in the Americas. Currently 18 countries of the 105 that have expressed interest in participating are from the Americas.

The Road Ahead

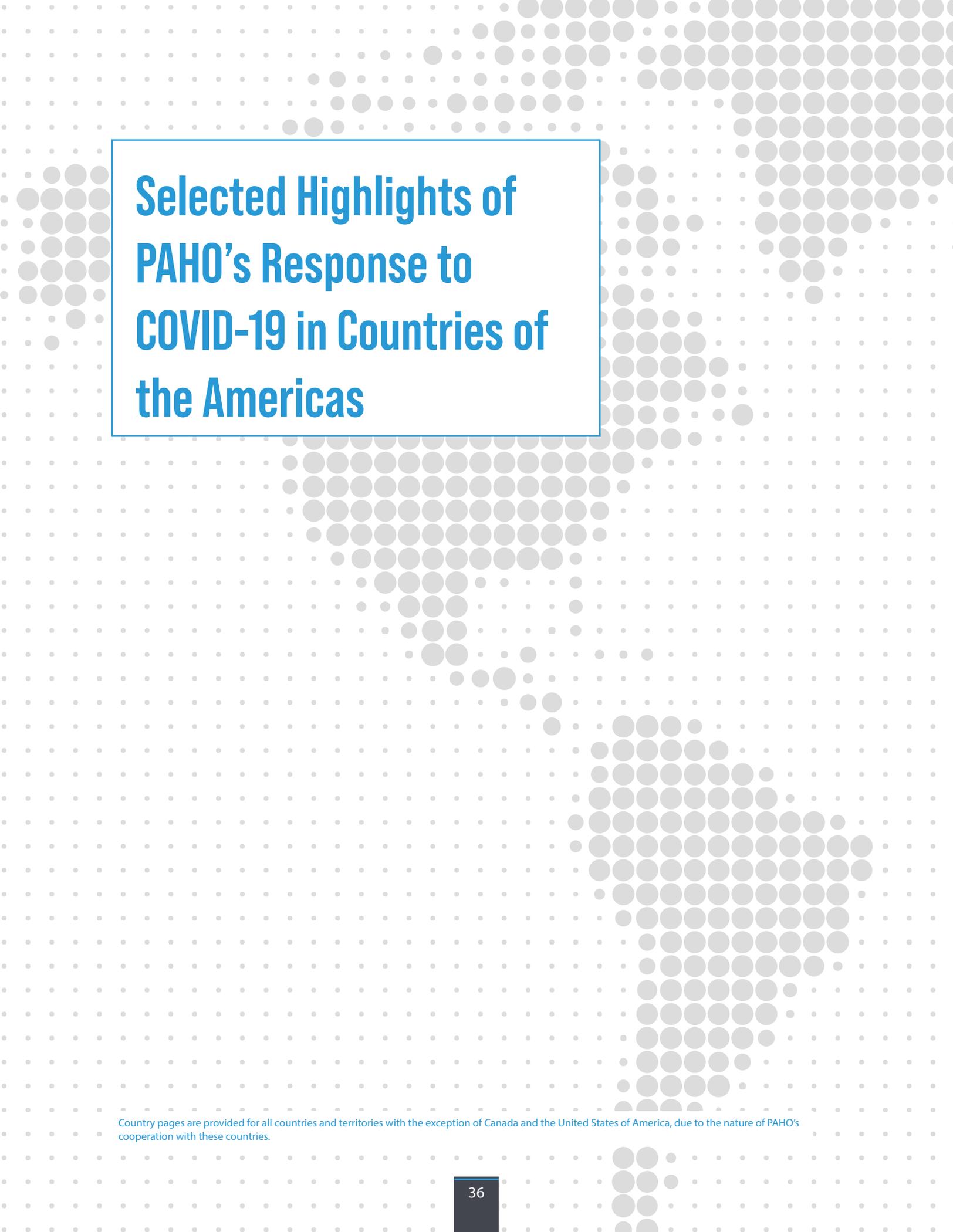
With four of the ten countries reporting the highest number of cumulative COVID-19 cases worldwide, the region of the Americas has become the epicenter of the pandemic. The fight against the spread of this virus will prove challenging, as countries face an uncertain economic outlook due to global and domestic problems stemming from the effects of months-long lockdown. This is compounded where health systems are underfunded and not adequately equipped to respond to malaria, measles yellow fever, and other diseases that predate the arrival of COVID-19 to the Americas.

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 country. Absent the development of an evidence-backed vaccine or treatment that is readily accessible to all peoples of the Americas, a challenging scenario is anticipated.

Countries in the Americas should maintain social distancing measures, improve surveillance, and strengthen health systems as three key actions to controlling the COVID-19 pandemic in the Region. Solidarity, the bedrock of Pan-Americanism, will

prove critical in addressing this pandemic as a united Western Hemisphere. Countries will benefit from learning from one another, pooling resources and expertise, and drawing upon the latest data that is shared transparently and rapidly.

As it has since 1902, the Pan American Health Organization will work directly alongside its Member States in the trenches of the battle against the COVID-19 pandemic. Its health experts will continue to track the virus in every country and territory in the Americas, sharing and disseminating up-to-date data on trends and cases as they emerge. It will periodically reassess the capacities of health systems to ensure that the necessary resources are in place to treat cases and protect health workers and the general public as COVID-19 cases rise and fall, while maintaining essential health services. It will produce and update its guidelines and technical guidance as new evidence becomes available, while carefully assessing the underlying robustness of new information to ensure it sufficiently backs emerging treatments, diagnostic kits, and strategies for facing the virus. PAHO remains committed to the peoples of the Americas and is confident that the Americas will ultimately prevail against COVID-19.



Selected Highlights of PAHO's Response to COVID-19 in Countries of the Americas

Country pages are provided for all countries and territories with the exception of Canada and the United States of America, due to the nature of PAHO's cooperation with these countries.



Antigua and Barbuda



Country-level coordination, planning, and monitoring

- Collaborated with partner UN agencies (UNDP, UNICEF, and UNOPS) to procure medical equipment for health facilities treating COVID-19 cases.
- Provided technical support for the development of Antigua and Barbuda's national COVID-19 response plan.



Risk communication and community engagement

- Delivered virtual training for healthcare workers (HCWs) and others, covering the mental health needs of community leaders, teachers and hotline workers as they interact with individuals.
- Provided technical support for the development of risk communication materials for HCWs and the general population.
- Produced and distributed posters and booklets on preventive public health measures for on COVID-19.



Surveillance, rapid response teams, and case investigation

- Disseminated technical guidance on COVID-19 surveillance, including case definitions.
- Worked with health authorities to ensure that their surveillance systems were calibrated, considering the COVID-19 case definition, and introduced data collection tools (e.g. Excel line listing, revised case reporting form).
- Provided orientation on Go.Data, the WHO contact tracing software for capturing data and monitoring the chain of transmission.
- Provided orientation on EpiEstim & CovidSim, mathematical models for short-term forecasting of cases.



Points of entry

- Provided communication materials, including banners, to raise awareness about COVID-19 among travelers and officers at ports of entry.



National laboratories

- Disseminated guidelines and protocols for COVID-19 testing.
- Procured and distributed sample collection materials.

- Procured and distributed RT-PCR enzymes, extraction kits and consumables.
- Trained laboratory staff from the National Health Laboratory to test for COVID-19 using open platforms for molecular diagnostics.
- Delivered test kits and critical material for the implementation of the reference protocol for SARS-CoV-2. (This is the first time that Antigua and Barbuda's national laboratory has installed capacities for PCR laboratory testing. Having in-country PCR diagnostics know-how means the country is better prepared to detect COVID-19, influenza, and other diseases that could arise in the future.)



Infection prevention and control

- Provided Personal Protective Equipment (PPE) and supplies for healthcare workers to keep them safe as they respond to the pandemic.
- Trained HCWs in infection prevention and control (IPC) techniques. Trained nurses, doctors, and surveillance officers to safely and appropriately use PPE.



Case management

- Provided technical support for the development of an isolation unit in acute healthcare settings.



Maintaining essential health services during the pandemic

- Worked with the national immunization program to ensure continuity in vaccinations during the COVID-19 pandemic; created a forum to exchange experiences and challenges in adjusting the delivery of immunization services.
- Provided training on the use of the WHO/UNICEF's annual Joint Reporting Form (JRF) and the new monthly reporting system for vaccines; convened a virtual campaign to support the annual Vaccination Week in the Americas.
- Provided guidance and training for care givers and family members of children with disabilities on care during the COVID-19 pandemic.
- Convened a Young People's Dialogue and a COVID-19 awareness webinar for youth leaders.

Argentina



Country-level coordination, planning, and monitoring

- Participated in the newly-created International Argentinian Humanitarian Network (RHIA), which includes the Health Cluster; coordinated the influenza vaccination for all Agencies/Programs and Funds (APFs) of the UN system.
- Created a medical-coordination network for medical advice and referral of patients to the private or national health services according to national guidelines for the UN system personnel.
- Managed the technical review of all COVID-related documents developed by the UN system in Argentina.
- Shared technical information (interim guidelines, recommendations, protocols, and methodologies) on a timely basis with counterparts at the national and subnational levels for further adaptation to the context and incorporation into existing protocols, instruments, and approaches.



Risk communication and community engagement

- Trained 600 national and provincial media and non-media journalists on “how to communicate during the pandemic.”
- Collaborated with UN AFPs in Argentina to adapt COVID-19 communication materials to the contexts of migrants, refugees, prisons, elder care and other vulnerable populations.



Surveillance, rapid response teams, and case investigation

- Trained the country's surveillance teams (85 surveillance personnel from 14 of 24 Argentinian provinces) to implement Go.Data for contact tracing at the national and provincial level
- Supported the Government of Argentina to set up a new sentinel surveillance system with five sentinel sites for influenza and other respiratory viruses, including COVID-19.
- In coordination with the National Center of Community Organizations (CENOC), mobilized six NGOs working with vulnerable populations to help implement case detection / surveillance/ contact tracing strategy, DetectAR for COVID-19, as part of national efforts.
- Trained epidemiology professionals to use the ‘EpiEstim’ tool to calculate the effective reproductive rate of the virus and to use the CovidSIM tool to project how the virus will spread, in light of implemented public health measures and the health system.

- Hired ten strategic professionals (epidemiologists, hospital engineers/architects, information systems engineers) to provide direct support to the Ministry of Health's pandemic response.



National laboratories

- Contributed with initial PCR primers and supplies to train more than 100 subnational laboratories in the 24 provinces, as part of a decentralized and expanded network of laboratory testing.



Infection prevention and control

- Trained 300 nurses across the country and key psychiatric hospital staff and managers in recommended IPC practices.
- Provided guidance to the National Directorate of Water and Sanitation and the Ministry of Public Works to ensure water quality in Argentina's water infrastructure during the pandemic.



Case management

- Trained national and subnational teams to use PAHO tools to calculate needed PPE, medical personnel, and supplies and equipment to manage anticipated COVID-19 cases.



Operational support and logistics

- Shared information about SUMA, the PAHO/WHO system for managing humanitarian supplies, with multi-sectoral professionals in the province of Santa Fe.



Maintaining essential health services during the pandemic

- Provided technical cooperation to the Ministry of Health to develop specific guidelines in the context of the pandemic (mental health; NCD; immunization; maternal, child and adolescent health; waste management in households and health units).



Bahamas



Country-level coordination, planning, and monitoring

- Provide technical advice on operational support for the national Emergency Operations Centre (EOC).
- Supported the Ministry of Health in their efforts to mobilize financial and technical support for the COVID-19 response from other UN agencies, foreign missions, public sector and civic society groups.
- Advised on legislative policies, strategies, and considerations on mental health and psychosocial support, and social support for vulnerable groups (e.g. urban poor, migrants, persons experiencing homelessness, unemployed, elderly, persons living with disabilities, persons deprived of their liberty, and other institutionalized groups).



Risk communication and community engagement

- Supported national authorities to roll out their risk communication strategy through press conferences, town hall meetings, radio/tv interviews, and social media to reach all Bahamians.
- Provided logistical support for preparation of communication products.
- Collaborated with the IOM and MOH to prepare Haitian Creole-language communication products for use with the Haitian migrant community.



Surveillance, rapid response teams, and case investigation

- Assigned an epidemiologist to provide the Ministry of Health with direct support for COVID-19.
- Worked with the MOH to adapt PAHO/WHO guidelines on epidemiological surveillance, contact tracing, case isolation, and quarantine of contacts to the context of the Bahamas.
- Supported the MOH in data management and reporting, including use of Go.Data, the WHO contact tracing tool.



Points of entry

- Provided recommendations for appropriate IPC measures at points of entry and trained staff working at these points (airport, harbor).
- Contributed to the preparation of communication materials on the health risks of COVID-19, which are used at points of entry.



National laboratories

- Strengthened laboratory capacities through training and provision of enzymes, controls, primers and RNA extraction kits to support testing for COVID-19.



Infection prevention and control

- Supported the MOH with access to WHO and PAHO IPC and clinical management guidelines and online training resources.
- Provided guidance to the MOH in the development of Standard Operating Procedures for IPC.
- Collaborated with MOH on investigation into risk factors associated with infections among health workers.



Case management

- Provided modular units that have been adapted to expand isolation and triage capacity in two hospitals.
- Assisted MOH to plan for clinical and hospital surge capacities, with the support of guidelines prepared by PAHO.



Operational support and logistics

- Delivered laboratory supplies, PPE, and nasopharyngeal swabs to enable Bahamas to ramp up testing for COVID-19.



Maintaining essential health services during the pandemic

- Provided PAHO/WHO guidance and guidelines to aid the MOH in selecting, adapting and maintaining essential health services in the face of the COVID-19 pandemic.

Barbados



Country-level coordination, planning, and monitoring

- Supported the Ministry of Health and Wellness to develop and implement its COVID-19 response plan.
- Convened consultations with national health authorities to assess needed technical support/supplies to enable Barbados to effectively respond to the pandemic.
- Coordinated with the United Nations system to develop and implement the COVID-19 Multi-Sectoral Response Plan for the Eastern Caribbean, in coordination with CDEMA, and other partners on the ground.



Risk communication and community engagement

- Produced posters and booklets on preventive public health measures for COVID-19.
- Produced and disseminated social media cards designed for the general public on coping with stress-related issues.
- Facilitated capacity building for community and religious leaders and influencers so that they can provide basic mental health and psychosocial support aimed at strengthening individual and community resilience.



Surveillance, rapid response teams, and case investigation

- Worked with health authorities to ensure that their surveillance systems were calibrated, considering the COVID-19 case definition, and introduced data collection tools (e.g. Excel line listing, revised case reporting form).
- Provided orientation on Go.Data, the WHO contact tracing software for data capturing and monitoring the chain of transmission.
- Produced orientation on EpiEstim & CovidSim mathematical models for short-term forecasting of cases.



Points of entry

- Produced communication materials to raise awareness of risks from COVID-19 at points of entry.



National laboratories

- Disseminated guidelines and protocols for COVID-19 testing, procurement, and distribution of sample collection materials.

- Procurement and distribution of RT-PCR enzymes, extraction kits and consumables.
- Trained laboratory staff in theoretical aspects of molecular diagnostics.



Infection prevention and control

- Delivered PPE to protect frontline health workers priority health facilities that receive and manage COVID-19 cases.
- Assessed isolation units and provided recommendations on how they should be designed and which IPC measures should be considered.



Case management

- Conducted a webinar for health personnel on the clinical management of COVID-19, focusing on experiences and lessons learned from across the Region.



Operational support and logistics

- Ensured movement of essential medical supplies to the Eastern Caribbean and the United Kingdom Overseas Territories, through a partnership with the Regional Security Mechanism. The Barbados Defense Force has helped with storage and distribution of medical supplies.



Maintaining essential health services during the pandemic

- Worked with the country's immunization program to ensure continuity in vaccinations during the COVID-19 pandemic and to create a forum to exchange experiences and challenges in adjusting the delivery of immunization services.
- Provided training on the use of WHO/UNICEF's annual Joint Reporting Form (JRF) and the new monthly reporting system for vaccines, allowing national authorities to monitor the impact of the pandemic on the immunization program.
- Participated in the Vaccination Week of the Americas (VWA) virtual campaign: Shared guidance, posters, GIFs, and key messages to support Barbados to develop this campaign.
- Conducted training with MOH focal points to discuss considerations for children with disabilities, including continued specialized health services for the children and their families.
- Convened a virtual dialogue for young people to discuss what it will take to adjust to this new way of living, and how to cope with pandemic-related isolation in a positive way.



Belize



Country-level coordination, planning, and monitoring

- Participated in the multisectoral national emergency response, the National COVID-19 Task Force and the medical and communication sub-committees and technical cooperation with various Ministries.
- Facilitated the development of COVID-19 Country Preparedness and Response Planning (CPRP) with Ministry of Health (MoH) and UNCT. Provided orientation to the Partners Platform.



Risk communication and community engagement

- Disseminated critical information through the national press, media briefings, radio, TV and social media.
- Developed and implemented, together with the MOH, a risk communication and community engagement strategy to reduce the impact of COVID-19.
- Developed language-specific public health messages in Spanish, Kriol, Garifuna and Ketchi Mayan.
- Conducted virtual information sharing sessions with the Chamber of Commerce, Ministry of Education and UN entities.
- Developed joint PAHO/WHO, UNHCR and UNFPA risk communications strategy under the UN MPTF and participation in the UN Communication Group. Support to the MOH Community Health Platform.



Surveillance, rapid response teams, and case investigation

- Provided technical guidance for the integration and timely reporting of COVID-19 into existing SARI surveillance.
- Offered guidance and capacity building exercises on the use and management of Go.Data for contact tracing.
- Gave technical guidance to the Statistical Institute of Belize and the MOH on the modelling of epi-projections.



Points of entry

- Produced health education materials for use at the airport and key health messages/infographics for nationals returning from abroad.



National laboratories

- Engaged in capacity building for laboratory diagnosis of COVID-19 and provided tests, supplies, and PPE.



Infection prevention and control

- Facilitated briefing/dissemination of information on the regulation, use and procurement of PPE for health workers in critical facilities.
- Held capacity building sessions for volunteers and health staff working in quarantine facilities.
- Procured a variety of PPE for the MOH, including masks, gowns, gloves, goggles.
- Coordinated with the IDB and MOH on issues related to the management of for medical waste in health facilities, to prevent re-infection.



Case management

- Conducted joint readiness assessment of hospitals and isolation and quarantine facilities and provided technical guidance and materials on ICUs, case management, and the latest research.
- Participated in the review of protocols, SOPs and facilitated capacity building webinars on the management of cases of COVID-19.
- Trained nationals to use the PAHO tool on Estimation and Management of COVID-19. This has helped to gauge needs for PPE, health workers, ICU and critical care beds, and supplies.



Operational support and logistics

- Disseminated information on strengthening regulatory capacity and accessing the COVID-19 Supply Portal.
- Supported the procurement of PPE for the protection of the health workforce and laboratory and other supplies, with an emphasis on ramping up testing for COVID-19.



Maintaining essential health services during the pandemic

- Provided guidance on the reorganization of health services in order to meet the changing demands in essential services as a result of the pandemic .
- Engaged in capacity building in mental health and the protection of healthcare providers working in an environment of COVID-19.



Bolivia



Country-level coordination, planning, and monitoring

- Worked with national authorities to form an inter-sectoral COVID-19 Technical Committee, composed of the Ministry of Health, the General Directorate for Migration (Digemig), the Ministry of Communications, the Bolivian Society of Infectology, other UN Agencies, and foreign missions to help coordinate the country's health sector efforts to combat COVID-19.
- Worked with national authorities to develop and implement the national response plan, including surveillance, laboratory, case management, and risk communication.
- Supported the Epidemiology Unit of the Ministry of Health with case data management, adopting the COVID-19 case definition, and developing and implementing protocols for managing suspected and confirmed cases, quarantine and home isolation, the use of PPE, and isolation in health facilities.
- Briefed over 100 Bolivian local authorities from Beni state, health workers, and journalists on the national COVID-19 strategy and its key response areas.



Risk communication and community engagement

- Supported the Ministries of Health and of Communications to develop and implement Bolivia's Risk Communications Strategy for COVID-19.
- Supported Bolivia to develop risk communication materials to reach the general population and indigenous groups, Afro-Bolivians, and persons living in rural parts of the country.
- Disseminated messages on social media designed to tackle discrimination against COVID-19 patients and health workers.



Surveillance, rapid response teams, and case investigation

- Provided guidance to enable Bolivia to analyze and visualize the virus' effective reproductive rate (using EpiEstim) and project how the virus will spread in each country considering implemented public health measures and its health system (using CovidSIM).

- Monitored COVID-19 cases among the country's indigenous populations to help guide the health cluster's efforts.
- Supported the Ministry of Health to conduct outbreak investigations in Santa Cruz and Oruro when the first cases were detected in Bolivia.



National laboratories

- Delivered reagents, RNA extraction kits, and other laboratory supplies to allow Bolivia to test a greater number of people for potential infection from COVID-19.
- Trained laboratory personnel from CENETROP, the designated national influenza center (NIC), to interpret results from COVID-19 molecular detection.



Infection prevention and control

- Trained health personnel from the departments of La Paz, Oruro, and Santa Cruz on the proper use of PPE, sample collection, patient isolation, and other key issues.
- Delivered PPE for use by health workers to reduce the risk of COVID-19 infection.



Case management

- Supported national health authorities to reorganize and strengthen existing hospital services for the management of COVID-19 cases, including critical care.



Maintaining essential health services during the pandemic

- Support the reorganization and expansion of Bolivia's health services by assessing hospital readiness in 41 hospitals, the readiness of the country's health service delivery networks, and developing an equipment distribution plan for 47 equipment types with detailed technical specifications.
- Provided an estimate of needed human resources and provided technical guidance for hiring of 6,500 health professionals to support all levels of care, including laboratory technicians, nurses, and doctors in various specialties, including intensive care.
- Supported the Ministry of Health to strengthen the first level of care with community brigades for monitoring of isolation centers, contact tracing, case identification and early referral.



Brazil



Country-level coordination, planning, and monitoring

- Strengthened Brazil's preparedness and response capacity by providing technical contributions to the country's emergency plans and protocols, including sharing international experiences.
- Supported the country's executive and judiciary branches to develop protocols to reduce COVID-19 transmission among indigenous populations and persons deprived of their liberty based on PAHO's epidemiological and risk analyses.
- Facilitated the COVID-19 emergency response coordination between the three levels of Brazil's administrative organization (federal, state, and municipal) under Brazil's Unified Health System (SUS).
- Translated WHO and PAHO COVID-19 publications and tools into Portuguese.



Risk communication and community engagement

- Trained community and migrant leaders to promote COVID-19 infection prevention measures.
- Developed and disseminated risk communication materials designed for migrant populations (particularly in Boa Vista and Roraima), persons in shelters, among others.
- With UNICEF support, developed virtual courses to train Venezuelans in Brazil to provide mental health and psychosocial support to migrant teenagers and children.



Surveillance, rapid response teams, and case investigation

- Worked with the Ministry of Health to adapt and implement surveillance and laboratory strategies and guidelines.
- Shared analytical tools and provided projections to support government decision-making.
- Supported 27 federal states to scale up their surveillance officers and laboratory staff and coordinated with the Ministry of Health, CONASS and CONASEMS to strengthen surveillance capacities in key states and municipalities for emerging and re-emerging pathogens.
- Worked with the Special Secretariat for Indigenous Health to strengthen surveillance and case monitoring in 100 indigenous areas.

- Trained Ministry of Health personnel to use Go.Data for contact tracing.
- Supported the government of Manaus and the state of Amazonas to strengthen laboratory and surveillance capacities by expanding the workforce (23 nurses, 2 biotechnology nurses, 4 pharmacists, 3 biologists, and 6 nursing technicians).



National laboratories

- Engaged in capacity building for laboratory workers to improve testing and diagnosis of COVID-19.
- Delivered test kits, extraction kits, and other supplies to national reference laboratories.



Infection prevention and control

- Provided local authorities with specifications for PPE, mechanical respirators, and other supplies.
- Worked with national counterparts to formulate and implement strategies for the safe management of cadavers, in the context of COVID-19.



Case management

- Supported the Ministry of Health to develop, update, and implement guidelines on clinical management, surveillance, mental health, and implementing non-pharmacological measures.
- Assessed hospital readiness and partnered with the Ministry of Health to train more health professionals, thus expanding the Unified Health System's workforce.



Maintaining essential health services during the pandemic

- Worked with national authorities to safely continue to deliver essential, but non-COVID health care, such as the national vaccination program and treatment for NCDs.



Chile



Country-level coordination, planning, and monitoring

- Worked directly with the Ministry of Health, professional and scientific groups, and Chile's emergency response team to develop and implement Chile's COVID-19 Plan of Action while adapting PAHO and WHO protocols and methodologies to the country's context.
- Promoted measures that protect people in situations of vulnerability, including people with disabilities, pregnant women, newborns, migrant populations, among others.



Risk communication and community engagement

- Disseminated important facts and recommendations via radio, television, and the Internet and social media to combat misinformation.



Surveillance, rapid response teams, and case investigation

- Collaborated with the Global Outbreak Alert and Response Network (GOARN) to train country counterparts to adopt Go.Data for contact tracing.
- Supported Chile to establish its GIS hub to facilitate the monitoring its COVID-19 cases.
- Provided recommendations for strengthening its surveillance system and delivered support to analyze and visualize the virus' effective reproductive rate (using EpiEstim) and to project how the virus will spread in each country considering implemented public health measures and its health system (using CovidSIM).



Case management

- Provided therapeutics and technical support to the Ministry of Health to improve case management, providing access to WHO/PAHO clinical management guidelines, on-line training resources and virtual meetings.



Colombia



Country-level coordination, planning, and monitoring

- Worked directly with the Ministry of Health to develop and adapt PAHO guidelines to Colombia's context and to build national capacities to respond to the COVID-19 pandemic.
- Facilitated a bilateral coordination meeting between health authorities from Colombia and Venezuela to formulate strategies to protect the health of border populations.
- Conducted a technical mission with the Ministry of Health to Amazonas state to help local authorities develop a contingency plan. PAHO deployed health workers and delivered medicines, PPE, hygiene supplies, and three ventilators to the local hospital.
- As part of the "Health for Peace" project, worked with the Ministry of Health, IOM, and UNFPA to deliver PPE and strengthen COVID-19 surveillance and health systems in 171 municipalities in the peace building process following decades of violence.



Risk communication and community engagement

- Collaborated with the Ministry of Health and other stakeholders to disseminate radio, television, and Internet-based content to combat misinformation and advise the population on preventing infection, maintaining a healthy lifestyle, and safeguarding mental health, broadcasting via the UN's weekly radio program, Bogota's International Book Fair, and other mediums.
- Delivered risk communication training to 70 media and hospital health workers and to indigenous leaders from the Guajira department. Materials have since adapted to the Wayuunaiki language).



Surveillance, rapid response teams, and case investigation

- Trained health professionals to use Go.Data for contact tracing; to analyze and visualize the virus' effective reproductive rate (using EpiEstim); and to project how the virus could spread considering implemented public health measures and its health system (using CovidSIM).



National laboratories

- Provided technical support for strengthening laboratory diagnostics for COVID-19.
- Delivered 100,000 PCR tests for high-risk populations and priority areas.



Infection prevention and control

- Delivered PPE to Colombia, including for a hospital in Cundinamarca, and a shipment of 440,000 gloves, over 4,000 surgical and N95 masks, and other supplies to Colombia's Air Force for use in the transport of severe cases from remote areas to designated specialized health centers.
- Trained Colombian health professionals, including 70 health workers from 43 clinics from Barranquilla and Atlántico, to estimate needs for PPE and other health supplies.
- Delivered masks to migrants in transit and temporarily sheltered in Ipiales, Nariño.



Case management

- Trained Ministry of Health workers on the reorganization and expansion of health services, primary care, the management of EMTs, and in establishing alternative medical care sites (AMCS).
- Facilitated donations of oxygen concentrators and other supplies Colombia and external parties.
- Trained 70 health workers from hospitals in the Atlántico department to use supply management tools for medicines and other essential items.



Maintaining essential health services during the pandemic

- Worked with UNDP, UNFPA, national authorities, and civil society to organize a service that delivers medicines to the homes of persons considered at high risk of COVID-19.
- Helped national authorities to roll out the national vaccination campaign while reducing the risk of infection. PAHO hired 228 vaccination workers and Delivered vaccination kits and PPE.

Costa Rica



Country-level coordination, planning, and monitoring

- Worked within national emergency operations centers and with other UN agencies, multilateral partners, and foreign missions to coordinate health sector efforts to combat COVID-19.
- Coordinated with counterparts to provide recommendations on adapting PAHO/WHO protocols and methodologies for COVID-19 response, including on the roadmap for progressive lifting of measures, considering four stages of reopening.
- Collaborated in the development of the Call to Action for COVID-19, an international mechanism to ensure access to and the use of the intellectual property of technologies in order to detect, prevent, control, and treat COVID-19, launched on May 29 with WHO.



Risk communication and community engagement

- Improved media presence to battle misinformation on radio, television, and online platforms.
- Disseminated messaging to target migrants, people in shelters, and people in conditions of vulnerability, which included key messages on hygiene, distancing, and mental health.
- Produced a children's book, in collaboration with other UN agencies, 'The Days that Everything Stopped', aiming to explain the crisis and present safety measures in a friendly way.
- Collaborated with the government and other UN agencies to launch campaigns on domestic violence, food safety, children, youth, and fathers, and videos on UN interagency solidarity.



Surveillance, rapid response teams, and case investigation

- Supported national authorities in analyzing surveillance data to project how the pandemic could evolve in the country and in establishing a GIS hub to facilitate the monitoring of COVID-19 cases.
- Worked with counterparts to analyze disease models and potential impact on the health systems.
- Delivered equipment and supplies to the Ministry of Justice and Peace for surveillance.



Points of entry

- Supported authorities in assessing public health measures and provided guidance to workers at points of entry into the country on potential scenarios/health risks related to COVID-19.



National laboratories

- Provided support for the development of a national laboratory plan for COVID-19 surveillance and troubleshooting support in molecular diagnosis.
- Procured materials, including enzymes, internal control primers, PCR tubes, and extraction kits.



Case management

- Prioritized actions to address mental health.
- Worked with priority municipalities and national authorities to strengthen local health services and ensure that the response was targeting vulnerable communities
- Conducted analysis of the impact on hospital services, considering scenarios for projected cases.
- Provided recommendations on implementing alternative medical care sites (AMCS).



Operational support and logistics

- Facilitated the management and distribution of critical supplies using the PAHO/WHO Supply Management System (SUMA).
- Supported the implementation of the WHO COVID-19 Partners Platform.



Maintaining essential health services during the pandemic

- Applied models and tools to help the government assess its health system and plan for reorganizing and strengthening capacities of health services and the Social Security Fund.
- Supported national authorities in the development of strategies to address health needs of migrants, asylum-seekers, and persons returning from abroad (along with UN agencies and NGOs), including children.
- Analyzed how to integrate surveillance of malaria and other diseases such as dengue, with the response to COVID-19.



Cuba



Country-level coordination, planning, and monitoring

- Coordinated with Ministry of Public Health, UN agencies, multilateral partners, and foreign missions to help coordinate efforts by the health sector to combat COVID-19.
- Spearheaded the United Nations System plan with the Ministry of Public Health for an immediate socioeconomic response to COVID-19.



Risk communication and community engagement

- Supported the formulation of key health messages and strategies for risk communication and community participation.
- Prepared list of decision-makers and researchers for information sharing, as well as information packages that have been delivered to the levels of surveillance, care, and management.
- Developed infographics and videos with information on COVID-19 for people with disabilities, maternal and child health, the elderly, and tobacco users.
- Disseminated a package of manuals for psychosocial support, prepared by the department of psychology and mental health.



Surveillance, rapid response teams, and case investigation

- Trained national epidemiological surveillance and analysis teams.



National laboratories

- Acquired equipment and supplies for surveillance and case detection, such as reagents, RNA extraction kits, body bags, means of transporting tests, and other supplies.



Infection prevention and control

- Procured soap, disinfectants, and bio-indicators for cleaning hands, surfaces and autoclave equipment, as well as bags for the safe transfer of laboratory waste and protective equipment for health personnel in charge of patient care.
- Shared and disseminated PAHO and WHO protocols and guidelines for IPC in health facilities, prisons, and long-term care facilities, for consideration by the national authorities



Case management

- Procured oximeters for monitoring the health status of patients being treated for COVID-19 in critical facilities.



Operational support and logistics

- Trained health authorities in estimating the needs for PPE, medicines, and essential supplies, using the PAHO tool.
- Coordinated with the national authorities and UN agencies the use of the global platform, both in the technical and supply areas.



Maintaining essential health services during the pandemic

- Provided guidance on modeling scenarios for health system planning.
- Supported the evaluation of hospital readiness for the management of COVID-19 cases according to PAHO/WHO guidelines.



Dominica



Country-level coordination, planning, and monitoring

- Produced daily COVID-19 briefs for the country.
- Provided in-country colleagues (IOM and UNDP) with PAHO and WHO guidelines and updates.



Risk communication and community engagement

- Participated in training for gender-based violence, immunization, use of the WHO/UNICEF Joint Reporting Form (JRF) for vaccines, Vaccination Week in the Americas, and psychological first aid.
- Conducted media briefing to detail PAHO's in-country support and collaboration with the Ministry of Health.
- Engaged with young people to ensure their participation in the Youth Leader Forum.



Surveillance, rapid response teams, and case investigation

- Disseminated COVID-19 case definitions.
- Shared data collection tools, e.g. Excel line listing, revised case reporting form, and provided guidance on their use to strengthen COVID-19 surveillance.
- Delivered orientation on Go.Data, the WHO contact tracing software.
- Delivered orientation on applying the EpiEstim & CovidSim mathematical models for short-term forecasting of cases.
- Provided technical guidance on the design of a COVID-19 community survey.
- Shared protocols for surveillance, contact tracing and case identification with national health authorities.



Points of entry

- Provided training in infection prevention and control / surveillance / case management at ports.
- Provided technical advice regarding the reorganization of port facilities to facilitate case identification, quarantine/ isolation and referral.



National laboratories

- Disseminated guidelines and protocols for COVID-19 testing.
- Procured/distributed RT-PCR enzymes, sample collection materials, extraction kits and consumables.
- Trained laboratory staff in theoretical aspects of molecular diagnostics.



Infection prevention and control

- Procured Personal Protective Equipment to reduce the risk of infection for health workers.
- Delivered IPC training in Spanish and English to nurses, doctors, allied health care workers.
- Shared IPC guidelines.



Case management

- Delivered training in clinical management of cases, mental health in COVID-19, management of pregnancy in COVID-19, children and disabilities in COVID-19.
- Trained health personnel on the appropriate use of PPE.
- Shared case management guidelines with the country.



Operational support and logistics

- Provided logistics support to clear COVID-19 materials and supplies through customs for delivery to the MOH.
- Maintained close coordination with the MOH on PAHO's support.



Maintaining essential health services during the pandemic

- Provided technical guidance on the reorganization of the health system to respond to COVID-19 cases.

Dominican Republic



Country-level coordination, planning, and monitoring

- Participated in high-level meetings with the Presidency to present PAHO's recommendations for the different scenarios of the epidemic and with the Ministry of Economics, Planning, and Development to prepare a matrix of needs for the different social sectors.
- Held multisectoral meetings, along with the ministry of health, convened by the Emergency Operations Center to prepare and oversee the mitigation and containment plans.



Risk communication and community engagement

- Held media briefings alongside Ministry of Health counterparts to disseminate key messages.
- Briefed the diplomatic corps and government on the International Health Regulations.
- Participated in meetings with the country humanitarian team and donor community.
- Worked with the Ministry of Health and UNHCR to distribute COVID-19 information to health personnel and the public via virtual platforms, and with UNHCR and IOM on key messages for radio and perifoneo (car speaker promotion), which were translated into Haitian creole.



Surveillance, rapid response teams, and case investigation

- Supported the emergency operations center in coordination and epidemiological analysis.
- Conducted training, together with GOARN, on the use of Go.Data for contact tracing.
- Supported the surveillance team, including in simulations, projection models, and supplies.
- Created a dashboard that is updated daily with information from the Ministry of Health.



Points of entry

- Worked with the Ministry of Health to develop materials in English and Spanish for the main points of entry.
- Facilitated a joint meeting with the government and local authorities from Dominican Republic and Haiti, to evaluate coordinated actions to mitigate the epidemic at the border zone.
- Coordinated with UNCT on an action plan to support the country and Haiti through binational cooperation.

- Worked with IOM on surveillance, IHR core capacities, migratory status, and reopening the economy, while ensuring access to services at the border and focusing on Haitian workers.



National laboratories

- Delivered test kits, extraction kits, reagents, and other supplies to the national laboratory.
- Provided diagnostic training for private laboratories, including donating kits.
- Arranged the hiring of human resources to build capacity of the national laboratory.



Infection prevention and control

- Trained health workers in IPC and other key areas, including the proper use of PPEs, sample collection, patient isolation, and other priorities.
- Delivered supplies to the National Council for Elderly People and the Expanded Immunization Program.



Case management

- Trained counterparts from the Ministry of Health and UNHCR on home care guidelines, care for key population groups, and diagnosis and treatment protocols.
- Strengthened capacities for protecting mental health.
- Supported the National Health Services to prepare protocols and manuals.
- Provided guidance to adapt the mechanism so that people with disabilities can report cases by phone or online.



Operational support and logistics

- Provided oxygen tanks, thermometers, and other supplies, as well as protection kits for use among vulnerable groups
- Delivered two vans to be used at two regional health facilities located in the South region.



Maintaining essential health services during the pandemic

- Collaborated with health authorities to evaluate hospital readiness for managing cases.
- Identified health centers for the establishment of alternative medical care sites.
- Supported the country with modelling/estimating efforts to plan, including for ICU and hospital bed needs.

Dutch Island Territories



Country-level coordination, planning, and monitoring

- Supported national authorities and health agencies to formulate strategies to address COVID-19 response.
- Provided technical guidance to focal points in the countries participating in Crisis Management Teams.



Risk communication and community engagement

- Shared and discussed PAHO/WHO guidelines for risk communication, especially physical distancing, use of masks, re-opening of schools, coping with the stressors, and safe hygiene practices.
- Provided technical guidance to Sint Maarten on how to reach the migrants (mainly the Haitian community) in the community to provide information on physical distancing and safe hygiene practices and to encourage those feeling ill to get tested. This community does not have insurance, and they do not speak English or Dutch.
- Shared guidelines on reopening, especially for hotels and other accommodation, with Aruba, Curacao, and Sint Maarten.



Surveillance, rapid response teams, and case investigation

- Hosted a webinar on COVID surveillance and interruption of transmission.
- Provided technical support to Aruba, Curacao, and Sint Maarten to enhance the collection and analysis of surveillance data for submission of reports to PAHO/WHO that are reflected in the COVID-19 dashboard.
- Held discussions with the Sint Maarten Department of Health about contact tracing protocols for COVID-19 cases, all of which were imported and arrived before the borders were closed.



Points of entry

- This area is under the remit of the Dutch Public Health Agency (RIVM).



National laboratories

- Shared PAHO/WHO guidelines on COVID-19 PCR testing with Sint Maarten Department of Health and provided guidance on the limitations of the use of rapid testing, which was presented to the Council of Ministers.
- Shared WHO guidelines with Saba for the establishment of a drive-through testing facility.



Infection prevention and control

- Provided technical assistance with the development of the infection prevention and control (IPC) guidelines for the elderly and long-term care facilities, children's homes and residential healthcare facilities.
- Hosted a webinar on the reopening of schools in the context of COVID-19.
- Provided technical assistance on infection prevention and control for homecare of patients with mild COVID-19 symptoms.



Case management

- Conducted a virtual session on COVID-19 clinical management for all Dutch-speaking countries/territories.
- Provided technical guidance to Aruba and Curacao on mental health and psychosocial support for COVID-19 and ensured participation in all virtual mental health webinars.



Maintaining essential health services during the pandemic

- Provided technical assistance to Aruba and Curacao on the reorganization of mental health services as they move through the different phases of reopening.
- Commenced work with Aruba on a roadmap and proposed methodology for the development of the National Health Plan, considering the reorganization and streamlining of the healthcare system to improve the efficiency of their response to future disasters.
- Provided support to Aruba and Curacao to purchase vaccines to maintain the implementation of their immunization programs.



Ecuador



Country-level coordination, planning, and monitoring

- Collaborated directly with the Ministry of Health Ecuador and its health emergency operations center to develop and implement the Ecuador Preparedness and Response Plan for COVID-19.
- Worked with the country's health sector working group (MTT2), where PAHO helped adapt and adopt PAHO and WHO protocols and methodologies for epidemiological surveillance, points of entry, IPC, case management, coordination, and risk communication.
- Deployed experts in surveillance, contact tracing, reorganization of health services, organization of national emergency response structure.
- Conducted a joint PAHO-Ministry of Health mission to Guayaquil and other coastal cities, as well as the province of Manabí and in the Galapagos.



Risk communication and community engagement

- Supported the Ministry of Health to develop and implement its National Plan for Communication to address COVID-19 and reviewed the protocol for preventing COVID-19 in indigenous peoples and other groups.
- Trained journalists and communicators from Afro-descendent populations, indigenous groups, and the Montubio population, to disseminate key messages and exchange strategies, and held weekly engagement meetings with community and youth leaders from these groups.



Surveillance, rapid response teams, and case investigation

- Supported the Ministry of Health to develop and implement national guidelines for COVID-19 containment and mitigation; analyzed COVID-19 trends and excess mortality.
- Delivered computer equipment to the national situation room and contracted 13 data officers to manage province-level databases.



Points of Entry

- Provided technical guidance to Ecuador's national center for IHR, including support with weekly information updating and technology equipment for information management and analysis.



National laboratories

- Provided technical guidance on molecular diagnostics to the country's decentralized laboratory network in Quito y Cuenca and delivered laboratory supplies for approximately 100,000 tests.
- Facilitated the exchange of experiences in COVID-19 molecular diagnostics with Bolivia and Peru.



Infection prevention and control

- Supported the Ministry of Health to develop and implement IPC guidelines for the health sector.
- Provided PPE and body bags to support the country's COVID-19 response and the management of cadavers.



Case management

- Provided assessments for reorganizing and expanding Ecuador's health services to respond to COVID-19. This included a province-level analysis and identification of gaps for 303 hospitals.
- Trained Ecuador's country teams to manage emergency medical teams (EMTs), establish alternative medical care sites (AMCS), and use tents and adapted housing units for triage.
- Trained health workers from 279 public and armed forces hospitals to assess their readiness to face the COVID-19 pandemic.
- Supported the development of guidelines for patient management, neonatal management, and pregnant women.



Operational support and logistics

- Trained logistics officers to use the SUMA and SISTOCK software programs for managing supplies and medicines during emergencies.



Maintaining essential health services during the pandemic

- Worked with the Ministry of Health and other partners to assess strategies to ensure continuity in vaccination, malaria, tuberculosis, and HIV/AIDS programs.



El Salvador



Country-level coordination, planning, and monitoring

- Served in the government's situation room with members of the expanded health cabinet.
- Supported the country in the national response plan that identifies priorities and gaps.
- In coordination with the UN System, developed a UN Response Plan and Humanitarian Support Plan for COVID-19. PAHO coordinates the Health Cluster in the Humanitarian Country Team.



Risk communication and community engagement

- Supported the Government in a risk communication campaign targeting 14 departments by participating in press conferences held by the expanded health cabinet, a national broadcast by the President. The PWR reinforced prevention messages, and interview spaces in the mass media positioning PAHO as an official source of information.
- Trained communicators from different institutions and disseminated manuals and graphic materials.



Surveillance, rapid response teams, and case investigation

- Supported with modeling scenarios for health system planning and provided technical guidance for epidemiological surveillance, with a focus on active case finding, contact tracing, information management, data analysis, and laboratory aspects, following PAHO/WHO guidelines. All the information related to COVID-19 is reported in the website <https://covid19.gob.sv/>.
- Intensified surveillance to detect cases of pneumonia or respiratory diseases.



Points of entry

- Prepared technical recommendations related to border closures with intensified search for suspected cases in travelers, risk communication, update on protection measures for personnel at entry points, and delivery of PPE.



National laboratories

- Delivered RT-PCR tests, laboratory supplies and PPE to the national authorities and provided technical support to the NIC to reinforce sentinel surveillance and incorporate SARS-COV-2.
- Provided tailored training and troubleshooting on COVID-19 testing.



Infection prevention and control

- Developed a training program and PPE for health personnel for an appropriate response to cases.



Case management

- Supported the country in preparing hospitals to care for confirmed cases. The country has invested more than US\$ 28 million in preparing hospitals with a capacity of 90 ICU beds. In addition, a new hospital is under construction that will have the capacity to care for 1,000 cases of moderate complexity in the ICU and 2,000 hospitalized patients. Centers for treatment of patients with mild conditions were built with a total capacity of 800 beds.



Operational support and logistics

- Established LSS-SUMA in the Logistics Center to receive and coordinate donations and purchases related to the COVID-19 pandemic.
- Trained 13 staff from the General Directorate of Civil Protection and the Health Solidarity Fund in aspects of logistics and the management of supplies.
- Contributed to the strengthening of hospitals with the procurement of equipment and supplies.



Maintaining essential health services during the pandemic

- Supported the government to inspect all 30 hospitals in the public health network in February 2020, which allowed them make adjustments/improvements to respond to the pandemic.
- Worked with the authorities to reorganize health services to strengthen the first level of care.

French Departments in the Americas

(French Guiana, Guadeloupe, Martinique)



Surveillance, rapid response teams, and case investigation

- Shared PAHO's surveillance guidelines to facilitate the exchange of epidemiological information between the French departments (Guadeloupe, Martinique, and French Guiana), the IHR focal point in France, and the IHR regional contact point for the Americas.
- Shared COVID-19 case definitions with department-level health authorities
- Facilitated the sharing of information between French Guiana, Suriname, Guyana, and Brazil regarding the dynamics of COVID-19 in the Guyanese Shield.



Points of entry

- Collaborated closely with counterparts from the French Departments to conduct joint risk assessments, particularly on the outbreaks on cruise ships and their movement in the Caribbean.



National laboratories

- Shared PAHO and WHO guidelines for laboratory molecular testing.



Case management

- Facilitated the exchange of the French Departments' experiences in COVID-19 clinical management with other countries and territories in the Eastern Caribbean.



Grenada



Country-level coordination, planning, and monitoring

- Strengthened the national Influenza Pandemic Plan to adapt to COVID-19.
- Strengthened the coordination of the COVID-19 response at the national level.



Risk communication and community engagement

- Produced and distributed posters and booklets on preventive public health measures.
- Provided banners for placement at points of entry.
- Supported the country to develop social media tools and public service announcements to address stigma.



Surveillance, rapid response teams, and case investigation

- Introduced data collection tools, e.g. Excel line listing, revised case reporting form.
- Offered training on Go.Data, the WHO contact tracing software for data capturing and monitoring the chain of transmission.
- Provided orientation on EpiEstim & CovidSim, mathematical models for short-term forecasting of COVID-19 cases.
- Contracted a short-term surveillance officer to strengthen contact tracing.



Points of entry

- Assessed existing capacities at the international airport to ensure surveillance systems.
- Provided technical guidance on considerations for the phased reopening of borders.



National laboratories

- Disseminated guidelines and protocols and provided training for RT-PCR detection.
- Procured sample collection materials, a RT-PCR machine, enzymes, extraction kits, and other supplies.



Infection prevention and control

- Strengthened infection prevention and control capacity for healthcare workers (HCWs) through in-person and virtual training and provided of Personal Protective Equipment.
- Supported the country's reopening strategy by providing training to hotel workers where hotels are being utilized as quarantine sites for repatriated Grenadian nationals.



Case management

- Provided training in hospital bed assessment and supplies management tools.
- Strengthened the country's ability to deliver mental health and psychosocial support (MHPS) in the context of COVID-19 to HCWs.
- Strengthened tele-health services and community engagement to provide psychosocial support.



Operational support and logistics

- Supported the delivery of supplies/equipment through the Regional Security System.



Maintaining essential health services during the pandemic

- Using the Virtual Campus in Public Health, two case studies were tailored to HCWs.
- Strengthened the country's ability to deliver mental health and psychosocial support (MHPS) in the context of COVID-19 to HCWs. Conducted technical webinars on the reorganization and expansion of services, including managing emergency medical teams (EMTs), maternal and perinatal care, children with disabilities, and the Expanded Program on Immunization (EPI).

Guatemala



Country-level coordination, planning, and monitoring

- Collaborated with coordinating mechanisms such as the EOC, IHR Committee, and the Health Cluster.



Risk communication and community engagement

- Produced risk communication materials and trained personnel to better inform the public, including almost 70,000 posters on various topics such as handwashing, isolation, and PPE.
- Convened a meeting with 260 journalists, in coordination with other UN agencies.
- Supported the translation of messages for health services in five Mayan languages.



Surveillance, rapid response teams, and case investigation

- Provided training to 300 surveillance, laboratory, hospital, and social communication personnel.
- Supported the country in analyzing and visualizing the virus' effective reproductive rate and in projecting how the virus will spread, considering implemented public health measures.
- Provided training on Go.Data, a contact tracing tool.



Points of entry

- Supported the government, along with other partners, to identify designated COVID-19 facilities, managing points of entry, and working with individuals returning from abroad.
- Supported the MOH in conducting a simulation exercise to prepare for outbreaks.



National laboratories

- Conducted training on laboratory response through subregional training at the InDRE in Mexico. Provided primers, probes, enzymes, and kits to conduct PCR tests.



Infection prevention and control

- Provided training to 430 hospital workers on IPC measures and provided guidance on assessing the temporary facility for COVID-19 patients in Guatemala City and in 13 hospitals.
- Provided training on PAHO/WHO safety standards with Ministry of Health at 9 hospitals and 3 hotels.



Case management

- Provided technical support on medical care to 10 hospitals; supported the organization of the temporary hospital; and provided guidance on planning for human resources for health.
- Provided guidance on preparing healthcare facilities for treating infected persons, and for intensive care.
- Trained more than 100 people on prehospital emergency services.
- Advised Ministry of Health on hospital coordination for expanding health services and using the hospital readiness checklist.
- Worked with private sector health facilities to ensure continued testing of cases.
- Provided guidance on treating child and adult patients, pregnant women, newborns, adolescents, and for family planning.



Operational support and logistics

- Provided training on the use of tools to calculate needs for supplies, medications, and PPE.
- Provided support on logistics and incident management, as well as procurement mechanisms.
- Facilitated donations of oxygen concentrators and other related supplies.



Maintaining essential health services during the pandemic

- Promoted measures that protect people in conditions of vulnerability, including people with disabilities, pregnant women, newborns, migrant populations, among others.
- Supported country in developing strategies to address health-related issues arising from migrants, asylum-seekers, and persons returning from abroad.
- Supported country on mental health in the context of COVID-19; on defining essential actions on sexual and reproductive health; and ensuring continuity of essential supplies for HIV, TB, and malaria.



Guyana



Country-level coordination, planning, and monitoring

- Assisted with the activation of the Health Emergency Operating Centre (HEOC).
- Revised the terms of reference and standard operating procedures for the HEOC.
- Worked within national emergency operations centers and with other UN agencies, multilateral partners and foreign missions to support coordination of health sector efforts to combat COVID-19.
- Assisted with the development of the COVID-19 Preparedness and Response Plan.
- Assisted with the development of a Risk Assessment of COVID-19 Public Health and Social Measures.



Risk Communication and Community Engagement

- Conducted periodic COVID-19 press conferences with the local media, in collaboration with the Government.
- Assisted with the development and distribution of COVID-19 Information, Education and Communication materials.
- Conducted COVID-19 sensitization sessions with UN staff.
- Provide technical support to the Ministry of Public Health to conduct of public symposiums.
- Assisted in the preparation of the national risk communication plan.



Surveillance, rapid-response teams, and case investigation

- Conduct training on contact tracing and case definition.
- Developed situation report template for daily reporting by the HEOC.
- Provided technical support for the implementation of Go.Data for case management, contact tracing and follow-up.
- Provided technical support and training in the area of epidemic modeling to define potential disease scenarios and their implications in the adoption, adjusting and lifting of social distancing measures adopted by the Ministry of Public Health.



Points of entry

- Identified and mapped official and informal points of entry and provided technical support to undertake a baseline assessment of key capacities and resources needed for screening and referral of suspect imported cases.

- Assisted with the development of a point-of-entry surveillance tool and conducted training on COVID-19 case definition.
- Provided technical support for the estimation of supplies, equipment and needs for PPE required to establish isolation area at all official and informal points of entry.



National laboratories

- Strengthened laboratory capacities through the provision of enzymes, internal control primers, PCR tubes, extraction kits to support early testing and detection.
- Strengthened laboratory capacities by providing training in theoretical aspects of molecular diagnostics.
- Provided troubleshooting support regarding testing procedures and sample collection.
- Provided technical support to project the costs for laboratory supplies needed to provide diagnostic support epidemic scenarios.



Infection prevention and control

- Provided training to improve IPC standards in isolation units at hospitals providing case management for COVID-19 patients.
- Estimated the demand PPE required at all levels of care, including frequency of use, targeted staff, type of PPE per function. Provided cost estimates.
- Conduct Hospital Readiness Assessment.



Case Management

- Estimated expected hospital care demand and determined additional number of ICU and intermediate care needs in terms of beds, equipment, and human resources to address the epidemic and determined costs of all additional resources needed.
- Defined with national counterparts the model of care for COVID-19; mapped 42 key geographic areas to focus response (cities, towns and points of entry that can be potential hotspots for the epidemic); defined referral pathways and transport needs.



Operational Support and Logistics

- Assessed procurement process and needs.
- Provided the country with additional Personal Protective Equipment (PPE) and COVID-19 test kits.
- Assisted with the coordination of supplies/needs through global procurement mechanisms.



Maintaining essential health services during the pandemic

- Trained national authorities on key aspects for building national EMT capacity.
- Trained national authorities in techniques to estimate the health sector needs, and how to expand health services.
- Provided technical support to the MoPH to design and adopt:
 - A telemedicine initiative to improve access to maternal and child services at the primary health care (PHC) level due to COVID-19 impact.
 - a response plan of action for mental health and psychosocial support for COVID-19, which prioritizes affected populations and health workers.



Haiti



Country-level coordination, planning, and monitoring

- Coordinated with national authorities to evaluate hospital readiness for managing cases, in alignment with PAHO guidelines.
- Supported the Ministry of Public Health and Population (MSPP, in French) National Emergency Response Unit (UNGUS) to improve coordination.
- Supported the National Multisector Commission for the Management of the COVID-19 Pandemic (CMGP COVID-19) to coordinate between national and subnational levels.



Risk communication and community engagement

- Deployed two missions to train 42 workers in two departments in risk communications.
- Translated educational materials to Haitian Creole.
- Supported the MSPP to update its webpage to add information on COVID-19, including the daily national situation report.
- Supported the MSPP Communication Unit to ensure teleworking capacities.



Surveillance, rapid response teams, and case investigation

- Collaborated with partner international agencies IOM, UNFPA and UNICEF to strengthen surveillance at the border with Dominican Republic.
- Strengthened surveillance in seven priority Departments.
- Contracted workers in the Nord-Est Department to carry out contact tracing.
- Trained national counterparts in the use and management of Go.Data, WHO's contact tracing tool to better follow up on cases and possible contacts.
- Implemented Go.Data in facilities to support contact tracing.



National laboratories

- Supported the orientation of 12 nurses, initially trained to work on cholera, to support sampling of suspected cases.
- Strengthened laboratory capacities by providing enzymes, internal control primers, PCR tubes, extraction kits to support early testing and detection.



Infection prevention and control

- Distributed WASH kits to COVID-19 health institutions and non-COVID-19 institutions doing early detection of suspected cases.
- Trained 1,048 healthcare workers in the appropriate use of PPE (both in COVID case management health institutions and in institutions with triage and isolation capacities).



Case management

- Trained 17 healthcare workers in oxygen therapy and respiratory rehabilitation.
- Conducted training of trainers in early detection in North and North-East Departments.
- Trained personnel of 21 health institutions in the proper set-up of an isolation room, following WHO guidelines.
- Supported 20 health institutions in the set-up of early detection and isolation of suspected COVID-19 cases.
- Distributed Personal Protective Equipment (PPE) kits to COVID-19 case management health institutions.
- Distributed early detection kits to health institutions with triage and isolation capacities.



Maintaining essential health services during the pandemic

- Conducted missions to various health institutions to provide recommendations and examine progress made to strengthen health care capacity.



Honduras



Country-level coordination, planning, and monitoring

- Collaborated with authorities on the COVID-19 Preparedness and Response Plan and later revisions.
- Supported a mission of experts in health systems for emergencies and health workers protection.
- Supported the authorities in resource mobilization to support the response to the epidemic.



Risk communication and community engagement

- Developed a risk communication strategy, in collaboration with other UN agencies, and provided technical cooperation to develop a risk communication plan for the Secretariat of Health.
- Convened media briefings alongside counterparts, worked with journalists and health facilities, and used social networks to disseminate key messages.
- Translated risk communication materials into indigenous languages to disseminate information on hygiene, the use of PPE, and other key issues.
- Financed and developed many communication resources for the Secretariat of Health.



Surveillance, rapid response teams, and case investigation

- Conducted training, together with GOARN, on the use of Go.Data for contact tracing.
- Supported the country to develop models and scenarios using existing epidemiological data, which has helped with targeting rapid response teams (RRTs).
- Deployed surveillance teams to the most affected Departments to support and train RRTs.
- Worked with authorities to adapt surveillance, laboratory, and case management guidelines and protocols to the country's context.
- Provided support on integrating COVID-19 into the SARI/ILI surveillance system, implemented a single information system (PAHO-Flu) and situation rooms, and trained personnel at sentinel sites to use PAHO-Flu for COVID-19.
- Designed a self-learning course for RRTs to expand their coverage.



Points of entry

- Worked with authorities from various sectors to adjust points of entry according to the IHR, providing training, guidelines, equipment, risk communications materials, and PPE.



National laboratories

- Provided targeted support to build laboratory capacities, with a focus on integrating private and university laboratories, as well as troubleshooting support in molecular diagnosis.
- Provided training to the virology laboratory on timely RT-PCR testing.
- Supported the procurement of laboratory materials, equipment and supplies.
- Mobilized resources to provide equipment for three laboratories in strategic geographical areas.



Infection prevention and control

- Delivered PPE, procured by PAHO/WHO, to hospitals throughout the country.
- Designed a self-learning course for health workers on the optimum use of PPE.
- Promoted PAHO/WHO virtual training courses through a platform on the PAHO country website.
- Trained health professionals, NGOs, government officials, and other partners on IPC.



Case management

- Prepared courses for the PAHO Virtual Campus for Public Health on home care of patients with mild symptoms and care for pregnancy, childbirth, and the puerperium during the pandemic.
- Delivered guidelines, protocols, and updates to the Secretariat of Health.



Operational support and logistics

- Provided support to develop modeling of the impact of the pandemic for planning purposes.
- Supported the Secretariat of Health in planning, quoting, and procurement of supplies.
- Delivered planning tools for beds, PPE, equipment and supplies and provided financial support for ventilators.



Maintaining essential health services during the pandemic

- Provided guidance on preparing healthcare facilities for treating people infected with COVID-19.
- Advised on maintaining logistical systems and cold chain for routine vaccination programs and services for maternal and mental health, dengue, and diabetic patients during the pandemic.



Jamaica



Country-level coordination, planning, and monitoring

- Worked within national emergency operations center (EOC) and other UN agencies, multilateral partners, and foreign missions to help coordinate health sector efforts.
- Procured and distributed digital thermometers, hand-held non-contact infrared scanners and 43 tablets to the Ministry of Health and Wellness (MOHW) EOC team.
- Worked with the national disaster mechanism led by the Prime Minister and within health EOC to provide guidance on health preparedness/response/recovery.
- Prepared proposals for resource mobilization and implemented work plans for multiple partners/donors.
- Collaborated with the MOHW for weekly and monthly submission of WHO COVID-19 indicators.
- Provided guidance to the Technical Working Group of the HSS project of the MOHW.



Risk communication and community engagement

- Produced a video championing healthcare workers in support of International Nurses Day.
- Disseminated PAHO's video on mental well-being / coping with stress during isolation.
- In collaboration with UNICEF, produced infographics tailored to pregnant women and lactating mothers. This is in addition to two videos tailored to seniors.
- Produced a one-page advertorial on tobacco cessation: "COVID is no joke, it gets worse with smoke".
- Developed animations on mental health and physical wellbeing.
- Produced video/materials for blood donations under the title "Safe blood saves lives."
- Undertook a rapid risk assessment of communications needs for vulnerable groups to inform risk communications strategies in advance of the 'now normal' phase.
- Supported the production of weekly 'Ask the Experts' Facebook live sessions.
- Supported training for journalists on responsible reporting on COVID-19.



Surveillance, rapid response teams, and case investigation

- Provided equipment to support field epidemiology/data collection in priority parishes.
- Trained health care workers in the WHO surveillance protocol for SARS-CoV-2.
- Trained field teams to use Go.Data and provided 25 tablets to expand contact tracing.



Points of entry

- Worked with the MOHW to reinforce training on IHR (2005) compliance for officials from the health sector, airports/seaports, immigration, customs and the Jamaican Defense Force.
- Collaborated with the MOHW to provide technical guidance on appropriate procedures at points of entry for the phased re-opening of borders to international travelers.
- Co-hosted, with the MOHW, the IHR Stakeholders Advisory Group, with representatives of all Ministries, Departments and Agencies, the Airports and Ports Authorities and Jamaican Defense Force on their roles within the IHR (2005) in the context of COVID-19.



National laboratories

- Provided technical advice to national authorities to review the NIC's testing protocols.
- Strengthened laboratory capacities by providing enzymes, internal control primers, PCR tubes, extraction kits to support early testing and detection.
- Strengthened laboratory capacities through training in theoretical aspects of molecular diagnostics, and troubleshooting support for testing procedures and sample collection.



Infection prevention and control

- With UNAIDS, trained members of 11 civil society organizations working in HIV/AIDS in IPC measures.
- Revised the National Strategy for Infection Control to cover COVID-19 response.
- Provided recommendations for use of non-traditional facilities as treatment centers.



Case management

- Facilitated the completion and submission of the MOHW EMT National Response Matrix.
- Provided technical advice to national counterparts to identify potential isolation facilities.
- Provided technical support for the establishment of Alternative Medical Care Sites (AMCS).
- Remained embedded in the MOHW EOC, supporting the updating of standards for quarantine and isolation facilities.
- Provided guidance/support in nutritional management/breastfeeding during COVID-19.
- Developed guidelines aimed at keeping businesses/offices safe for returning workers.
- Provided technology/communications equipment to assist with operations and logistics.



Maintaining essential health services during the pandemic

- Provided technical analysis/advice on the reorganization of health services.
- Worked with MOHW and the regulatory agency to share crisis management guidance.
- Supported acquisition of antiretrovirals (ARVs) for maintenance of HIV treatment during the response.
- Supported the development and implementation of COVID-19 Research Agenda.
- Provided support for the upgrade of the information infrastructure in 110 health facilities.



Mexico



Country-level coordination, planning, and monitoring

- Collaborated with emergency operations centers and other UN agencies, multilateral partners, and foreign missions to help coordinate health sector efforts to combat COVID-19.
- Provided recommendations on adapting PAHO/WHO protocols for COVID-19 response.
- Worked with state of Chiapas on approaches to prevention, detection, treatment, and control.



Risk communication and community engagement

- Disseminated critical, tailored information on COVID-19 through national media and improving country office media presence to battle misinformation.
- Partnered with UNHCR, IOM, UNICEF, and the ICRC to ensure a coordinated approach to communicating risk, and trained UNHCR staff in risk communications and the use of PPE.
- Delivered risk communication training to state leaders to boost health promotion efforts.
- Distributed weekly analysis of public risk perceptions, social behaviors, and recommendations among decision makers, policy makers, and international cooperation agencies.
- Engaged in dialogue on response strategies, reopening, and the challenges of the new normal.
- Collaborated with the National Institute of Indigenous Peoples to develop radio COVID-19 prevention messages in 68 indigenous languages, reaching an estimated 16 million people.



Surveillance, rapid response teams, and case investigation

- Provided guidance on adapting surveillance, laboratory, IPC, case management, risk communication, and health promotion strategies to the country's context.



Points of entry

- Coordinated with the Secretariat of Health, IOM, ACNUR and ICRC to design infection prevention measures to detect possible cases among returnees arriving at entry points.
- Shared recommendations with the country as it considered reopening its tourism sector.



National laboratories

- Provided guidance to the national laboratory, InDRE, to update guidelines and build capacities.
- Provided tailored training and troubleshooting on COVID-19 testing.
- Donated laboratory test kits, extraction kits, enzymes, internal controls, and other supplies.



Infection prevention and control

- Supported the formulation and implementation of IPC measures in psychiatric hospitals.
- Provided training for use of PPEs.



Case management

- Provided support to draft a PHC-based strategy for the first level of care to search for alert signs in people suspected of COVID-19 and maintain under control persons at risk; with community-sensitive health promotion and risk communication messages.
- Provided support on recommendations to improve case management of COVID-19 patients.
- Provided support to draft and implement a strategy for rotation of clinical personnel (doctors and specialized nurses) in a bid to strengthen clinical capacities given strained health services.
- Strengthened capacities for protecting mental health, including measures to prevent suicide.



Operational support and logistics

- Provides technical recommendations on the selection of equipment and medical devices for COVID-19.
- Trained health authorities in estimating PPE needs using PAHO's tool.



Maintaining essential health services during the pandemic

- Provided guidance on preparing healthcare facilities for treating people infected with COVID-19.
- Supported the provision of essential health services for persons with chronic diseases, including through the HEARTS project, and coordinated with authorities from Yucatan, Sonora, Campeche, and other entities on the use of telemedicine for managing chronic diseases.
- Provided intersectoral support to address risk factors for NCDs in the context of COVID-19.
- Supported the National Network of Clinicians of Reference for dengue and other arboviruses to provide guidance for the States in the clinical management of dengue.
- Supported the response to the measles outbreak and drafting differential diagnostic algorithms for Measles, Dengue, and COVID-19.
- Promoted measures to protect people in conditions of vulnerability, including implementing a National Commission to Care for Vulnerable Populations in Emergency Conditions.
- Collaborated in drafting a national guide for COVID-19 targeting pregnant women and newborns and provided recommendations to professionals from Chiapas, Guerrero, San Luis Potosí, and Veracruz on caring for pregnant women with COVID-19 symptoms.
- Shared SIP-COVID tool with authorities and trained officials from Centro Nacional de Equidad de Género y Salud Reproductiva and the Dirección General de Epidemiología.
- Supported country in addressing health-related issues of migrants, asylum-seekers, and persons returning from abroad (in coordination with UN agencies and NGOs).



Nicaragua



Country-level coordination, planning, and monitoring

- Evaluated the readiness of the health services, including in infection prevention and control.
- Prepared recommendations to the MINSA protocol of care for the response to COVID-19, both in the first and second levels of health care.
- Applied checklist for COVID-19 response readiness at designated hospitals.
- Provided technical cooperation for the organization of Emergency Operations Centers at the local and national levels.



Risk communication and community engagement

- Provided targeted support for the development of a communication plan.
- Provided technical cooperation for the development of messages in accordance with PAHO/WHO recommendations.
- Delivered 70,200 units of posters, banners, and flyers for the prevention of respiratory diseases and 40,540 on the promotion of healthy habits.
- Updated the Nicaragua node on the PAHO Virtual Campus for Public Health with COVID-19 relevant WHO and PAHO publications and scientific articles.



Surveillance, rapid response teams, and case investigation

- Conducted training, together with the Global Alert and Response Network (GOARN), on the use of Go.Data for contact tracing.
- Supported country in establishing a GIS hub to facilitate the monitoring of COVID-19 cases.



Points of entry

- Supported the preparation of a binational cross-border plan (Costa Rica and Nicaragua) for the timely detection of suspected cases and contact tracing.



National laboratories

- Provided primers, probes, and swabs for the molecular detection.



Infection prevention and control

- Collaborated with WHO to deliver personal protection equipment (PPE).
- Dispatched gowns, shoe covers, and goggles to support the country in preventing infections among health workers.



Case management

- Accompanied the Cuban medical brigade “Henry Reeve” in the exchange of experiences with Nicaragua on surveillance, contact identification and tracing, case management, and application of non-pharmaceutical measures such as social distancing.
- Coordinated with the National System for the Prevention, Mitigation and Response to Disasters (SINAPRED) to train and implement COVID-19 care protocols with the institutions providing prehospital services.



Operational support and logistics

- Coordinated with institutions providing pre-hospital services (Nicaraguan Red Cross and Federation of Fire Departments) in order to establish care protocols according to the recommendations of the guide for Pre-Hospital Medical Emergency Services.



Maintaining essential health services during the pandemic

- Provided technical cooperation to organize vaccination week, adapt immunization services to COVID-19 context, implement Malaria Elimination Initiative, and strengthen the national regulatory authority.



Panama



Country-level coordination, planning, and monitoring

- Activated a joint PAHO-Ministry of Health situation room; supported national authorities to develop and implement the country's national COVID-19 response plan.
- Adapted protocols for surveillance, laboratory, case management, and risk communication to Panama's context.
- Worked with national authorities to assess the effectiveness of implemented public health measures as the government considers how to gradually reopen different work sectors.



Risk communication and community engagement

- Worked with the Ministry of Health and the Presidency of the Republic to develop, adapt, and disseminate COVID-19-related communication materials in Spanish and indigenous languages.
- Trained health promoters in risk communications and coordinated closely with the Ministry of Indigenous Affairs to reach the Guna-Yala and Ngäbe-Buglé indigenous populations and with the IOM and UNHCR to reach migrants.



Surveillance, rapid response teams, and case investigation

- Trained epidemiological personnel in COVID-19 surveillance and analysis.
- Supported the Ministry of Health to build a database of COVID-19-related data that supports case management and collaborated in data analysis, with a focus on detecting imported cases.



Points of Entry

- Worked with health authorities, points of entry officials, and the IHR focal point to establish systems to improve surveillance for possible cases; delivered PPE and other supplies.



National laboratories

- Provided training and supplies to the network of 11 laboratories to perform molecular detection of SARS-CoV-2, essential for contact tracing and outbreak investigation.
- Supported the country to formulate a strategy to expand testing across the country.



Infection prevention and control

- Delivered 25 air-conditioned tents with generators; and other equipment to establish field hospitals for triaging patients from Panama's public hospitals.
- Provided recommendations to mitigate new infections as restrictions are gradually lifted.



Case management

- Analyzed health system capacities, shared guidance to help Panama reorganize and expand its health services, and created a dashboard to track health system indicators and ICU beds.
- Trained 17 participants from the Ministry of Health to use PAHO's tool for planning for the progressive expansion of hospital capacity.



Operational support and logistics

- Worked with health authorities to help manage donations for a field hospital that provides care and shelter for the general population as well as migrants.



Maintaining essential health services during the pandemic

- Supported the Ministry of Health to develop strategies to ensure the continuity of essential health services and key programs (vaccinations, NCDs, malaria, tuberculosis, dengue, and others) during this pandemic; developed mechanisms for health authorities and pharmacies to follow up with chronic patients and to provide home delivery of medicines.



Paraguay



Country-level coordination, planning, and monitoring

- Worked with the Ministry of Health to develop and implement Paraguay's National COVID-19 Pandemic Response Plan, establish its national Emergency Operations Center, and adapt and adopt PAHO and WHO protocols and methodologies to the country's context.
- Worked with the emergency operations team to activate and guide department-level centers.
- Strengthened Ministry of Health and the National Secretariat for Human Rights for Persons with Disabilities (SENADIS) to improve health access for persons living with disabilities.



Risk communication and community engagement

- Supported the Ministry of Information, Technology, and Communications to disseminate Guaraní and Spanish-language risk communication materials.
- Trained 50 health communicators and 40 journalists in risk communication for COVID-19.



Surveillance, rapid response teams, and case investigation

- Worked with national authorities to establish COVID-19 surveillance systems in shelters housing migrant workers returning from abroad.
- Provided guidance for establishing a call center for persons who suspect they may be infected with COVID-19.



Points of Entry

- Developed communication materials for travelers and/or returning citizens who arrive at land and air points of entry.



National laboratories

- Provided training and guidance to the Ministry of Health to conduct PCR testing for COVID-19. Delivered supplies for PCR diagnostics, and assessed needs for capacity building.
- In close collaboration with Paraguay's Central Public Health Laboratory, worked with the Ministry of Health and the Ministry of Agriculture and Livestock to install COVID-19 testing capacities within the reference veterinary laboratory, in alignment with PAHO protocols and guidelines.



Infection prevention and control

- Trained health workers to reduce infections among persons with disabilities, with support from UNHCR and AECID.
- Distributed PPE and provided IPC training to health workers, Ministry of Justice for long-stay facilities, and the Ministry of Labor for workspaces.
- Supported the country to adapt hotels and similar spaces for isolation and patient care.



Case management

- Trained health personnel to reorganize and expand health services (i.e., case management, safe management of cadavers).
- Assessed estimated needs for expanding Paraguay's health services to manage COVID-19 cases.
- Provided support to the national authorities to adapt military facilities, hotels, and other locations at Paraguay's borders as Alternative Medical Care Sites in line with EMT/AMCS recommendations for returning persons from abroad.



Operational support and logistics

- Guaranteed logistics planning, coordination and management for critical supplies, medicines, and equipment.



Maintaining essential health services during the pandemic

- Implemented communication campaigns on NCDs, mental health, violence and COVID-19.
- Worked with the Ministry of Health to implement a protocols and guidelines to maintain essential services (maternal, child, and adolescent health, vaccination, etc.).
- Technical cooperation to strengthen mental health services in COVID-19 and reform of the country's current mental health system.

Peru



Country-level coordination, planning, and monitoring

- Worked directly with national counterparts from the Ministry of Health and Wellbeing and its emergency response team to develop and implement Peru's Plan of Action for Surveillance, Containment, and Care for New Cases for COVID-19.
- Worked with counterparts from the Ministry of Health to tailor guidelines for surveillance, IPC, health promotion, clinical management, and other topics to Peru's context.
- Worked with the regional governments from Ancash and Loreto to train health workers in COVID-19 prevention, detection, treatment, and control activities. PAHO deployed teams for information management, logistics, surveillance, and inventory management to health facilities.
- Engaged the private sector as a partner in expanding the health sector's capacity.



Risk communication and community engagement

- Coordinated with national authorities and the army to launch a COVID-19 community plan in the department of Ucayali, reaching 3.8 million persons.
- Developed communication materials on home care for COVID-19 patients, physical distancing, mental health, NCDs, protecting persons living with disabilities, and other issues.
- Held media briefings alongside Ministry of Health counterparts to disseminate key messages to the population and jointly trained 30 journalists from Pasco in risk communication.



Surveillance, rapid response teams, and case investigation

- Supported the development of a national epidemiological plan and in its implementation with a focus on improving information management, forecasting, and points of entry surveillance.
- Developed a platform for managing COVID-19 case notification and information sharing along the Leticia-Tabatinga-Santa Rosa border areas between Brazil, Colombia, and Peru.



Points of Entry

- Developed communication materials for travelers arriving at land and air points of entry.



National laboratories

- Provided technical cooperation and training to improve the molecular detection of SARS-CoV-2.
- Delivered laboratory supplies for molecular diagnostics for COVID-19 to the National Health Institute.



Infection prevention and control

- Delivered PPE to the National Institute of Health, national CDC response teams, the National Penitentiary Institute, and the regions of Amazonas, La Libertad, and Tumbes.
- Collaborated with justice authorities and other UN agencies to promote the implementation of IPC measures in closed setting environments such as prisons.
- Collaborated with UN agencies and national authorities for housing, construction and hygiene, environment, and Lima's municipal government to implement WASH interventions.



Case management

- Conducted health system needs assessments and estimated needs for beds and other supplies.
- Trained health personnel to utilize the virtual CICOM tool to manage EMTs.
- Facilitated donations of oxygen concentrators and other supplies between external parties and Ministries of Health for delivery to health facilities serving indigenous populations in Junin, Loreto, and Ucayali.



Operational support and logistics

- Provided SISMED software package to Peru's mobile urgent care service (SAMU) to manage patient references.



Puerto Rico



Country-level coordination, planning, and monitoring

- Participated in the virtual meetings coordinated by PAHO; sharing and presenting information and materials received from the Department of Health.
- Maintained active communication with national authorities by providing up-to-date information to guide the planning and implementation processes of public health strategies.



Risk communication and community engagement

- Worked with the Office of Public Health Preparedness and Response in the Department of Health to distribute COVID-19 information to health personnel and the public.
- Supported the Department of Health's Geriatric Program through the distribution of informational and risk communication materials and responded to inquiries as received.
- Participated in the PAHO virtual training on responding to mental health challenges and issues, which the Department of Health utilized to organize social support and community outreach.



Case management

- Shared materials on COVID-19 prevention and case management in hospitals in digital format, which have been distributed to the Department of Health's programs as a guide/tool in the planning of strategies and services.



St. Kitts and Nevis



Country-level coordination, planning, and monitoring

- Conducted a webinar on Health Emergency and Disaster Risk Management in the context of the COVID-19 pandemic.



Risk Communications and Community Engagement

- Conducted risk communication training and review of the messaging for COVID-19.
- Provided support to develop the country's Risk Communication Plan.
- Conducted Psychological First Aid Training for the COVID-19 hotline volunteers.
- Conducted a visit to and educational session for the country's prison population and prison staff.
- Produced 500 posters on different aspects of COVID-19 and IPC and handwashing.
- Supported the production of 800 parenting booklets.
- Convened a PAHO/WHO Webex COVID-19 Presentation and Update for journalists and media professionals from St. Kitts and Nevis.



Surveillance, rapid response teams, and case investigation

- Procured a vehicle to support contact tracing activities in Nevis.
- Contracted the services of two workers to conduct contact tracing and surveillance.
- Held a webinar to share methods for the mathematical modelling of COVID-19.



Points of entry

- Provided banners for to raise awareness about COVID-19 at ports of entry.



National laboratories

- Procured laboratory supplies for COVID-19 testing.



Infection prevention and control

- Trained staff (hospital and clinics) in the donning and doffing of PPE.
- Assessed the country's IPC system.
- Procured and disseminated 397 complete PPE kits to reduce the risk of infection for health workers.
- Convened a webinar on the protection of healthcare workers in COVID-19.
- Provided training on clinical management for COVID-19.



Case management

- Convened a seminar on managing the flow of healthcare workers exposed to COVID-19 in health facilities.
- Produced and distributed a mobile booklet for healthcare workers
- Convened a seminar on WHO's Mental Health Gap Action Program's Humanitarian Intervention Guide (mhGap-HIG), focusing on general care and acute stress among healthcare workers.



Operational support and logistics

- Shared the COVID-19 Supply Management Model Tool to facilitate logistics for managing supplies, equipment, and medicine received for the country's response.



Maintaining essential health services during the pandemic

- Worked with health authorities to ensure continuity with the country's immunization program and maternal and perinatal response during the COVID-19 pandemic.
- Shared the Epidemic Needs Analysis Tool and provided virtual training to health workers.
- Worked with health authorities to ensure that environmental public health is integrated into the COVID-19 emergency.
- Worked with the Ministry of Health to support Family Health Day – Families in the time of COVID-19 in Nevis on
- Coordinated with the CMO to highlight COVID-19 experiences and best practices.



St. Lucia



Country-level coordination, planning, and monitoring

- Supported the national authorities to develop the COVID-19 preparedness and response plan.



Risk communication and community engagement

- Provided support for the development of communication and community awareness materials for the general population and vulnerable groups.
- Produced and distributed posters and booklets on COVID-19 preventive public health measures.
- Provided retractable information banners for placement at points of entry.



Surveillance, rapid response teams, and case investigation

- Disseminated COVID-19 surveillance technical guidance.
- Introduced COVID-19 data collection tools, e.g. Excel line listing, revised reporting form
- Provided orientation on Go.Data, the WHO contact tracing software for data capturing and monitoring the chain of transmission.
- Provided orientation on EpiEstim and CovidSIM mathematical models for the generation of effective reproductive rate and short-term forecasting of COVID-19 cases.



Points of entry

- Conducted training on port health surveillance for COVID-19.



National laboratories

- Distributed sample collection materials and RT-PCR testing materials for COVID-19 testing.
- Conducted training and hands-on practice in theoretical aspects of molecular diagnostics.



Infection prevention and control

- Conducted training on IPC for healthcare workers.
- Conducted training in the use of PPE.
- Delivered PPE to reduce the risk of COVID-19 infection among healthcare workers.



Operational support and logistics

- Facilitated the international procurement of laboratory supplies and PPE for shipment to Saint Lucia.



Maintaining essential health services during the pandemic

- Procured and distributed water testing kits to the Ministry of Health.
- Worked with the country's Immunization Program to ensure continuity in vaccinations during the COVID-19 pandemic and to create a forum to exchange experiences and challenges in adjusting the delivery of immunization services. It provided training on using WHO/UNICEF's annual Joint Reporting Form (JRF) and the new monthly reporting system for vaccines. PAHO also conducted a virtual campaign to support Vaccination Week of the Americas.
- Provided training on COVID-19 and its impact on children living with disabilities.
- Developed a UNICEF and PAHO Interagency work plan for preparing the country to ensure that children can safely return to school ("Safe Back to School").
- Conducted a webinar for youth and adolescents to raise awareness on COVID-19 and familiarize them with the roles they play in the country's response to the pandemic.

St. Vincent and the Grenadines



Country-level coordination, planning, and monitoring

- Briefed national experts and oriented them on recommendations for the response to COVID-19.
- Procured eight A/C Units for the country's PCR laboratory and the Health Emergency Operations Center (EOC).



Risk communication and community engagement

- Produced COVID-19 video for Nurses Week (to be released in June 2020).
- Distributed 580 posters on COVID-19 island-wide.
- Produced information, education, and communication (IEC) Materials in the form of 250 posters for pre and primary school children.
- Conducted training with focal points from the region to discuss public health considerations for children with disabilities in the COVID-19 context and to offer guidance for continuation of specialized health services for children with disabilities and their families.
- Developed a UNICEF and PAHO Interagency work plan for Safe Back to School.
- Convened a virtual dialogue targeting young people from the Region aimed at exploring, with young people across the region, what it will take to adjust to this new way of living, and how to cope with pandemic-related isolation in a positive way. There were over 1,400 participants.
- Participated in weekly meetings with the Ministry of Health and youth leaders.
- Developed a work plan that will serve as a framework for encouraging young people in investing their time in positive ways.
- Held discussions with country focal points that resulted in agreed interventions to use as a framework to address gender-based violence in the region.



Surveillance, rapid response teams, and case investigation

- Procured four desktops for COVID-19 surveillance activities.



Points of entry

- Supported the production of two banners at points of entry – the airport on mainland St. Vincent, and the seaport in Bequia.



National laboratories

- Procured materials including enzymes, internal control primers, PCR tubes, and extraction kits and coordinated with the IAEA to donate supplies and equipment.
- Trained laboratory staff from the National Health Laboratory to test for COVID-19 using open platforms for molecular diagnostics. Delivered test kits and critical material for the implementation of the Reference protocol. This marks the first moment that Saint Vincent and the Grenadines' national laboratory has installed capacities for PCR laboratory testing. Having in-country PCR diagnostics know-how means the country is better prepared to detect COVID-19, influenza, and other diseases that could arise in the future.



Infection prevention and control

- Conducted training on essential aspects of infection prevention and control.



Case management

- Trained responders in psychosocial aspects of COVID-19, including responders in ports of entry, basic needs services, in-patient, and long-term care facilities.
- Supported national authorities to develop a plan to address country mental health needs.



Maintaining essential health services during the pandemic

- Procured two water quality testing kits for environmental health.



Suriname



Country-level coordination, planning, and monitoring

- Worked with national authorities to identify needs and formulate strategic plan to address the pandemic.
- Coordinated with UN agencies, multilateral partners, and foreign missions to ensure a streamlined, multi-sectoral response.



Risk communication and community engagement

- Collaborated with other UN agencies to distribute prevention posters to retirement homes and children's homes, among others, and to increase the participation of social media influencers in the WHO Safe Hands Challenge.
- Produced risk communication materials in Dutch and Sranan Tongo, including the Inter-Agency Standing Committee children's book, "My Hero is You." Collaborated with the UN Communications Group to produce materials tailored to indigenous and migrant populations.
- Held two media sensitization sessions with sixteen media outlets.



Surveillance, rapid response teams, and case investigation

- Collaborated with Inter-American Development Bank (IDB) counterparts to provide supplies, training, and equipment needed to establish sustainable data collection systems and to foster better database management and data analysis utilizing Go.Data to optimize information flow.
- Coordinated with authorities, the Malaria program, and the Medical Mission to boost capacities for active surveillance, case investigation, and contact tracing at high-risk border areas.
- Supported country in establishing a GIS hub to facilitate the monitoring of COVID-19 cases.
- Trained rapid response teams in evidence-based recommendations for managing patients.
- Provided guidance on adapting surveillance, laboratory, IPC, case management, health promotion, and risk communication guidelines/protocols to the country's context.



Points of entry

- Provided technical guidance for cargo handlers working at the country's ports of entry.



National laboratories

- Built capacity for RT-PCR testing for SARS-CoV-2 at the Central Laboratory,
- Delivered tests and other laboratory materials, including 700 swabs to the Central Laboratory.
- Facilitated an exchange of test kits and swabs with the health authorities of Guyana, allowing both countries to quickly address gaps in testing.



Infection prevention and control

- Trained health personnel in infection prevention and control measures.
- Delivered PPE, thermometers, and hand sanitizer to reduce the risk of infection for health workers operating in the interior of the country, along the coastal areas and those conducting case detection and contact tracing.



Case management

- Conducted hospital readiness assessment to identify areas for strengthening in case management and reorganization of the health services.
- Provided public health input for the establishment of an Alternative Medical Care Site.
- Provided training to country team on managing emergency medical teams (EMTs).



Operational support and logistics

- Provided guidance on the logistic management information system to be used for procurement, warehousing, and distribution of supplies for COVID-19.



Maintaining essential health services during the pandemic

- Provided guidance on maintaining essential health services, such as mental health, immunizations, and treatment for persons with NCDs, as well as intensive care delivery for COVID-19.
- Assessed the needs of migrants and refugees and coordinated with national health authorities, NGOs (e.g the Red Cross), the Brazilian Embassy, and other partners to identify interventions.
- Assessed the effect of COVID-19 on maternal and newborn care provision and developed information materials on pregnant and recently pregnant women and breastfeeding.

Trinidad and Tobago



Country-level coordination, planning, and monitoring

- Developed and implemented the COVID-19 Workplan in collaboration with the Ministry of Health.
- Contributed to the health sector economic assessment in partnership with other UN Agencies.



Risk communication and community engagement

- Disseminated critical, tailored information through national press, using this opportunity to reach wider audiences, and developed a risk communications strategy and campaign.
- Collaborated with the Chamber of Commerce to host the business community for sensitization on COVID-19 and to provide workplace guidelines.
- Built capacity in public health and social measures for the Trinidad and Tobago Medical Association.
- Reviewed and built capacity to support the Ministry of Health communication plan and the implementation of the national communications campaign.
- Participated in several radio and TV interviews, sharing information and responding to questions from the public.
- Conveyed messages on mental health and psychosocial support (MHPSS), including on stigma, discrimination, and coping with stressors, and with a special emphasis on youth.



Surveillance, rapid response teams, and case investigation

- Provided technical guidance for surveillance, in particular to enhance the collection and analysis of surveillance data submitted to PAHO/WHO.
- Developed a database on COVID-19 patients for use in evidence-informed decision making.



Points of entry

- Trained and provided PPE to healthcare workers and personnel at points of entry, as well as guidance within the wider UN system in the country to guide PPE procurement.



National laboratories

- Organized and provided tailored training and troubleshooting on COVID-19 testing, as well as on theoretical aspects of molecular diagnostics.
- Trained 50 laboratory personnel to expand national testing capacities in the country.

- Provided technical support for the procurement of GeneXpert machines and reagents for testing at A&E Departments at 8 hospitals.
- Provided materials such as RNA extraction kits, enzymes, internal controls, swabs, and PPE.



Infection prevention and control

- Worked with counterparts to develop IPC guidelines for children's homes and residential facilities, homes for the elderly and long-term care facilities, and dialysis centers.
- Hosted a webinar on the reopening of schools in the context of COVID-19 (over 500 participants).



Case management

- Supported the development of a workplan for MHPSS based on the gaps identified from a stakeholder mapping exercise.
- Hosted a webinar on selfcare for healthcare workers, with 90 participants from the Caribbean.
- Provided technical support for the development of pre-triage and triage for influenza-like illness.



Operational support and logistics

- Worked with the country to analyze available stocks of medicines for HIV, TB, and malaria.
- Developed and implemented a plan to address possible stockouts of medications.
- Worked with country to ensure availability of medications through the PAHO Strategic Fund and facilitate loans of medications from other countries.



Maintaining essential health services during the pandemic

- Guided national authorities in planning for their health system needs using modeling scenarios.
- Provided training through a webinar on the use of PAHO's tools for estimating hospital beds, staff time, medicines, medical supplies, and PPE, considering epidemic projections.
- Provided guidance on prioritizing care for patients with NCDs amid the pandemic.
- Supported health promotion activities designed for vulnerable settings.
- Continued to support the procurement of vaccines through the Revolving Fund.

United Kingdom Overseas Territories

 Anguilla  Bermuda  British Virgin Islands

 Cayman Islands  Montserrat

 Turks and Caicos Islands



Country-level coordination, planning, and monitoring

- Worked with the national authorities of Bermuda and the Cayman Islands, technical guidance to coordinate health sector activities, conduct needs assessments, and identify priorities.
- Provided Bermuda and Cayman Islands with technical guidance for documenting public health and social measures for all phases of the response.
- Provide technical advice on operational support for the national Emergency Operations Centre (EOC) in the Turks and Caicos Islands.
- Provided technical guidance to Bermuda and the Cayman Islands on the scope of rapid response teams and community engagement



Risk Communications and Community Engagement

- Distributed communication materials (posters, banners, and parenting booklets) in Anguilla, British Virgin Islands and Montserrat.
- Trained community leaders in Anguilla, British Virgin Islands and Montserrat in psychological first aid.



Surveillance, rapid response teams, and case investigation

- Disseminated COVID-19 case definitions and guidelines for laboratory molecular testing in Anguilla, British Virgin Islands, and Montserrat.
- Trained national counterparts in Anguilla and Bermuda to use and manage Go.data, WHO's contact tracing tool for capturing and monitoring the chain of transmission.
- Oriented national counterparts in Anguilla, British Virgin Islands and Montserrat on the use of EpiEstim and CovidSim, mathematical models for short-term forecasting of COVID-19 cases.

- Provided Turks and Caicos Islands with access to PAHO/WHO guidelines on epidemiological surveillance, contact tracing, case isolation and quarantine of contacts for adaptation to the national context.



Points of entry

- Provided PAHO/WHO guidelines on COVID-19 and travel precautions at points of entry of the Turks and Caicos Islands.



National laboratories

- Strengthened laboratory capacities by providing enzymes, internal control primers, probes, positive controls, extraction kits and RT-PCR testing materials to support early testing and detection.
- Strengthened laboratory capacities by providing training/guidance/trouble-shooting support in theoretical aspects of molecular diagnostics and laboratory testing procedures. This resulted in RT-PCR testing for SARS-CoV-2 being implemented at 2 laboratories of Bermuda and 2 laboratories in the Cayman Islands.
- Ensured that Turks and Caicos Islands had access to reference laboratories for referral of samples for PCR testing.
- Provided the Turks and Caicos Islands with technical advice for validating test results after Public Health England provided equipment and training of personnel for in-country capacity.



Infection prevention and control

- Supported the protection of healthcare workers through the provision and distribution of Personal Protective Equipment (PPE).
- Supported the Ministry of Health of the Turks and Caicos Islands with access to WHO/PAHO IPC and clinical management guidelines, on-line training resources and virtual meetings.



Case management

- Assisted the Turks and Caicos Ministry of Health to plan for clinical and hospital surge capacities.
- Supported MOH of Turks and Caicos Islands with access to WHO/PAHO clinical management guidelines, on-line training resources and virtual meetings.



Maintaining essential health services during the pandemic

- Provided PAHO/WHO guidelines to Turks and Caicos Islands on selecting and maintaining essential health services.
- Guided Bermuda in technical aspects to enable procurement of pharmaceuticals for essential health services.

- Trained national counterparts in Anguilla, British Virgin Islands and Montserrat in monitoring the impact of COVID-19 on the national immunization program.
- Oriented Anguilla, British Virgin Islands and Montserrat on PAHO's recommendations for maintaining immunization programs in the context of COVID-19.



Uruguay



Country-level coordination, planning, and monitoring

- Provided continuous support to the Ministry of Health's emergency operation command.
- Worked with the Ministry of Health to update Uruguay's national COVID-19 Plan of Action.
- Monitoring IHR application process.
- Participated in inter-disciplinary advisory groups to deliver expert advice on responding to the COVID-19 pandemic.



Risk communication and community engagement

- Disseminated key messages on hygiene, physical distancing, mental health, and others to populations in situations of vulnerability.



Surveillance, rapid response teams, and case investigation

- Trained surveillance personnel and shared tools and equipment to strengthen the country's epidemiological surveillance system's capacity to detect COVID-19 cases.



Points of Entry

- Developed communication materials for travelers arriving at land and air points of entry.
- Contributed to mass media campaigns designed to sensitize persons traveling from abroad.



National laboratories

- In collaboration with Chile, facilitated continued virtual South-South cooperation efforts to strengthen SARS-CoV-2 sequencing in Uruguay, in addition to donating tests.



Infection prevention and control

- Delivered PPE to the national authorities for use by emergency health workers.



Case management

- Supported national health authorities to adopt and implement strategies for caring for COVID-19 patients.



Operational support and logistics

- Consolidated the health sector's resources needs and created a contingency reserve of PPE and equipment to bridge critical gaps.
- Worked with the Ministry of Health to ensure continuity in Uruguay's vaccination programs, including the procurement of vaccines.



Maintaining essential health services during the pandemic

- Provided updated guidelines and recommendations on maintaining essential health services during the pandemic and on strengthening the first level of care.
- Exchanging international experiences for best practices.



Venezuela



Country-level coordination, planning, and monitoring

- Supported Venezuela to develop its national COVID-19 response plan, building upon prior pandemic influenza preparedness plans (PIP), and to adapt surveillance, laboratory, case management, and risk communication to Venezuela's context.
- Facilitated the signing of an agreement between the Ministry of Popular Power and Health and the COVID-19 Advisor from the National Assembly, in which both will collaborate on protecting the health of Venezuelans during the COVID-19 pandemic, aligning around core priorities including surveillance, diagnostics, and other areas.
- Supported Venezuela's regions through field offices established to implement priority COVID-19 prevention and control activities, with a priority on border crossings.
- Facilitated a bilateral coordination meeting between health authorities from Colombia and Venezuela to formulate strategies to protect the health of people living along the countries' border area.
- Collaborated with academia to leverage their technical expertise to address COVID-19.



Risk communication and community engagement

- Launched a web video to disseminate messages on hygiene and in-hospital infection control.
- PAHO partnered with Digitel, a mobile phone company, to send out 1.5 million SMS messages to the public, with a focus on safeguarding mental health and preventing infection.



Surveillance, rapid response teams, and case investigation

- Supported Venezuela to establish its own GIS hub to facilitate the monitoring of COVID-19.



National laboratories

- Worked closely with the National Hygiene Institute "Rafael Rangel" (INHRR), the country's reference laboratory, providing training, technical support, and supplies to conduct molecular detection of COVID-19.



Infection prevention and control

- Trained health workers in IPC, sample collection, patient isolation, and proper use of PPE.
- Delivered critical medicines, PPE, and hygiene kits to hospitals in Caracas and three other states.



Case management

- Trained health workers in case management, with a focus on therapeutics, and on the expansion and reorganization of health services.
- Conducted a joint evaluation with health authorities on hospital readiness for managing COVID-19 cases.
- Collaborated with Direct Relief to deliver life-saving supplies to Venezuela.



PAHO

PAHO/PHE/COVID-19/20-0037

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