



Pan American Health Organization Response to COVID-19

January – June 2021

PAHO



Pan American
Health
Organization



World Health
Organization
REGIONAL OFFICE FOR THE
Americas

Pan American Health Organization Response to COVID-19. January to June 2021

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Contents

Introduction.....	1	Colombia	107
Epidemiological Situation Analysis	4	Costa Rica	111
North America Subregion.....	9	Cuba.....	116
Central America Subregion	9	Dominica.....	119
South America Subregion.....	10	Dominican Republic	123
Caribbean Subregion.....	10	Dutch Island Territories	127
PAHO's Regional Response to COVID-19	17	Ecuador.....	130
Pillar 1. Country-level Coordination, Planning, and Monitoring	18	El Salvador	134
Pillar 2. Risk communication and community engagement.....	24	French Departments.....	138
Pillar 3. Surveillance, rapid response teams, and case investigation.....	29	Grenada	139
Pillar 4. Points of entry, international travel, and transport.....	34	Guatemala.....	143
Pillar 5. National laboratories	37	Guyana	148
Pillar 6. Infection Prevention and Control and Protection of the Health Workforce	41	Haiti.....	152
Pillar 7. Case management, clinical operations, and therapeutics.....	44	Honduras.....	156
Pillar 8. Operational Support, Logistics, and Supply Chain.....	50	Jamaica.....	160
Pillar 9. Maintaining Essential Health Services during the Pandemic	54	Mexico.....	164
Protecting the Health of Indigenous Peoples from COVID-19.....	58	Nicaragua	168
Pillar 10. Vaccination.....	61	Panama.....	171
The Road Ahead	70	Paraguay.....	174
Selected Highlights of PAHO's Response to COVID-19 in Countries of the Americas.....	72	Peru.....	177
Antigua and Barbuda	73	Saint Kitts and Nevis	181
Argentina.....	77	Saint Lucia	184
Bahamas	81	Saint Vincent and the Grenadines	187
Barbados	84	Suriname	190
Belize.....	88	Trinidad and Tobago	194
Bolivia (Plurinational State of)	92	United Kingdom Overseas Territories	198
Brazil.....	97	Uruguay	202
Chile	103	Venezuela (Bolivarian Republic of).....	204
		Abbreviations	209

Introduction

The outbreak of COVID-19, which began in 2020 in Wuhan City, Hubei Province of China, has brought about dramatic shifts in health concerns and how we live our daily lives. The first case in the Americas was confirmed in the United States of America on 20 January 2020, followed by Brazil in February 2020. Since then, COVID-19 has spread to all 56 countries and territories in the Americas. As of 30 June 2021, the WHO Region of the Americas leads in the number of confirmed cases and deaths worldwide.

Beginning in January 2020, the Pan American Health Organization (PAHO) activated an organization-wide response to support all countries and territories in the Region to address and mitigate the impact of the COVID-19 pandemic. Working through the regional Incident Management Support Team (IMST) and country incident management teams in Latin America and the Caribbean, PAHO provides direct emergency response to ministries of health and other national authorities, in alignment with the WHO COVID-19 Strategic Preparedness and Response Plan.

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

A major effort of the Organization during the first half of 2021 has focused on supporting countries in the rollout of the COVID-19 vaccination. This builds on support provided during the last semester of 2020 to prepare the countries for the introduction of the COVID-19 vaccines, as institutions worldwide raced against time to leverage novel and existing technologies to produce safe and effective vaccines.

PAHO played a critical role in assisting countries in the acquisition of vaccines made available through the COVAX Facility, a groundbreaking global collaboration to accelerate the development, production, and equitable access to COVID-19 vaccines. The Organization continued to support countries with the arrival and distribution of vaccines, including installation of and training on cold chain equipment; activation of data collection systems; surveillance mechanisms for events supposedly attributable to vaccination or immunization (ESAVI); development of guidelines for vaccination operations in the field; and production of messages and communication materials to stimulate vaccine demand among the population.

The course of the COVID-19 pandemic in the Americas remains highly uncertain. The surge in cases throughout South and Central America in the first four months of 2021 is unsettling. It comes against the backdrop of a gradual vaccination rollout, prioritizing high-risk groups, such as frontline health personnel and older people. COVID-19 vaccine availability is limited worldwide and many countries, including those

in Latin America and the Caribbean, face inequities in terms of access. Vaccine hesitancy may further slow uptake by the population or prevent full achievement of vaccination potential.

At the same time, countries and territories in the Region continue to report persistent disruptions of varying degrees in the provision of essential health services. These disruptions highlight the difficulties in ensuring continuity of services and the need to strengthen resolution capacity, especially at the first level of care.

A possible scenario is that, well into 2022, countries in the Americas will still face localized COVID-19 outbreaks, primarily in institutions (e.g., nursing homes, prisons), densely populated peri-urban areas, and rural settings. While vaccination coverage may reach high levels overall and may be homogenous across subnational entities, significant heterogeneity in coverage may persist among the different age and population groups. This will depend on vaccine supply availability, vaccine uptake, and access and demand among specific population groups.

This situation indicates that suppression of the COVID-19 pandemic in the Americas will continue to require a comprehensive response with sustained

health services network capacities, sustained public health and social measures, targeted vaccination operations, and outbreak control actions, including early detection, investigation and isolation of cases, as well as tracing and quarantine of contacts.

This report updates the situation in Latin America and the Caribbean since the publication of the last report, [Pan American Health Organization Response to COVID-19 in the Americas: January–December 2020](#).

It documents PAHO's efforts in the first six months of 2021, when the Organization continued responding to emerging needs in the Region to detect, track, treat and slow the spread of COVID-19; acted promptly to facilitate vaccine procurement; and supported countries during each step of the vaccine introduction process.

The section that follows presents an updated picture of the epidemiological situation in the Americas and the status of vaccination operations in the countries and territories. It also includes selected highlights of PAHO's work. Epidemiological data are presented for the first semester of 2021, up to 30 June (unless indicated otherwise).



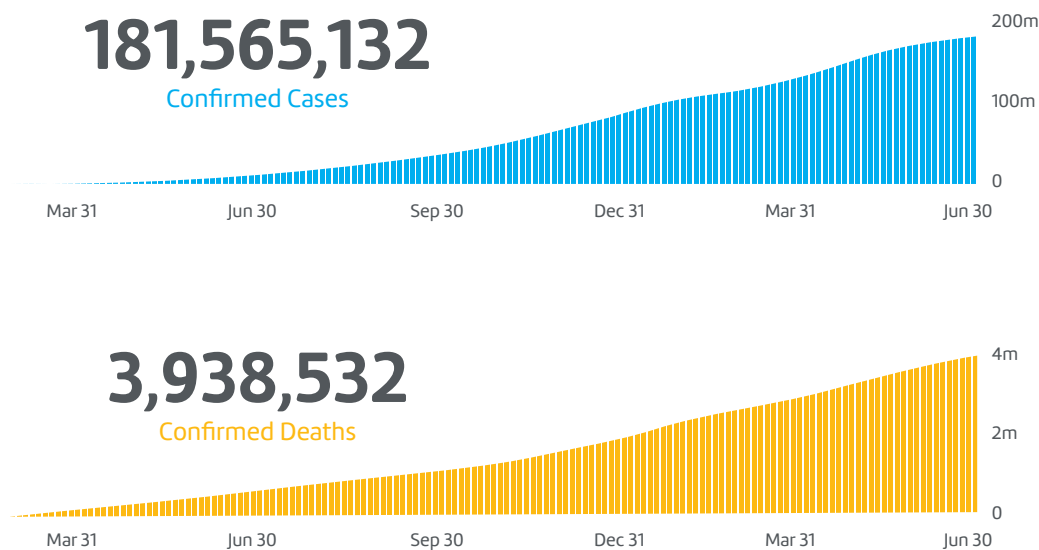
Epidemiological Situation Analysis

This section presents an updated picture of the epidemiological situation in the Americas and the status of vaccination operations in the countries and territories. It includes selected highlights of PAHO's work. Epidemiological data are presented for the first semester of 2021 (unless indicated otherwise).

As of 30 June 2021, the Region of the Americas had reported 40% and 48% of the global COVID-19 cases

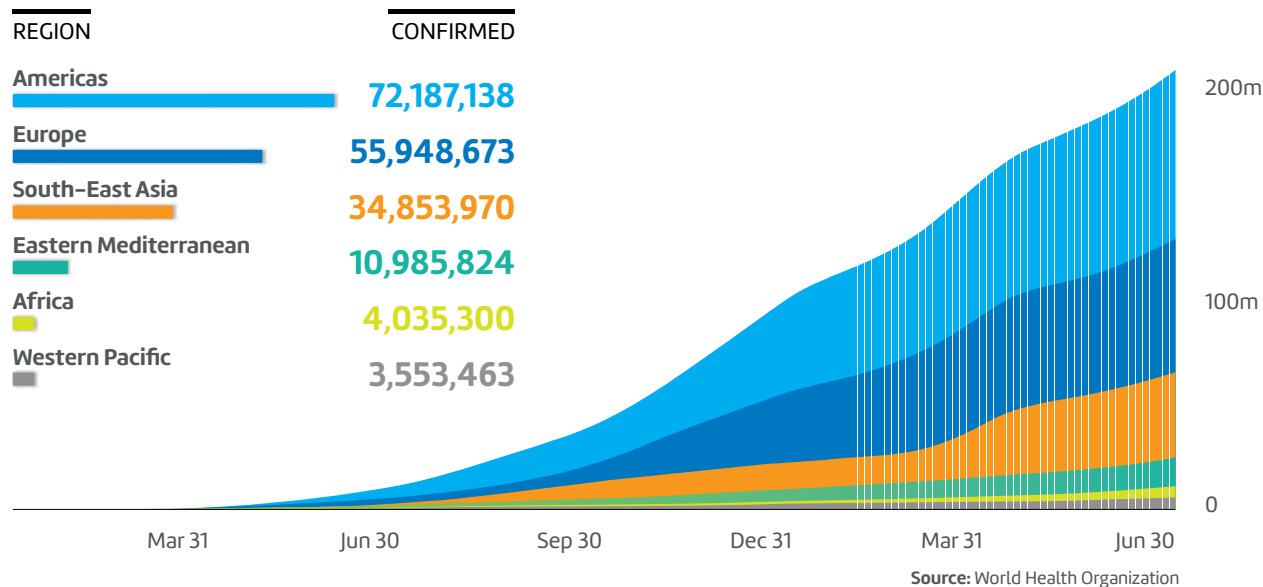
and deaths, respectively. Two countries in the Americas, Brazil and the United States of America, ranked among the top 10 countries reporting the highest numbers of cumulative cases globally. Four countries—Brazil, Colombia, Mexico, and the United States of America—ranked in the top 10 for cumulative deaths globally.

Global Situation

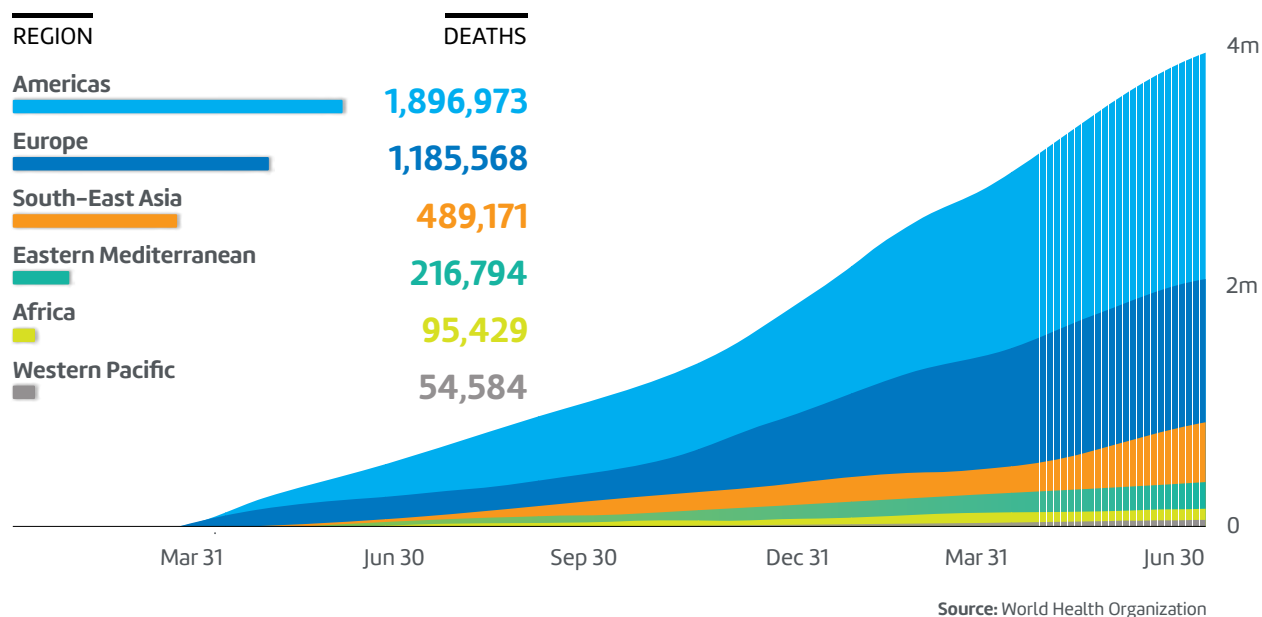


Source: World Health Organization

COVID-19 cases reported weekly by WHO Region up to 30 June 2021



COVID-19 deaths reported weekly by WHO Region up to 30 June 2021

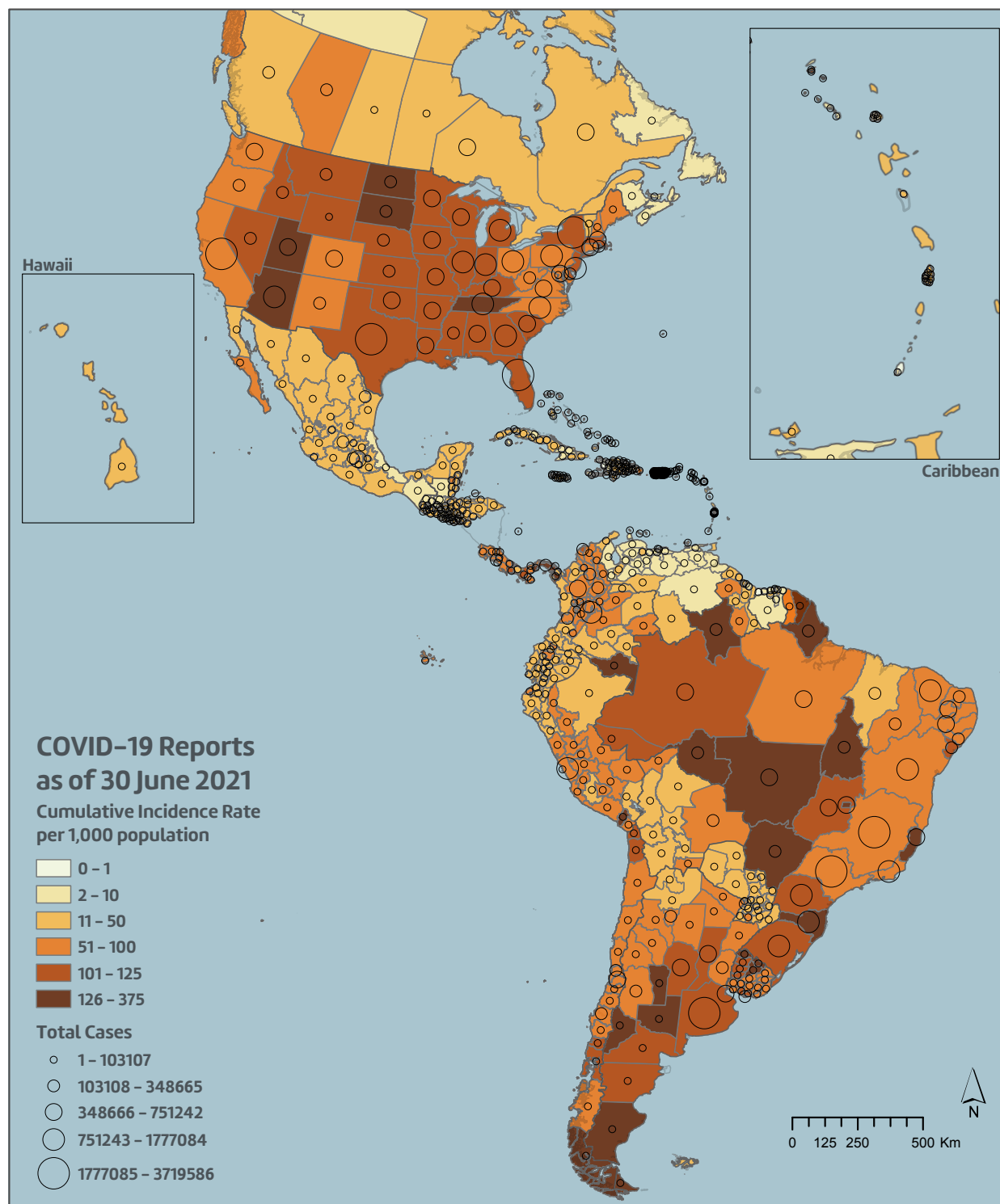


The most up-to-date epidemiological information on the pandemic is available on the PAHO website:

[COVID-19 Information System for the Region of the Americas.](https://www.paho.org/en/covid-19)

Country and Subregional Overview

COVID-19 Reports as of 30 June 2021 / Cumulative Incidence Rate per 1,000 population



Within the Region, **51%** of total cases are from North America and **45%** from South America.

United States of America accounts for **46%** of cases and **31.5%** of deaths.

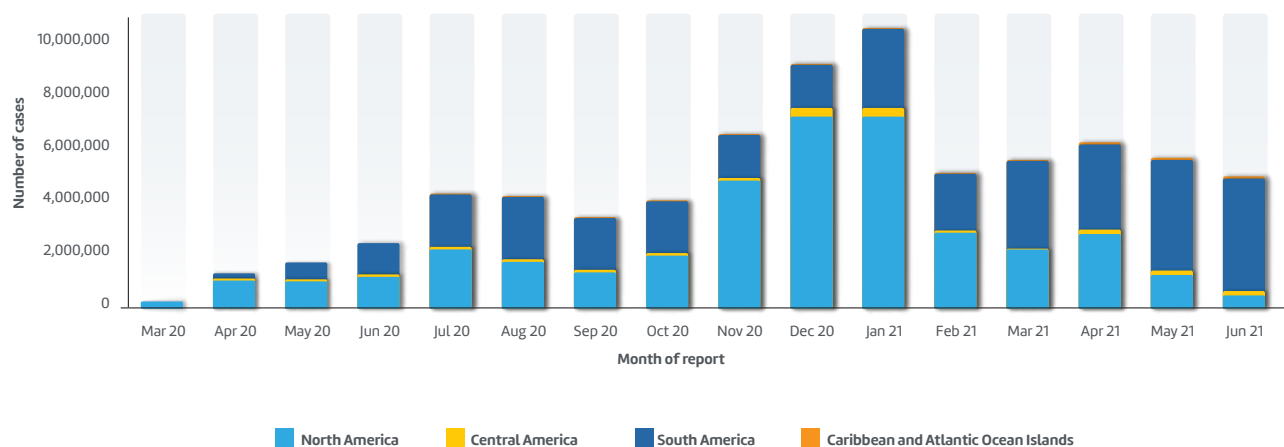
Together, these two countries account for **71.6%** of all cases and **58.6%** of deaths currently reported in the Americas.

45% of total deaths in the Region are in North America and **52.6%** in South America.

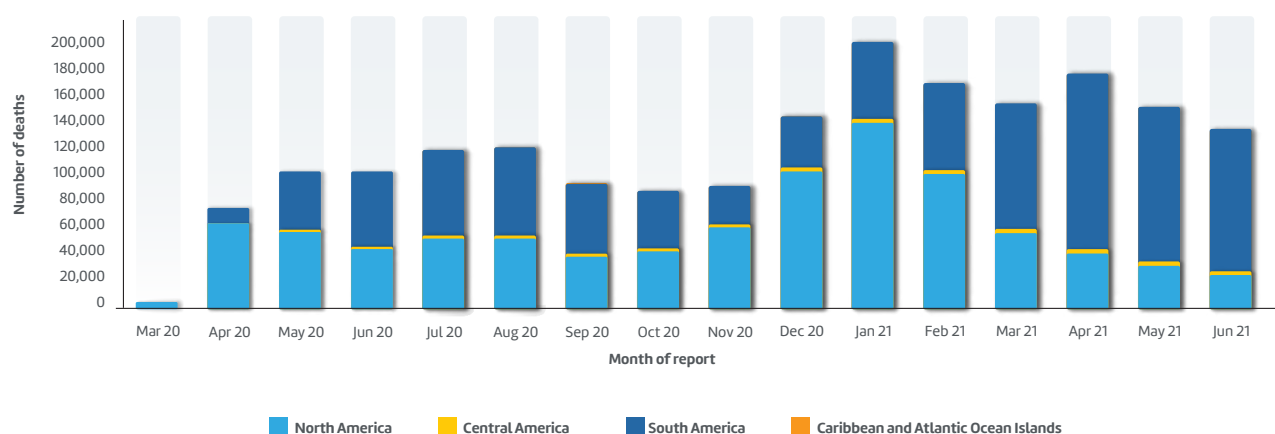
Brazil accounts for **25.6%** of cases and **27.1%** of deaths.

Argentina has the third highest cumulative number of cases and deaths, **4,447,701** and **93,668**, respectively.

Distribution of confirmed COVID-19 cases, by subregion and month of report.
Region of the Americas, 1 March 2020 to 30 June 2021.



Distribution of confirmed COVID-19 deaths, by subregion and month of report.
Region of the Americas, 1 March 2020 to 30 June 2021.



Source: PAHO/WHO COVID-19 Update, Region of the Americas, 30 June 2021

Cumulative cases, deaths, and crude case fatality rates (CFR%) among the 15 countries/territories reporting the highest number of cumulative cases in the Americas.

Country/Territory	Cases	Deaths	CFR (%)
United States of America	33,317,803	599,089	1.8%
Brazil	18,513,305	515,985	2.8%
Argentina	4,447,701	93,668	2.1%
Colombia	4,213,074	105,934	2.5%
Mexico	2,513,164	232,803	9.3%
Peru	2,052,065	192,331	9.4%
Chile	1,555,902	32,545	2.1%
Canada	1,414,736	26,273	1.9%
Ecuador	458,504	21,560	4.7%
Bolivia	437,623	16,702	3.8%
Paraguay	421,589	12,763	3.0%
Panama	402,581	6,536	1.6%
Uruguay	368,178	5,558	1.5%
Costa Rica	366,161	4,661	1.3%
Dominican Republic	325,221	3,822	1.2%

Source: PAHO/WHO COVID-19 Update, Region of the Americas, 30 June 2021

The pooled crude case fatality estimate (number of reported deaths divided by the number of reported cases) in the Region of the Americas is 2.63% as of 30 June 2021.

North America Subregion

Canada • Mexico • United States of America

Total cases
37,245,703

Total deaths
858,165

382,007

new deaths from 1 January to 30 June 2021.

15,911,996

new cases from 1 January to 30 June 2021.

Majority of deaths in the USA: **69.8%**;
Mexico: **27.1%**; and Canada: **3.06%**.

Majority of cases in USA: **89.4%**; Mexico:
6.7%; and in Canada: **3.8%**.

All three countries in the North American
subregion continue to report community
transmission.

Central America Subregion

Belize • Costa Rica • El Salvador • Guatemala • Honduras • Nicaragua • Panama

Total cases
1,422,991

Total deaths
30,293

14,461

new deaths from 1 January to 30 June 2021.

710,781

new cases from 1 January to 30 June 2021.

Majority of deaths in Guatemala: **30.4%**;
Honduras **23%**; Panama: **21.6%**;
and Costa Rica **15.4%**.

Majority of cases in Panama: **28.3%**; Costa
Rica: **25.7%**; and Guatemala: **20.6%**.

All countries in this subregion continue to
report community transmission.



South America Subregion

Argentina • Bolivia • Brazil • Chile • Colombia • Ecuador • Paraguay • Peru • Uruguay • Venezuela

Total cases
32,739,620

Total deaths
1,000,147

19,649,00

new cases from 1 January to 30 June 2021.

Majority of cases in Brazil: **56.5%**; Argentina **13.6%**; Colombia **12.9%**; and Peru **6.3%**.

639,347

new deaths from 1 January to 30 June 2021.

Majority of deaths in Brazil **51.6%**;
Peru **19.2%**; Colombia **10.6%**;
and Argentina **9.4%**.

All **10** countries continued to report community transmission.

Caribbean Subregion

Anguilla • Antigua and Barbuda • Aruba • The Bahamas • Barbados • Bermuda • Bonaire • Cayman Islands • Cuba • Curacao • Dominica • Dominican Republic • Falkland Islands • French Guiana • Grenada • Guadeloupe • Guyana • Haiti • Jamaica • Martinique • Montserrat • Puerto Rico • Saba • Saint Barthelemy • Saint Kitts and Nevis • Saint Lucia • Saint Martin • Saint Pierre and Miquelon • Saint Vincent and the Grenadines • Sint Eustatius • Sint Maarten • Suriname • Trinidad and Tobago • Turks and Caicos • Virgin Islands (UK) • Virgin Islands (USA)

Total cases
923,597

Total deaths
12,325

568,688 new cases from 1 January to 30 June 2021.

Majority of cases in the Dominican Republic **35.2%**; Cuba **20.7%**; and Puerto Rico **15.1%**.

6,709

new deaths from 1 January to 30 June 2021.

Majority of deaths in the Dominican Republic **31%**; Puerto Rico **20.7%**; and Cuba **10.4%**.

20 countries and territories reporting community transmission as of 30 June, 5 reporting clusters of cases, another reporting imported/sporadic cases.

Anguilla, The Falkland Islands, Montserrat, Saba, and Sint Eustatius were experiencing no new cases at the end of June 2021



Indigenous Populations

Indigenous and Afro-descendant communities in Latin America and the Caribbean have historically faced inequalities. In general, they have lower incomes, lower levels of education, and other disadvantaged social determinants of health, which compounded with their reduced access to health services, geographic barriers, discrimination, and stigma, make these populations particularly vulnerable to COVID-19 infection and mortality. While precise data on these populations is not always available, reports have shown that the impact on indigenous populations is not homogenous.

This vulnerable population is most often employed

in the informal economy, which has been hard hit by certain public health measures, such as lockdowns, when these have been put in place. Additional stressors on their livelihoods are compounding food insecurity and impacting their access to health, communication, and transportation services. Throughout the pandemic, PAHO, through its country offices and in partnership with the national health authorities and other partners, has been conducting risk assessments and an analysis of vulnerabilities, capacities, and exposures of these vulnerable populations to ensure the needs of these population groups are appropriately reflected and adequately addressed.

617,229 confirmed cases, including **14,990** deaths among indigenous peoples or communities in 18 countries for which data were available.

Highest numbers of confirmed cumulative cases in indigenous nations or indigenous communities in the **USA** (259,884); **Chile** (65,884); **Peru** (64,923); and **Colombia** (63,250).

From January 2020 to 20 July 2021. Source: [Epidemiological Update: Coronavirus disease \(COVID-19\) – 22 July 2021](#)





“We must remember that the challenges and inequities that we faced prior to COVID-19 haven’t gone away during the pandemic – in fact, they’ve only worsened and can’t be overlooked.

That’s why we must make protecting the lives of women a collective priority.” Dr. Carissa F. Etienne, Director of PAHO

Women and COVID-19

According to a study on COVID-19 Health Outcomes by Sex in the Americas, published in March 2021, the impacts of the pandemic on women are less visible and are not routinely quantified the way infections are counted. This is due to a number of factors, including women’s caring roles and responsibilities, their livelihoods, their exposure to domestic violence, and their unequal participation in decision-making at higher levels of governance. The Economic Commission for Latin America and the Caribbean reports that, especially in lower-income countries, women are largely engaged in informal work and other vulnerable forms of employment (e.g., self-employment in small subsistence businesses,

and domestic work). This often leaves them out of formal social protection measures targeted to workers who are impacted economically by the COVID-19 pandemic. Under these circumstances, the pandemic has exacerbated gender inequality, as women in the Region have been disproportionately affected by increases in unemployment and poverty. The economic impact of the pandemic must also contemplate the gender gap in work hours that has increased during the COVID-19 pandemic, as mothers with young children have been more likely than their male counterparts to experience reduced work hours.

The **male/female** ratio is **1.02** for cases and **1.46** for deaths.

49% of cases are female.

Men account for 59% of deaths.

Source: Data from countries through Case Report Forms, compiled by PAHO under the International Health Regulations, through August 2021.

Health Workers

From the first reports of confirmed cases of COVID-19 in the Region of the Americas through 21 July 2021, at least 1,763,315 COVID-19 cases have been reported

1,763,315 cases of COVID-19, including 10,278 deaths among health workers in 37 countries and territories for which data were available.

among health workers, including 10,278 deaths, according to the data made available by 37 countries and territories in the Americas.

Highest numbers of confirmed cumulative cases among health workers reported in the **USA** (515,527); **Brazil** (498,422); and **Mexico** (244,711).

Variants of Concern (VOC)

The appearance of mutations is a natural and expected event within the evolutionary process of a virus. Since the initial genomic characterization of SARS-CoV-2, this virus has been divided into different genetic groups. Variants may increase transmissibility of the virus, increase its virulence, or decrease the effectiveness of public health and social measures or diagnostics, vaccines, and therapeutics. Much remains to be learned about these variants.

As of 21 July 2021, 50 countries and territories in the Americas have published a total of 2,438,680 SARS-CoV-2 genomes on the GISAID platform, collected between February 2020 and July 2021. Forty-eight countries/territories have reported the detection of cases of VOC (the variants Alpha, Beta, Gamma, and Delta). The detection of all four of these VOC has been reported in Argentina, Aruba, Brazil, Canada, Chile, Costa Rica, French Guiana, Guadeloupe, Martinique, Mexico, Puerto Rico, and the United States of America.

48 countries and territories in the Region reported the detection of variants of concern.

46 countries reported the Alpha variant (B.1.1.7).

20 countries reported the Beta variant (B.1.351, B.1.351.2, B.1.351.3).

31 countries reported the Gamma variant (P.1, P.1.1, P.1.2).

18 countries reported the Delta variant (B.1.617.2, AY.1, AY.2).

As of 21 July 2021. **Source:** [PAHO Epidemiological Update dated 22 July 2021](#).

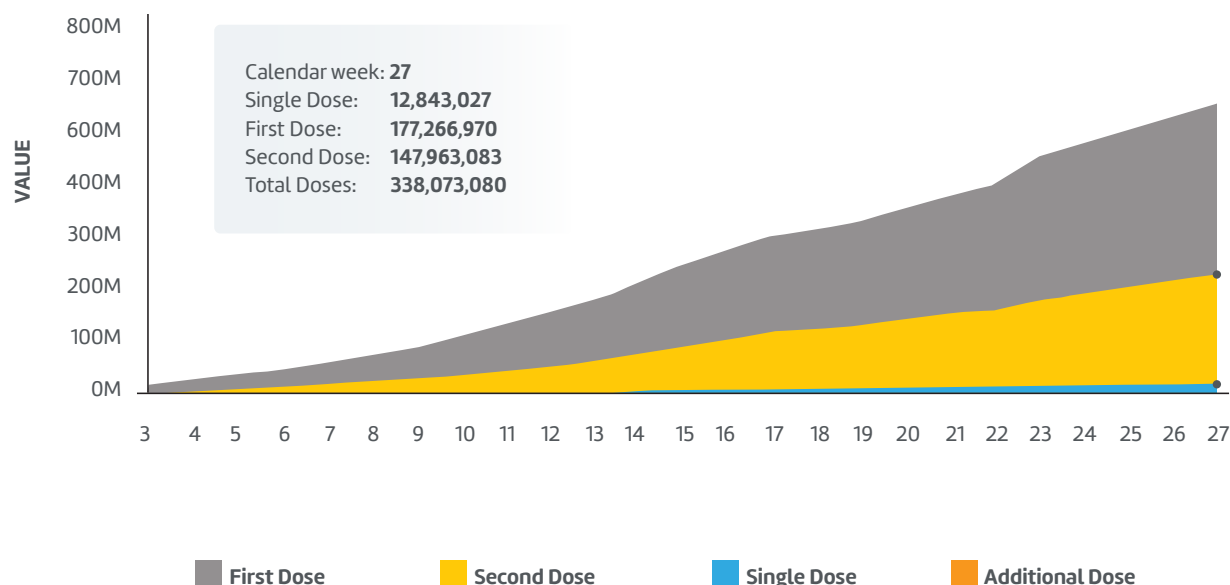
Countries and territories reporting SARS-CoV-2 variants of concern (VOC) in the Caribbean and Atlantic Ocean Islands subregions, as of 20 July 2021.

Country/Territory	Alpha	Beta	Gamma	Delta
Anguilla	●			●
Antigua and Barbuda	●	●		
Aruba	●	●	●	●
Bahamas	●			
Barbados	●		●	●
Bermuda	●	●		
Bonaire	●			
British Virgin Islands	●		●	
Cayman Islands	●		●	
Cuba	●	●		
Curacao	●		●	
Dominica	●			
Dominican Republic	●		●	
French Guiana	●	●	●	●
Grenada	●			
Guadeloupe	●	●	●	●
Guyana			●	
Haiti	●		●	
Jamaica	●			
Martinique	●	●	●	●
Montserrat	●			
Puerto Rico	●	●	●	●
Saba				●
Saint Barthelemy	●			
Saint Lucia	●			
Saint Martin	●	●		
Sint Maarten	●	●		●
Suriname	●	●	●	
Trinidad and Tobago	●		●	
Turks and Caicos	●		●	

Source: PAHO Epidemiological Update Coronavirus disease (COVID-19) 22 July 2021

Vaccination

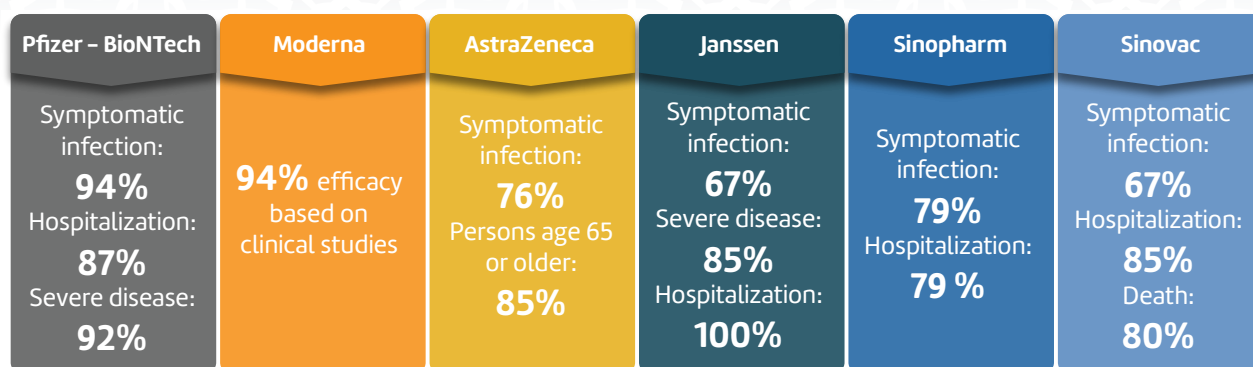
Cumulative doses administered through 10 July 2021



Source: [COVID-19 Vaccination in the Americas Dashboard](#)

Global efforts to develop a safe and efficacious vaccine were fortunately successful and WHO included Vaccination Operations as the tenth pillar in its updated plan for 2021, the [WHO Strategic Preparedness and Response Plan for COVID-19](#). PAHO's response to the COVID-19 pandemic remained aligned with all 10 pillars of work set forth in this document and with PAHO's [Response to the COVID-19 Outbreak in the Region of the Americas: Response Strategy and Donor Appeal](#).

As of 25 June, 49 of the Region's 51 countries and territories had begun vaccination operations, with the exception of Haiti and Cuba. As of that date, more than 587 million COVID-19 vaccination doses had been administered and 237 million persons were considered to be fully immunized. By the end of June 2021, WHO had granted Emergency Use Listing (EUL) approval to six COVID-19 vaccines: Pfizer, Moderna, AstraZeneca, Janssen, Sinopharm, and Sinovac. The chart below shows the efficacy rates of the following vaccines, according to data from the Strategic Advisory Group of Experts on Immunization (SAGE). More data about these vaccines [are available in SAGE documents available on the WHO website](#).

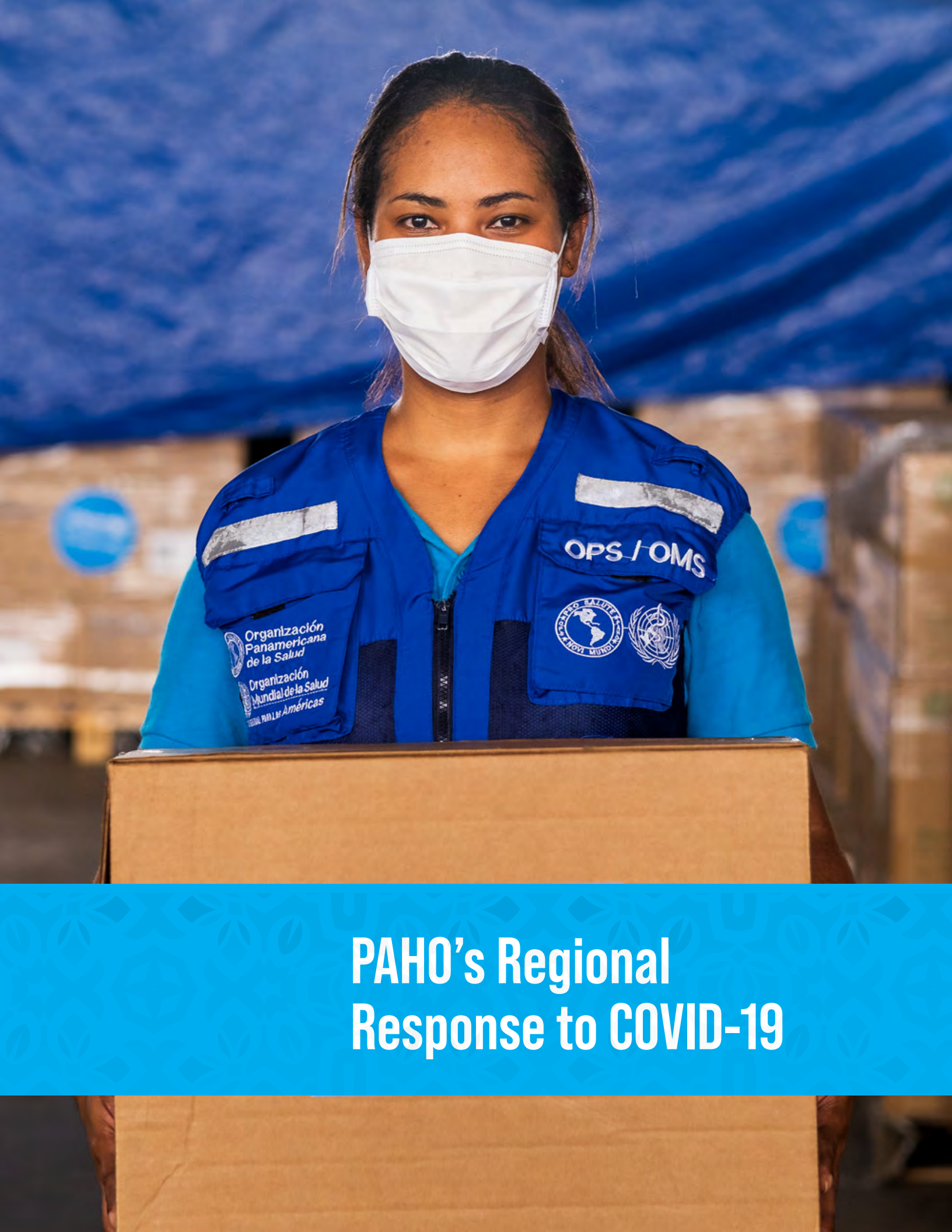


Source: [Strategic Advisory Group of Experts on Immunization \(SAGE\)](#), World Health Organization.

While Pfizer and Moderna vaccines were administered in higher numbers compared to the other vaccines, the AstraZeneca vaccine was the most deployed (25 countries), followed by Pfizer. Throughout the first six months of 2021, there have been obvious disparities in vaccine distribution and administration between high- and low-middle income countries. For example, the United States accounted for 56% of all doses administered in the Region as of 25 June.

Since the appearance of the Alpha variant of concern in the United Kingdom in December 2020, one of the biggest efforts worldwide has been to measure the effectiveness of COVID-19 vaccines against these new strains of SARS-CoV-2. WHO published a summary table of all studies on this topic, and updates it every two weeks.





PAHO's Regional Response to COVID-19



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

Support activation and operation of national public health emergency management mechanisms, as well as COVID-19 planning and response, based on a whole-of-government and inclusive whole-of-society approach.

Pillar 1 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.

The PAHO/WHO regional Incident Management Support Team (IMST), activated in January 2020, and Incident Management Teams (IMTs) in all PAHO/WHO country offices, were established to spearhead the Organization's technical cooperation for the pandemic. This cooperation is structured around three areas of response:

■ Epidemic Intelligence

critical to ensuring surveillance systems are in place to detect cases of COVID-19; people have access to timely and accurate testing; and decisionmakers have the analyses needed 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 likelihood of infection, while ensuring systems are in place to detect new cases coming from abroad.

■ Strengthening Health Systems

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

During the first quarter of 2021, the PAHO/WHO IMST and IMTs officially incorporated a fourth area of response related to COVID-19 vaccination. This area of the response supports planning and readiness for vaccine deployment, as well as assistance for procurement, regulatory and logistical issues, and evaluation of COVID-19 vaccines, ensuring their timely and equitable access, while strengthening vaccine safety surveillance.

Regional Coordination

PAHO's Director provided representation, advice, and support in strategic, technical, and financial issues to regional coordination mechanisms such as the Caribbean Community (CARICOM), the Forum for the Progress and Development of South America (PROSUR), the Central American Integration System (SICA), the Southern Common Market (MERCOSUR), as well as the Organization of American States (OAS) and other regional multilateral organizations. The Bureau also convened regular meetings with ministries of health, including Governing Bodies meetings, to provide the most current advice, based on available evidence and science, and to seek consensus on region-wide approaches to tackle the pandemic.

Activated Mechanisms for PAHO's Response

17 January 2020

PAHO activated its Incident Management Support Team (IMST).

184 regional-level technical staff

mobilized and technical subgroups convened to provide support.

27 country offices

established country-level IMTs for rapid technical guidance and support to health authorities in LAC.

849 bilateral communications

(under Article 44/IHR) between National Focal Points on cases/contacts and travel-related issues.

From January to June 2021

5 missions

to countries were prepared to conduct laboratory molecular testing and antigen detection for COVID-19 diagnosis, and molecular screening for genomic surveillance.

Delivered more than **23** regional and national virtual trainings and webinars to health professionals across the Americas up to June 2021.

Virtual trainings and webinar

on estimating needs for PPE and hospital and ICU beds; identifying alternative medical care sites; molecular diagnostics for COVID-19; and surveillance.

43 additional

evidence-informed public health guidelines developed in 2021 geared toward developing national strategies, policies, and protocols for an effective response to the pandemic.

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 \(SPRP\)](#), originally published in February 2020 and last updated in February 2021. This plan outlines the support that WHO and the international community stand ready to provide to enable all countries to respond to COVID-19. WHO also issued updated [Operational Planning Guidelines](#) to support the development of Country Preparedness and Response Plans for COVID-19. PAHO integrated the pillars from WHO's SPRP into its [Response Strategy and Donor Appeal](#).

All 35 Member States continued operation of intersectoral mechanisms that were activated in response to the COVID-19 pandemic, involving the



“The loss of one million people from this virus should serve as an urgent call that we must do more to protect ourselves and each other from getting sick. This includes strong calls to action to reinforce the public health measures that are needed now in each of the places that are seeing outbreaks.”

Dr. Carissa F. Etienne, Director of PAHO

highest level of political leadership, and including key sectors to provide a comprehensive response. PAHO liaised with other in-country UN agencies to lead the health sector response and ensure that the UN system followed a holistic approach in tackling the pandemic and its repercussions.

In March 2020, WHO launched the [COVID-19 Partners' Platform](#), a collaborative tool to facilitate coordination and governance between countries, UN Country Teams, donors, and partners. The Platform was created in partnership with the UN Development Coordination Office and it enables a streamlined online response to COVID-19 to be fully operational in the Region. In addition to providing the framework for planning and monitoring; serving as a repository for response plans and assessments; allowing for standardized monitoring of plan implementation via action checklist; and containing a summary of up-to-date technical guidance and resources, the Platform played a key role in vaccine delivery. The Region of the Americas includes 10 AMC (Advance Market Commitment) countries, which are lower-and lower-middle income countries eligible to receive donor-funded doses of COVID-19 vaccines through the COVID-19 Vaccines Global Access initiative (COVAX). The initiative aims to ensure equitable access to these countries.

During the month of February 2021, these 10 countries were required to submit their National Deployment

and Vaccination Plans (NDVP) for approval in order to be eligible to receive vaccines from COVAX. All 10 countries in our Region were able to submit their NDVP, using the Platform, and all 10 had the plans approved by the Regional Committee and thus were able to receive vaccines through COVAX. PAHO also supported 13 other self-financed countries to upload their NDVP to the Platform.



33 countries

in LAC supported and trained to access the Partners Platform.



28 countries

in LAC uploaded their COVID-19 National Response Plans and used the platform to review and monitor their public health actions.



23 countries

in LAC uploaded their National Deployment Vaccination Plans (NDVP) for COVID-19 vaccines to the Platform.

PAHO/WHO has supported action reviews in some Brazilian states and is in the process of adapting the methodology and tools prepared by the WHO Secretariat for Intra-Action Reviews.¹ As the epidemiological situation becomes more conducive, PAHO will work with relevant WHO Collaborating

¹ Guidance for conducting a country COVID-19 Intra-Action Review is available on the WHO website at: <https://www.who.int/publications/i/item/WHO-2019-nCoV-Country-IAR-2020.1>



Centers² to support other countries and territories in this process, according to their interests and requests. The COVID-19 pandemic has highlighted aspects of the national response to public health emergencies that had not been highly visible before. It is important to critically assess and learn from the response to COVID-19 in order to “build back better.”

Guidance for Decisionmakers

Since the onset of the COVID-19 pandemic, most PAHO Member States have put in place diverse packages of community-wide non-pharmaceutical measures to fight the pandemic. However, their introduction, adjustment, and discontinuation are not always anchored in evidence or based on granular and multi-source data. These measures, including use of

masks, often lack a robust set of indicators that would facilitate more predictable risk communication efforts and, possibly, increase adherence.

Since April 2020, PAHO has been convening ministers of health of the Americas for periodic briefings related to the COVID-19 pandemic. In national responses to the pandemic, health policy has moved beyond the health ministries, with leadership exerted by heads of state and heads of government. In general, effective national responses have been both holistic and agile, featuring centralized leadership, coordination across sectors and administrative levels, clear decision-making based on scientific advice, efforts to build trust of the population, and, most importantly, the ability to change the course of action to confront the rapidly unfolding pandemic.

2 CHI-23, Universidad del Desarrollo, Chile, WHO Collaborating Centre for the International Health Regulations (IHR); USA-359, Centers for Disease Control and Prevention (CDC), United States of America, WHO Collaborating Center for Implementation of IHR Core Capacities; USA-453, Johns Hopkins University, United States of America, WHO Collaborating Center for Global Health Security.

PAHO has published more than 145 [evidence-informed guidelines and guidance documents](#) 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.

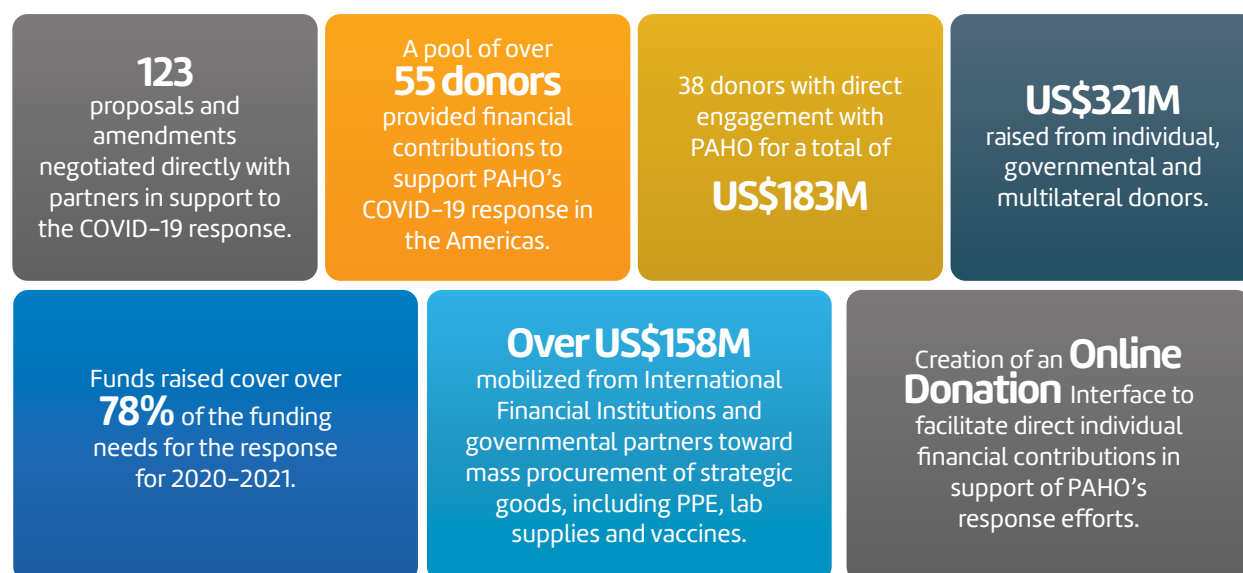
Mobilizing Resources for the Americas

In April 2021, PAHO launched its updated [Response Strategy and Donor Appeal](#), aimed at sustaining and scaling up the response to the COVID-19 pandemic to contain the spread of the virus and mitigate the longer-term health impact. It builds on knowledge acquired and lessons learned over the past year to better tackle

persistent and newly arising challenges and priorities at national, subnational and regional levels, such as the need to mitigate risks related to new variants and the safe, equitable, and effective delivery of diagnostics and vaccines.

Between February 2020 and 30 June 2021, PAHO has mobilized more than US\$321 million from strategic donors and partners, achieving more than 78% of estimated funding requirements for priority public health needs of countries in the Region for 2021.

The Organization also received more than US\$158 million from international financial institutions and bilateral donors to support the procurement, on behalf of Member States, of essential supplies and equipment critical to the response, including PPE; laboratory tests, reagents, and equipment; clinical care supplies; and COVID-19 vaccines.



As of June 2021

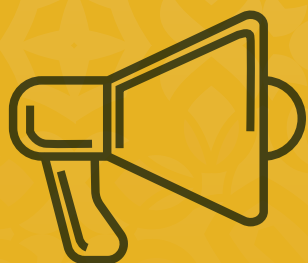
Thank You!

PAHO thanks our generous donors who have been helping us save lives and reduce the impact of COVID-19 in the Region.

Donor	Amount (USD)
Alma Jean Henry Charitable Trust	30,000
Belize	11,221
Canada	26,659,167
Caribbean Development Bank (CDB)	58,155
U.S. Centers for Disease Control and Prevention (CDC)	14,907,980
Central American Bank for Economic Integration (CABEI)	805,335
Colombia	500,000
Confederation of Caribbean Credit Unions (CCCU)	75,000
Corporación Andina de Fomento (CAF)	750,000
European Commission	8,289,443
Global Fund	1,972,680
Foundation for Innovative Diagnostic Initiative	2,126,127
Fundación Yamuni Tabush	34,975
Inter-American Development Bank	19,285,428
International Organization for Migration (IOM)	200,000
Japan	2,727,272
Korea	306,061
Mixed Fund for Technical and Scientific Cooperation Mexico-Spain	359,336
New Zealand	10,000
Other donors	94,996
PAHO COVID-19 Response Fund	76,317
Rockefeller Foundation	3,000,000
Spain	407,000
Sweden	10,554
Switzerland	1,040,143
UN Agencies consortium	311,496
UNICEF	955,825
United Kingdom	3,774,147
UNDCO	5,000
UNDP	2,711,069
UN Multi-Partner Trust Fund	2,916,690
UNOSSC	1,939,719
UNRCO	2,000
USAID	7,000,000
World Bank	4,982,365
World Food Programme	3,564,988
Donations channeled through WHO	138,682,893
Member States National Voluntary Contributions	70,832,684
TOTAL	321,482,244

As of 30 June 2021

Details on donations can be found on the [PAHO website](http://www.paho.org).



Pillar 2. Risk communication and community engagement

Support participatory development and implementation of risk communication plans and dissemination of risk communication information to populations and travelers.

The novel coronavirus outbreak has posed new challenges to populations worldwide and to health authorities, both in terms of facing pandemic-related health issues as well as ensuring the dissemination of accurate, updated, and trustworthy life-saving information. In 2020, coordinated actions across governments and society at large were key to managing the COVID-19 pandemic, amidst the “infodemic” caused by the proliferation of large amounts of information, including misinformation generated across media, social media and mobile messaging apps.

Challenges continued into 2021, as some countries began to see a drop in the number of cases and deaths while others in the Region faced sharp increases once again. Once the distribution of vaccines began worldwide in 2021, communication played a crucial role in incentivizing demand for the vaccine and challenging or dispelling false information and rumors related to its effectiveness. This helped, to varying degrees, to contain the spread of the virus and prevent further loss of lives, thus reaffirming the importance of risk communication and community engagement (RCCE) plans and materials in the national response to

COVID-19, ensuring that all audiences receive clear and accurate information in the language and through the channels most familiar to them.

Communicating to Build Trust in COVID-19 Vaccines

The infodemic surrounding COVID-19 vaccines has required the strengthening of risk communication and community engagement approaches, as well as infodemic management. PAHO implemented interventions to address this issue during the first half of 2021, many of which continued from 2020. This included a series of Twitter and Facebook Live sessions with experts to talk to the public about COVID-19 vaccines and respond to their questions and doubts.

The Organization also developed a [website dedicated to COVID-19](http://www.paho.org) vaccination that is continuously updated with information and resources for different audiences, laying the groundwork to enable Member States to strengthen community engagement and generate demand for COVID-19 vaccination.

Facebook

Through an agreement with the World Health Organization in mid-2020, Facebook allowed PAHO to place COVID-19 public health messaging ads at no cost to the Organization. These ads—with advice on a wide variety of COVID-19 health issues—engaged the general public and public health officials and creatives throughout the Region and beyond. Through August 2021, the monetary value of Facebook's in-kind support to PAHO, in the form of free ad placement on the Facebook platform, is estimated at approximately US\$5 million—the second highest, after WHO headquarters—in terms of support to WHO regions. PAHO's increased dissemination of COVID-19 vaccination material and non-COVID-19 public health information has had a significant impact: Impressions reached 8.4 billion (impressions are the total number of times the content has been shown to social media browsers) and its reach to unique users totals 634.4 million people.

Collaboration with Twitter Latin America

Since the onset of the pandemic, Twitter Latin America has had an agreement with PAHO through which advertising credits for COVID-19 posts have been donated to PAHO. As of August 2021, PAHO has received US\$ 42,000 in advertising credits.

Twitter Latin America has also provided training opportunities and a dedicated customer service representative to answer technical questions regarding the use of the dashboard. During the first half of 2021, PAHO staff participated in training sessions, including on crisis response communications.

Training and Capacity-Building Materials

From June 2020 through January 2021, PAHO held a [training series aimed at preparing Caribbean journalists and communicators](#) for the challenges of reporting on mental health issues during the COVID-19 pandemic. Participants received tools to help them provide informative, responsible, safe, and evidence-based coverage of the COVID-19 pandemic, with a focus on mental health-related topics. The training was followed by the presentation of an award to recognize stories that reflected the topics and key recommendations raised during the series. PAHO also developed a suite of technical and communications material that addresses mental health and psychosocial support during COVID-19. These materials are designed for the general population and

for vulnerable groups, including frontline and health workers; they were used in training and capacity-building exercises over virtual courses and more than 60 webinars.

In February 2021, PAHO released the Guide for the preparation of a [risk communication strategy for COVID-19 vaccines](#): A Resource for the countries of the Americas. Its goal is to help strengthen the communication and planning capacities of ministries of health and other agencies charged with communicating about new COVID-19 vaccines in the Americas.



In June, PAHO hosted a Spanish-language [webinar for the exchange of experiences on risk communication and community engagement in the context of COVID-19](#). Specialists from Chile, Cuba, and Honduras described the actions carried out, the tools used, and the lessons learned to aid other health communicators facing similar situations.

Facilitating Online Training on COVID-19

8

online WHO courses are on the PAHO Virtual Campus for Public Health, in Spanish and Portuguese.

500,000

persons enrolled in courses on topics ranging from infection prevention and control to clinical management and hand hygiene.

647

persons enrolled in virtual courses and webinars on the VCPH Caribbean Node ; three have been translated into Dutch).

10

capacity-building webinars, developed with CARICOM and PANCAP to broadcast key messages in the Caribbean.

- COVID-19: detection methods, prevention, response and control.
- COVID-19 operational planning guidelines: for UNCT systems and other partners.
- Standard precautions: Hand hygiene (COVID-19).
- Infection prevention and control (IPC) caused by COVID-19.
- ePROTECT Respiratory Infections: Health and occupational health.
- Course on the clinical management of Severe Acute Respiratory Infections (SARI).
- Severe Acute Respiratory Infection (SARI) Treatment Facility Design.
- Risk communication and community engagement.

OpenWHO, WHO's interactive, web-based, knowledge-transfer platform offering online courses to improve the response to health emergencies, launched a series of online courses titled "Serving Countries," focused on specific countries. The course series for Suriname was launched on 11 June. The courses, developed in collaboration with the PAHO/WHO Country Office and the Ministry of Health, provide countries with educational materials in their official languages to support their response to the current COVID-19 outbreak and other health threats. The goal is to empower frontline health professionals, policymakers, and the public.

The [Virtual Campus for Public Health](#) is the learning platform of the Pan American Health Organization. Its goal is to contribute to the development of skills and competencies of health workers, while supporting the transformation of public health services and practices in the Region of the Americas.

The Virtual Campus is a decentralized network of people, institutions, and organizations that share courses and open educational resources about topics related to public health. COVID-19 courses are available on the VCPH in multiple languages.

Communicating to the Public

In 2021, PAHO continued its efforts to address misinformation surrounding vaccine hesitancy and fake news related to COVID-19 and to ensure the public could easily find accurate information. The Organization partnered with Twitter, Google, and Facebook to counter misinformation, carry out live events on Facebook and Twitter – 'Ask the Experts' – and facilitate communication, with infographics available in Spanish and Portuguese.



During the [weekly press briefings](#), PAHO's Director, Dr. Carissa F. Etienne, continuously reinforced the importance of maintaining strong public health control measures, such as testing and contact tracing, and evidence-based prevention mechanisms, such as social distancing, limiting gatherings, and promoting mask wearing, considering the surging case numbers throughout the Region. She addressed the rise in cases and severe illness among young people in many countries and discussed the stress health facilities were facing, with rising numbers of hospitalizations

that were placing an overwhelming burden on oxygen supplies and the already limited number of health workers in the Region.

In the earlier months of 2021, Dr. Etienne encouraged countries to formulate national vaccine deployment plans to prioritize those at risk, such as health workers, older persons, and those with preexisting conditions, and highlighted PAHO's work with countries to secure a sufficient number of vaccine doses to protect populations and plan for the vaccine rollout, building on the Region's legacy of prior immunization campaigns.

In the evolving regional context, she also focused on the need to take steps to respond to the variants of concern. It was noted that widespread collaboration across the Americas is essential so that information can be disseminated and shared, and that responses can be tailored appropriately. She highlighted the importance of targeting misinformation that fuels vaccine hesitancy.

27

weekly virtual press briefings from PAHO's Director to inform and update the public, issue calls for action, and share recommendations on COVID-19.

250

social media materials in different languages produced about COVID-19 (including PHSM and Vaccines)

Facebook 
@PAHOWHO

Instagram 
@ops_paho

Twitter 
@pahowho

LinkedIn 
Pan American
Health Organization



“It is when there are breakdowns in information and communication or when details are slow to arrive that misinformation can take root.”

Dr. Carissa F. Etienne, Director of PAHO

PAHO’s Director continued to advocate for advanced and priority vaccine distribution in the Americas, which remained the epicenter of the pandemic, and addressed the disparities in access to vaccines throughout the Region. She noted the importance of prioritizing health investments in pursuit of equity, particularly given that COVID-19 has exacerbated poverty and inequity throughout the Americas.



PAHO partnered with SmartStudy, the global entertainment company behind the children’s brand, Pinkfong, to launch a [new public campaign](#) in February 2021 to encourage small children and their parents to protect themselves and others from COVID-19 by

washing their hands often. The result was a series of videos in English, Portuguese, and Spanish featuring Baby Shark and other aquatic friends, using catchy lyrics to promote safe practices that aim to help prevent the spread of this virus.





Pillar 3. Surveillance, rapid response teams, and case investigation

Strengthen the capacity of surveillance systems to detect COVID-19 cases, while ensuring continued surveillance of other diseases with the potential to rise to epidemic or pandemic levels.

An essential part of PAHO's response has been the support the Organization has provided to countries in the Region to strengthen their public health surveillance systems to detect COVID-19. Supporting efforts to boost event-based surveillance (EBS) and indicator-based surveillance (IBS) helped ensure that countries integrate COVID-19 into their routine severe acute respiratory illness / influenza-like illness (SARI/ILI) surveillance systems.

PAHO published regional updates (by epidemiological week) that detail trends in influenza and other respiratory viruses. These updates include [SARS-CoV-2 surveillance indicators](#) as well. PAHO continued to analyze SARS-CoV-2 trends in the Region, particularly through the collection of COVID-19 line list of nominal case data.

Seroprevalence studies have provided invaluable data on how the virus has spread, from the onset of the pandemic to date. PAHO maintains a [dashboard containing seroprevalence studies in Latin America and the Caribbean](#). Information on individual studies ranges from the design of the study, to sampling methods and sample sizes, to other relevant information.

PAHO's epidemiological reports/alerts, which include COVID-19 trend analysis, have provided countries in the Region with critical information to guide health interventions. [Epidemiological updates](#) were published regularly and analyze the occurrence of SARS-CoV-2 variants. The Region of the Americas contributes to the generation of genomic sequencing data through the [Regional Network for Genomic Surveillance of COVID-19](#).



13 of 18
epidemiological
alerts and updates,
issued between
January 2020 and 30
June 2021 were
related to COVID-19.



38 of the 54
countries, territories, and
areas in the Americas
report weekly on
surveillance indicators
for SARS-CoV-2,
influenza, and other
respiratory viruses.



77% of COVID-19
cases and **55%** of
deaths were captured
for epidemiological
analysis to better
characterize the
pandemic in the
Region.

As of 2 July 2021.

Monitoring and Analytical Products

179 daily situation reports with regional and global COVID-19 numbers, both total numbers and in the last 24 hours; COVID-19 highlights from EBS; comparative trends in all 56 countries and territories.

26 trend presentations at weekly meetings for PAHO IHR focal points on behavior of the virus and what to expect; 26 COVID-19 briefing notes prepared for communications.

15 bi-weekly tri-border situation reports with context of border areas in COL, VEN, PER and BRA; online dashboard updated with descriptions of COVID-19 in specific border areas: incidence, testing, mortality, hospitalizations, and contextual gaps/challenges.

Information Management

Daily update and maintenance (including on the weekends) of COVID-19 cases and deaths for all 56 countries and territories.

Weekly update of available COVID-19 data on healthcare workers and multisystem inflammatory syndrome (MIS-C/MIS-A) in children.

Daily update and maintenance of COVID-19 database on variants of concern and variants of interest in the Region: shared weekly with global and regional partners.

Ongoing efforts to automatically update hospitalization and testing data.

PAHO COVID-19 Dashboard

The [COVID-19 Epidemiological Dashboard](#) monitors the current situation of the COVID-19 pandemic in the Region. Monitoring and quantifying transmissibility, over the course of the COVID-19 epidemic is essential to understanding the evolution of the virus, forecasting its impact, and evaluating and adjusting public health responses.

Regional Geo-Hub

PAHO has also developed the [Geo-Hub COVID-19: Information System for the Region of the Americas](#), which includes a dashboards and epidemiological data that is updated daily, as well as four subregional and 56 country/territory geo-hubs. The public can consult PAHO's interactive dashboard that shows cumulative cases, deaths, cumulative incidence rates, new cases and deaths, as well as other epidemiological indicators, as reported by countries and territories.



2.8 million

views on the dashboards were registered since the beginning of the pandemic.



Includes data from **54 countries** and territories and from **791 states**, departments, and provinces in the Region of the Americas.



Subnational daily data collection for COVID-19 cases reported since March 2021 with 294,000 records.

Event-Based Surveillance (EBS)

PAHO supported the expansion of the [Epidemic Intelligence from Open Sources](#) (EIOS) platform to four countries in the Region, to enhance their capacity for event-based surveillance of COVID-19 and other emerging infectious diseases. The EIOS platform enables multiple communities of users to collaboratively assess and share information about outbreak events in real time, which enhances the capacity to conduct ongoing risk assessment at the regional, national, and subnational levels. In 2021, PAHO held meetings with Guatemala, Guyana, and Haiti to plan EIOS implementation; it supported implementation of the platform at subnational level in Brazil and trained 219 health professionals.

3.3 million

reports related to COVID-19
captured by EIOS in the Region.

Approximately **195,000**

reports related to COVID-19 scanned in 2021,
detecting 7,095 signals.

129

bulletins shared in January–June 2021.

Laboratory-Based Surveillance

Laboratory-based surveillance, necessary to monitor COVID-19 disease trends, relies on data produced in clinical and/or public health laboratories. To strengthen laboratory diagnostics capacity, PAHO supported countries and territories with data review, virtual trainings, troubleshooting sessions, and support to ensure the availability of validated tests and SARS-CoV-2 reference molecular assays.

PAHO continues to work closely with the Region's laboratories to prioritize samples for genomic sequencing. To date, 22 countries are participating in the [PAHO COVID-19 Genomic Surveillance Regional Network](#), with 23 reference sequencing laboratories in Brazil, Chile, Mexico, Panama, Trinidad and Tobago, and the United States of America.



Contact Tracing Knowledge Hub

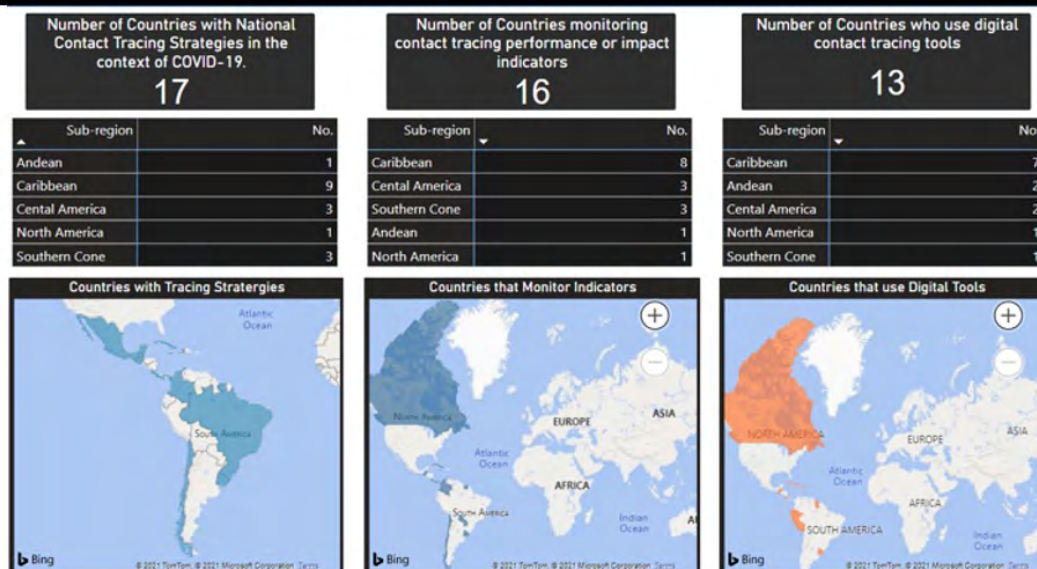
[PAHO's Contact Tracing Knowledge Hub](#) was launched in May 2021 and offers multidisciplinary information on contact tracing for a variety of audiences, from policy-makers to responders, to researchers, to educators, to affected communities, and the public. This hub is a public platform for access to the best and most up-to-date resources available to support contact tracing programs and activities.

The hub is comprised of four sections: technical guidelines, communication material, digital tools, and training. There is also a library of courses/trainings and an e-library of all scientific articles published regarding COVID-19 contact tracing. An interactive dashboard provides key contract tracing indicators at regional, subregional, and country level.

Welcome to PAHO's Contact Tracing Knowledge Hub. The hub offers multidisciplinary information on Contact Tracing for a variety of audiences from policy makers, to responders, to researchers, to educators, to affected communities and the public. This hub is a public platform for access to the best and most up to date resources available to support your contact tracing programs and activities.

Technical Guidelines <ul style="list-style-type: none"> Guidelines Resources from other Agencies 	Communication Material <ul style="list-style-type: none"> Video Social media content
Digital Tools <ul style="list-style-type: none"> Contact Tracing Staffing/Workforce Calculators Go Data 	Training <ul style="list-style-type: none"> Library of courses
Presentations & Features <ul style="list-style-type: none"> Presentations 	PAHO TV <ul style="list-style-type: none"> Contact Tracing

REGIONAL CONTACT TRACING DASHBOARD





Go.Data

Digital contact tracing tools have been used in the Americas to enhance COVID-19 outbreak response. Go.Data, an outbreak investigation tool developed by WHO, continues to be used to facilitate field data collection, contact tracing, and transmission chain visualization. This has accelerated the capacity for countries to operationalize and tailor contact tracing operations.

To date, PAHO has trained 24 countries in the Region and these countries have proceeded to download and install Go.Data, either at ministry of health level or at specific administrative levels. Of these 24 countries, 18 continue to use Go.Data.

PAHO will continue to provide training on an individual basis (by country) and will continue working to integrate Go.Data into national surveillance systems.

Argentina presented the outcome of its Go.Data integration into the national surveillance system to WHO, PAHO, and partners on 31 March 2021.

Capacity Building

Beginning in April 2021, PAHO launched monthly roundtable sessions or discussion forums, in which a focused group of countries in the Region is invited to participate, share experiences, and discuss topics related to contact tracing. To date, two roundtable sessions have taken place. Attendees have reported that these sessions have helped them understand existing gaps in knowledge about contact tracing activities and have facilitated communication/discussion and dissemination of lessons learned between countries.



Pillar 4. Points of entry, international travel, and transport

Support surveillance and risk communication activities at points of entry as well as implementation of appropriate public health measures.

As COVID-19 rapidly spread across the globe and countries began reporting an increasing number of cases, international travel-related measures were put in place to prevent further importation of the virus. With vaccines not available until the first quarter of 2021, COVID-19 control strategies centered on the use of non-pharmaceutical interventions, including personal protection, environmental measures, social distancing, and international travel restrictions.

PAHO has continuously supported countries to ensure that COVID-19 risk mitigation measures are in place, including advice for travelers on the self-monitoring of signs and symptoms; surveillance and case management at the point of entry and across borders; capacities and procedures for international contact tracing; and environmental controls and public health and social measures at points of entry and onboard conveyances.

As international travel began to resume, efforts focused on defining national COVID-19 risk-based policies, taking into account the provisions of the

International Health Regulations (2005) [IHR], available scientific evidence, and the most cost-effective use of available resources. PAHO continued to monitor the range of international travel-related measures implemented by Member States, in particular those related to the emergence of SARS-CoV-2 variants of concern. The Organization published this information in its PAHO COVID-19 Daily Updates, initially daily and then weekly, as well on the WHO secure [Event Information Site for National IHR Focal Points](#), as part of the global update.

The COVID-19 IHR Emergency Committee met twice in the first half of 2021, on [14 January 2021](#) and [15 April 2021](#). Following these meetings, the Director-General of WHO issued temporary recommendations for States Parties related to international travel revolving around (i) maintaining essential international travel; (ii) the non-introduction of proof of vaccination against COVID-19 as a condition for exiting or entering the territory of any given country; and (iii) the adoption of a risk-based approach while defining international travel-related measures. Similarly, the IHR Emergency

Committee advised the WHO Secretariat to develop guidance documents regarding the risk-based approach, as well as the digitalization of international travel health documents. The meeting concluded with steps for WHO and PAHO regarding the need to address arising and potential SARS-CoV-2 variants, as well as COVID-19 vaccines; evidence-based response strategies; surveillance; and strengthening health systems.

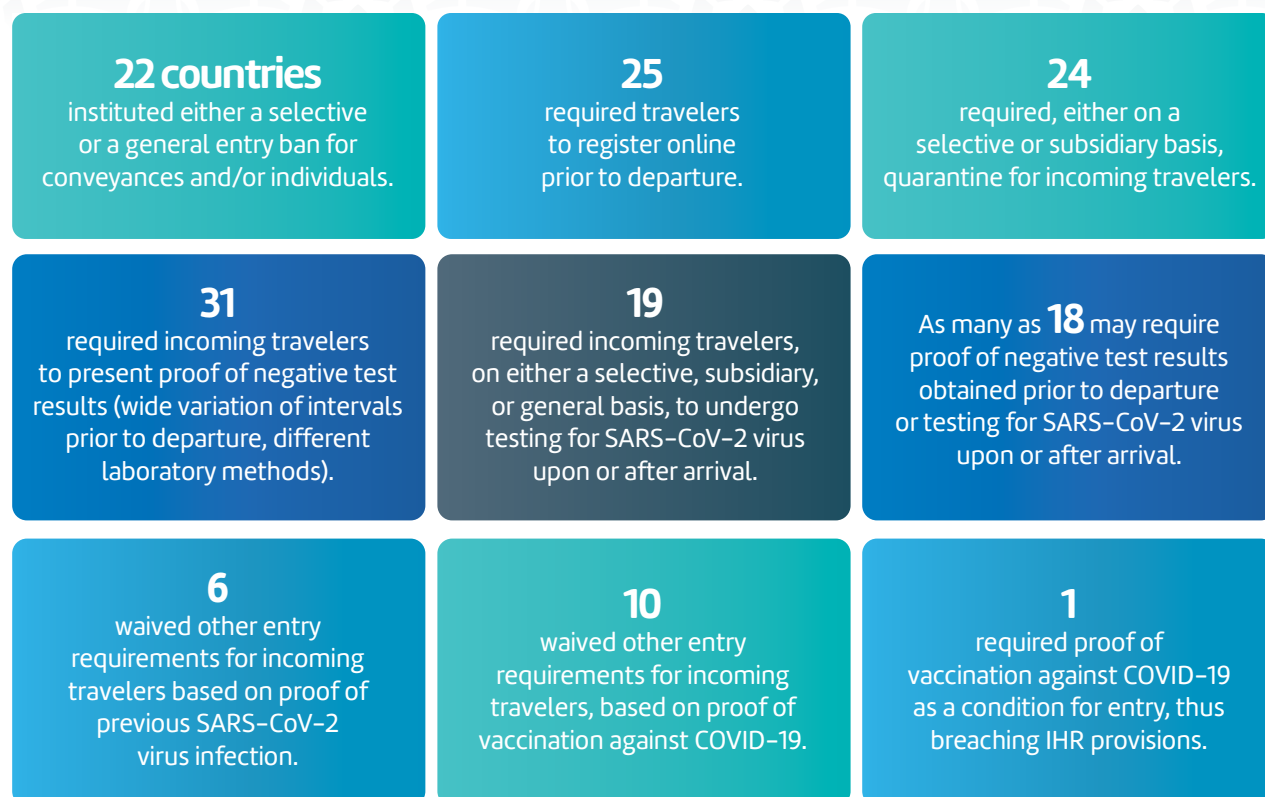
PAHO has contributed to the development of a number of WHO documents since January 2021. Regarding a risk-based approach to international travel, the Organization collaborated with WHO on [Policy considerations for implementing a risk-based approach to international travel in the context of COVID-19](#); and [Technical considerations for implementing a risk-based approach to international travel in the context of COVID-19: Interim guidance](#).

In addition, with the rollout of COVID-19 vaccines early in 2021, PAHO worked with WHO to publish the [Interim position paper: considerations regarding proof of COVID-19 vaccination for international travellers](#) and the [Call for public comments: Interim guidance for developing a Smart Vaccination Certificate](#).

Non-pharmaceutical measures pertaining to international travel vary widely from country to country, whereas other risk mitigation measures, such as personal protection and social distancing, are generally implemented at community level across the Region. Nonetheless, and in compliance with a 2020 [Resolution from PAHO's Directing Council on the COVID-19 pandemic](#), essential international travel generally has been maintained across the Americas through the promulgation of ad hoc legal provisions. However, international travel-related measures had an impact on the deployment of experts, the shipment of samples for testing, and procurement of supplies and equipment for testing, case management, and infection prevention and control.

Since attempts to resume non-essential international travel began in mid-2020, there have been multiple and rapid changes to travel-related measures. At the same time, the Region has seen the introduction and spread of SARS-CoV-2 variants of concern. Within that context, as of 29 May 2021, the range of international travel-related measures implemented by the 35 PAHO Member States, according to governmental sources, is as follows:





In an attempt to promote a risk-based approach to international travel-related measures in the Americas, PAHO has been working closely at different levels with the two Regional Offices of the International Civil Aviation Organization (ICAO) covering the Americas: the ICAO Regional Office for North America, Central America and the Caribbean, and the ICAO Regional Office for South America.

With respect to community-wide social distancing measures in PAHO Member States, their adoption and implementation has remained challenging due to: (i) individual, societal, political, and economic fatigue; (ii) the emergence of SARS-CoV-2 virus variants with different rates of transmissibility; (iii) the introduction of the vaccines, which, in certain contexts, has generated a false sense of security. Nonetheless, the approach promoted by PAHO in 2020, calling for an evidence-based decision-making process at the lowest possible administrative level,

was consistently adopted by a small number of countries in the Americas. The “traffic light” approach generally categorizes the status of SARS-CoV-2 transmission and response capacity, allowing countries to implement predefined sets of social distancing measures according to the current category.

PAHO contributed to the development of the WHO document [Considerations for implementing and adjusting public health and social measures in the context of COVID-19](#). With regard to public health and social measures in specific settings, such as schools, mass gatherings, and electoral processes, PAHO has worked with the regional offices of international agencies, such as the United Nations Educational, Scientific and Cultural Organization (UNESCO); United Nations Children’s Fund (UNICEF); and regional sports-related bodies, and has supported national institutional entities responsible for electoral activities.



Pillar 5. National laboratories

Enhance laboratory capacity to detect COVID-19 cases as well as to manage large-scale testing for COVID-19 domestically or through regional networks and international reference laboratories.

Laboratory-based surveillance, necessary to monitor COVID-19 disease trends, relies on data produced in clinical and/or public health laboratories. During the first half of 2021, PAHO not only continued building the diagnostic capacity in the Region's National Influenza Centers (NICs) and in the SARI (Severe Acute Respiratory Infection) laboratory network to detect SARS-CoV-2, but also included wider health and laboratory systems. The Organization donated essential laboratory reagents and supplies for establishing or strengthening surveillance and confirmation of the virus.

The emergence of SARS-CoV-2 led to an unexpected surge in the global demand for laboratory supplies, causing product scarcity in the market and making it more difficult to maintain the supply chain for in vitro diagnostics (IVDs) using PCR, the reference diagnostic platform recommended by WHO.

For some time, all 35 PAHO Member States have had the capacity for molecular diagnostic testing for SARS-CoV-2 and the Region's public health laboratory network, including specialized referral

laboratories, has demonstrated expertise in the molecular detection of respiratory viruses. During the first half of 2021, PAHO's Member States continued to leverage the installed capacity for molecular diagnostic testing. PAHO disseminated a clear algorithm for testing for SARS-CoV-2 that builds on existing influenza surveillance systems and continued to provide guidance on testing strategies, quality assurance procedures, and genomic surveillance. The Organization developed and shared technical guidance on the interpretation of laboratory results for COVID-19 diagnosis, conducted technical trainings, followed up to provide troubleshooting and analysis of results, and conducted refresher training, as needed. In addition, to reduce the burden on laboratory systems, PAHO continued expanding the diagnostic network through the use of antigen-based detection tests (Ag-RDT) in points of care.

In January, PAHO published [Occurrence of variants of SARS-CoV-2 in the Americas](#), a preliminary technical document with information on detection in the Americas of the two variants of interest identified at that moment, which were associated with increased

transmission in the United Kingdom and the Republic of South Africa. This document includes PAHO's recommendations that Member States continue with the sequencing of samples according to the guidelines of the regional genomic surveillance network and monitor sudden changes in the incidence of COVID-19 that occur in light of public health measures and of social distancing carried out by the population.

At a meeting on the "Role of the National Public Health Laboratories in the SARS-CoV-2 Variants Detection and Surveillance," organized by the Amazon Cooperation Treaty Organization (ACTO), the Organization presented the PAHO Genomic Surveillance Network to participating countries (Bolivia, Brazil, Colombia, Ecuador, Peru, Suriname, and Venezuela). The presentation was followed by discussions on next steps for collaboration in sequencing, focused on Amazon Shield countries.

PAHO participated in the webinar "Update on Scientific Knowledge about SARS-CoV-2: Effective Measures and New Variants," organized by the Andean Health Organization (ORAS, for its acronym in Spanish). The Organization reviewed the current diagnostic methods and the situation regarding the SARS-CoV-2 variants. ORAS was created to provide a space for integration, developing coordinated actions to face common problems, and work with governments to guarantee the right to health. Its members are Bolivia, Chile, Colombia, Ecuador, and Venezuela.

In the first semester of 2021, PAHO began collaboration with the [Foundation for Innovative New Diagnostics \(FIND\)](#), a global alliance for diagnostics, with the goal of scaling up the use of SARS-CoV-2 Ag-RDTs in the Americas. PAHO also participated in the Genomic Working Group meeting, where the current situation regarding variants of concern (VOC) and variants of interest (VOI) were reviewed. During the meeting, additional data regarding the B.1.617 variant (Delta) were reviewed and its classification as a VOC was confirmed. The Genomic Working Group is made up of experts from the Global Laboratory Alliance of High Threat Pathogens (GLAD-HP); WHO reference laboratories that provide confirmatory testing for COVID-19; the Global Outbreak Alert and Response Network (GOARN); temporary advisers; and members of the WHO COVID-19 Laboratory Team. Its purpose is to monitor the public health events associated with SARS-CoV-2 variants and provide technical advice and updates information on genomic sequence techniques and results.

Genomic Surveillance Regional Network

Coordinated by PAHO and comprised of laboratories from 24 countries in the Region, the [COVID-19 Genomic Surveillance Regional Network](#) (COVIGEN) was created in 2020 to monitor the virus that causes COVID-19 and to detect any change in its sequence that may influence its ability to spread and increase disease severity, as well as to monitor vaccine effectiveness, treatments, diagnostics, or other public health and social measures.

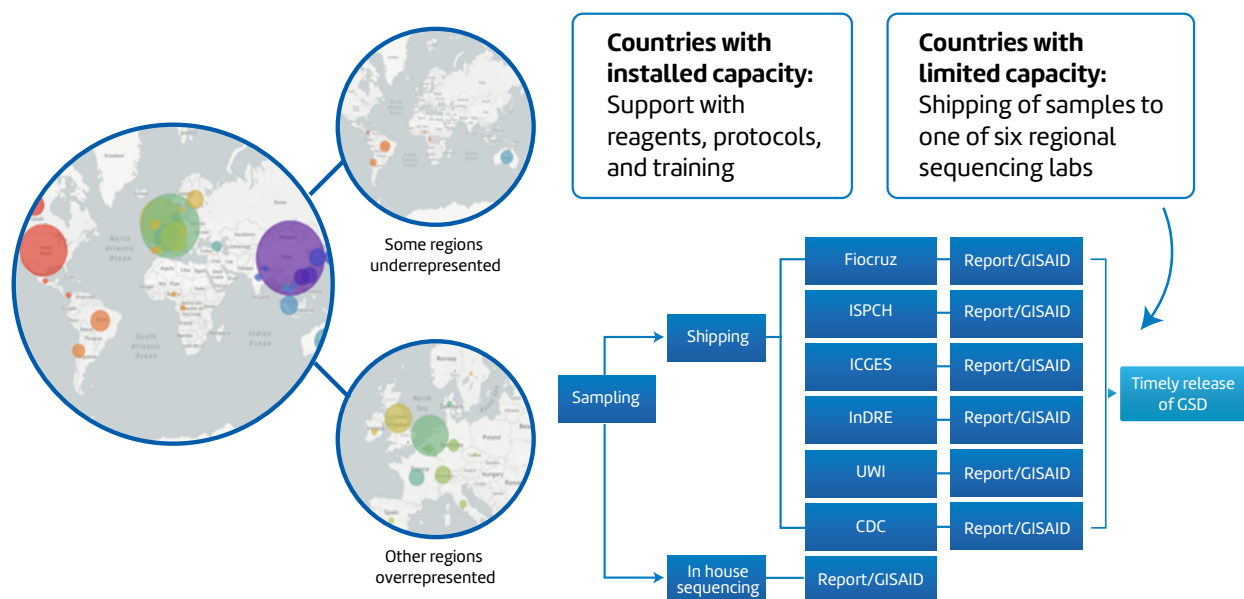


"The network has been instrumental in monitoring the spread of the virus within border regions and among travelers, who are often the first to introduce variants into a country,"

Dr. Carissa F. Etienne, Director of PAHO

SARS-CoV-2 Genomic Surveillance Network

Strengthen countries capacity for genomic surveillance of SARS-CoV-2 in the Americas



To date, 47 countries and territories in the Americas have detected at least one variant of concern and 11 have detected all four of them – Alpha, Beta, Gamma, and Delta.

Genomic surveillance network

PAHO coordinates the COVID-19 Genomic Surveillance Regional Network and supports **24 countries** and territories to strengthen SARS-CoV-2 genomic sequencing.

Approximately **39,000** full genome sequences of SARS-CoV-2 have been uploaded to the Global Initiative on Sharing All Influenza Data (GISAID) platform.

The SARS-CoV-2 Genomic Surveillance Network has been expanded to include **four** sequencing reference laboratories in Mexico, Panama, Trinidad and Tobago, and the United States of America, in addition to the existing two in Brazil and Chile.

The first virtual meeting of the network in April 2021 hosted **295** participants from **30** countries and territories, including Singapore, South Africa, Spain, and Switzerland.

The rapid procurement and deployment of material (primers, probes, positive controls, enzymes, plastic and general material, etc.); in-house reagents from WHO/PAHO Collaborating Centers; and antigen rapid diagnostic tests (Ag-RDTs), in stock either at PAHO HQ or at the warehouse in Panama, have contributed to enhancing laboratory capacity to detect COVID-19.



In 2021, PAHO conducted training sessions, through webinars and virtual events, in at least 17 countries, aimed at building and strengthening the capacity of national laboratories throughout the Region. Additional data review, troubleshooting sessions, and follow-up calls regarding laboratory diagnostics were held (more than one session) with 29 countries.





Pillar 6. Infection Prevention and Control and Protection of the Health Workforce

Support efforts to reduce human-to-human transmission within health facilities and the community, including assessment of national IPC plans.

33 Member States

reported having a national IPC program and WASH standards in health facilities.

220 IPC

sessions held in 2020–2021.

19,604 persons trained,

including health professionals, logisticians, hospitality workers, and others at higher risk of exposure trained.

1,719

health professionals trained in 2021.

Statistics as of 30 June 2021.

Infection prevention and control (IPC) is critical to containing the spread of emerging and re-emerging pathogens in health care facilities and community settings. Since the onset of the COVID-19 pandemic, PAHO has worked closely with health authorities to reiterate the need for consistent and robust IPC practices, such as standard precautions; hand hygiene while providing care; the rational use of personal protective equipment (PPE); cleaning and disinfection of medical devices; and water, sanitation, and hygiene (WASH) in health facilities and the community.

PAHO has conducted technical cooperation activities directed at IPC and developed and implemented education and training programs in Member States. Additionally, PAHO provided technical support to guide health workers and workers from other sectors on the use of appropriate PPE, while ensuring sufficient levels of supplies.

In March 2021, the Organization designed a [self-assessment tool for acute healthcare facilities](#) to help identify, prioritize, and address the gaps in infection prevention and control capacity while managing the response to COVID-19.

From January to June 2021, PAHO has also worked in collaboration with three countries and territories in the Region to assess the implementation of IPC at national and subnational levels and in health facilities. The results are currently under analysis, and recommendations will be issued to Member States.

■ The Bahamas

Assessment at national level and in 60 health facilities

■ Guatemala

Assessments in five health facilities

■ Belize

Assessment at national level and in six health facilities

practices in intensive care units in Antigua and Barbuda and Saint Kitts and Nevis, and for primary health workers in Dominica and The Bahamas.

PAHO provided a six-week training program for health workers in Haiti on basic concepts of infection prevention and control as well as four additional sessions on special topics of IPC and COVID-19 (management of dead bodies, rational use of PPE, the management of health workers exposed to COVID-19, and cleaning and disinfection of the environment).

Virtual Session	Number of participants
IPC sessions Antigua and Barbuda	76
IPC sessions Saint Kitts and Nevis	268
IPC training Dominica	236
IPC training Eastern Caribbean Countries	321
IPC assessment meeting The Bahamas	78
IPC training Haiti (basics and special topics)	370
Total	1,719

Health workers

Health workers are on the front line of COVID-19 response and provide care for potential and confirmed COVID-19 patients, at great personal risk to the own health. In 2020, PAHO issued guidelines on care for health workers exposed to COVID-19 in health facilities, and in 2021, continued to aid countries by carrying out in-person and virtual training sessions on IPC within ministries of health and with health workers.

During this period, general IPC training was provided to health workers from the Eastern Caribbean Countries. Additional trainings were conducted to meet specific needs of Member States and territories, such as IPC

In March 2021, PAHO held a [regional meeting](#) with national IPC focal points to discuss challenges related to the implementation of IPC programs and practices in the context of COVID-19. A total of 114 delegates from 35 Member States attended the meeting.

In addition to conceptual presentations, some countries presented real life experiences, followed by an exchange of experiences in small working groups. With this conceptual and applied approach, the following topics were discussed: advances in the organization and structure of IPC programs; the development and implementation of guidelines; education and training; surveillance of health care-associated infections; and monitoring, evaluation, and reporting of results.

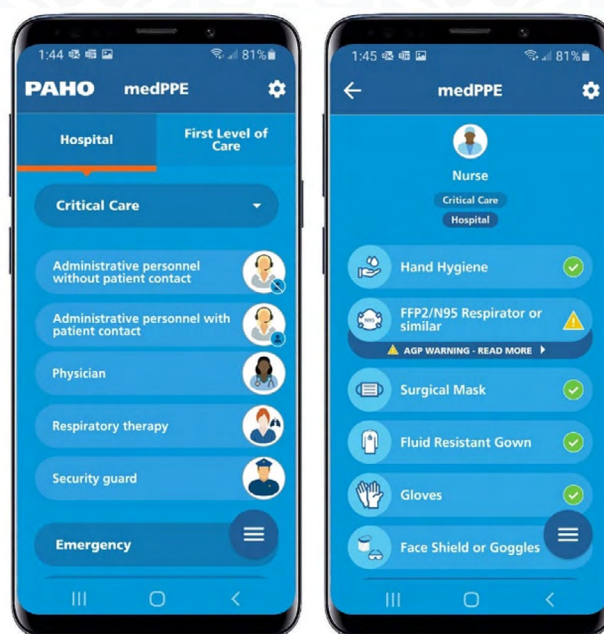
Rational Use of Personal Protective Equipment

Guidance on the best practices for the rational use of PPE is still crucial to ensure that supplies and often limited resources are most adequately and effectively used.

In 2021, PAHO maintained its collaboration with ministries of health to estimate needs for PPE, essential medicines, and other supplies, based on epidemiological trends and projections. The Organization supported the development of departmental intervention plans by training ministry personnel to calculate the quantity and volume of PPE needed to inform transportation and logistics concerns.

PAHO has also supported efforts to protect health workers by providing donations of IPC equipment and supplies as Member States/territories continued to respond to an increasing number of cases of COVID-19 in Latin America and the Caribbean. Additionally, the Organization produced videos and posters to guide and promote the proper use of PPE in health facilities.

PAHO developed an [app offering health workers quick guidance on the adequate and rational use of PPE](#), based on the type of activity and professional role. medPPE is available for iPhone or on Google Play and



was designed to protect health workers and avoid the misuse of essential PPE and supplies while caring for patients with diseases transmitted by droplets and contact, such as COVID-19, or during procedures that generate aerosols. Since its launch, in January 2021, and through 30 June, almost 3,000 users have downloaded the application.



Pillar 7. Case management, clinical operations, and therapeutics

Improve local health system capacity and protect healthcare workers to safely deliver equitable healthcare services.

The COVID-19 pandemic has posed challenges in the delivery of health services. Patient care must be coordinated with and integrated into the primary, secondary, and tertiary care levels, while ensuring an uninterrupted supply of medicines and medical devices, including in remote areas. All Member States took significant measures to rapidly strengthen their health systems by increasing the availability of beds; providing essential supplies, equipment, and human resources to health facilities; and establishing Severe Acute Respiratory Infection (SARI) treatment units and respiratory clinics, among other measures. During the first semester of 2021, PAHO continued to provide technical guidance on case management and strategies to expand health services to meet these unprecedented needs.

PAHO has also trained health workers in case management and therapeutics and worked with health authorities to adapt their recommendations and policy options on clinical management. The Organization collaborated closely with WHO and other global partners and stakeholders to advance

clinical research, expand the knowledge base, and facilitate the exchange of experiences and expertise of frontline health providers. PAHO is working closely with Member States and partners to utilize the [WHO Global COVID-19 Clinical Data Platform](#) (Argentina, Brazil, Chile, Colombia, Dominican Republic, Mexico, Panama, Peru, and the United States of America have contributed to the Clinical Data Platform), which collects anonymized clinical data on hospitalizations and suspected or confirmed COVID-19 cases.

Medical Surge Capacity

PAHO has developed workforce planning surge capacity tools for COVID-19, such as [Recommendations for medical surge capacity and deployment of emergency medical teams](#), published in March 2020. In 2021, the Organization continued to support countries to initiate policy dialogue about task-sharing plans and the management and regulation of health professionals to better confront COVID-19, and to build capacity in medical and nursing faculties to expand the roles of doctors and nurses in primary care. Many

countries have promulgated legal and normative tools for the management of human resources for health. The availability and safety of healthcare workers has been a critical factor in expanding services to respond to the pandemic and in making adaptations to ensure the continuity of essential services.

Between March 2020 and April 2021, countries faced significant increases in ICU occupancy and critical care capacity, which is not necessarily sustainable; care has not always met standards for quality and patient safety. Staff burnout and insufficient access to therapeutics (including oxygen) are among the main challenges. PAHO provided guidance for the expansion of hospital services and critical care capacity, including estimates of hospital capacity requirements, planning of resources needed, management of critical beds, and coordination of care, to respond to the surge of COVID-19 patients. Virtual missions were also conducted to support countries and territories whose hospitals found themselves at a breaking point amid the COVID-19 surge. In those countries and territories, a key mitigation strategy has been the mobilization of Emergency Medical Teams and/or technical guidance within the Emergency Medical Teams (EMTs) and the Alternative Medical Care Sites (AMCS) strategy.

As of June 2021, thanks to this response, more than 600,000 patients were treated for COVID-19 and other trauma and acute medical conditions by EMTs and pre-hospital Emergency Medical Services since the pandemic unfolded.

The role of Emergency Medical Teams and Alternative Medical Care Sites is recognized as key to the expansion of capacity to meet needs created by the exponential increase in patients due to COVID-19. PAHO has therefore provided guidance, training, and recommendations to support countries and territories

in establishing comprehensive medical surge capacity for response within their national health services networks. Regional EMTs have been supporting clinical care in border and remote areas, providing access to migrants and indigenous populations.

23 countries reported
188 national EMTs deployed

203 AMCS made operational

14,357 inpatient beds and
1,477 critical care beds provided

*As of June 2021

PAHO works with its partners and the regional network of EMT focal points to coordinate local responses and compliance with COVID-19 recommendations. Updated detailed information on deployed EMTs and AMCS throughout the Americas remains available at [PAHO's COVID-19 EMT Response](#) information hub.

Strengthening Country Capacity

94
regional
webinars

59
national
webinars

150
technical
meetings

89
regional
meetings

13
technical
reports

10
tools and
guidelines
developed/
adapted

*As of 30 June 2021.

More information about PAHO EMT response [available here](#)

PAHO held the Regional Caribbean EMT Coordination course in January 2021 to introduce the work of EMTs to the ministries of health and to coordinate the adoption of the CICOM (Spanish acronym)

methodology for setting up medical coordination and information cells as a key function of health emergency operations centers (EOCs). Experts from Antigua and Barbuda, Grenada, and Turks and Caicos helped deliver the course.

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

National regulatory agencies ensure that robust mechanisms are in place to adapt to a rapidly changing environment as new products become available for prevention, treatment, diagnostics, and other COVID-19-related uses. PAHO convened all NRAs in the Region to establish a network of regulatory focal points for COVID-19 that met frequently to share information, get updates in critical areas such as approaches to issuing regulatory emergency authorizations for medical devices, and identify potential collaboration for the approval and oversight of new therapeutic products.

The Organization continued to work with Member States to provide guidance on the use of in vitro diagnostics and other regulatory aspects, considering authorizations from the WHO Emergency Use Listing (EUL) procedures and based on recommendations from eight NRAs worldwide. Health technology assessments (HTAs) provide invaluable guidance for health authorities in the use of technologies relevant to the COVID-19 pandemic, and the Regional Database of HTA Reports of the Americas (BRISA) has 310 reports available in its COVID-19 section. PAHO maintained and updated a list of 76 prioritized (or approved under WHO's EUL) IVDs for proprietary and open platforms.

PAHO has provided quality assurance, technical recommendations, and advice on medicines and medical devices such as biomedical equipment,

PPE, and IVDs for donations, local and regional procurement. Quality assurance consisted in the definition of eligibility criteria, technical evaluation, regulatory compliance, and compliance with standards, as main aspects.

Eligibility and technical criteria were also developed for the procurement of sodium chloride, an injectable solution to support COVID-19 vaccine (Pfizer-BioNTech) deployment for those countries in the Region without a diluent supply.

Regional NRAs were supported on regular basis to address challenges by sharing lessons learned, facilitating access to information on the EUL COVID-19 vaccines (27 NRAs) and providing guidance on technical documents available as part of the COVAX Facility allocation mechanism. Additionally, six regulatory update meetings were held with regulators in the Americas, in collaboration with WHO. Ten countries were supported to define institutional development plans to strengthen regulatory capacities for medicines and training on the use of the computerized Global Benchmarking Tool (GBT) for self-assessment of regulatory capacities.

PAHO developed and published the [recommendations on Regulatory Processes and Aspects related to the Introduction of Vaccines during the COVID-19 Pandemic and Other Emergencies](#). Through a consultation process including 25 NRAs, recommendations to improve regulatory capacities were provided for authorization, importation, lot release, and pharmacovigilance of COVID-19-related medicines.

PAHO provided countries with training, documents, and guidelines for passive and active surveillance to support their national pharmacovigilance plans. Weekly meetings were held with NRA focal points

to exchange information and support decision-making regarding the management of adverse events following immunization. Additionally, 19 bulletins (both in Spanish and English) with consolidated updates on COVID-19 vaccines safety were produced and shared with countries: [PAHO also developed a web dashboard](#) with key information on efficacy and safety of the authorized COVID-19 vaccines that has had more than 180,000 visits in the last month.

PAHO presented information on the outcome of the WHO Emergency Use Listing Procedure (WHO/EUL) to the NRAs and enabled access to COVID-19 EUL vaccine dossiers for all NRAs that signed a confidentiality agreement with WHO. In this way, countries were able to rely on WHO recommendations for use during emergencies and swiftly grant access to vaccines, while having enough information to generate trust and conduct proper pharmacovigilance activities.

From March 2020 to March 2021, the Organization carried out an assessment of the implementation of PAHO/WHO recommendations by Member States, examining the use of COVID-19 evidence in decision-making for clinical management. The assessment identified and reviewed 107 published documents from 21 countries. Results show heterogeneity in the decisions made by governments across the Latin American region to recommend the use of therapeutics and the need to improve the use of evidence.

Evidence Synthesis and Evidence-Informed Guidelines

The Organization developed evidence-informed guidance for the management of mild, moderate, severe, and critical care of patients with COVID-19, issued recommendations on the initial care of persons

with acute respiratory illness due to COVID-19 in health facilities, and on the reorganization of services for patient management. PAHO also supported countries and territories to develop and implement evidence-informed guidelines and policy options to manage and control the disease.

10 publications providing updated evidence on therapeutics (living reviews).

Evidence of **137** therapeutics was synthesized from more than **350** randomized controlled trials.

5 guidelines on clinical management.

Ongoing Living Update of Potential COVID-19 Therapeutics Options: Summary of Evidence

The vast amount of data generated by clinical studies of potential therapeutic options for COVID-19 present important challenges. This new data must be interpreted quickly so that clinicians can make optimal treatment decisions with as little harm to patients as possible, and pharmaceutical manufacturers can rapidly scale up production and bolster their supply chains. This publication is the [24th edition of the database of evidence on potential therapeutic options for COVID-19](#) and examines 137 therapeutic options. The information helps investigators, policymakers, and prescribers navigate the flood of relevant data to ensure that management of COVID-19, at both individual and population levels, is based on the best available knowledge. This resource will be continually updated as more research is released into the public space.

[Guidelines for Care of Critically Ill Adult Patients with COVID-19 in the Americas. Version 3](#)

This publication, available in four languages, is the result of a rapid guideline development process and provides more than 80 evidence-informed recommendations and good practice statements for the management of critically ill adult patients with COVID-19 being treated in ICUs in the Americas. The evidence-informed recommendations are for identifying markers and mortality risk factors in critically ill patients, as well as infection control, sample collection, supportive care (respiratory and hemodynamic), pharmacological treatment, early rehabilitation, diagnostic imaging use, prevention of complications, and discharge requirements.

The recommendations are for all health care staff caring for patients in emergency departments and ICUs and for use by decisionmakers and government entities involved in the management of patients with COVID-19 in ICUs. This document reflects published evidence, up to the date of preparation, and PAHO will periodically update the applicable recommendations.

[List of Essential Medicines for Management of Patients Admitted to Intensive Care Units with Suspected or Confirmed COVID-19 Diagnosis](#)

The list of essential medicines required for the treatment of critically ill patients with suspected or confirmed COVID-19 in intensive care units was published in 2020 and recently updated. The contents of the list are in line with PAHO guidelines on the topic.

Training and Capacity Building

[Clinical Management webinar series](#)

From March to June 2021, PAHO organized a webinar series that covers topics related to the clinical management of COVID-19. The presentations are the latest evidence-based clinical practices and research in pharmaceuticals and other therapeutic interventions for the management of COVID-19 patients in the Region. Medical professionals, health workers, ministries of health, and PAHO country office focal points participated in the series.

PAHO also launched a [virtual course on Assessment, Selection, Rational Use, and Management of Health Technologies](#) in the context of COVID-19, tailored primarily to Caribbean health personnel. The course ran from October 2020 to June 2021, with the participation of people from 14 countries and

Sessions	Attendance
Update on therapeutics and prevention of COVID-19 complications with colchicine.	> 500 attendees
Tocilizumab: Recovery trial and clinical characterization of post COVID.	> 150 attendees
Reducing mortality and morbidity in COVID-19 patients.	> 800 attendees
Expert Panel discussion on the management of COVID-19 patients.	> 950 attendees
Expert panel on the identification and management of clinical decompensation in COVID-19 patients.	> 700 attendees

territories. The Organization shared recommendations, considerations, and over 300 health technology assessments of products for the management of COVID-19, produced by regulatory agencies from the EU, Australia, and other countries.

At a March 2021 meeting of the Eastern Caribbean countries (ECC), PAHO presented a webinar on the [Clinical Management of COVID-19 in Health Facilities and Communities](#) for health workers and ministries of health from ECC. That same month, PAHO, in collaboration with WHO, organized a workshop on WHO Emergency Use Listing for IVDs, reaching more than 137 participants from 27 countries.

In April, PAHO led a virtual seminar on the clinical management of COVID-19 and delivered a presentation on preliminary characterization of long-haul COVID-19 syndrome. The seminar also explored the potential impact of this syndrome on labor benefits, such as long-term sick leave, using analysis from the Mexican Social Security Institute (IMSS).

In June 2021, PAHO's Oxygen Technical Group co-organized and participated in the EMTignite webinar series, with the presentation "Medicinal Oxygen: Sources of risks and mechanisms of action." More than 100 people participated. The Oxygen Technical Group, the Suriname Country Office, and technical staff from the Academisch Ziekenhuis Paramaribo Hospital met to review local capacities for the production and demand of oxygen. The Technical Group also met with Peru's oxygen technical group to discuss priorities for technical cooperation. Finally, PAHO supported Guyana to review its national proposal to the Global Fund.

Digital Platforms

PAHO provided technical support for the implementation of the [WHO Global Clinical Platform for COVID-19](#) in countries of the Region. Global understanding of the natural history of COVID-19, its clinical features, prognostic factors, and outcomes remains incomplete. In response, WHO has created a global clinical platform of patient-level anonymized clinical data. The Platform is a secure, limited-access, password-protected platform. Currently it has more than 350,000 cases. Argentina, Brazil, Chile, Colombia, Dominican Republic, Mexico, Panama, Peru, and the United States of America are major contributors from the Region, with more than 23,000 cases each.

The database on [COVID-19 Guidance and the Latest Research in the Americas](#) is a searchable platform, launched in March 2020, that gathers guidelines and scientific papers published by national authorities in the Region, as well as PAHO and WHO technical documents. The database reported more than 800,000 page views, proving it to be a solid resource platform for many health professionals, researchers and decisionmakers. This continuing effort to catalogue technical information from Member States, using international metadata sets, increased the discoverability of COVID-19 guidance documents by the most-used Internet browsers.

[BIGG](#) is PAHO's International database of GRADE guidelines (Grading of Recommendations, Assessment, Development and Evaluations). To date, the database offers more than 1,300 guidelines in several languages that cover a wide range of health topics, including COVID-19. [Updated evidence on seroprevalence studies](#) from the Region has been summarized and is available on an ongoing basis.



Pillar 8. Operational Support, Logistics, and Supply Chain

Establish and implement expedited procedures to facilitate the Organization's support to the countries' and territories' response to COVID-19 healthcare services.

The protracted length of the pandemic and recurring peaks in cases have posed a variety of challenges, both logistically, in terms of the availability of medical supplies, particularly PPE, and in case management and diagnostics. The travel restrictions and lockdowns implemented in response to the COVID-19 pandemic severely interrupted supply chains. This interruption was exacerbated by more stringent export controls and the lack of commercial flights, which PAHO has relied on to deploy experts and ship medicines, supplies, and equipment. In addition, it was necessary to continuously verify the quality of goods and supplies, as the market has been flooded with products of dubious quality.

Between January and June 2021, the IMST operations pillar coordinated and dispatched more than 120 shipments in support COVID emergency response.

76 shipments mobilized to Member States from the strategic reserve in Panama and warehouses in Ecuador. These contained: 154 tons of PPE, including 956,500 gloves, 3.6 million surgical masks, 248,028 respirators, 363,570 gowns, and 495,500 face shields.

49 tons of biomedical devices were shipped to 31 Member States, including: 1,333 oxygen concentrators (w/accessories), 1,445 portable handheld pulse oximeters, and 6,512 fingertip pulse oximeters.

45 shipments of laboratory supplies totaling 30 tons, were dispatched to Member States, including virus sampling kits, RDTs, primers, antigen tests, swabs.

124 shipments sent.

31 Member States received shipments.

233 tons of relief supplies dispatched.

PAHO dispatched an average of **1** shipment every **36** hours.

A PAHO team at the Strategic Reserve warehouse in Panama prepares PPE kits and ships them in a standardized manner for delivery. Each kit contains a sufficient supply of PPE (gloves, gowns, surgical masks, respirators, and face shields or goggles) to protect a number of ICU healthcare workers for 30 days. Packaging the kits in this standardized manner makes it easy to quickly know the quantity of kits received and how many hospitals can be supplied, which saves time and reduces logistical efforts once these kits are received and distributed within countries. More than 75 kits have been dispatched during this reporting period.

PAHO COVID-19 Kit: 5x30	
Gloves	7,500
Masks	3,750
Respirators	150
Gowns	3,750
Goggles	150
or	
Face Shields	450

PAHO's Strategic Reserve in Panama allowed for quick mobilization of essential supplies, thus bridging the gaps between in-the-field needs and vendors' lead times, which are comparatively prolonged, and have been thoroughly challenged as all supply chains have been during the pandemic. Identifying mechanisms for replenishment of supplies to the reserve has become critical to allow the continuity of strategic support during emergencies. The logistics team at the Strategic Reserve in Panama was strengthened to meet the increasing operational demands. Currently, a five-member team carries out the daily duties, coordinating operations with the warehouse manager at the United Nations Humanitarian Response Depot (UNHRD).

Cross-functional coordination with technical units and pillar leads in PAHO's Incident Management Support Team allowed for the timely shipment of supplies and for effective planning between PAHO country offices and stakeholders, as well as with the Operation, Support and Logistics team, the World Food Program (WFP), and strategic partners such as Direct Relief.

From January to June 2021, Venezuela, Brazil, Barbados (for onward shipping to the Caribbean), and Cuba were the top four beneficiaries of all three categories of supplies (PPE, laboratory, and clinical management). In addition to the pandemic response, PAHO also supported emergencies such as the La Soufriere volcanic eruption in Saint Vincent and the Grenadines and the migrant crisis in the triborder area of Brazil, Colombia, and Peru, as well as in Venezuela. The Organization additionally supported Member States with technical guidance and recommendations on the quality assurance and post-market surveillance of items procured directly through national mechanisms.

During this same period, PAHO conducted 83 technical evaluations of and consultations on COVID-19 medical devices (51 for biomedical equipment, eight for IVDs, and 24 for PPE). PAHO also monitored alerts and recalls from 12 national regulatory agencies for post-market surveillance of medical devices related to COVID-19. Between January and June 2021, 76 alerts and recalls (16 IVDs, 33 PPE, 18 ventilators, nine other biomedical equipment) were disseminated to the Regional Working Group on Medical Devices. Seventy-six technical evaluations were provided for ICU medicines.

From the regional level, PAHO continued to collaborate with regional, national, and international partners (including other UN agencies) on all matters

related to procurement, shipping, freight, logistics, and technical specifications for PPE, oxygen concentrators, in vitro diagnostics, and other goods, supplies, and equipment critical to the COVID-19 response.

Considering the multitude of suppliers and concerns about the quality of procured goods, supplies, and equipment, PAHO has made quality assurance a critical component of its technical support. This has entailed reviewing technical specifications of procured goods, ensuring correct shipping documentation for customs clearance, and supporting countries with quality assurance issues. WHO issued interim guidance on the rational use of PPE for COVID-19 as well as considerations during severe shortages.

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

PAHO is co-lead of the Regional Health Sector Group. The group works as a mechanism to improve the coordination of the health sector during the response to emergencies. Humanitarian organizations work together to harmonize efforts, use available resources more efficiently, and create a cohesive response for the benefit of the affected population.

Through periodic and ad hoc meetings, the participating agencies share information regarding ongoing emergencies, actions taken, challenges identified, and measures to improve operations. PAHO has organized three meetings with the representatives of 13 humanitarian agencies in the reporting period.



PAHO Revolving Fund for Essential Medicines and Strategic Public Health Supplies

Established in 2000, the PAHO Strategic Fund supports Member States by:

1. integrating technical cooperation with PAHO programs on communicable and non-communicable diseases and robust partnerships with multi-stakeholder agencies.
2. ensuring quality, safety, and efficacy of medicines and other health products.
3. improving demand planning and capacity-strengthening for supply chain systems.
4. sustainably reducing prices of critical medications and supplies through transparent international sourcing line of credit option to facilitate Member State procurement.

Throughout the pandemic, the Strategic Fund has rapidly assessed inventories of PPE and other critical materials across the Region to ensure there is adequate stock and which items need to be prioritized. By leveraging close relationships with suppliers to better plan deliveries and shipments, as well as existing long-term agreements to assure the availability of supply and mitigation of price inflation, the Strategic Fund expanded feasible supply chain options that provided Member States with needed flexibility.

The Strategic Fund also coordinated alternative modes of transport (e.g., air freight versus ocean freight) to adapt to the most cost-effective and timely methods of shipment, amid continuously evolving disruptions related to COVID-19. This required direct negotiations with suppliers to absorb increases in freight costs for medicines.

Finally, given the need to adapt to the fluctuating availability of supplies during COVID-19, the Strategic Fund worked with partners to support effective alternative treatment protocols. Since the start of the pandemic, the Strategic Fund has procured more than \$240 million worth of COVID-19 diagnostic tests (PCR and rapid tests), PPE, and medicines for critical care, supporting more than 30 million people throughout the Americas. The Fund continues to support the procurement of medicines and public health supplies for individuals affected by HIV/AIDS, tuberculosis, malaria, diabetes, neglected tropical diseases, cardiovascular diseases, and hepatitis C.



Pillar 9. Maintaining Essential Health Services during the Pandemic

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

The COVID-19 pandemic has created unparalleled stress on the health systems and services of countries in the Americas. Many countries find that they do not have sufficient health personnel, quality services, capacity, or supplies to manage the uptick in cases. At the same time, the priority given to managing the pandemic has interrupted routine health services and programs, including vaccination campaigns, malaria elimination, tuberculosis prevention and control, and the reduction of noncommunicable diseases (NCDs) and their risk factors. PAHO 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.

This pandemic has demonstrated the critical need for universal health, showing that activation of the primary health care strategy and use of all the resources of the health services network, including the first level of

care, are essential to address the pandemic. Increased resolution capacity at the first level of care facilitates public access to health services and continuity of care at the community level.

The Organization used epidemiological models to estimate needs for human and financial resources, as well as supplies and hospital beds. It also supported countries to analyze options for reorganizing and expanding hospital services and share experiences. Tools and guidance were developed for managing human resources for health, adapting the first level of care, and reorganizing different levels of care to address the needs of the pandemic.

PAHO published [‘Considerations for Strengthening the First Level of Care in the Management of the COVID-19 Pandemic’](#) in January 2021. It was launched during a webinar that attracted hundreds of participants from the Americas. This document



presents considerations regarding the response capacity of first level of care services so that each patient with a suspected or confirmed case of COVID-19 receives appropriate care at the community level. It provides guidance on how to facilitate the effective functioning of health service networks and the response capacity of the first level of care, including: the availability and training of human resources; the clinical management of suspected and confirmed cases; the distribution and availability of medicines, supplies, and medical devices; the implementation of digital health applications and information systems for use within the health services networks; and the availability of transportation for patient transfers, as well as coverage for the entire population.

Response to the COVID-19 pandemic requires health services to deliver patient care that is coordinated and integrated across the different levels of complexity, with availability of an uninterrupted supply of medicines and medical devices in all health care facilities, including in remote areas. Many countries and territories in the Region have been challenged when it comes to delivering health services in this manner, even though all have implemented measures to expand the capacities of health services networks for the effective management of COVID-19 patients and for the continuity of essential health services.

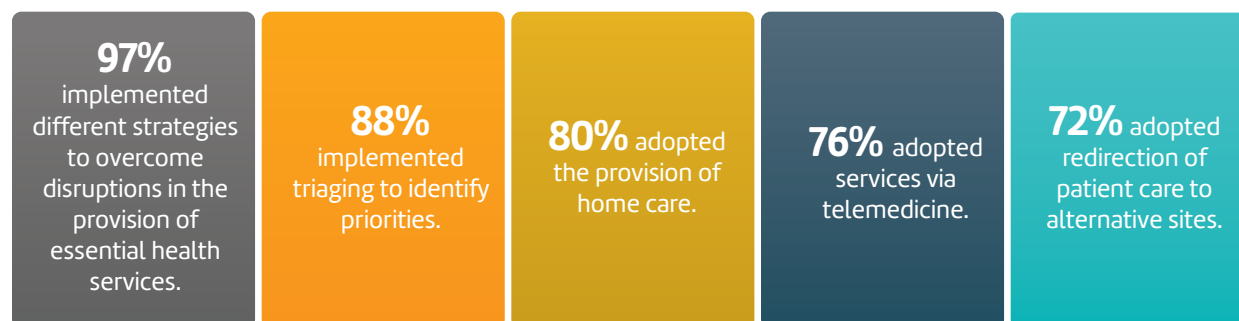
Measures have included expansion, redeployment, and training of human resources, procurement of essential commodities, budgetary allocations, and innovations in service delivery modalities. PAHO has provided ongoing tailored support to countries and territories in the Region to implement these measures, including the deployment of personnel and/or supplies. The Organization has provided technical guidance, training, and shared experiences to all countries and territories as needed for the reorganization of health services and the expansion/strengthening of capacities to respond to the COVID-19 pandemic.

The first level of care plays a critical role in the identification of COVID-19 cases, containment of expansion of cases, timely management of ambulatory cases in the community, and continuity of essential health services. PAHO provided guidance and monitored the continuity of essential health services in 2021 through the implementation of the second round of the [WHO pulse survey on continuity of essential health services during the COVID-19 pandemic](https://www.paho.org/en/topics/essential-health-services).

The survey, first launched in August 2020, included questions related to national policies and plans, the maintenance of essential health services, and country priorities and technical assistance needs within the context of COVID-19.

A [second round of the WHO pulse survey](#) was carried out between January and March 2021 to better understand the extent of disruptions to essential health services. It presents global findings from 135 countries and territories. Twenty-nine countries and territories in the Americas answered the questionnaire, which addressed essential health services and disruptions to supply chain systems,

as well as strategies to mitigate them; changes to service delivery platform access and essential public health functions and activities; policies, plans and mechanisms to maintain essential health services; and information tracking. Results are available on the [‘Tracking continuity of essential health services during the COVID-19 pandemic’ Dashboard](#).



Virtual Campus for Public Health

Offered **23** courses related to COVID-19.

Used by **35** countries and territories in the Americas.

818,120 new students enrolled.

More than **70,000** health workers trained.

As of 30 May 2021

Health systems continue to face difficulties in providing timely access and coverage and meeting the needs of the population at the first level of care, particularly in rural, remote, and neglected areas and border zones where there is a high number of COVID-19 cases.

Nutrition continues to be an important area of concern in all countries as health officials consider the necessary measures to ensure food security during the pandemic. The COVID-19 crisis poses a threat to all components of the food system, placing at risk the nutritional well-being of the peoples of Latin America and the Caribbean. PAHO, with other UN organizations, released a [Joint Statement on nutrition in the context of the COVID-19 pandemic Latin America and the Caribbean](#) in March 2021.

Mental Health

Health workers are on the frontlines of the COVID-19 response and are indispensable to ensuring the continuity of health services. The dramatic expansion of health services capacities, including for critical care to manage the surge of COVID-19 patients and maintain other essential health services, has put enormous pressures on health workers. Task shifting and work in high-risk departments, with long shifts and significant exposure to large numbers of



“To control the virus, we must remain vigilant and committed to the public health measures we know are effective – especially as new variants circulate in the region and may increase the burden on our health systems.” Dr. Carissa F. Etienne, Director of PAHO

At least **1.8 million** health workers have become infected with COVID-19 globally.

The health workforce has suffered more than **9,000** deaths.

COVID-19 patients, has negatively impacted their health, and in particular their mental health.

As of 12 May 2021, health providers who participated in the COVID-19 Health Care Workers (HEROES) Study reported feeling stigmatized and/or discriminated against because of their work with COVID-19. Twenty-two countries in the Americas were included in the study. Most participants, particularly women, reported being concerned about infecting their relatives and other persons close to them and received little assistance to balance their responsibilities with workplace duties. Unpublished preliminary data indicate the presence of mild to moderate depressive symptoms, with an increased risk of depression in specific groups, such as primary care doctors and nurses.

The pandemic has also had a negative impact on the mental health of the general population. In the first quarter of 2021, according to the second round of WHO pulse survey, 60% of responding countries and territories reported disruptions to mental health services – the area of health services for which the most countries and territories reported disruptions. Since 2020, PAHO has provided ongoing technical cooperation to countries and territories in key areas related to mental health and psychosocial support (MHPSS), including support to 24 countries and territories to advance their MHPSS coordination mechanisms; to 20 countries to deliver remote MHPSS interventions; and, to 13 countries and territories to develop implementation plans for WHO’s Mental Health Gap Action Program (mhGAP). PAHO also developed a series of technical and communications material to address MHPSS during COVID-19 for the general population and for vulnerable groups, including frontline and health workers, and facilitated training and capacity building on MHPSS through virtual courses and more than 60 webinars.

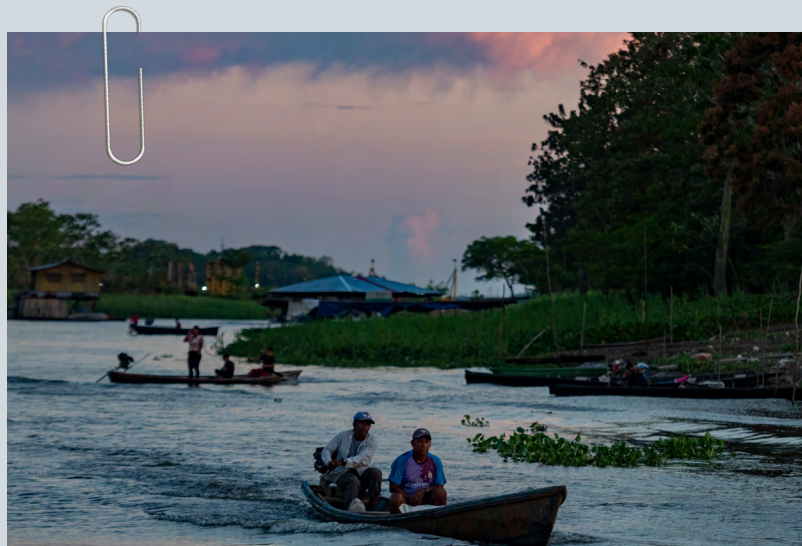
Stories from the field

Protecting the Health of Indigenous Peoples from COVID-19

As of July 2021, 617,000 individuals belonging to indigenous populations in the Region have been infected by COVID-19 and nearly 15,000 have died from complications related to this disease.

The introduction of vaccines to prevent COVID-19, and especially severe illness and death, has provided hope for controlling the pandemic. Seventeen countries in the Region have included indigenous peoples in their list of the priority groups for vaccination, recognizing their vulnerabilities and risk to contracting COVID-19.

Several initiatives below highlight how indigenous communities are addressing the challenge of bringing vaccination to their populations, many of whom live in remote and isolated areas.



With “sweet words,” vaccination advances in the Colombian Amazon

In May 2021, Teófilo Tatayeri contracted COVID-19, a disease that he says, “almost put me in the hole.” To avoid repeating the tragedy that put his life at risk, when he learned vaccinations were being offered in Puerto Nariño, he refused to wait for the health brigade to arrive in his community. Without thinking twice, together with his Yagua family and friends from the Siete de Agosto community, he embarked on a two-hour crossing on the Atacuari River to be vaccinated.


Stories from the field



Strengthening risk communication in Costa Rica's indigenous communities

In the Ngäbere indigenous language, Elicia Bejarano, from the Abrojo Montezuma community in the canton of Corredores, Puntarenas, Costa Rica, invites others in her community to get vaccinated: "Let's get the vaccine against COVID-19 so that (the virus) doesn't affect us severely," she emphasized.

Elicia is a community leader who participated in the PAHO workshop on knowledge dialogues and training on risk communication, organized with the Indigenous Development Associations in eight indigenous communities in the Costa Rica. These knowledge dialogues focused on improving capacities to communicate about COVID-19 and vaccines at the local level, how to address the main concerns of community members on the topic, and sharing information materials adapted to and distributed in the communities.



Through a campaign led by members of indigenous peoples, Ecuador promotes vaccination against COVID-19

"Vaccination to counter COVID-19 is very good. The vaccine does not present reactions or, if it does, they are not strong, and it does not cause any disease. Come and get vaccinated, this vaccine helps us a lot," says Anabel Motalvo, Assistant Director at the University of Otavalo, Ecuador, in the Kichwa language.

Anabel's testimony is one of many that are part of a campaign by Ecuador's Ministry of Public Health to promote vaccination and guarantee equal access to the COVID-19 vaccine for indigenous peoples, Afro-Ecuadorians, and Montubios, in the effort to reduce mortality and serious morbidity due to this disease.

Native doctor promotes COVID-19 vaccination in Tolupán villages in Honduras

For the past two years, Dr. Ena Banegas has worked in the Yorito municipality, located in the north-central Region of Honduras. The municipality has nine villages, three of which are inhabited by the Tolupán ethnic group, of which she is a native.

The villages are a 20-to-50-minute drive from center of the municipality, where the incidence of COVID-19 cases is high. Their remote location was "an advantage for the indigenous population that lives in the highlands and seldom goes down to the municipal center," says Ena. However, since the pandemic began, measures to protect the inhabitants in these communities have increased: closing communities and commerce, suspending events with crowds, and inviting those who present symptoms to be tested for the virus.

Stories from the field



Community health at the center of COVID-19 vaccination in indigenous communities in Paraguay

The Nivaclé indigenous community La Princesa, in the Department of Boquerón, is located more than 500 kilometers from Asunción, the country's capital. A community health promoter, Bernabé Desiderio, is going to receive the first dose of the COVID-19 vaccine. "I am not afraid to get vaccinated. I will have the antibodies against this disease that has caused so much pain and death. Now you too can get vaccinated and save your life," he says, and he will bring these vaccination messages to members of his community.

To encourage COVID-19 vaccination and continue promoting other preventive measures, PAHO and the Country Team launched a communication campaign, coordinated with the ministry of health and validated by the National Council for the Health of Indigenous Peoples (CONASAPI). The campaign included messages that consider the cosmovision of indigenous peoples, placing the value of community health at the center of the messaging.



Pillar 10. Vaccination

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

Safe and effective vaccines are a game-changing development when it comes to reducing severe disease and death from COVID-19, while timely and equitable access to vaccines is critical to ending the COVID-19 pandemic. PAHO has been working tirelessly to ensure that every country receives and administers the number of doses required to protect their population, starting with those that are the most vulnerable.

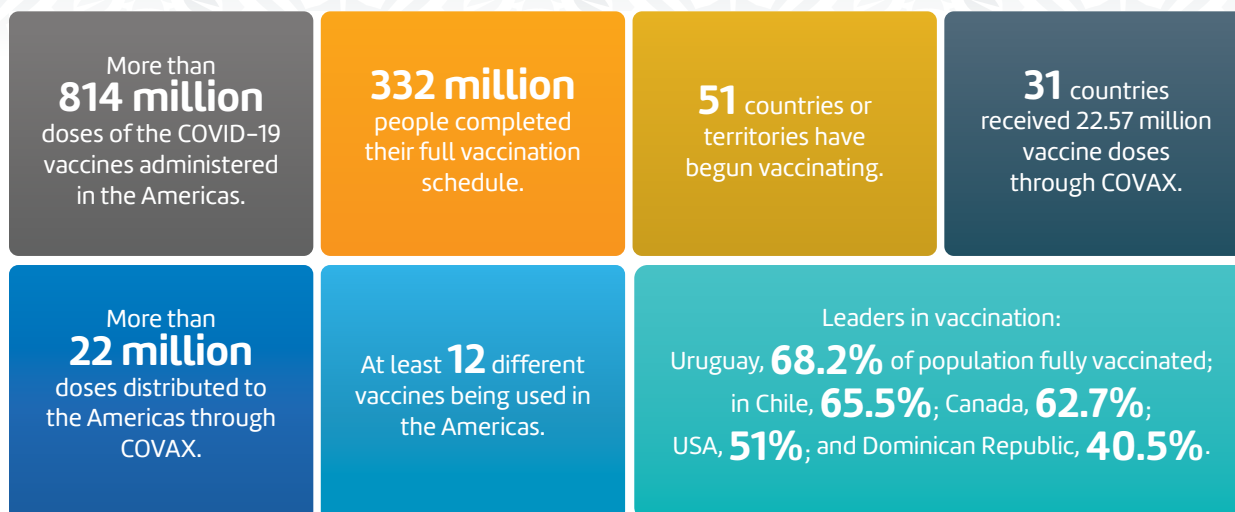
In order to successfully deploy vaccines against COVID-19, countries must develop national deployment and vaccination plans that include factors ranging from regulatory and logistical issues to human resource needs and equitable distribution, while prioritizing the persons most at risk of infection (e.g., frontline health workers, older persons, those with underlying health conditions).

Regional support included collaboration with those countries interested in accessing vaccines through the COVAX Facility. Through the PAHO Revolving Fund, 41 countries and territories in the Americas have been able to pool their resources to purchase WHO Emergency Use Listing Procedure (EUL)-approved vaccines, syringes, and injection supplies at lower prices than they would have been able to negotiate

on their own. This is complemented by PAHO's efforts to generate COVID-19 vaccine demand forecasting to better assess countries' needs as the pandemic evolves.

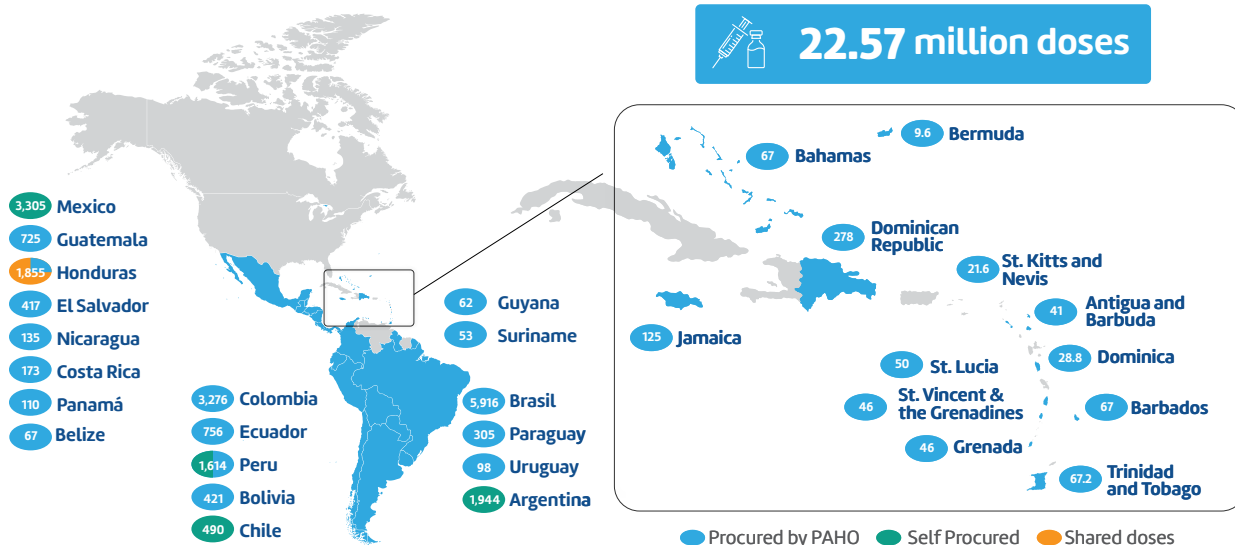
The Organization initiated the modernization of the PAHO Revolving Fund for Vaccines and the PAHO Strategic Fund processes by implementing new technologies and digital solutions. The deployment of the COVAX Tracker in March 2021 allowed users to monitor the processing and delivery of COVID-19 vaccines to Member States. The deployment of the COVID-19 Vaccine Demand Planning tool in June 2021 allows both PAHO and the Member States to document country vaccine demands and COVAX and bilateral agreements through a centralized platform.

In September 2020, the Director of PAHO established a Task Force for COVID-19 Vaccination to provide strategic guidance for the successful planning and rollout in the Americas, while complementing existing organizational resources and technical cooperation. The following table highlights selected regional statistics.



As of 28 June 2021.

COVID-19 vaccines provided by COVAX as of 28 June 2021 (in thousands)



PAHO's strategy included engagement with the [Access to COVID-19 Tools Accelerator \(ACT-A\)](#) and the Global Supply Consortium, which promote and accelerate the development, production, and equitable distribution of COVID-19 vaccines, diagnostics, and therapeutics; the development and implementation of quality-assurance procedures to ensure the quality, safety, and effectiveness of the products procured through the Organization; national purchases or donations; and ensure that Member States received safe and effective

vaccines, according to EUL criteria. In addition, PAHO worked with each country to ensure that regulatory pathways were applied, despite the rapid uptake of products.

Country Preparedness and Planning

In early 2021, PAHO launched preparedness activities to support countries as they introduce COVID-19 vaccines. WHO developed the National

Deployment and Vaccination Plan (NDVP) template to guide countries in planning the COVID-19 vaccine introduction process and made the completion of the template mandatory for Advance Market Commitment (AMC) countries. Self-financing countries also could submit their NDVP to the PAHO Regional Office if they wanted additional technical support. By March 2021, PAHO had reviewed the NDVP of the 10 AMC countries, plus the NDVP of 13 self-financing countries. All documents received technical input and gaps were recorded for further discussion and action.

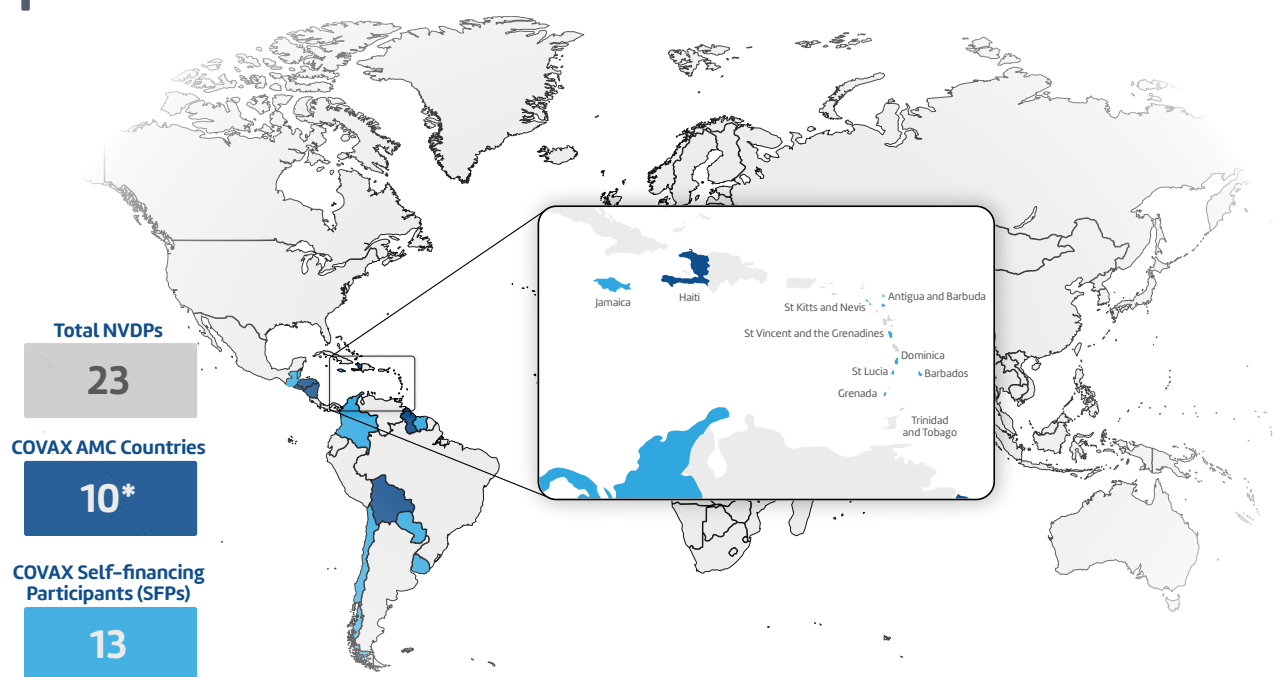
WHO also required countries to complete a COVID-19 Vaccine Introduction Readiness Assessment Tool (VIRAT) to monitor different aspects of the preparedness process and correct gaps as they were identified. All 35 Latin American and Caribbean countries and two territories submitted the VIRAT to PAHO for review. The tool was updated weekly until all countries had reached adequate readiness

levels. Countries were trained to use the tools, and data were collected to measure progress in the readiness indicators. The results were published on a public dashboard and updated weekly. The NDVP development was conducted by countries, with support from PAHO, and progress was recorded on the WHO Partners Platform. The incoming data were analyzed and shared with partners to determine next steps and identify gaps.

Countries were also encouraged to collect data on equitable vaccine distribution (i.e., monitor vaccination coverage rates among priority sub-populations) and to collect information that could facilitate and support decision-making (e.g., information on ESAVI cases) and the development of data-driven strategies.

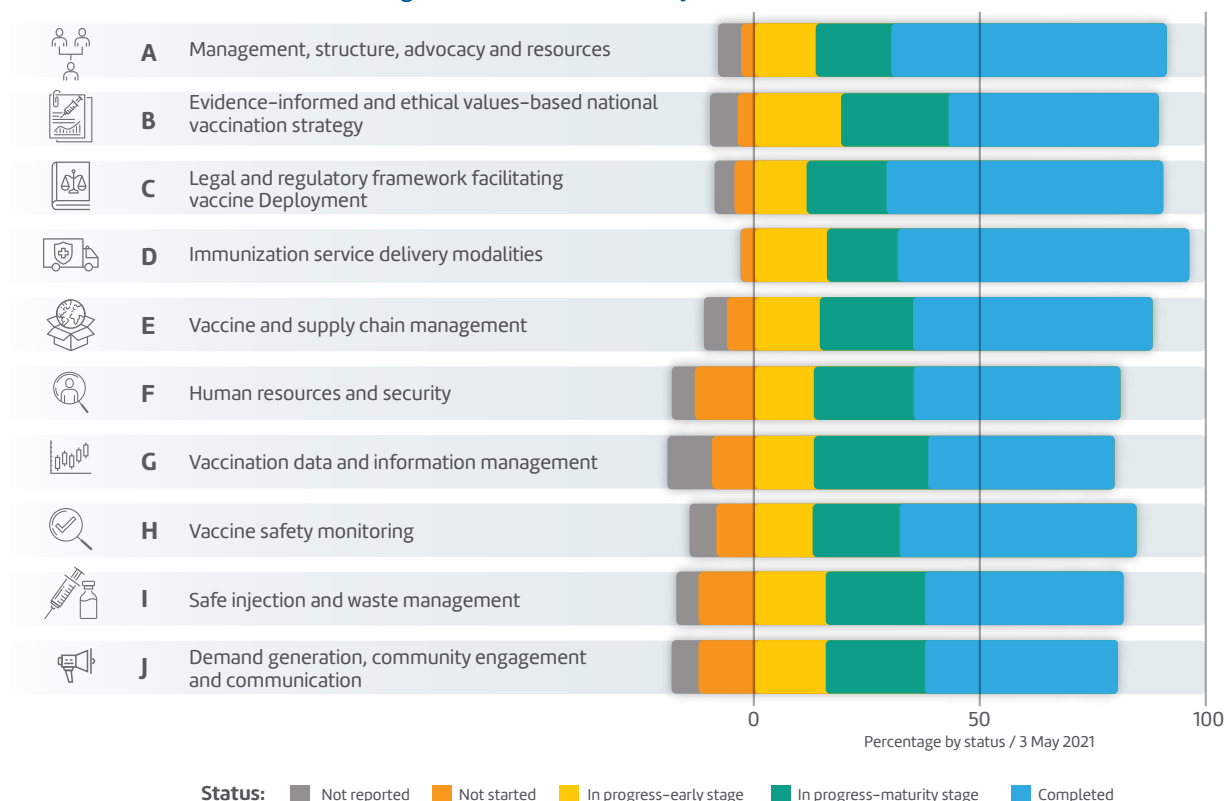
Finally, PAHO developed strategic documents and guidelines to orient countries during the micro planning process.

TOTAL NDVPs / COVAX AMC COUNTRIES / COVAX SELF-FINANCING PARTICIPANTS (SFPs)



Status: completed / in progress–maturity stage / in progress–early stage / not reported / not started

Regional Readiness Status by Areas of VIRAT



COVID-19 Vaccination Monitoring

Monitoring COVID-19 vaccination includes the following components:

Monitoring country readiness for COVID-19 introduction and the development of COVID-19 NVDPs.

Analyzing trends in vaccination coverage against COVID-19 according to: persons, time, geography, or place, and characteristics of the vaccine, in order to take specific actions when necessary.

Monitoring the equitable application of COVID-19 vaccines (i.e., the extent to which national policies are effectively implemented to prioritize at-risk groups).

Ensuring that the necessary forms and documentation are adapted and available to record, in a timely manner, the number of vaccine doses administered.

Facilitating the availability of information for analysis and use in decision-making.

COVID-19 Vaccine Effectiveness Studies

As soon as the availability of COVID-19 vaccines was announced in the Region, PAHO began expanding its regional network for influenza to include COVID-19 vaccines, using the same methodology (test-negative design among SARI patients). This work allows PAHO to evaluate the effectiveness of different COVID-19 vaccines including against specific SARS-CoV-2 variants. In addition, for interested countries, PAHO proposed expanding the regional Network for the Evaluation of Vaccine Effectiveness in Latin America and the Caribbean – influenza, (REVELAC-i), to include COVID-19 vaccines as well.

PAHO is collaborating with Harvard University to implement a multi-country collaborative research network to assess COVID-19 vaccine effectiveness in four countries (Argentina, Brazil, Chile, and Colombia). This study will be conducted among research institutions and the respective ministries of health in each country.

Risk Communication and Community Engagement to Address Hesitancy and Misinformation

Misinformation about COVID-19 vaccines has compelled countries to reinforce risk communication and community engagement approaches.

Partnerships with the media are critical for effective communications. Similarly, if countries are to respond to and overcome vaccine hesitancy, it is critically important to listen to and understand the concerns and doubts that people may have regarding immunization. For these reasons, PAHO used

social media as part of its social listening activities, dedicating time to answering individuals' questions and developing social media materials that respond to broader uncertainties, thus fighting the infodemic. A [webpage](#) with frequently asked questions on COVID-19 vaccination was developed and is constantly updated with responses to questions received from countries and the media, through social media, and from other sources. This information is translated into PAHO's four official languages.

In March 2021, PAHO conducted a [survey on COVID-19 vaccine hesitancy among health care workers \(HCW\)](#) in 14 Caribbean countries to inform the development and implementation of strategies to reduce COVID-19 vaccine hesitancy and promote advocacy for vaccination among this priority group. Preliminary results show that of 848 participants, 195 (23%) respondents displayed some level of vaccine hesitancy. Across HCW categories, 15% of physicians disagreed with getting a COVID-19 vaccine as soon as possible, compared with 34% of nurses, 23% of public health professionals, and 38% of allied professionals.

ESAVI Surveillance System

When it comes to all vaccines, PAHO recommends that countries set up a surveillance system to capture events supposedly attributable to vaccination or immunization (ESAVI). This is even more critical for new vaccines such as the COVID-19 vaccine. PAHO staff actively contributed to the development of the WHO [COVID-19 Safety Surveillance Manual](#). PAHO implemented a five-stage strategic plan to establish a regional ESAVI surveillance network, with reporting to the national and regional levels. The five steps of the strategic plan are:

- Strengthen regular activities.
- Develop regional manuals and tools for ESAVI investigation and causality assessment (i.e., [PAHO Guidance for Implementing the Regional COVID-19 Vaccine AEFI/AESI Surveillance System](#)).
- Strengthen national capacity.
- Implement active surveillance.
- Build strategic partnerships and communications.



PAHO developed a [pharmacovigilance dashboard](#) to support regulatory processes for the introduction and monitoring of the safety of COVID-19 vaccines, consolidating, into a single tool, information on the various components. The dashboard includes:

- Number of vaccines that are in different phases of clinical trials, as well as vaccines included in the WHO emergency use list (EUL) and authorized by countries or regions.
- Information on each of the authorized vaccines.
- Additional resources and access to other tools.
- Methods used in the pharmacovigilance panel for COVID-19 vaccines.
- Glossary of terms.

Cold Chain and Supply Chain Operations

PAHO assisted Member States to evaluate their cold chain capacities and update cold chain equipment inventories, including logistics requirements for vaccine distribution. The Organization provided technical assistance for estimating the additional cold chain capacity required for receiving, storing, and distributing COVID-19 vaccines, as well as guidance on equipment choices and specifications for purchasing cold chain equipment, including ultra-cold chain (UCC) freezers.

Regional and country-specific

training workshops were conducted to prepare health workers to handle COVID-19 vaccines. The workshops covered how to estimate required storage and transport capacities and guidance on how to manage UCC equipment and vaccines that require ultra-low temperatures.

Inventory management software for managing and tracking COVID-19 vaccines, from reception to distribution, was updated to include management of temperature requirements in Dominican Republic, Honduras, Jamaica, Mexico, Nicaragua, Paraguay, and Suriname.

Members of the mobile hospitals division of the Emergency Medical Teams were trained in cold chain operations, including ultra-low temperature refrigeration equipment and the management of ultra-low temperature COVID-19 vaccines.

Training and Information Material

PAHO's COVID-19 strategy includes the organization of training and capacity building events covering essential areas such as vaccine safety, surveillance for events supposedly attributable to vaccination or immunization (ESAVI), cold chain management, activation of health data systems, and micro planning

for vaccination campaigns. For each of these topics, PAHO developed regional guidelines. Finally, PAHO maintains active communication channels with the country offices to share the latest information and WHO guidelines on all aspects of the COVID-19 vaccine introduction process.

Vaccination Week in the Americas 2021

In April 2021, PAHO carried out the 19th Vaccination Week in the Americas (VWA). Since its inception, participating countries have vaccinated a total of 908 million persons against multiple diseases such as polio, measles/rubella, influenza, yellow fever, etc. This year, the Organization included the COVID-19 vaccine, where available. The VWA is a flexible platform that countries can adapt to focus on their needs and epidemiological situation, mainly aimed at strengthening the general population's confidence in vaccines and immunization, supporting the introduction of COVID-19 vaccines, and promoting immunization during the pandemic.

Forty-three countries participated in this year's VWA. While most countries are still in the process of submitting information to PAHO Headquarters, according to reports received from five countries (Guatemala, Grenada, Honduras, Nicaragua, and Uruguay), over 3.1 million individuals were vaccinated against COVID-19; measles, mumps and rubella (MMR); influenza; and polio, among others. Countries also extended their seasonal influenza campaigns beyond the week to reach as many individuals as possible.

The PAHO Revolving Fund for Access to Vaccines

As part of PAHO's technical cooperation package, the PAHO Revolving Fund (RF) for Access to Vaccines supports national immunization programs to improve their vaccine demand planning and forecasting capacities, strengthen supply chain management, and ensure their financing and sustainability.

During the first half of 2021, Member States continued to focus their efforts on preparing for and introducing COVID-19 vaccines, while maintaining their routine immunization services. In this context, countries in the Americas have accessed the RF to leverage more affordable pricing and to ensure the availability of vaccines to reach every corner of the region.

The RF has worked closely with national immunization programs in preemptive planning for fluctuations in national vaccine demand, triaging supply allocations, and monitoring national vaccine inventories to minimize risks for vaccine stock-outs in weakened health systems.





“Our vaccination goals in the region are grounded in equity. Everyone – regardless of who they are or where they live – should have access to a COVID-19 vaccine.” Dr. Carissa F. Etienne, Director of PAHO

Since March 2021, the COVAX Facility has been facing supply shortages compared to contractual projections, leaving countries that depended on the Facility as their main supply source with insufficient vaccine doses to cover their most prioritized population. This has presented a significant inequity concern for the Americas.

To mitigate inequalities and improve access by Member States to COVID-19 vaccines, PAHO has successfully advocated for regional dose sharing with the United States Government, Global Affairs Canada, and other governments and has supported the reallocation of COVAX doses between participating countries. By coordinating the delivery, logistics, and safe arrival of vaccines, the RF has been essential to the implementation of donations in the region through the COVAX Facility and has assisted in bilateral donations

as well. The RF also provides technical advice and overview of the entire process—cold chain, syringes, legal and regulatory requirements, etc.

In response to requests by Member States, PAHO is implementing a plan to facilitate access to additional COVID-19 vaccine supply. To achieve this, the RF developed a COVID-19 Vaccine Demand mapping platform that allows PAHO to monitor changes in the demand for vaccines and secure a matching supply. Through the RF, PAHO will continue working to strengthen the performance of the Member States’ vaccine demand plans as well as advocating for vaccine affordability, with the goal of improving sustainability of the national immunization programs.

\$750 million

in vaccines, syringes, and cold chain equipment procured through the RF in 2020.

\$80 million

in purchase orders (March–June 2021) for COVID-19 vaccines.

39 countries and territories using the Revolving Fund.

More than **10 million** vaccines donated.

8.3 million

vaccine doses from six manufacturers shipped and delivered through COVAX.





“As we continue to fight this virus, we must do more than just stop COVID-19. We must commit to working together to build a fairer, healthier world. We must also take this opportunity to build a healthier region that’s better prepared to tackle the next challenge and realizes our promise of health for all.”

Dr. Carissa F. Etienne, Director of PAHO

The Road Ahead

The first half of 2021 has been no different than last year in terms of the tireless efforts required of, and indeed being tackled by health workers and national authorities to manage the challenges presented by the COVID-19 pandemic. SARS-CoV-2 has touched every corner of the globe and has changed the course of history, bringing existing social and economic inequalities to the fore and regrettably exacerbating them.

The Region of the Americas is the world’s leading region in numbers of cases and deaths. Although in the Northern Hemisphere there has been a decline in the overwhelming rates of infections and deaths, for most countries in the Region, the end remains in the distant future.

Disruptions to essential health services are still widespread across the Region, with 29 countries reporting disruptions to almost half of all services. Despite this worrisome picture, as of June 2021, just one in ten people in Latin American and the Caribbean has been fully vaccinated against COVID-19.

Even within this context, according to PAHO’s estimates of the COVID-19 vaccine deficit in Member

States, given current and future vaccine market dynamics and the continuation of bilateral deals, the severe vaccine inequity problem in the Region may not be resolved without donations and dose sharing. Member States with available and projected excess doses are therefore encouraged to immediately consider dose sharing and donations.

It is important to remember, however, that while vaccines may offer protection from the worst of this virus, there are still uncertainties regarding the effectiveness of the COVID-19 vaccines in preventing SARS-CoV-2 virus transmission, as well as inequities in vaccine access. Although community transmission of COVID-19 may wane in the medium term, localized outbreaks could still be frequent.

As in the past, the Region’s common goal focuses on bringing down the epidemic curve and saving lives. Among the available means to reach this goal are: vaccination and systematic and rigorous application of nonpharmaceutical measures. Social distancing, wearing masks, and avoiding gatherings in closed spaces are key to reducing transmission, especially as dangerous variants of concern circulate.

Unfortunately, the adoption of these measures varies greatly within and among countries.

The Region must continue directing its efforts toward prevention and applying non-pharmaceutical measures systematically and rigorously, in line with the epidemiological situation experienced in each country and an evidence-based strategy, agreed on at the highest level of government.

Prioritizing prevention also means that there must be proactive action in communication campaigns, reminding younger, working-age populations of their risk and the need to protect themselves, including by getting vaccinated when it is their turn.

But while vaccines are being rolled out as fast as possible, vaccines are not the only measure that can help to bring down infections, especially when countries do not have access to a sufficient quantity to meet national demand. All efforts must be put in place to bend the curve downward, to save lives, and to ensure access to vaccines.

Until the pandemic is over, health systems should be prepared to deal with surges in COVID-19 cases as well the increased demand for hospital beds and critical care for a range of other illnesses. Therefore, health systems should strive for a comprehensive approach to managing the pandemic, adapting to a constantly evolving context.

PAHO will continue to provide technical cooperation to help countries and territories adopt a more holistic approach to the regional and national COVID-19 health response. Member States with available and projected

excess doses are encouraged to immediately consider dose sharing.

In addition to supporting a successful vaccine rollout, PAHO continues to work to strengthen critical areas of the response, such as diagnostics, case management, infection prevention and control, and continuity of essential health services. This includes adapting and increasing capacities of the health services networks and addressing health systems bottlenecks and health logistics. This will help mitigate the risk of countries transitioning to a vaccine-centric response.

A tailored approach to each country's reality has demonstrated added value and should continue to be an important aspect of direct technical cooperation to countries and territories. Support brings together the extensive expertise within the Incident Management Support Team and at all levels of the Organization, with virtual missions to countries, including to remote areas, and in-person missions when possible.

PAHO is confident about being on the right direction, but there is still a long path ahead. Action to control and treat COVID-19 during the pandemic, as well as during the economic recovery, must be centered on reducing inequalities. Equity should be the force guiding recovery from the pandemic.

The Region of the Americas is resilient and long known for the values of Pan-Americanism and solidarity. The Pan American Health Organization remains committed to leveraging all collective resources to see this pandemic through, toward recovery and rebuilding.

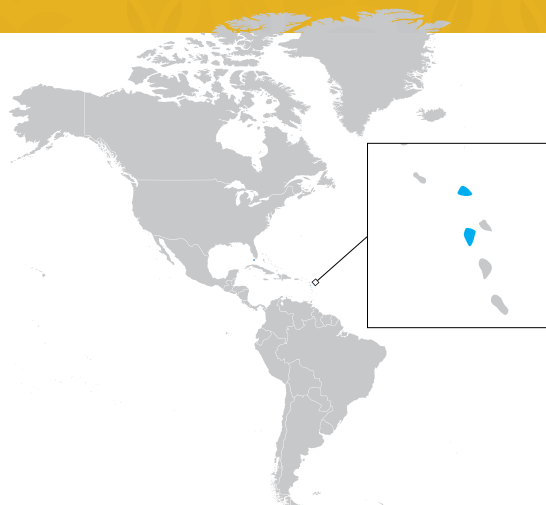


Selected Highlights of PAHO's Response to COVID-19 in Countries of the Americas

From start of the pandemic to June 2021



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.
- Launched consultations with national health authorities on the development of country strategic preparedness and response plans according to WHO guidelines.
- Continued publication of the COVID-19 information bulletin including measures taken by countries to contain the spread of the virus and highlights on PAHO support to countries.
- Maintained the Country Office's Incident Management System Team structure and adapted the members' roles to the WHO SPRP pillars to facilitate implementation and reporting.
- Facilitated coordination with the United Nations Resident Coordinator (UNRC) system on COVID-19 initiatives.



Risk communication and community engagement

- Delivered virtual training in psychological first aid for healthcare workers (HCWs), community leaders, teachers, and hotline workers to provide mental health and psychosocial support to strengthen individual and community resilience.
- 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.
- Produced five-part television series and public service announcements (PSAs) for radio on coping with COVID-19, addressing stigma and fear.
- Purchased equipment to strengthen the country's Health Promotion Unit.
- Produced a video highlighting the contributions and issues faced by healthcare workers in the COVID-19 response.



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 with COVID-19 case definitions; introduced data collection tools (e.g., Excel line listing, revised case reporting form).
- Provided orientation on the Go.Data platform (i.e., the WHO contact tracing software for capturing data and monitoring the chain of transmission).
- Provided orientation on EpiEstim and CovidSIM, mathematical models for short-term forecasting of cases.
- Provided guidance to national epidemiologists and laboratory personnel on the PAHO regional program for influenza laboratory-based surveillance for SARI/ILI and its link to COVID-19.
- Procured vehicle to national authorities to strengthen surveillance and contact tracing.
- Provided tablets and a desktop computer for strengthening surveillance, contact tracing, and data collection.
- Trained medical doctors and other health professionals on WHO guidelines for ICD-10 coding of COVID-19 mortality.
- Provided necessary equipment (e.g., thermal imagers and IT tools for data collection) to strengthen infrastructure for case detection at points of entry.
- Conducted a webinar on “Considerations for resuming nonessential travel in the Caribbean.”



National laboratories

- Disseminated guidelines and protocols for COVID-19 testing.
- Procured and distributed sample collection materials, 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.
- Ensured laboratory capacity to detect COVID-19 cases by providing tests and reagents and to scale up capacity as more cases were detected.
- Conducted a webinar on scaling up laboratory testing in the Caribbean.
- Jointly collaborated with the regional team to establish an emergency stock of COVID-19 laboratory materials for distribution to countries and territories in the subregion.
- Facilitated training by the regional team on molecular testing to establish on-island testing capacity.
- Delivered test kits and critical material, including reagents, to implement 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.
- Supported the strengthening of laboratory capacity for diagnosis of SARS-CoV-2 by providing GeneXpert cartridges.
- Disseminated updates on COVID-19 diagnostics, including recommendations for use of rapid antigen tests.



Points of entry, international travel, and transport

- Provided communication materials, including banners, to raise awareness about COVID-19 among travelers and officers at points of entry.
- Reviewed entry protocols for the reopening of borders as they became available and provided feedback to national health authorities as appropriate.



Infection prevention and control and protection of the health workforce

- Provided PPE and supplies for healthcare workers to keep them safe as they respond to the pandemic.
- Trained HCWs in IPC techniques. Trained nurses, doctors, and surveillance officers to use personal protective equipment (PPE) safely and appropriately.
- Trained 90% of the country's hospital staff in infection prevention and control.
- Provided handwash and hand sanitizing stations to health care facilities as part of ongoing support for protection of HCWs.



Case management, clinical operations, and therapeutics

- Provided technical support for the development of an isolation unit in acute healthcare settings.
- Improved local health system capacity and protected healthcare workers to safely detect and deliver healthcare services.
- Provided training in critical care management of COVID-19 patients to personnel from the nursing fraternity.
- Procured vital signs monitors, IV infusion pumps, ventilators, and oxygen concentrators to augment capacity for management of COVID-19 cases.



Operational support, logistics, and supply chain

- Supported the MOH with the procurement and institution of management arrangements for transportation required for strengthening case management and surveillance.



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.
- Supported the promotion of breastfeeding during the pandemic, including an address by the Minister of Health; visual displays at wellness centers; dissemination of information through health talks; online ads on social media platforms; celebrating and recognizing breastfeeding moms training for staff and couples, call-in radio programs, and reactivation of breastfeeding support groups. PAHO also produced six videos, for dissemination on social media, targeting mothers, their families and health care professionals, using identifiable members of the local community whose messages would resonate with various segments of the population.
- Supported a panel discussion on gender-based violence and men's health to discuss how the pandemic influenced the risk of intimate partner violence. This session, with 72 participants, was held at night to facilitate the participation of men.
- Convened a virtual campaign to support the annual Vaccination Week in the Americas.
- Provided guidance and training for caregivers 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.



Vaccination

- Provided mental health and psychosocial support to HCWs by a dedicated psychologist.
- Procured a vehicle for use by the community mental health team to strengthen the outreach of mental health services.
- Strengthened the capacity of vector control programs to prevent outbreak of dengue during the COVID-19 pandemic, by providing insecticide application equipment, insecticides, and entomological supplies.
- Provided capacity building for healthcare workers on the Mental Health Gap Action Plan.
- Provided training programs for MOH staff on aspects of clinical management and other health concerns, including mental health, family planning and the chronic care model in the context of COVID-19.
- Conducted training sessions on surveillance operations to detect and report Events Supposedly Attributable to Vaccines or Immunization (ESAVI) and cold chain management.
- Provided technical support for the development of the COVID-19 National Deployment and Vaccination Plan and supported the use of VIRAT, the Vaccine Country Readiness Assessment tool.
- Provided technical support to the MOH for the introduction and rollout of the COVID-19 vaccine.
- Provided training in the management of the COVID-19 vaccine to national immunizations focal points.



Argentina



Country-level coordination, planning, and monitoring

- Participated in the Argentinian International Humanitarian Network (RHIA), established in March 2020, to respond to emergencies, together with the United Nations system and civil society actors that make up the health cluster. RHIA coordinated the response to emergency due to drought and food crisis in native villages in the Gran Chaco area.
- Created the COVID-19 network of coordinators, with delegates from each agency, fund and UN Program, to provide advice and training for staff and a group of ad-hoc physicians to support UN staff by providing counseling for cases and aspects related to vaccination.
- Undertook a technical review of all COVID-19 documents prepared by the UN system in Argentina.
- Transmitted technical information (provisional guidelines, recommendations, protocols, and methodologies) to counterparts at the national and subnational levels, enabling them to adapt the material to their context and incorporate it, where appropriate, into existing protocols, instruments and approaches.
- Supported the purchase of COVID-19 supplies through PAHO's Strategic Fund and managed the WHO partner platform in Argentina.

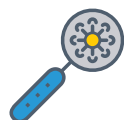
- Advised on the development of a strategic plan 2020–2024, including on COVID-19 and human resources for health.
- Contributed to the development of a new digital version of the Argentine Journal of Public Health, in the context of the pandemic, to disseminate scientific evidence on COVID-19.
- Trained subnational teams of indigenous health leaders, health workers, and nurses involved in the prevention and control of COVID-19 infections.
- Recruited IT specialists to provide the country's provinces with the required support to ensure the continuity of the COVID-19 response.



Risk communication and community engagement

- Provided pandemic training to more than 600 national and provincial journalists and to journalists from 65 municipal communication teams.
- Collaborated with UN agencies, funds, programs in Argentina to incorporate an ethnic-racial approach to the communication component of infection prevention and control in the context of COVID-19 for Afro-descendants, Roma, and other groups such as migrants, refugees, the incarcerated, older persons, geriatrics; printed and distributed these materials in Argentina.

- Collaborated in the implementation and dissemination of the campaign to promote blood donation in the context of COVID-19, together with the MOH and the office of the Presidency.
- Developed messages for contact tracing, adapted to the general population and health workers.



Surveillance, rapid response teams, and case investigation

- Incorporated the WHO tool Go.Data into the national surveillance system to support the contact tracing. Together with the MOH, trained Argentina's epidemiology teams (800 local and provincial users in 22 of the 24 regions) and helped develop seven guides on using Go.Data.
- Evaluated the current state of providing COVID-19 telehealth services in 547 public health departments in 23 provinces and in Buenos Aires.
- Supported the government to establish a new sentinel surveillance system with five sentinel centers for influenza and other respiratory viruses, including COVID-19.
- In coordination with the National Center for Community Organizations (CENOC), mobilized six NGOs working with vulnerable groups to help implement COVID-19 ("DetectAR") case detection, surveillance and contact tracing strategy.
- Trained epidemiology professionals to use the EpiEstim tool to calculate the virus' effective reproductive rate and CovidSIM to predict how it will spread, taking into account public health measures and the health system.
- Provided advice to health authorities in the provinces of Córdoba and Jujuy in analyzing excess mortality and COVID-19-related comorbidities.
- Hired 10 professionals (epidemiologists, engineers and architects of hospitals, information systems engineers) to provide direct support to the MOH anti-pandemic response.
- Mapped research and innovation initiatives on COVID-19 in which the country is participating, together with the health research directorate of the MOH.
- Published a section on COVID-19 research and innovation initiatives in the Argentina 2020 Basic Indicators.¹
- Trained 50 health professionals in Buenos Aires on human resources for health policies in the context of the pandemic.
- Improved the transparency and democratization of data through mapping, monitoring, and ongoing publication of critical data via a hub, done with the participation of the MOH on the COVID-19 Research and Innovation Initiatives.



Points of entry, international travel, and transport

- Considered recommendations to reopen entry points in the context of COVID-19, in coordination with the Secretariat of Foreign Affairs and the PAHO focal point for the International Health Regulations (IHR).



National laboratories

- Provided the first PCR kits and inputs to train more than 100 subnational laboratories in the 24 provinces, as part of a decentralized and expanded laboratory testing network.
- Donated enzymes and primers to the national laboratory network for PCR diagnostic testing.
- Donated Ag-RDT tests for use at the primary care level.

1 Pan American Health Organization. Indicadores Básicas de Argentina, 2020. Online at: <https://iris.paho.org/handle/10665.2/53210>



Infection prevention and control and protection of the health workforce

- Trained 300 nurses countrywide and hospital psychiatric staff and managers on infection prevention and control best practices.
- Trained indigenous and other health workers (including nurses) on COVID-19 infection, prevention and control at the subnational level.
- Provided technical guidance to Argentina to develop and disseminate a publication on the prevention and control of COVID-19 transmission, with a focus on isolation and follow up of suspected and/or confirmed cases, as well as [guidance for contact tracing](#).



Case management, clinical operations, and therapeutics

- Trained national and subnational teams to use PAHO tools to calculate the needs related to PPE, medical staff, supplies and equipment to handle the expected cases of COVID-19.



Operational support, logistics, and supply chain

- Shared information about SUMA, PAHO's humanitarian supply management system, multisectoral professionals in Santa Fe province.
- Supported the mobilization of health coordinators at the subnational level.



Maintaining essential health services during the pandemic

- In the context of the pandemic, supported the MOH to develop guidelines on mental health; NCDs; immunization; maternal, child and adolescent health; older adults; and breast, cervical and colorectal cancers.
- Conducted the "Impact of the COVID-19 pandemic and adaptive response of health services" research study.
- Supplied kits and portable equipment to the Chaco Salteño water authority to monitor the quality of water for human consumption in decentralized and/or isolated municipal water supply systems in the area during the COVID-19 pandemic.
- Conducted a research study on the impact of the pandemic on health services and adaptive response with a focus on protecting sexual and reproductive health rights; also conducted a case study on the pandemic, mental health, human rights, and discrimination among adolescents in the Chaco region.
- Supported the development of an instrument to certify the quality and safety of primary care in the context of COVID-19.



Vaccination

- Worked with the National Immunization Commission to share information about the COVAX Facility as a means of accessing COVID-19 vaccines.
- Supported Argentina to develop a COVID-19 National Deployment and Vaccination Plan and supported the use of VIRAT, the Vaccine Country Readiness Assessment tool.
- Provided training on the implementation of a cold chain system for different COVID-19 vaccines, as well as on the use of syringes and disposable materials. Additional trainings concerned vaccine preparedness, registration and safety.
- Implemented the ESAVI surveillance system in seven sentinel units (active surveillance; five reports to the regional system) and real-time case notification (passive surveillance). Supported the implementation of a vaccine effectiveness study (Sputnik, Sinopharm, and AZ) to assess reduction in the mortality rate of persons aged 60 or older.



Bahamas



Country-level coordination, planning, and monitoring

- Provided ongoing technical advice and operational support to develop public health and COVID-19 outbreak prevention and control policies, e.g., for clinical management, IPC, disease surveillance, quarantine/isolation/follow-up of cases and contacts, mental health and psychosocial support (MHPSS), travel, employers, schools, and social support for vulnerable groups (e.g., urban poor, migrants, homeless, unemployed, older people, persons with disabilities, persons deprived of their liberty, and other institutionalized groups).
- Supported the MOH in their efforts to mobilize financial and technical support for the COVID-19 response from other UN agencies, foreign missions, public sector and civil society groups.
- Advised on legislative policies, strategies, and considerations on mental health and psychosocial support, and social support for vulnerable groups, as noted above.
- Participated in discussions with the Prime Minister, Cabinet, opposition, and Chamber of Commerce on COVID-19 situation, links with public health and economy, and options for strengthening public health response.



Risk communication and community engagement

- Supported national authorities to develop and roll out their risk communication strategies and products through press conferences, town hall meetings, radio/TV interviews, and social media to reach all Bahamians.
- Provided occasional logistical support to the MOH for preparation and printing of communication products.
- Collaborated with the IOM and MOH to prepare Haitian Creole-language communication products for use with the Haitian migrant community.
- The PAHO Representative participated in periodic press conferences, town hall meetings, and radio/TV interviews.
- Developed new corporate risk communication and public education products (mental health, cyber safety for children, prevention of gender-based violence and substance abuse, parenting during COVID-19, and COVID-19 quarantine/isolation tips) for dissemination through PAHO social media platforms and via local mass media and partner agencies.



Surveillance, rapid response teams, and case investigation

- Assigned an epidemiologist for three months to support the MOH in disease surveillance and data management for COVID-19.
- Worked with the MOH to adapt PAHO 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.
- PAHO staff and national consultants provided technical assistance to the MOH's data management team, including in the use of WHO Go.Data tool for the analysis of chains of transmission.
- Provided technical assistance to review medical records to assist with the classification of deaths.
- Provided financial support to produce videos to be used in an online contract tracing course for collaborative project with University of the Bahamas and the MOH.
- Supported the modeling of the trends of the two waves of the COVID-19 outbreak in the Bahamas.
- Supported the MOH with COVID-19 outbreak investigations and assessments as well as vaccine distribution on the Family Islands, namely Andros, Cat Island, Eleuthera, and the Berry Islands.



Points of entry, international travel, and transport

- 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, for use 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.
- Strengthened the National Reference Laboratory by providing training, reagents, enzymes, controls, primers, and RNA extraction kits to support testing for COVID-19.
- Donated GeneXpert machines and tests for expansion and decentralization of laboratory testing capacities in response to the surge in cases.
- Supported the establishment of a laboratory sub-committee in the EOC to discuss and resolve issues related to operations, surveillance, and reporting for COVID-19 antigen testing.



Infection prevention and control and protection of the health workforce

- Supported the MOH with access to WHO and PAHO IPC and clinical management guidelines and online training resources.
- Provided guidance to the MOH to develop Standard Operating Procedures (SOPs) for IPC.
- Collaborated with the MOH on investigation into risk factors associated with infections among health workers.
- Offered an online IPC course (total of 20 hours over 10–12 weeks) for 36 healthcare personnel from primary health care clinics and hospitals.



Case management, clinical operations, and therapeutics

- Provided modular units that have been adapted to expand isolation and triage capacity in two hospitals.
- Assisted the MOH to plan for clinical and hospital surge capacities (hospital beds, human resources, and supplies) with the support of tools and guidelines prepared by PAHO and WHO.
- Provided guidance to the MOH in the development and update of clinical guidelines for the management of patients according to the severity classification in primary care clinics and hospital settings.
- Advised MOH on the expansion of acute care services in hospitals, workflow, and workplace to minimize COVID-19.
- Supported the rapid assessment and monitoring for continuity of essential health services during the COVID-19 pandemic using a WHO assessment tool.
- Provided sanitation supplies to various organizations which deliver services to vulnerable populations, including older people, migrant groups, displaced persons, adolescent parents, as well as drug rehabilitation centers.
- Provided ongoing support to the national authorities for the procurement and delivery of vaccines through PAHO's revolving funds for maintaining immunization services.



Operational support, logistics, and supply chain

- Delivered laboratory supplies, specifically primers and probes, PPE, and nasopharyngeal swabs to enable the Bahamas to ramp up testing for COVID-19.
- Procured and donated nasopharyngeal swabs, laboratory equipment and supplies, PPE, hand sanitizers, oximeters, and ventilators.



Maintaining essential health services during the pandemic

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

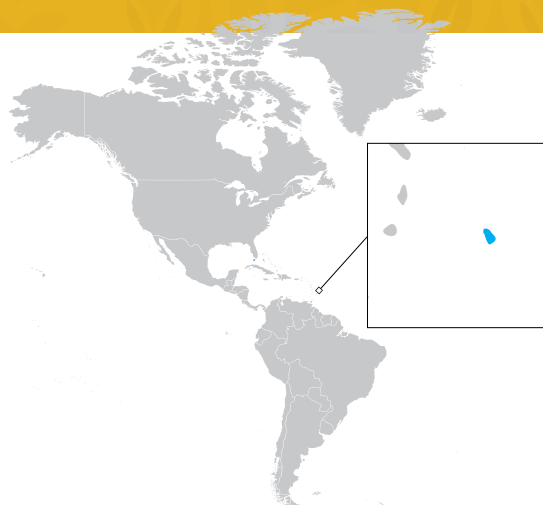


Vaccination

- Participated in planning and development of the National COVID-19 Vaccination Strategy and Plan, using WHO and PAHO guidelines.
- Supported a workshop for the introduction of COVID-19 vaccines, including cold chain management.
- Supported the MOH to strengthen regulatory capacities for the registration and importation of COVID-19 vaccines and pharmaceuticals.
- Provided the MOH and relevant stakeholders with updated information related to the COVID-19 vaccines available through the websites of WHO, PAHO, and other accredited public health organizations.



Barbados



Country-level coordination, planning, and monitoring

- Launched consultations with national health authorities on the development of country strategic preparedness and response plans for COVID-19, according to WHO guidelines.
- Helped national health authorities to access needed technical support/supplies to enable the country to effectively respond to the pandemic.
- Coordinated with the UN system to develop and implement the Multi-Sectoral Response Plan for the Eastern Caribbean, in coordination with CDEMA, and other partners.
- Continued publication of the PAHO Country Office information bulletin, including measures taken by countries to contain the spread of the virus and highlights on PAHO's support to the Member States.
- Maintained the structure of the Country Office Incident Management System Team and adapted the roles of members to the pillars of the WHO SPRP to facilitate implementation and reporting.
- Facilitated coordination with the UNRC system on COVID-19 initiatives.



Risk communication and community engagement

- Produced posters and booklets on preventive public health measures for COVID-19.
- Produced and disseminated social media cards on coping with stress-related issues during the pandemic.
- Facilitated capacity building in Psychological First Aid (PFA) for community and religious leaders, teachers, and influencers so that they can provide basic mental health and psychosocial support aimed at strengthening individual and community resilience.
- Hosted a virtual youth dialogue titled "COVID-19: Adjusting to the new normal" for 1,400 persons.
- Produced two videos on hand hygiene and mixing of disinfecting solutions for the general public.
- Marketed social media cards, via Facebook, Twitter, and Instagram, on coping with stress.
- Produced a video and a jingle on COVID-19 and discrimination.
- Produced a video highlighting the contributions and issues faced by HCWs in the COVID-19 response.
- Published a case study on Barbados' leadership and cooperation in containing COVID-19.

- Collaborated with national authorities in the production and airing of videos on the safe reopening of schools.
- Provided technical assistance for the organization of a National Consultation entitled "A Conversation on Ageing and Elder Affairs: Forming the Narrative."
- Produced educational videos for parents and children addressing the common stressors during the pandemic coupled with upcoming exams.



Surveillance, rapid response teams, and case investigation

- Worked with health authorities to ensure that surveillance systems were calibrated with COVID-19 case definitions 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 and CovidSIM mathematical models for short-term forecasting of cases.
- Procured computers to support COVID-19 surveillance and contact tracing.
- Trained medical doctors and other health professionals on WHO guidelines for ICD-10 coding of COVID-19 mortality.
- Provided IT equipment for four polyclinics to enhance surveillance capacities.



Points of entry, international travel, and transport

- Produced communication materials to raise awareness of risks from COVID-19 at points of entry (POE).
- Regularly reviewed entry protocols for the reopening of borders as they became available and provided feedback to national authorities.
- Provided necessary equipment, e.g., thermal imagers, and IT tools for data collection, to strengthen infrastructure for case detection at POE.
- Organized a webinar on "Considerations for Resuming Nonessential Travel in the Caribbean."



National laboratories

- Disseminated guidelines and protocols for COVID-19 testing, procurement, and distribution of sample collection materials.
- Procured and distributed RT-PCR enzymes, extraction kits, and consumables.
- Trained laboratory staff in theoretical aspects of molecular diagnostics.
- Conducted a webinar on scaling up laboratory testing in the Caribbean.
- Established an emergency stock of COVID-19 laboratory materials for distribution to countries and territories in the subregion.
- Disseminated updates on COVID-19 diagnostics, including recommendations for use of rapid antigen tests (Ag-RDTs) for COVID-19.
- Procured additional laboratory test kits and consumables in support of laboratory strengthening for the diagnosis of SARS-CoV-2.



Infection prevention and control and protection of the health workforce

- Delivered PPE to protect frontline health workers and 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.
- Provided infrared thermometers, resource packs, water stations, floor markers, tables with shelter coverings, IT equipment (laptops, tablets, etc.), and PPE and face shields to support the safe reopening of schools.



Case management, clinical operations, and therapeutics

- Conducted a webinar for health personnel on the clinical management of COVID-19, focusing on experiences and lessons learned from across the Region.
- Improved local health system capacity and protected healthcare workers to safely diagnose COVID-19 cases and deliver healthcare services.
- Provided eight vital signs monitors, eight IV infusion pumps, and five oxygen concentrators to augment the capacity for managing COVID-19 cases.
- Trained nursing personnel in critical care management of COVID-19 patients.



Operational support, logistics, and supply chain

- Ensured the movement of essential medical supplies to the Eastern Caribbean and the British Overseas Territories, through a partnership with the Regional Security Mechanism. The Barbados Defense Force helped with storage and distribution of medical supplies.
- Procurement of vehicle for isolation and health facilities to support supply chain management and monitoring.



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.
- Convened a webinar on "Dengue Response during the COVID-19 Pandemic." The webinar targeted policy makers, health experts, medical and public health practitioners.
- 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 virtual campaign: shared guidance, posters, 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.
 - Hosted a webinar on “Building Back Better NCD Services.”
 - Collaborated with UNICEF to provide MHPSS support to the affected community.
 - Developed a risk communication campaign during COVID-19 for persons living with NCDs.
 - Offered online training for health personnel to implement the Self-Management for Chronic Disease Program and provided manuals and tablets to support the program’s implementation.
 - Shared technical guidance on maternal care during COVID-19 and prepared a summary fact sheet on the increased risk of pregnant women to COVID-19 complications.
 - Developed a technical document to provide guidance to various stakeholders on strategies to engage young people in the COVID-19 response.
 - Provided technical assistance for the development of a national consultation entitled “A Conversation on Ageing and Elder Affairs: Forming the Narrative.” This Consultation was a first step in the process of developing a new national policy and strategic and action plans on ageing and the elderly in Barbados.
- This was a joint effort between the MOH and the Ministry of People Empowerment and Elder Affairs (MPEA). PAHO provided support to the development of a National Ageing Policy and Strategic Plan for Barbados.
- Provided support to strengthen the capacity of the vector control program to prevent and control dengue in the midst of the COVID-19 pandemic through the provision of insecticide application and entomological surveillance supplies.
 - Produced a video and a jingle on dengue prevention and control in the midst of the COVID-19 pandemic.
 - Provided technical assistance to promote PAHO Online Training on Tobacco Cessation for Primary Health Care to the general public.
 - Established sanitation and hygiene stations in special needs schools.



Vaccination

- Conducted training sessions on ESAVI surveillance and cold chain management.
- Provided technical support for the development of COVID-19 National Deployment and Vaccination Plan and to support vaccine introduction readiness using the VIRAT.
- Provided technical guidance to complete the requirements of the COVAX Facility.



Belize



Country-level coordination, planning, and monitoring

- Provided ongoing technical support to the MOH and Wellness (MOHW) in country preparedness and response to the COVID-19 pandemic.
- United Nations: Facilitated follow-up meetings on medical evacuation and the First Line of Defence (FLOD) with UN focal points. With UN examining physicians, provided updates on emerging COVID-19 epidemiological trend, health system response, and COVID-19 protocols for MEDEVAC and FLOD.
- Participated in meetings with the Ministry of Foreign Affairs (MoFA), MOHW, and the National Emergency Management Organization (NEMO) on needs (including health) for persons in shelters and residing in flooded areas post Tropical Storm Eta, Hurricanes Nana and Iota in the context of COVID-19 pandemic. PPE was provided for persons in shelters.
- Facilitated meeting with Belize Defence Force (BDF) to rapidly assess their COVID-19 situation and plan for support in response to the identified needs. Collaborated with the Belize Medical Dental Association (BMDA) and MOHW on the role of the private sector in the COVID-19 response.
- Conducted a virtual presentation for 73 primary school teachers of the Ministry of Education on noncommunicable diseases (NCDs) and COVID-19 to highlight the risks of chronic diseases and being infected with COVID-19.



Risk communication and community engagement

- Updated the MOHW risk communication strategy. Developed key messages on COVID-19 transmission, prevention, stigma and discrimination, alcohol use, breastfeeding, pregnancy, use of masks, homecare, and self-isolation, as well as management of hypertension and diabetes.
- Delivered language-specific public service announcements (PSAs) to 85 severely affected and remote communities with indigenous populations and those that lack internet access and electricity.
- In collaboration with UN agencies, designed a COVID-19 Quick Facts and Resources Booklet in English and Spanish for community health workers. Developed video messages for UN Day, the launch of the 16 Days of Activism and Human Rights Day.
- In collaboration with the MoFA, conducted radio and TV campaigns on COVID-19 prevention and protective measures in preparation for the country's national elections.
- Designed language-specific COVID-19 prevention infographics to target the Garifuna and Mayan population, with guidance from the Belize National Garifuna Council and the Belize Maya Leaders Alliance. Produced videos on the work community health workers during COVID-19, the PCR testing process at the Central Medical Laboratory (CML), and PAHO's influenza vaccine drive event.

- Developed a Christmas-themed COVID-19 PSA that aired on national and local radio and television stations during the holiday season.
- Collaborated with the MOHW to address the “infodemic” surrounding COVID-19, thus promoting the use of evidence-based information at the right time and from trusted sources.
- Collaborated with the MOHW in the production of public service announcements, posters, and social media messaging.



Surveillance, rapid response teams, and case investigation

- Provided technical guidance for the integration and timely reporting of COVID-19 into existing SARI surveillance, including the adaptation of the surveillance guidelines.
- Supported capacity building of healthcare workers from all districts by conducting field epidemiology training with the MOH.
- Provided technical guidance to the Statistical Institute of Belize and the MOHW on the modeling of epidemiological projections.
- Facilitated capacity building on timely reporting and consensus on the variables to be reported to PAHO.



Points of entry, international travel, and transport

- Provided necessary equipment and materials, e.g., walkthrough temperature scanners, digital cameras, liquid dispensers for soap and sanitizers to enhance COVID-19 surveillance capacity and IPC at the international airport.
- Produced health education materials for use at the airport and key health messages/infographics for returning nationals and tourists.



National laboratories

- Supported the MOHW to scale up the testing strategies and decentralize COVID-19 antigen testing to health facilities in the regions through the procurement of seven SD Biosensor Rapid Diagnostic Test (RDT) Analyzers; antigen tests; and supplies and reagents. PAHO HQ donated Ag-RDTs and SD Biosensor analyzers.
- Primers, probes, and positive controls were also donated for molecular diagnosis of SARS-CoV-2, while the rapid antigen tests were deployed at district level to ensure timeliness of results.
- Provided support to improve COVID-19 testing standards at the Central Medical Laboratory (CML), including the provision of safety equipment and accessories to protect laboratory workers.
- Supported the decentralization of COVID-19 testing at the regional and district levels to ensure efficient and timely detection of cases.
- Procured and donated GeneXpert machines to detect COVID-19 cases, to test for sexually transmissible infections/HIV and to provide a platform to detect future pandemics.



Infection prevention and control and protection of the health workforce

- Facilitated briefing on the regulation, use, and procurement of PPE for health workers in critical care facilities. Capacity building sessions were also held for volunteers and health staff working in quarantine facilities and caregivers in long-stay residential homes for older persons.
- Procured PPE for frontline responders such as the Belize Defence Force, Belize Coast Guard, Customs, Belize Central Prison, and the Ministry of Human Development, Families and Indigenous Peoples' Affairs.

- Supported the Belize Family Life Association with training on infection prevention and control to safeguard their staff and clients, and to deliver targeted interventions to reduce the risk of infection of COVID-19 among the adolescent population that seeks services at these sites.



Case management, clinical operations, and therapeutics

- Provided technical guidance on national case management, clinical operations, and therapeutics for COVID-19 through the dissemination of updated recommendations for COVID-19 therapies and recommendations from the WHO Solidarity Trials.
- Facilitated continuing medical education (CME) sessions, in collaboration with the MOHW and BMDA on best practices in COVID-19 patient management, including prognoses, mental health and psychosocial support, and the management of complications and sequelae of the disease.
- Supported the capacity building of nurses from the Karl Huesner Memorial Hospital (KMH) and regional hospitals on critical care nursing, in partnership with the University of the West Indies School of Nursing in Trinidad and Tobago.
- Donated medical equipment, ventilators, patient monitors, mobile X-ray machine, and accessories to the KMH to improve their COVID-19 critical care unit. Two hundred pulse oximeters were handed over to MOHW.
- Trained national counterparts on the PAHO tool on the estimation and management of COVID-19 to estimate needs for PPE, human resources, ICU and critical care beds, and supplies.

- Procured and donated clinical medical equipment, which improved and impacted the quality of care for persons diagnosed with COVID-19, reducing morbidity and mortality, as well as oxygen concentrators, patient monitors, high-flow cannula machines, pulse oximeters, and defibrillators.
- Disseminated information on strengthening regulatory capacity and supply chain management.



Operational support, logistics, and supply chain

- Coordinated with UN Resident Coordinator Office, UNHCR, UNFPA, and ILO to hand over equipment and supplies funded by the UN Multi-Partners Trust Fund for COVID-19 response.
- Facilitated the handover of equipment, materials, and supplies to MOH, in collaboration with donor representatives.
- Continued the follow up of equipment and supplies procurement through the COVID-19 Supply Portal.



Maintaining essential health services during the pandemic

- Provided guidance on the reorganization of health services to meet the changing demands in essential services during the pandemic, including the maintenance of immunization services.
- Facilitated capacity building in MHPSS, on HIV self-testing, chronic noncommunicable diseases, disabilities and rehabilitation, blood regulation, public health ethics, information systems and digital health, telemedicine and virtual care, malaria elimination, dengue prevention and treatment, maternal and child health surveillance, youth and adolescent health, and caring for older persons.

- Supported the MOHW's Community Health Platform providing community health worker (CHW) kits with basic health monitoring equipment and supplies, developed CHW training curriculum on NCDs, and donated laptops and projectors to facilitate training.
- Supported the implementation of measures for environmentally friendly and sustainable waste management of medical waste in health facilities in the context of COVID-19.
- Enhanced mental health care during the pandemic through the donation of tablets to the MOHW for use by psychiatric nurse practitioners in the field.
- Provided training on NCDs for community health workers to enhance the continuity of care at local level.
- Reviewed plans and other documents including the VIRAT, cold chain equipment, regulatory framework, indemnification and liability, risk communication, and demand generation.
- Provided regular updates on the progress on COVID-19 candidate vaccines and access through the COVAX Facility.
- Provided capacity building on analysis of cold chain capacity, costing using the COVID-19 vaccine introduction and deployment costing (CVIC) tool, post-marketing surveillance, crisis communication, etc.
- Supported the implementation of updates to the cold chain in order to receive different COVID-19 vaccines.
- Collaborated with the MOHW to increase public awareness of the importance and safety of the COVID-19 and other vaccines during Vaccination Week in the Americas (VWA) in April 2021, with a massive social and mainstream media campaign and distribution of VWA 2021 campaign materials.



Vaccination

- Participated in planning meetings for the national deployment of COVID-19 vaccines.



Bolivia



Country-level coordination, planning, and monitoring

- Supported national authorities to establish the Strategic Coordination Group, composed of the presidency and ministries of health, defense, development planning and others; the national EOC; the Office of the UN Resident Coordinator, the World Bank, and the IDB.
- Supported national authorities to develop and implement the National COVID-19 Response Strategy.
- Disseminated the National COVID-19 Response Strategy, seeking widespread socialization and consensus with national and subnational authorities.
- Provided technical support to the MOH to develop the Post-Lockdown Containment, Mitigation and Recovery Plan in response to COVID-19 (through December 2020), using the active community surveillance strategy.
- Prepared, published, and disseminated 1,000 copies of the strategy through a national launch in five departments.
- Launched a project to implement a risk training and communication strategy for COVID-19 in Guaraní indigenous populations, through a partnership with the School of Health Tekove Katu; similar actions are underway for the Yuki people.

- Led the Sectoral Health Group and generated sectoral and cross-sectoral coordination processes within the framework of the Humanitarian Country Team.
- Created an Incident Command to coordinate the emergency response to COVID-19.
- Provided technical guidance and support to formulate the country's 2021 COVID-19 response plan.
- Supported the country to strengthen capacities to respond to the COVID-19 pandemic, as part of the Pandemic Influenza Preparedness (PIP) Framework, with focus on early detection, clinical management, biosecurity, laboratory diagnostics and epidemiological analysis.
- Worked with national authorities, in coordination with UNDP, to support the active participation of civil society and other agencies to successfully obtain approval for and implement the Global Fund grant as part of the COVID-19 Response Mechanism (C19RM) to mitigate the impact of the pandemic on the fight against TB, HIV, and malaria.



Risk communication and community engagement

- Supported the MOH and the Vice-Ministry of Communication to develop and implement the risk communication strategy for COVID-19.

- Supported the MOH and Departmental Health Services (SEDES) to develop risk communication materials to reach the general population and adapt the materials addressed to indigenous groups, Afro-Bolivians, and populations living in the Amazon region, Chaco, and the highlands, as well as videos to promote vaccination among the Takana and Esse Ejja indigenous peoples.
- Disseminated messages through social networks designed to address discrimination against COVID-19, generate respect for health workers, promote self-care and social distancing measures.
- Forged strategic alliances with the UN Communication Group in Bolivia, the Country Humanitarian Team, and prestigious media groups at the state, private, and community levels.
- In coordination with the SEDES of Santa Cruz, Beni, and Oruro, conducted a survey on risk perceptions to guide community risk activities. Executed a risk communication plan based on that study in Beni.
- Designed a survey on citizens' attitudes toward the COVID-19 vaccine and a digital study of the anti-vaccine movement.
- Guided Bolivia in the use of the EpiEstim tool to analyze and visualize the virus' effective reproduction rate and to formulate projections on how it will spread in the light of the public health measures applied and the national health system (using the CovidSIM tool).
- Collaborated with the National Liaison Center in the periodic reporting of information on COVID-19, in line with the IHR.
- Set up the Regulatory Center for Medical Emergencies (CRUEM) in Oruro, strengthened the epidemiological information system, and monitored health services' needs (beds, oxygen, ambulances, etc.).
- Provided technical support to the monitoring and contact tracing of COVID-19 cases and communication in Guaraní-speaking indigenous communities in the department of Santa Cruz, in partnership with the Technical Health School Tekove-Katu from the region of the Bolivian Chaco.



Surveillance, rapid response teams, and case investigation

- Developed a methodology and tools for information management, case definition, case detection protocols, quarantine, and home isolation.
- Developed a community surveillance strategy to mobilize health brigades and rapid response teams in coordination with other actors to detect and isolate cases in a timely manner.
- Helped adapt guidelines for handling and disposal of bodies of COVID-19 victims, adapting the guidelines to agricultural populations, indigenous peoples (peoples through the COVID-19 Guide for Indigenous Peoples), Afro-Bolivians, and other groups.
- Coordinated with the National Emergency Operations Center and the Environmental Health, Emergency and Disaster Risk Management Unit of the MOH to mobilize rapid response teams for COVID-19 surveillance to air and land entry points, in order to respond to situations created by 20,000 repatriated Bolivians.
- Provided training on biosecurity protocols for airport, customs, and migration personnel.
- Brigades in the Department of Oruro received support for surveillance of critical border points at the beginning of the pandemic.
- Fostered coordination among national authorities: epidemiology; civil aviation; airport authorities; and SEDES to implement safety measures and protocols for air transport, both for ground and in-flight services.



Points of entry, international travel, and transport

- Supported SEDES with land and river borders in decision-making for border control and closure related to entry points (both land borders and those formed by rivers) under the IHR.



National laboratories

- Provided technical support for the installation of new open molecular biology laboratories and laboratories with GeneXpert platforms in different departments of Bolivia. Trained the country's laboratory staff on molecular diagnostic analysis using real-time PCR and GeneXpert.
- Provided 12,000 laboratory kits for PCR and 10,000 PPE sets, which accounted for 50% of the total PCR tests carried out in the laboratories 2020.
- Helped health networks in the Department of Oruro to organize procedures for sampling, transfer, processing, reading, and delivery of PCR test results.
- Trained the laboratory staff at the National Center for Tropical Diseases (CENETROP) to interpret the results of COVID-19 PCR tests.
- Through social networks, provided training on the use and interpretation of virological, serological, and antigen-based tests, in coordination with the National Institute of Health Laboratories (INLASA).
- Provided support for antigen tests, in connection with the promotion, training, and donation of 60,000 tests.
- Established a SARS-CoV-2 network of molecular biology laboratories with external quality controls (CENETROP).
- Provided support to the National Institute of Health Laboratories (INLASA) to build capacity for sequencing to identify variants of interest and variants of concern and to provide information to the SARS-CoV-2 Genomic Surveillance Network; this was complemented with technical advisory and the donation of reagents.



Infection prevention and control and protection of the health workforce

- Trained health personnel on biosecurity protocols related to the proper use of PPE, sample collection, and patient isolation.
- Supported the MOH to develop a PPE supply plan.
- In Santa Cruz, Cobija, and Oruro, supported the installation of isolation and recovery centers for patients with mild cases of COVID-19, in terms of logistics, operations, and training on biosecurity for health and service personnel.
- Carried out a training plan to improve the response skills of health workers (10 virtual courses; 26 courses (mixed face-to-face and virtual); and 1,400 participants).



Case management, clinical operations, and therapeutics

- Supported national health authorities to reorganize and strengthen existing hospital services to manage COVID-19 cases, including critical cases.
- Trained health personnel hired by the COVID-19 health networks and hospitals.
- Applied the COVID-19 Hospital Readiness Checklist (organization, leadership, differentiated triage, isolation, etc.) at 42 reference hospitals in nine departments, including social security and private hospitals.
- Disseminated guidelines and protocols for the management of pre-hospital care cases.
- Supported the Scientific Commission of the MOH to design and update clinical protocols and guidelines for the management of COVID-19 patients with mild, moderate, and severe or critical disease.

- Set up of 11 isolation centers: adequate indoor environmental conditions and biosecurity protocols. Activities were made possible by interagency collaboration: WFP (food supply); UNICEF (PPE); and the leadership of the MOH. Systematized the experience with setting isolation centers for mild cases of COVID-19 in 23 centers in Bolivia.
- The Oruro department reorganized the health services networks, readying health facilities and reassigning 50% of the primary care health workforce to manage suspected and positive cases of COVID-19 (triage, isolation, referral, telemedicine, brigades).
- Support provided to Hospitales de la Mujer, de Clínicas, Boliviano Holandés, and Challapata as they are converted to treat COVID-19 patients.
- Supported the MOH in the design of COVID-19 management guidelines for Bolivian agricultural populations, indigenous peoples, and Afro-Bolivians.
- Developed a 2021 COVID-19 Training Plan for health personnel hired by the corresponding health networks and hospitals (1,700 participants) using the PAHO Virtual Campus for Public Health.
- Provided technical support to strengthen 17 health network offices in order to program and supervise the deployment of the Active Community Surveillance Brigades.
- Applied the PAHO Essential Conditions Assessment Tool (VCE) in primary care networks and facilities in Oruro and La Paz. Follow-up to the final improvement and evaluation plans.
- With support from SNIS, developed a digital platform for monitoring occupancy rates and availability of hospital beds.
- Supported the establishment of a center for COVID-19 clinical support in the Department of La Paz, which included the use of telemedicine for clinical guidance, referral of patients, and the implementation of oxygen therapy services for the first level of care.



Operational support, logistics, and supply chain

- Supported the MOH to estimate gaps in the supply of services to manage COVID-19 patients and program the distribution of equipment and supplies. The Center for Health Provisions and Supplies (CEASS) and the Health and Medical Equipment Infrastructure Agency (AISEM) are currently implementing this plan.
- Supported Bolivia's Agency for Medicines and Health Technologies to conduct an institutional evaluation; make a proposal to counter rising prices due to the pandemic; conduct training on pharmacovigilance and clinical trials; and the manufacture of community masks.
- Organized health networks in Oruro to prepare and distribute kits for home management of mild cases of COVID-19.
- Supported Bolivia's Office for Drugs and Supplies (CEASS) in the development of control systems for the logistics of medicines and supplies as well as the distribution of PPE donated by PAHO.
- Supported the MOH to recruit approximately 140 technicians in order to implement the national pandemic plan.
- Obtained, through PAHO's Strategic Fund, 150,000 rapid antigen test kits.
- Facilitated the emergency delivery of 70 tons of liquid oxygen in response to acute shortages of oxygen.



Maintaining essential services during the pandemic

- Supported the MOH to strengthen the first level of care, by using community brigades to monitor isolation centers, perform contact tracing, detect cases, and do early referral of cases.

- Supported the MOH to develop a document on adaptation of health services for a consolidated response to COVID-19 and to ensure the continuity of essential health services.
- Supported the conversion of COVID-19 hospitals to maintain essential services or reassign them to other facilities.
- Implemented the health network adaptation plan for a consolidated COVID-19 response, maintaining and monitoring of essential health services.
- Through the Health Action Group, produced a document on strengthening essential health services for vulnerable populations in the context of the COVID-19 pandemic, aimed at authorities and technical working groups.
- Supported the MOH to calculate the percentage of population at high risk of COVID-19 for underlying health conditions.
- Systematized the indirect effects of COVID-19 on essential health services for women, pregnant women, newborns, children, adolescents, and older adults. PAHO additionally supported national authorities to develop a national framework on obstetric emergencies, neonatal care and neonatal emergencies, congenital guidance, and the Intercultural Birth Guide (focusing on pregnancy, birth, and puerperium) to protect maternal and child health despite the ongoing pandemic.
- Provided training on an integrated care model for victims of sexual violence in the context of COVID-19; donated to reference hospitals 1,000 evidence boxes for victims of sexual violence.
- Supported the organization of a National Comprehensive and Community Mental Health Care Network (RENASMIC); implemented the mhGAP (Mental Health Global Action Plan) Guide for mental, neurological, and substance use disorders; supported a telephone survey on the impact of COVID-19 on mental health and noncommunicable

diseases (NCDs); prepared stories about the impact of COVID-19 on community mental health and provided capacity building to health workers in a bid to protect mental health.

- Assisted with donations of medications to expand diabetes care as part of the global pandemic response.
- Broadly disseminated guidelines and manuals on hygiene, water, and waste management to staff from the MOH, HSDS, and health and water, sanitation, and hygiene conglomerates.
- Worked with national and subnational authorities to identify strategies to reestablish and sustain coverage of the national vaccination program.



Vaccination

- Developed the National Preliminary COVID-19 Vaccination Plan.
- Supported a communication strategy for the introduction of the COVID-19 vaccine, as well as the launch of a social media communication plan.
- Supported the MOH in a self assessment of the NDVP using the VIRAT tool, which was a requirement for accessing COVID-19 vaccines through the COVAX Facility.
- Helped update the country's Surveillance Guide on Events Supposedly Attributable to Vaccination or Immunization (ESAVI).
- Supported the MOH as it ratified its participation in the COVAX Facility.
- Collaborated with UN agencies to plan, prepare, and promote access to COVID-19 vaccines in cross-border indigenous communities in countries of the Andean Community (CAN), with a focus on the communities of Cavineño, Ese Ejja, and Takana, in the department of Pando.



Brazil



Country-level coordination, planning, and monitoring

- Supported the establishment of partnerships between the Federal Government, states, and municipalities aimed at strategies defined by the three parties to respond to COVID-19. Coordination also involved civil society organizations through the National Council of Health Secretariats (CONASS) and the National Council of Municipal Health Secretariats (CONASEMS). The role in coordinating the response to COVID-19 also involved other humanitarian organizations, such as other UN agencies based in Brazil's Amazon region and Doctors Without Borders.
- Contributed to Brazil's emergency plans and protocols to improve national readiness.
- Supported states to define and monitor the implementation of non-pharmacological measures. One hundred and seven WHO and PAHO COVID-19 publications and tools were translated into Portuguese.
- Coordinated pandemic response efforts with other UN agencies and international organizations to support vulnerable populations such as indigenous, coastal, and isolated communities, especially in the northern region of the country.
- Worked with the Special Secretariat for Indigenous Health to prepare a weekly Epidemiological Bulletin focused on the country's indigenous populations.
- Established an agreement with the state of Amazonas to strengthen COVID-19 preparedness and response.
- Liaised with the MOH to use data from surveys conducted in the prison system to develop a tool for the National Council of Justice.
- Promoted the sharing of experiences between municipalities and states, facilitating the dissemination of good practices, supporting coordinated response, bolstering integration between states and municipalities, and strengthening local initiatives. Convened a webinar for Brazil to exchange experiences combating the COVID-19 pandemic with Japan and Spain.
- Helped create the SUS Strategic Information Center for State Management (CIEGES) to develop information dashboards and make strategic information available to improve decision-making, planning, budgeting, and financial decisions.
- Supported the development of state-level dashboards for managing labor and health education. CIEGES provided state health authorities with data and indicators about the size and composition of the SUS workforce, as well a breakdown on numbers and costs related to SUS staff that gave health authorities a dimensional overview and aided in the distribution of human resources for health.

- Supported health surveillance, health care, surveillance, laboratory work, research, and coordination of networks and strengthening of SUS through the facilitation of the exchange of experiences.
- Conducted 89 technical missions to 19 states in conjunction with the MOH and the Health Secretariats for on-site situation analyses.
- Carried out on-site assessments of good practices and lessons learned through joint missions together with the MOH, CONASS, CONASEMS.
- Provided support in the areas of health care, epidemiological surveillance, laboratory work, and risk communication in all regions of the country, identifying strengths and opportunities for the improvement in health units and work processes at the municipal and state level.
- Provided direct technical cooperation to the states, with the provision of qualified professionals to alleviate shortage, especially in the most vulnerable regions.
- Supported the MOH, state and municipal Health Secretariats, FIOCRUZ and the Evandro Chagas Institute, and the University of Brasilia and Federal University of Amazonas in efforts to improve the understanding of COVID-19, especially with the emergence of the Gamma variant in Brazil.
- Generated knowledge through the publication of studies that could be rapidly incorporated and disseminated at the various levels of local health services management.
- Collaborated on developing best practices and targeted communications plans, such as for contact tracing (in Paraná and Mato Grosso do Sul); the implementation of disease prevention measures (in Rio Grande do Norte); to support a new municipal administration (in Rio de Janeiro), and for a vaccination communication plan (Amazonas state).
- Produced scientifically based communication materials; disseminated information to different target audience via social media and other platforms; worked with the media to provide the population with accurate information; and reviewed and dispelled false information and unfounded rumors related to COVID-19, using WHO'S Epidemic Intelligence from Open Sources (EIOS).



Surveillance, rapid response teams, and case investigation

- Conducted a daily analysis of the COVID-19 epidemiological situation, which is sent to the MOH, the Brazilian Intelligence Agency (ABIN), CONASEMS, and CONASS, to be forwarded to all health secretariats. These analyses provide daily information, such as incidence curves and tables, and hospitalization and mortality figures.
- Strengthened the surveillance and response capacity of the MOH Strategic Health Surveillance Information Center (CIEVS) by transferring dashboards that allowed them to monitor and analyze indicators and make projections that support government decision-making.
- Collaborated with various states to develop their own dashboards and databases for the collection of epidemiological information.
- In conjunction with the MOH and Brazilian institutions, planned a national sero-epidemiological study to determine the prevalence of SARS-CoV-2 infection in Brazil; supported the design of a platform to collect data from the study. Helped develop a seroprevalence research project for the state Pernambuco.



Risk communication and community engagement

- Carried out a critical review of the states' and municipal-level response in the area of communications.

- Contracted 274 health professionals to support efforts in 27 federal states to increase surveillance and laboratory staff and strengthen surveillance capacities to address emerging and re-emerging pathogens. In Manaus and the state of Amazonas the workforce was expanded by 124 health professionals. In the state of Roraima, 18 analysts, biochemists and laboratory technicians were contracted.
- Continued to train staff from the MOH countrywide on the use of Go.Data for contact tracing. Guided new health managers in the municipalities of Rio de Janeiro and Manaus, who took on pandemic response responsibilities, on information management, data analysis, clinical management, and laboratory diagnostic flow.
- Supported the MOH and other national actors to design four epidemiological studies on the P1 variant of SARS-CoV-2 in order to determine its transmission rate, how it affects reinfection, and clinical presentation associated with this variant. Additionally, PAHO designed studies to understand the incidence, magnitude, and patterns of transmission, reinfection, and severity of different strains of SARS-CoV-2, with a focus on the Gamma variant, both in the general population and in specific populations (pregnant women, newborns, the elderly, and residents of capital cities, among others).
- In the municipality of Rio de Janeiro and the states of Pará and Santa Catarina, supported setting up the Emergency Operations Center to conduct epidemiological analysis and the automate their COVID-19 epidemiological bulletin.
- Supported health authorities in Amazonas, Amapá, Roraima, and Rondônia to strengthen local capacity in surveillance, health care, crisis management, analysis of the health situation, and forecasting. A course was given to train health technicians in Boa Vista (Roraima), (Goiás) and Marabá (Pará) on analyzing health situations.
- Supported the genomic surveillance network to develop strategies and strengthen human resources for the identification of circulating strains, especially

variants of concern (VOCs). Provided daily updates to the MOH with data on the genomic surveillance of strains circulating in Brazil.

- Increased the number of professionals to strengthen primary health care, laboratory capacities, surveillance, genomic surveillance, research, and infrastructure. Since the pandemic began, and as of 30 June 2021, 765 professionals had been hired; 152 of these persons are currently providing direct support on the ground throughout the country's states.
- Provided information on the distribution of vaccination and on variants of concern (VOCs) circulating in Brazil. These analyses constitute the only reported data on occupancy rates in intensive care units (ICUs) in all the country's states and capitals, which makes them essential for managers discussing health service delivery.



Points of entry, international travel, and transport

- Collaborated with the MOH to develop, adapt, and implement guidelines and protocols on surveillance at borders.
- Supported the Oswaldo Cruz Foundation and the MOH to reorganize the education program on health surveillance to address needs at the border.
- Supported the MOH to strengthen information management and health surveillance in selected border municipalities.



National laboratories

- Supported the states of Roraima, Pará, Rondônia, Amapá, and Maranhão to improve their capacity to diagnose SARS-CoV-2 infection by donating rapid antigen-based tests.

- Supported the Central Public Health Laboratory of Amazonas (LACEN) to create automated routines to quickly analyze the situation and improve the recording results in the information system; expanded staff to allow for 24/7 operations.
- Provided rapid antigen-based tests for COVID-19 diagnosis and oximeters for silent hypoxemia monitoring in patients to health authorities in Amazônia.
- Developed technical guidance and video training for health professionals in the correct use of the rapid antigen-based test.
- Supported laboratory systems in the use of RT-PCR for COVID-19 diagnosis in the state of Amazonas and increased the number of professionals working in state laboratories.



Infection prevention and control and protection of the health workforce

- Together with the MOH, trained more than 38,000 health professionals in IPC.
- Provided support to develop protocols to mitigate the risk of transmission in health services.



Case management, clinical operations, and therapeutics

- Supported the state of Amazonas to develop a primary health care treatment plan for patients with mild and initial COVID-19 symptoms; provided recommendations to assess oxygen consumption and donated concentrators.
- Due to the significant increase in cases statewide, collaborated with health authorities in Amazonas state to reorganize the flow of services in health facilities treating COVID-19 patients and to develop a plan to free up bed space. PAHO also helped to develop contingency plans for the rational use of

neuromuscular blockers and other treatments for COVID-19 patients.

- Worked with the states of Amapá and Roraima to diagnose needs among COVID-19 patients and develop contingency plans to avoid shortages of oxygen and other supplies.
- Collaborated with the MOH to train more than 4,600 health professionals in the clinical management of COVID-19.
- Deployed rapid antigen diagnostic kits to several state health departments to take pressure off of hospitals and to manage cases in remote regions and among vulnerable populations.
- Coordinated with 53 hospitals in Brazil to participate in WHO's project Global Clinical Data Platform COVID-19, which collects anonymous clinical data related to suspected or confirmed COVID-19 hospitalizations.
- Worked with the MOH and state and municipal health secretariats, to conduct online training courses on COVID-19 case management (1,079 trained), online training courses on infection prevention and control (22,358 trained), and 180 training sessions on surveillance of public health events using the Epidemic Intelligence from Open Source (EIOS) tool.



Operational support, logistics, and supply chain

- Coordinated the purchase of rapid diagnostic tests and medicines and supplies for critical patient care.
- Facilitated donations of PPE for health facilities in low-income communities.
- Helped CONASS, Brazil's national council of health secretariats, to acquire equipment to set up situation rooms in the 27 federal Strategic Information Centers and a situation room in the Central Office.
- Donated rapid antigen-based tests (Ag-RDT), personal protective equipment, swabs, and pulse oximeters, in addition to other equipment and supplies, as well as 160 oxygen concentrators.

- Provided support to address the logistics of patient transfers and the acquisition and reorganization of supplies.
- Provided technical guidelines on the use of hospital equipment (such as oxygen compressors), rational use of medical supplies, and preparation of flows of medical referrals and counter-referrals.



Maintaining essential health services during the pandemic

- Systematized primary health care best practices, which provided important resources for national SUS managers.
- Developed training programs for health professionals in PPE, clinical management, and mental health; in coordination with the network of university hospitals, used simulation exercises to train healthcare workers prior to deployment to Amazonas.
- Together with WHO and the Gates Foundation, worked on a project to identify the indirect effects of COVID-19 on essential health services for pregnant women, newborns, adolescents, and older adults in the municipalities of São Luís (Maranhão), Pelotas (Rio Grande do Sul), and Niterói (Rio de Janeiro).
- Developed technical guidance for the management of patients under 10 years of age with multisystem inflammatory syndrome (MIS-C).
- Participated in the production of guidance videos for adolescents and young people with health questions regarding the pandemic.
- Collaborated in the publication “Recommendations for health professionals for treatment of COVID-19 in pregnant women and those who have recently given birth.” Produced 16 video classes related to the publication.
- Supported the WHO-led study, “Definition and categorization of the timing of mother-to-child transmission of SARS-CoV-2,” which was carried out by the University of Campinas (UNICAMP). Contributed to the planning of the second phase of the study.
- Helped to convene a national call for best practices under the banner “Strong Primary Health Care in the fight against the pandemic” so that the best practices of basic health teams could receive widespread recognition. [Over 1,600 experiences were disseminated, and the broadcasts reached more than 60,000 people, professionals, and health sector managers.](#)
- Supported the development of a specific line of care for COVID-19. [An infographic supports managers, workers, and health teams in responding to the needs of patients during the pandemic.](#)



Vaccination

- Worked with MOH to design and implement a national COVID-19 vaccination plan. Supported two states to develop state-level immunization plans.
- Supported the MOH to prepare the national and state vaccination plans for COVID-19.
- Supported the formation of a national technical group to discuss issues related the purchase of COVID-19 vaccination syringes through the PAHO Revolving Fund (the MOH purchased 190 million syringes).
- In conjunction with PAHO's Revolving Fund, the Organization participated in the MOH negotiations for the purchase of COVID-19 vaccines through the COVAX Facility.
- Helped the national immunization program in the MOH to implement the COVID-19 Vaccine Introduction Readiness Assessment Tool (VIRAT).
- Supported the recruitment of technical human resources in 27 states to provide services, monitor vaccine-preventable events, and support national vaccination programs and laboratory surveillance.

- Supported the MOH to develop protocols for monitoring adverse events of special interest related to COVID-19.
- Supported the implementation of the immunization plan, which involved technical information and research on adverse events following immunization.
- Designed 12 epidemiological studies to evaluate the efficacy of the vaccine in healthcare professionals and older adults, assess immune response by comparing vaccinated people with COVID-19 patients, and detect new variants and variants of concern (VOC) in patients with the SARS-CoV-2 virus.
- Supported the Central Crisis Management Committee in Amazonas to:
 - Implement the immunization plan, with technical information on logistics, procuring supplies, and guidance on post-vaccine adverse events.
 - Implement a computer platform to record vaccination data with individual identification and ESAVI registration.
 - Create a panel to monitor panel vaccine distribution.



Chile



Country-level coordination, planning, and monitoring

- Collaborated with national authorities to develop and implement Chile's action plan for COVID-19, adapting PAHO and WHO protocols and methodologies to the country context.
- Disseminated PAHO technical guidelines and updates with national authorities, organizing discussions to exchange views and recommendations on components of the response, such as the epidemic intelligence and the work of the subcommittee, chaired by the [Ministry of Science](#); adjustments to public health measures and the availability of data for monitoring; the integration with sentinel influenza surveillance, and recommended use of antigen-based diagnostic tests.
- Facilitated interagency discussions (UNESCO, UNICEF, ILO, UN Resident Coordinator) on the reopening of schools and participated in UNSC Working Groups to support resource mobilization efforts while positioning health in the Socioeconomic Response Plan to the Pandemic.
- Participated in the Inter-Agency Committee on Human Rights, advocating for the health rights of the most vulnerable.
- Continued to participate in ProSUR thematic discussions on joint procurement and epidemiological data.
- Participated with representatives from the MOH and of Indigenous and Afro-descendant Peoples in a subregional technical consultation and a high-level meeting on the impact of COVID-19. Followed up on the availability of information on the impact of COVID-19 indigenous peoples and identification of areas of cooperation.
- Finalized the UN Communications and Change of Conduct Plan, which provides guidance for agencies, funds and programs.
- Contributed to the preparation of the 2021 COVID-19 Action Plan and validation of health sector activities of the Venezuelan Regional Platform for Migrants and Refugees.
- Held a technical meeting with Chilean Institute of Public Health to discuss Chile's participation in the Solidarity Clinical Trial, maternal health issues, and the use of antigen-based diagnostics.
- Participated in the virtual consultation on rare diseases and COVID-19, organized by the Asia Pacific Economic Cooperation (APEC).
- Engaged the community and health professionals:
 - from Raúl Silva Henríquez University on PAHO's role in COVID-19.
 - with the University of Magellan on the epidemiology of the pandemic in Chile.
 - Held the 4th Conversation, Dialogues on Primary Health Care: Care of Health Teams in Pandemic Times.

- Presented at the International Social Security Forum, "Professional Diseases (focusing on work-related diseases) during the Pandemic."
- PAHO experts in mental health and gender participated in the Virtual Congress of Public Health and Epidemiology "Action and Reflection during COVID-19."



Risk communication and community engagement

- Participated, together with the Minister of Sciences, in an [international press conference](#) on the COVID-19 data in Chile, in September 2020.
- Met with the MOH communications team to discuss risk communications challenges and strategies. The Health Squad strategy was presented, and support was given to training squad members.
- Developed virtual training courses to train instructors in COVID-19 prevention in open markets, in coordination with the University of Chile and the University of Valparaíso. Meanwhile, PAHO coordinated with its partners on the launch of the campaign "To Be Like Lettuce at the Market," which was initiated by market vendors who participated in the first course on "Health Monitors in Markets During the COVID-19 Pandemic," organized by PAHO in Chile, FAO, the National Trade Union Confederation of Open Market Organizations, the University of Valparaíso, and the School of Public Health of the University of Chile.
- Provided technical advice to working groups in the UN system on preparing and communicating risks to UN staff. Conducted a workshop on COVID-19 prevention in fieldwork for UNSC staff.
- In the context of COVID-19, developed a campaign for LGBTQ+ people, with the participation of civil society organizations and for the international HIV/AIDS Day.



Surveillance, rapid response teams, and case investigation

- Participated in the COVID-19 webinar on influenza and pollution, with a focus on respiratory disease surveillance and the use of sentinel surveillance for COVID-19.
- Collaborated with the Global Outbreak Alert and Response Network (GOARN) to train country counterparts in adopting Go.Data for contact tracing.
- Supported the definition of criteria for COVID-19 surveillance and the corresponding reporting of cases and deaths through global and regional data platforms.
- Provided recommendations to strengthen the surveillance system and provided support to analyze and visualize the effective reproduction rate of the virus (using the EpiEstim tool) and to make projections on how it will spread in each country, taking into account the public health measures applied and its health system (using the CovidSIM tool).
- Monitored information regarding the circulation of variants of the SARS-CoV-2 virus. Alerted national authorities about variants of interest and provided recommendations on strengthening genomic surveillance.
- The Universidad de la Frontera was identified as a research center to participate in the study of how severe acute respiratory infections by SARS-Cov-2 affects pregnancy outcomes.
- Facilitated the meeting between PAHO and MOH experts on the International Classification of Diseases, to share information and clarify doubts about the classification of deaths associated with COVID-19.



Points of entry, international travel, and transport

- PAHO participated in an intersectoral roundtable on the International Health Regulations (IHR) and provided global recommendations and followed up to the measures taken at points of entry into Chile. PAHO provided recommendations on reactivation of non-essential international travel.
- Met with national health and aeronautical authorities to discuss the resumption of non-essential domestic and international flights and provide PAHO recommendations.
- Participated in monthly in meetings of the IHR team, together with other sectors of interest (armed forces, police, foreign relations, etc.) to monitor progress and recommendations.



National laboratories

- Trained the national reference laboratory team to adopt the recommended technique for diagnosing COVID-19 using RT-PCR.
- Provided supplies to strengthen the analysis capacity of the national reference laboratory.
- Supported Chile's participation in the working group of national regulatory authorities related to the Solidarity clinical trial for vaccines.
- Recommended strengthening genomic and COVID-19 surveillance in the human-animal interface and exchanged verbal communications with PSI and MOH. Met with Chile's agricultural and livestock service (SAG) following the WHO report on COVID-19 in mink.



Infection prevention and control and protection of the health workforce

- Held technical meetings with the MOH and PAHO focal points to make recommendations on the use of PPE, transmission mechanisms for SARS-CoV-2, and community protection measures.
- Trained UN staff in Chile on IPC in everyday situations.



Case management, clinical operations, and therapeutics

- Provided therapeutic supplies; technical support to the MOH to improve case management; and access to PAHO clinical management guidelines, online training resources, and virtual meetings.



Operational support, logistics, and supply chain

- Supported purchases of laboratory supplies through PAHO's Strategic Fund and local purchases using emergency funds.



Maintaining essential health services during the pandemic

- Organized intercountry exchanges of experiences on the means to safely resume elective surgeries.
- Provided technical advice, advocacy, and dialogue with different actors to strengthen primary care. The Organization facilitated dialogues and sharing of experiences pertaining to engagement, person- and family-centered care, and conducted psychological and emotional support for PHC teams in relation to their work in the pandemic response.

- Collaborated with the University of Chile to develop a complete triage and distance care model for patients with and without COVID-19 at the primary health care (PHC) level. PAHO also conducted the Third Conversational Dialogue of the PHC Community of Practice that analyzes information systems and digital health during the COVID-19 pandemic.
- Used public communications, dialogues with academic institutions, and conferences with health service managers to advocate for the importance of maintaining essential health services, with an emphasis on the first level of care.
- Provided equipment and training to support the implementation of eight primary care centers as part of the “Triage in Primary Health Care (PHC)” project, which establishes a model for the prioritization and selection of patients in the country’s primary care system (for which the municipalities are responsible). The project makes use of telemedicine in the present context of the COVID-19 emergency. [PAHO also organized the seminar on the telemedicine regulatory framework.](#)
- Through a program to reduce morbidity associated with COVID-19, [health teams were trained in smoking cessation strategies at the primary care level, which they used in two vulnerable communes.](#)
- Promoted workshops for community prevention and counseling on HIV and adherence to anti-retroviral treatment for trans women deprived of their liberty throughout the country in the context of the COVID-19 pandemic.
- Supported the design of the “SaludableMente” program to provide information to improve mental health and psychological/social well-being through coordinated actions, including widespread access to virtual psychotherapy and promoted cooperation activities between Brazil and Chile on the priority issues of mental health and suicide prevention.
- Supported the conducting of a study to understand the migratory situation in the country and the needs of migrant populations in the north of the country; supported generation of evidence for biopsychosocial actions in most affected areas, which supports the management of health teams that provide guidance to migrant populations on the access to health services.
- Conducted the Second Virtual Dialogue on primary health care: [Strategies for continuity of care in people with chronic diseases, in the context of the COVID-19 pandemic.](#)



Vaccination

- Coordinated a meeting between the MOH immunizations and ICT teams and PAHO, as part of the review process of an ESAVI surveillance information systems survey and the development of the regional plan for the safety of COVID-19 vaccines.
- Promoted the country’s participation in the WHO Solidarity clinical trial for COVID-19 treatments.
- Promoted Chile’s accession to the COVAX Facility and collaborated in managing information and data needed to facilitate the procurement of vaccines through the COVAX Facility.



Colombia



Country-level coordination, planning, and monitoring

- Collaborated with the MOH and Social Protection to formulate and adapt PAHO guidelines to the Colombian context and build national capacities to respond to the COVID-19 pandemic.
- Strengthened the MOH Health Action Group and coordinated activities with partners in the response to COVID-19.
- Developed an intersectoral response plan for COVID-19.
- Facilitated a bilateral coordination meeting between health authorities from Colombia and Venezuela to formulate strategies to protect the health of the population in the border area.
- Carried out a technical mission with the MOH to the department of Amazonas to help local authorities develop a contingency plan. PAHO mobilized health professionals and delivered medicines, PPE, three respirators, and an oxygen concentrator to the local hospital.
- As part of the inter-institutional project “Health for Peace” (PAHO, IOM, and UNFPA), carried out interventions focused on COVID-19 in 171 municipalities, which included the delivery of PPE and equipment for emergency rooms in primary and secondary level facilities and the strengthening of COVID-19 surveillance.

- In coordination with the UN system, developed an action plan to strengthen the response to COVID-19 in the department of Amazonas, which borders Brazil and Peru, to focus on indigenous communities.
- Formulated health interventions for migrant populations in Colombia.
- Provided technical assistance to the Presidency, the MOH, and other sectors in the follow-up and analysis of cases, preventive measures, and the response to COVID-19.

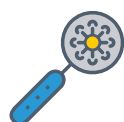


Risk communication and community engagement

- Continued transmitting situation reports to national authorities, UN agencies, the Health Action Group, embassies, territorial entities, and humanitarian partners.
- Collaborated with the MOH and other stakeholders to prepare content to advise the population on how to prevent infection, maintain a healthy lifestyle, and protect mental health. This content was broadcast on the UN weekly radio program, at the International Book Fair in Bogotá, and through other media.
- Provided training on risk communication to 70 health workers in the media and hospitals, as well as indigenous leaders from the department of Guajira.

The materials were adapted to the Wayunaiki language. This was in addition to training organized for health workers and communicators from localities in the country.

- Disseminated key messages on preventing COVID-19 infections on social networks, at risk communication workshops, through radio programs, and other UN platforms, aimed at health personnel and the community in general, promoted campaigns on COVID-19 vaccination and the prevention of pandemic-associated diseases, and carried out campaigns at the community level with influencers and the general public.
- Forged alliances with the manufacturing sector to raise awareness and prevent risk of COVID-19 infection.
- Carried out 10 cyber-seminars on key topics related to COVID-19 for humanitarian partners and territorial entities that are part of the Health Sector Group.
- Collaborated with the MOH to develop a participatory communication strategy to promote COVID-19 vaccines bearing in mind cultural and ethnic considerations. This strategy was formulated based on consultations with indigenous communities. This important experience represents the start of a mass vaccination effort in Tarapacá (Amazonas) and has enabled the country to vaccinate 33% of the population covered by the plan.



Surveillance, rapid response teams, and case investigation

- Trained health professionals on how to use Go.Data for contact tracing and how to analyze and visualize the effective reproduction rate of the virus (using the EpiEstim tool) and make projections about how it could spread, taking into account the public health measures applied and the health system (using the CovidSIM tool).

- Purchased supplies to equip 16 community centers in La Guajira.
- Supported the department of Chocó to strengthen public health surveillance, manage information, and respond to important public health events, with a focus on responding to COVID-19.
- Provided training to local-level health workers to improve epidemiological analysis to monitor the health situation.
- Worked with national authorities to develop strategies and procedures for improving surveillance at the triple border with Peru and Brazil, to activate an early warning, response and community-based monitoring system, and to establish and strengthen situation rooms (since equipped with the necessities for their operation, including virtual tools).
- Collaborated with national authorities to implement an emergency syndromic surveillance in Arauquita, in the Arauca Department, given the presence of a population of approximately 5,000 persons in movement in the area.



Points of entry

- Provided national authorities with technical recommendations and guidance as the country strategies aligned with the International Health Regulations as border restrictions were adjusted.



National laboratories

- Provided technical support to strengthen laboratory diagnostics for COVID-19 as well as genomic surveillance (in collaboration with the national laboratory, the INS).
- Delivered 100,000 PCR tests for high-risk groups and priority areas.

- Provided equipment and supplies to five prioritized public health laboratories and supplies for PCR testing to the department of Amazonas.
- Provided laboratory supplies (reagents and materials) for PCR diagnosis and antigen testing in the national laboratory (INS) and nine subnational laboratories.



Infection prevention and control and protection of the health workforce

- Delivered PPE (440,000 gloves, 4,000 surgical and N95 masks, and other supplies) to the Colombian Air Force for use in transporting severe cases from remote areas to designated specialized health centers.
- Delivered PPE to the departments of Vichada, Amazonas, La Guajira, and Norte de Santander, as well as to a hospital in Cundinamarca and the San Francisco de Asís de Quibdó hospital. Distributed PPE to migrants traveling on foot and residents of temporary shelters in Ipiales.
- Trained health professionals to use the tool to calculate needs for PPE and other supplies. In Amazonas, provided supplies and transport required for Ag-RDT and PCR samples.
- Provided 250 care kits for the indigenous population of the department of Vaupés.
- Trained 70 health workers from hospitals in the Atlántico department on the use of supply management tools for medicines, goods, supplies, and other essential elements.
- Provided the Colombian Air Force with a transport capsule and accessories to reduce the risk of contagion from patients with COVID-19.
- Purchased an oxygen generating plant for the E.S.E. Nazareth Hospital in the Alta Guajira region.
- Equipped four prioritized health facilities in Norte de Santander and Arauca with supplies and equipment for triage and for hospital expansion.
- Provided technical support to the reference hospital in the department of Santander to expand hospital services and improve triage.
- Worked with national health networks to improve case management and ensure continuity for other health services, including access to and rational use of medicines and technologies needed for COVID-19.
- Provided 12 high-burden departments in the countries with supplies, medicines, and personal protective equipment to help alleviate the existing burden and keep both health workers and those under their care safer.
- Delivered hygiene kits and PPE to temporary emergency shelters in order to help these persons during emergencies associated with natural disasters or forced displacement.



Case management, clinical operations, and therapeutics

- Trained workers from the MOH in the reorganization and expansion of health services, primary care, the management of emergency medical teams, and the establishment of alternative medical care sites.
- Facilitated the donation of 65 oxygen concentrators and other supplies offered by donors.



Operational support, logistics, and supply chain

- Supported the MOH with the shipment of PCR supplies to Colombian territories.
- Supported the transportation of the rapid response team of the National Institute of Health to the department of La Guajira.



Maintaining essential health services during the pandemic

- Collaborated with national authorities to maintain national vaccination services by hiring 100 vaccination workers and delivering vaccination kits and PPE to 12 departments, three districts, and 41 municipalities.
- Delivered medicines, equipment, anthropometric kits, therapeutic food, and antiparasitic drugs to prioritized health institutions to provide care for groups of migrants. These items will be used primarily in emergency rooms and for maternal and perinatal care.
- Supported the development of a Comprehensive Territorial Health Care Model based on the work coordinated by community health managers in the department of La Guajira.
- Adapted obstetric care services to ensure compliance with basic quality care standards in emergency rooms, prenatal care, delivery care, and emergency obstetric care, and adapted tools to facilitate consultations from home using telemedicine.
- Supported a series of activities to address the impact of COVID-19 on health workers and communities, including:
 - Assistance to 7,941 persons through psychosocial strategies and implementation of the MAPS toolkit.
 - Assistance to 706 health workers from 170 municipalities covered by the Territorial Approach Development Program, or PDETs.
 - Technical remote support to 106 health workers who treat patients seeking or requiring access to services for mental health.
- Development of self-learning courses aimed at providing tools to manage health worker stress and grief associated with losses due to COVID-19.
- Strategy for preventing burnout among front-line health workers, with all hospitals in the different territories of the country coordinating with the MOH and Social Protection.
- Creation and deployment of an audiovisual campaign to promote mental health, providing tools for managing emotions and stress.



Vaccination

- Supported the country's application to the COVAX Facility to gain access to COVID-19 vaccines.
- Provided technical and other support for development and implementation of the national vaccination plan (including cold chain management), with a priority to support the country to attain high vaccination coverage rates against COVID-19, especially among the most high-risk populations.
- Coordinated the Health Cluster active in the country to identify needs and gaps in the deployment of the COVID-19 vaccination plan at the national and territorial level, to ensure a coordinated joint response.
- Supported the generation of knowledge and capacity building for the surveillance of adverse events following COVID-19 vaccination.



Costa Rica



Country-level coordination, planning, and monitoring

- Coordinated the national response to COVID-19 with the National Commission for Risk Prevention and Emergency Response (CNE), integrating the country office in the different intersectoral roundtables.
- Activated the UN Health Cluster, at the request of the MOH. Supported the UN Inter-Agency Emergency Response Group (UNETE) as technical secretariat, to coordinate the response of the UN System and other humanitarian actors to the pandemic.
- Prepared the COVID-19 Health Response Plan for vulnerable populations in cross-border areas, with the participation of IOM, UNHCR, and the Resident Coordinator's office (RCO). Implemented protocols at border points (strategy implemented in the context of the pandemic with an approach that considers migrants).
- Provided technical cooperation to formulate technical guidelines, protocols, etc., which served as the basis for public health measures to manage the pandemic.
- Participated in the health services roundtable with the International Center for Pure and Applied Mathematics (CIMPA) of the University of Costa Rica; the Social Security Agency; and the MOH during which the behavior of the pandemic is analyzed and projections regarding its impact are made to enable decision-making and adjustments to health measures and regarding the national economic recovery.
- Supported, together with WHO, the presidential initiative on the COVID-19 Rights Repository, a platform that allows for the sharing of data, knowledge, and intellectual property and facilitates equitable access to health products.
- Coordinated actions with the Costa Rican Coffee Institute (ICAFE) for a comprehensive health approach for indigenous and migrant children and families who participate in the coffee harvest, in the context of COVID-19.
- Identified priority technical cooperation actions with the Joint Institute for Social Assistance (IMAS) and made progress in diagnosing capacities and vulnerabilities in WASH at the national level.
- Advanced in the preparation of the National Plan for Pharmaceutical Services, based on primary health care in the context of COVID-19, in conjunction with the MOH.
- Coordinated a training strategy to strengthen care centers for the return of face-to-face activities in the context of the pandemic with the Technical Directorate of the National Education and Nutrition Centers and Comprehensive Care Child Centers (CEN-CINAI).
- Supported the strengthening of human resources units, health economics units, and the national regulatory authority for medicines and medical devices, in order to address the COVID-19 emergency.

- Supported pharmacovigilance systems to strengthen MOH functions after the pandemic.
- Participated in dialogue and work sessions with national authorities and various sectors of society (chambers of commerce, business associations, professional associations, etc.) to seek intersectoral feedback and consensus to accelerate vaccination efforts and economic recovery.
- Worked with the Economy Unit of the MOH, producing reports to estimate the expense and economic impact of COVID-19 care on the country's health sector. The analysis includes spending by health institutions as well as out-of-pocket expenditures incurred by households. The results will be compared with similar studies published in other OECD countries.
- Contributed to a project for the economic recovery and health of migrant women and host communities in cross-border areas of the country, in partnership with the Multi-Partner Trust Fund (MPTF). In conjunction with other agencies of the United Nations system (ILO, IOM, and UNHCR), PAHO provided training and support for the economic recovery of women so that they can act as multipliers in their communities (both in the home and at work) in health promotion activities, community surveillance, COVID-19 prevention, and the prevention of xenophobia, discrimination, and gender-based violence.
- Partnered with local governments and developed health promotion and COVID-19 prevention initiatives for indigenous migrant families, coffee harvesting groups, and host communities.
- Supported the pandemic response in indigenous territories through the development of COVID-19 action plans, risk communication, and promotion of intercultural dialogues with local government actors, specifically Integrated Indigenous Development associations. The impact of COVID-19 on indigenous peoples, populations in movement, and other groups in situations of vulnerability has remained a critical aspect of PAHO's response.
- Supported the organization of and participation in high-level events such as: "Mental Health in the COVID-19 pandemic: A priority for women's human rights;" the international symposium "Transparency and access to information in times of pandemic," organized by the Legislative Assembly of Costa Rica; and the Conference on Risk Management (University of Costa Rica).
- Provided technical collaboration to the Municipality of San José, promoting and supporting community-based risk communication actions and "house-to-house" campaigns in the communities.
- Supported the pandemic response in indigenous territories through the development of COVID-19 action plans, risk communication, and promotion of intercultural dialogues with local government actors, specifically Integrated Indigenous Development associations. The impact of COVID-19 on indigenous peoples, populations in movement, and other groups in situations of vulnerability has remained a critical aspect of PAHO's response.



Risk communication and community engagement

- Collaborated on more than 30 campaigns through various communication channels. PAHO worked mainly with the MOH, CCSS, CNE, the Presidency of the Republic, the Women's Institute (INAMU), IMAS, the Ministry of Labor and Social Security (MTSS), the Ministry of Public Safety (MOH), the Institute on Alcoholism and Drug Dependence (IAFA), and the
- Strengthened community participation and primary health care processes in the COVID-19 response, particularly through the development of COVID-19 response work plans in coordination with institutions outside the health sector, such as the Joint Institute for Social Assistance and municipal emergency committees in 24 cantons.



Surveillance, rapid response teams, and case investigation

- Collaborated with national authorities on the activation of the MOH Situation Room for the analysis of epidemiological information and decision-making for COVID-19, including preparation of operational technical documents.
- Coordinated with the MOH and CCSS on the national response to COVID-19, adapting PAHO protocols and recommendations (including prevention and control measures for the following sectors: health, justice, education, housing, human development, economy, tourism, culture, and youth, as well as local governments).
- Provided training on the Go.Data tool for monitoring patients and contacts, in coordination with the regional team.
- Supported the MOH to develop a proposal for the establishment of community-based epidemiological surveillance for priority areas.
- Coordinated efforts to deploy an emergency medical team (EMT) from Panama to support the country's COVID-19 response, which included mobile hospitals.



Points of entry, international travel, and transport

- Supported and advised national authorities to assess the implementation of public health measures and on strategies and procedures for the control and opening at points of entry into the country and developed projections, data analyses, and evidence to guide the adoption of public health measures (ranging from control of movement to capacity limits in public spaces, among others).



National laboratories

- Supported the development and implementation of Network of Public Health Laboratories' national laboratory plan for COVID-19.
- Trained INCIENSA personnel for molecular diagnosis of SARS-CoV-2.
- Donated to the MOH reagents and supplies for the molecular diagnosis of SARS-CoV-2, as well as 16,000 antigen tests for the CCSS.
- Promoted the implementation of genomic surveillance of COVID-19 with INCIENSA and CCSS, expansion of the COVID-19 diagnostic network, and updating of the diagnostic methods for SARS-CoV-2.



Infection prevention and control and protection of the health workforce

- Supported the review of quality and regulatory information on equipment and supplies donated by the country office to the national authorities.
- Supported the revision of the MOH guidelines for the opening of day centers for older adults.



Case management, clinical operations, and therapeutics

- Collaborated with priority municipalities to ensure integrated care for COVID-19 in vulnerable communities.
- Helped prepare the National Plan for Prehospital Services for COVID-19, with the MOH, Red Cross, CCSS, and the private sector.
- Advised on the inclusion of HRH management issues in the context of COVID-19 response.
- Developed recommendations on the establishment of alternative medical care sites (AMCS) for patient care.
- Supported a project on community participation in four cantons of the country, with inter-institutional and community input into work plans for the local response.
- Supported a project to address COVID-19 in indigenous territories with nine indigenous peoples to identify needs and strengthen local coordination.
- Supported the MOH, the Costa Rican Social Security Fund, and private health providers facing an increase in hospitalizations due to COVID-19 to identify needs and design a plan for the use of hospital beds in the private sector as part of public health care.



Operational support, logistics, and supply chain

- Supported the implementation of the PAHO Supply Management System (SUMA) for the CNE.
- Supported the inclusion of information from Costa Rica in the WHO COVID-19 Partners Platform and the procurement portal.
- Donated PPE, medical equipment, and other supplies for COVID-19 response to INAMU, DGME, ministries of justice and peace, CNE, CCSS, MS, INCIENSA, and Red Cross.
- Worked on a standard operating procedure to strengthen the use of the PAHO Strategic Fund in Costa Rica, in conjunction with CCSS, and the MOH.
- Mobilized medical equipment and supplies from EMTs in Panama, and human resources from the Emergency Medical Assistance Service (SAMU) in Seville to support the saturation of hospital services caused by the pandemic.



Maintaining essential health services during the pandemic

- Collaborated in the formulation of the plan to strengthen and expand CCSS health services.
- Supported the development of CCSS Health Services Indicators in Phase II of expanding services for the response to COVID-19.
- Advised on maternal and perinatal health in the context of COVID-19.
- Advised on the continuity of the delivery of prioritized essential health services for communicable and noncommunicable diseases, including malaria, arboviruses, influenza, mental health, cancer, smoking, and alcoholism.
- Advised on the implementation of strategies for the approach to mental health in the context of COVID-19.
- Supported the MOH Regulatory Unit to review actions recommended for the authorization of emergency use of the COVID-19 vaccine in Costa Rica, including the introduction of the Pfizer vaccine against SARS-CoV-2 by bilateral agreement. Additional work encompassed working with regulatory authorities to support the registration and authorization of emergency use of subsequent COVID-19 vaccines.
- Supported the country to participate in PAHO's COVID-19 vaccines simulation exercise, in support of the regulation and oversight of COVID-19 vaccines in Central America.
- Collaborated with the National Vaccination and Epidemiology Commission in Costa Rica, participating in the development and periodic updating of guidelines for planning and implementing the COVID-19 immunization campaign; analyzing adverse events at the national level; periodically reviewing the technical criteria for the different vaccine protocols; and monitoring vaccination progress by risk stratification groups.



Vaccination

- Participated in and promoted the country's participation in information sessions on COVID-19 vaccines and the COVAX Facility, and provided guidance on planning, regulation, pharmacovigilance, and other operations related to vaccine introduction in the country.
- Developed plans that included vaccination promotion activities, the community mental health approach, domestic violence, and healthy lifestyle habits, as well as promoting vaccination through "mythbusting" workshops from a primary health care (PHC) perspective.
- Actively participated in the National Commission for Immunizations and Epidemiology.



Cuba



Country-level coordination, planning, and monitoring

- Coordinated, on an ongoing basis, with the Ministry of Public Health (MINSAP), UN agencies, multilateral partners, and accredited diplomatic missions in Cuba to strengthen the country's response to COVID-19.
- Spearheaded the immediate response of the UN System with the MINSAP while coordinating pillar 1 of the socioeconomic response plan to COVID-19.
- Informed MINSAP about the requirements and deadlines for participation in the COVAX Facility, with a view to accessing the COVID-19 vaccine.
- Collaborated with health authorities and the biopharmaceutical sector in the search for financing alternatives for the development of Cuban vaccine candidates for COVID-19, as well as the local production of supplies.



Risk communication and community engagement

- Supported the formulation of key health messages and strategies for risk communication and community participation.

- Prepared a list of decisionmakers and researchers for information sharing; information packages were delivered to those working on surveillance, care, and management of COVID-19.
- Developed infographics and videos with information on COVID-19 for people with disabilities, maternal and child health programs, older adults, and tobacco users.
- Disseminated a package of manuals for psychosocial support, prepared by external experts in psychology and mental health, in alignment with PAHO recommendations.
- Managed press conferences and interviews with national and foreign media accredited in Cuba.
- Provided coverage and disseminated technical cooperation activities related to efforts to deal with COVID-19.
- Prepared two issues of the PAHO country office's *Andar la Salud* Bulletin, related to confronting the pandemic.
- Contributed to the interagency risk communication work for COVID-19, including with UNESCO and RCO, in discrediting misinformation, and with UNICEF on preventing COVID-19 in schools.
- Reports prepared by the country incident management team were published weekly and disseminated widely.



Surveillance, rapid response teams, and case investigation

- Participated in the training of national epidemiological surveillance and analysis teams.
- Disseminated updated WHO guidelines on COVID-19 surveillance.



Points of entry, international travel, and transport

- Supported health promotion efforts by preparing communication materials on health and prevention of COVID-19, which were disseminated at all international entry points.



National laboratories

- Procured equipment and supplies for surveillance and case detection, such as reagents, RNA extraction kits, means of transporting tests, and other supplies.
- Trained the team of the National Reference Laboratory for Respiratory Viruses on the diagnosis of SARS-CoV-2 through molecular biology and on genomic surveillance.



Infection prevention and control and protection of the health workforce

- Procured soap, disinfectants, supplies for hand washing and cleaning surfaces, and autoclave equipment, as well as bags for the safe disposal of laboratory waste and PPE.
- 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, clinical operations, and therapeutics

- Procured pulse oximeters, two ultrasound machines, and medicines and medical supplies for the management of serious cases in the ICUs.
- Provided technical advice to the MINSAP to update COVID-19 protocols regarding the reorganization and expansion of health services.
- Facilitated exchanges of regional and global experiences for COVID-19 case management.
- Shared PAHO recommendations regarding the emergency use of unproven treatment options, reinforcing ethical and regulatory aspects and the need to generate reliable scientific evidence.



Operational support, logistics, and supply chain

- Supported health authorities to estimate needs for PPE, medicines, and essential supplies.
- Coordinated with the national authorities and UN agencies on the use of the Global Platform, both in the technical and supply areas.
- Supported information and communication services for virtual meetings to exchange experiences.
- Supported, with official PAHO information, the development of country newsletters and platforms led by INFOMED, a PAHO Collaborating Center.
- Sent personal protective equipment, PCR machine repair and calibration materials, PCR diagnostic kits, equipment to transport specimens, protective face masks, antigen-based rapid diagnostic tests and corresponding equipment, trauma kits, and COVID-19 kits, in addition to materials and supplies needed for SARS-CoV-2 sequencing and detection of variants, and a flask to inactivate the virus during transport.

- Delivered several PPE, including surgical masks, KN95 masks, and goggles, among others.
- Facilitated donations of medicines, disposable materials, medical devices, and other equipment, supplies that are essential to strengthen the response to emergency situations resulting from hydrometeorological events, which are occurring as part of an especially active hurricane season.



Maintaining essential health services during the pandemic

- Provided guidance on modeling scenarios for health system planning and expansion.
- Supported the evaluation of hospital and isolation center readiness for the management of COVID-19 cases according to PAHO guidelines.
- Supported the reorganization of health services into comprehensive networks to maintain essential services, in addition to prioritized programs.

- Promoted the dissemination of knowledge through communication with a gender perspective for self-care and collective care in the face of COVID-19 and its gender consequences in the school environment.



Vaccination

- Supported the strengthening of the cold chain management system.
- Supported the country with the acquisition of syringes for the application of vaccines in testing stages.
- Led the interagency processes with WFP and UNICEF to support the country's vaccination plan.
- Purchased prequalified (PQS) refrigerators, household refrigerators, thermoses, and ice packs through the Global Alliance for Vaccines and Immunization (GAVI).



Dominica



Country-level coordination, planning, and monitoring

- Produced daily COVID-19 briefs for the country.
- Provided in-country UN staff with PAHO and WHO guidelines and updates.
- Launched consultations with national health authorities on the development of country strategic preparedness and response plans according to WHO guidelines.
- Continued publication of the Country Office COVID-19 information bulletin, including measures taken to contain the spread of the virus and highlights of PAHO's support to the Member States.
- Maintained the country office's IMST structure and adapted the members' roles to the pillars of WHO's strategic plan to facilitate implementation and reporting.
- Coordinated with the UNRC system on COVID-19 initiatives.
- Provided IT and communication equipment to strengthen the Health EOC.
- Trained community health aides to work rapidly and quickly throughout the country, assisting in the COVID-19 response at the community level.



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 briefings on PAHO's in-country support and collaboration with the MOH.
- Engaged with young people to ensure their participation in the Youth Leader Forum.
- Provided equipment for strengthening the Health Promotion Unit for production and dissemination of local communications materials.
- Convened a webinar on dengue response during the pandemic. The webinar targeted policymakers, health experts, medical and public health practitioners.
- Produced videos highlighting the contributions and issues faced by HCWs in the COVID-19 response.
- Published a case study featuring community health workers in Dominica leading the fight against COVID-19.



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. Procured and implemented mobile application for contact tracing.
- Acquired vehicles to strengthen contact tracing.
- Retrofitted the country's quarantine facility.
- Delivered orientation on applying the EpiEstim and CovidSIM 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.
- Supported early detection of cases through existing surveillance systems to inform and improve analysis and decision-making.
- Procured 10 infrared and 100 digital contact thermometers for surveillance and case management of persons with COVID-19.
- Strengthened capacity for surveillance and contact tracing by providing a vehicle and laptops to national health authorities.
- Trained medical doctors and other health professionals on WHO guidelines for ICD-10 coding of COVID-19 mortality.



Points of entry, international travel, and transport

- Provided training in IPC, surveillance, and case management at ports.
- Provided technical advice regarding the reorganization of port facilities to facilitate case identification, quarantine/isolation, and referral.
- Regularly reviewed entry protocols for the reopening of borders as they became available and provided feedback to national health authorities as appropriate.
- Jointly hosted a webinar on "Considerations for resuming non-essential travel in the Caribbean."
- Strengthened surveillance activities at ports of entry through contracting data entry clerks and health workers.



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.
- Ensured laboratory capacity to detect cases with necessary tests and reagents, and to scale up capacity as more cases are detected.
- Conducted a webinar on scaling up laboratory testing in the Caribbean.
- Facilitated joint collaboration with the regional team to establish an emergency stock of COVID-19 laboratory materials for distribution to countries and territories in the subregion.

- Conducted a training on molecular testing to establish on-island testing capacity.
- Disseminated updates on COVID-19 diagnostics, including recommendations for use of rapid antigen tests for COVID-19.
- Procured additional GeneXpert cartridges, laboratory test kits, and consumables to strengthen laboratories for diagnosis of SARS-CoV-2.
- Trained laboratory technicians in molecular testing.



Infection prevention and control and protection of the health workforce

- Procured PPE to reduce the risk of infection for health workers.
- Delivered IPC training in English and Spanish to nurses, doctors, and allied healthcare workers.
- Shared IPC guidelines.
- Trained hospital staff in infection prevention and control.



Case management, clinical operations, and therapeutics

- In the context of COVID-19, delivered training on clinical management of cases, mental health, management of pregnancy, and children and disabilities.
- Trained health personnel on the appropriate use of PPE.
- Shared case management guidelines with the national authorities.
- Improved the protection of healthcare workers to safely detect and deliver healthcare services.

- Supported six nurses in completing a certificate course in critical care. This aimed to deliver high-level critical care and scale up available human resources to respond in a timely manner in circumstances should there be a second or third wave.
- Procured eight vital signs monitors, six ventilators, three infusion pumps, and five oxygen concentrators to augment capacity for management of COVID-19 cases.



Operational support, logistics, and supply chain

- Provided logistics support to clear COVID-19 materials and supplies through customs for delivery to the MOH.
- Provided logistics support for the procurement of a supply of reagents for PCR testing, PPE, and a vehicle to strengthen the management and surveillance of COVID-19 cases.



Maintaining essential health services during the pandemic

- Provided technical guidance on the reorganization of the health system to respond to COVID-19 cases and to better enable the country's health system to respond to COVID-19.
- Completed the first stage of the Joint Reporting Form (JRF), aimed at improving capacity to track implementation of the Global Vaccine Action Plan. The monthly reporting was established as part of the tracking mechanism to monitor effects of COVID-19 on the immunization program.
- Strengthened prevention of foot care for persons with diabetes and peripheral artery disease during COVID-19 through the procurement of Doppler ultrasounds and development of a training video.



Vaccination

- Trained health personnel online to implement the Self-Management for Chronic Disease Program. Provided manuals and tablets to support implementation of the program.
- Shared technical guidance for maternal care during COVID-19. Also prepared a summary fact sheet to share the latest evidence on the increased risk of COVID-19 complications during pregnancy. Shared a data collection form for monitoring pregnant women.
- Guidance on the care of older persons during and after COVID-19 was also shared. Provided support to strengthen and update the Perinatal Information System to include the COVID-19 module.
- Installed WASH infrastructure in selected health facilities.
- Provided training programs for MOH staff on aspects of clinical management and other health concerns, including family planning, mental health, HEARTS, and chronic care model, in the context of COVID-19.
- Conducted training sessions on ESAVI surveillance operations and cold chain management.
- Provided technical support for the development of COVID-19 National Deployment and Vaccination Plan; supported vaccine introduction readiness using the VIRAT.
- Technical guidance was shared, and support was provided for the completion of the requirements of the COVAX Facility.
- Provided technical support to the MOH for the introduction and rollout of the COVID-19 vaccine.
- Provided training in the management of the COVID-19 vaccine to national immunizations focal points.



Country-level coordination, planning, and monitoring

- Engaged in high-level meetings with the government to present PAHO's recommendations on scenarios associated with the pandemic, including on the COVID-19 vaccines.
- Participated with other international agencies (IDB, UNICEF, and the World Bank) in meetings with the MOH on support to mitigate the impact of the pandemic and collaborate in COVID-19 vaccination efforts.
- Participated in multisectoral meetings, along with the MOH, to prepare and oversee mitigation and containment plans and consider specific needs (storm alerts, interventions in the provinces, etc.).
- In coordination with the MOH, prepared the Operational Plan for Response to the COVID-19 Emergency, which was formally presented to the Health Cabinet, coordinated by the Vice Presidency of the Republic.
- Completed the first phase of the Global COVID-19 Clinical Platform project in three Santiago province hospitals, which obtained contributions from 314 adult and child patients.
- Conducted work with the focal points of health centers and the Medical Research Committee of the Pontificia Universidad Católica Madre y Maestra (PUCMM) in the search for new strategies for implementing phase 2

of the project and obtaining contributions from up to 1,000 patients.

- Supported the MOH on the Human Resources for Health Monitoring and Evaluation Plan in the context of the COVID-19 pandemic response. Work is currently underway on logistics for the next steps.
- Contributed to the COVID-19 Recovery Needs Assessment (CRNA), spearheaded by the Ministry of Economy, Planning, and Development, in coordination with United Nations agencies. This effort has made it possible to identify gaps and additional social and economic recovery needs, advance in the preparation of recovery strategies, and guide the country's budgetary reorientation and international cooperation.



Risk communication and community engagement

- Held media briefings alongside MOH counterparts to disseminate key messages.
- Supported the Department of Health Promotion and Education to update a guide for the home and community during the pandemic. Printed 20,000 copies to be distributed to key groups identified by the MOH.
- Worked with the media in order to promote prevention measures provided by national authorities and to position PAHO's technical cooperation in the country.

- Collaborated with the MOH risk management team to prepare a series of informative brochures that were distributed in communities nationwide.



Surveillance, rapid response teams, and case investigation

- Supported the updating and strengthening of the information system of the General Directorate of Epidemiology (DIGEPI).
- Supported MOH to start up its Center for Intelligence and the Health Situation Room.
- Conducted training, together with GOARN, on the use of Go.Data for contact tracing and weekly training to update on program implementation. Supported in the installation of Go.Data in the National Epidemiology Directorate.
- Supported the surveillance team, including with simulations, projection models, and supplies, and created an information dashboard that was updated daily, with data from the MOH.
- Collaborated with the MOH to integrate national and provincial level data from several departments (DIS, DASIS, and DIGEPI) into the MOH Situation Room.
- Supported contracting health staff to strengthen surveillance and rapid response capacities in areas with the greatest community spread of COVID-19.
- Delivered rapid antigen-based tests to the MOH national laboratory to monitor symptomatic contacts in the areas with the highest community circulation of the SARS-CoV-2 virus.
- Collaborated to the implementation of the genomic surveillance strategy at the Dr. Defilló National Laboratory, coordinating the shipment of positive SARS-CoV-2 samples for genomic sequencing in the PAHO COVID-19 Genomic Surveillance Regional Network and supporting capacity building in genomic surveillance of pathogens in the country.



Points of entry, international travel, and transport

- Supported the Ministry of Tourism and the MOH with the guidelines on measures for the reopening of non-essential travel, based on the WHO recommendations for the tourism sector.
- Collaborated with the IOM on surveillance, IHR core capacities, immigration 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, means of transporting the virus, and other supplies to the national laboratory.
- Provided diagnostic training for private laboratories, including donating kits.
- Arranged contracting of health staff to build capacity in the national laboratory.
- Supported the mobilization of technicians from the national laboratory to the areas with the greatest community circulation of COVID-19 for sampling, safety, and transport of SARS-CoV-2 samples.
- Strengthened the capacity of the Doctor Defilló National Laboratory for timely detection of the SARS-CoV-2 virus in samples through donations that included laboratory supplies and viral transport for detection, diagnosis, and antigen tests, which further contact tracing in the localities with the highest number of COVID-19 cases.



Infection prevention and control and protection of the health workforce

- Trained teachers and educational staff in IPC and other key areas through a series of webinars in conjunction with the Universidad Iberoamericana, the Dominican Initiative for a Quality Education, the Association of Private Educational Institutions, and the Pontificia Universidad Católica Madre y Maestra.
- Delivered supplies to civil society organizations working with people living with HIV and sex workers.
- Donated masks, including to the Expanded Program of Immunizations, General Directorate of Prisons, and the National Council of Disability–CONADIS.



Case management, clinical operations, and therapeutics

- Supported the national health services (SNS) to prepare protocols and manuals.
- Collaborated with the SNS to implement the COVID-19 Global Clinical Data Platform project in three hospitals in the province of Santiago and participated in follow-up meetings on the implementation of the Platform.
- Together with SNS and PUCMM, worked on the first phase of implementation of the project on strengthening the capacities of the first and second levels of care in the border provinces (Independencia and Dajabón).



Operational support, logistics, and supply chain

- Managed the storage of PPE that was donated to the Health Cabinet for health workers.
- Supported the mobilization of experts to the territories to strengthen human resources in detection and diagnosis of SARS-CoV-2.

- Delivered two water treatment kits (mobile water treatment plants) to be used in two MOH mobile hospitals.

- Delivered equipment for use in training on sampling, safe transportation, and proper use of personal protective equipment. These trainings were for health professionals working in laboratories in the provinces with the highest incidence of infection.

- Donated oxygen concentrators, supply kits, handheld pulse oximeters, and personal protective equipment (PPE) to the National Health Service (SNS).



Maintaining essential health services during the pandemic

- Supported the implementation of the EMT initiative and strengthened EMTs with training in water management.
- Collaborated in the implementation of the Multi-Hazard Event Response Framework with preparedness measures for the response to the 2020 hurricane season and COVID-19.
- Supported the review and updating of the MOH legal framework for health risk management.
- Supported the structural evaluation of the municipal hospital of Esperanza in the Valverde Mao province and the evaluation of the correct use of the mobile hospital, which is being used provisionally.
- Collaborated with health authorities to evaluate hospital readiness for managing cases.
- Identified health centers for the establishment of alternative medical care sites.
- Strengthened capacities for protecting mental health.
- Supported the country with modelling/estimating efforts to plan, including for ICU and hospital bed needs.

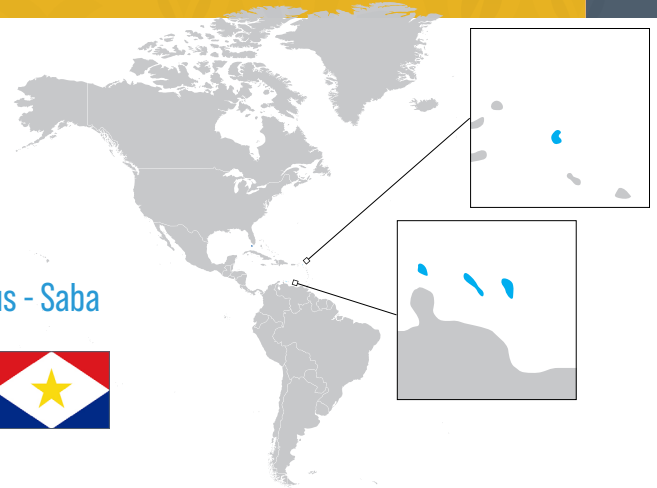


Vaccination

- Supported the National Health Service in its expansion plan for the Hospital Centers Directorate, in order to ensure timely access to health services.
- Collaborated with the MOH to develop general guidelines for the progressive return to normalcy in public and private health centers, after the de-escalation phase announced by the Government.
- Supported the MOH to complete adjustments in the tuberculosis laboratory; in addition to supporting the epidemiological and laboratory surveillance of dengue, malaria, and other arboviruses.
- Supported in the preparation of the National Vaccination Plan, technical guidelines, oversight manual, and vaccinator's manual.
- Participated in the meetings of the COVID-19 Vaccine Advisory Committee.
- Supported the definition of standard information to be collected in the COVID-19 vaccination card, as well as the vaccination recording form.
- Supported the design of training documents for health personnel who will oversee vaccination operations.

Dutch Island Territories

Aruba - Curaçao - Sint Maarten - Bonaire - Sint Eustatius - Saba



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 PAHO 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 to reach migrants in the community to provide information on physical distancing and safe hygiene practices and to encourage those feeling ill to get tested.
- Shared guidelines on economic reopening, especially for hotels and other accommodations, with counterparts in Aruba, Curaçao, and Sint Maarten.
- Shared guidelines for the reopening of borders to international travel with Aruba 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, Curaçao, and Sint Maarten to enhance the collection and analysis of surveillance data for submission of reports to PAHO that are included in the COVID-19 dashboard.
- Convened 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.
- Supported the disaggregation of COVID-19 data for Bonaire, Sint Eustatius, and Saba provided to WHO, PAHO, and the U.S. Centers for Disease Control and Prevention (CDC) to allow for island-specific data to guide travel advisories given the difference in transmission rates among these three territories.



National laboratories

- Shared PAHO guidelines on COVID-19 PCR testing with the 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 and protection of the health workforce

- Provided technical assistance with the development of the 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.
- Hosted webinar on "Caring for the Caregiver, protecting your mental health when caring for others."
- Shared several guidance documents and provided response to a number of questions on IPC.



Case management, clinical operations, and therapeutics

- 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.
- Conducted a two-day virtual training of 30 mental health and substance use service providers in Aruba and Curacao in the management of substance use disorders in the context of COVID-19.
- Trained representatives from Aruba and Sint Maarten in mental health and psychosocial support (MHPSS) as part of the first PAHO virtual MHPSS course.



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.
- Provided support to Aruba and Curacao to purchase vaccines to maintain the implementation of their immunization programs.
- Provided technical assistance to assess disability services within the context of COVID-19 in Aruba.
- Supported the capacity assessment of the mental health and substance use service providers as the first step in the reorganization of services that are more integrated, people-centered, high-quality, and accessible to all.
- Facilitated a disability and rehabilitation situational analysis in the context of COVID-19 in Aruba.
- Provided technical assistance to Aruba to develop a National Strategic Framework for the Health Sector 2021-2030 that outlines the vision, overall goal, and draft strategic priorities and related actions, which enhanced policy decision-making in Aruba. This document is being used as an advocacy tool in discussions on health reform between the Government of Aruba and the Netherlands.
- Collaborated with counterparts in Aruba to develop 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.



Vaccination¹

- Collaborated with counterparts in Aruba on the continued reorganization and strengthening of mental health and substance use services as part of their socioeconomic rebuilding and recovery efforts during the COVID-19 pandemic.
- Developed a situational analysis to facilitate the adoption of standards of care for the treatment for substance abuse disorders in Aruba and Curaçao.
- Enhanced the NCD program with the completion of the national multisectoral plan for the prevention and control of NCDs.
- Shared the information received from PAHO on the planning of the COVID-19 vaccination process.
- Briefed health authorities in Aruba, Curaçao, and Sint Maarten on the COVAX Facility and its relevant mechanisms, as they are being utilized by other countries and territories in the Americas.

¹ The COVID-19 vaccines for the Dutch Caribbean will be provided through the Netherlands, not through the COVAX Facility. The Netherlands National Institute for Public Health and the Environment (RIVM) has been working with the islands to develop their logistics plans and has already shipped the special refrigerators to the islands.



Ecuador



Country-level coordination, planning, and monitoring

- Collaborated directly with Ecuador's Ministry of Public Health (MOH) and its health emergency operations center to develop and implement the national COVID-19 Preparedness and Response Plan.
- Activated the Health Action Group of humanitarian team to formulate a response to COVID-19.
- Coordinated with Technical Working Group on mental health to adapt and adopt PAHO protocols and methodologies for epidemiological surveillance, entry points, IPC, case management, coordination, and risk communication.
- Deployed experts in surveillance, contact tracing, reorganization of health services, and organization of the national emergency response structure.
- Developed territory-level health cooperation activities to strengthen, inter-group, epidemiological surveillance, risk management, health services and infection prevention and control, and to carry out health measures with related civil society organizations.
- Collaborated with the Working Group on Refugees and Migrants, the health group responsible for coordinating activities for people with limited mobility.



Risk communication and community engagement

- Promoted strategic alliances with authorities, community leaders, and other social actors to encourage hygiene and prevention measures in the community, in line with public health recommendations for the containment of COVID-19.
- Supported the implementation of activities under a WHO program to strengthen civil society by channeling funds toward organizations working to support indigenous peoples and persons with disabilities.
- Supported the formulation of a national education and communication plan on COVID-19 and trained the relevant staff to implement the COVID-19 risk communication plan.
- Helped design and implement a health promotion and risk communication plan for indigenous peoples, Afro-descendants, and Montubios and supported the development and validation of an inter-cultural protocol for the prevention and care of COVID-19 patients. Trained journalists and communicators from these populations, as well as community broadcasters, to disseminate key messages. PAHO additionally developed and disseminated communication materials with key messages for the prevention of COVID-19 and for health promotion with an intercultural approach, using the various languages of the peoples and nationalities addressed.

- Adapted and printed risk communication materials adapted to indigenous communities including in Spanish, Shuar, Achuar, and Andean Kichwa, while adapting the messages for the differing realities of the targeted communities.
- Conducted outreach targeting the country's peoples and nationalities, including educational messages and materials, while engaging these sectors of the population to participate in joint activities.
- Convened weekly meetings with community and youth leaders complemented with three knowledge-based dialogues on COVID-19 vaccination for Amazonian peoples and other groups, as well as indigenous Andean Kichwa peoples, and Afro-descendant peoples.
- Conducted a project in the provinces of Pastaza, Morona, and Tungurahua with the Confederation of Indigenous Nationalities of the Ecuadorian Amazon (CONFENIAE) and the "Voice of CONFENIAE" radio station, providing equipment and developing messages to prevent COVID-19 and support vaccination.



Surveillance, rapid response teams, and case investigation

- Supported the MOH to develop and implement national guidelines for the containment and mitigation of COVID-19 and analysis of trends and indicators to examine excess mortality.
- Delivered computer equipment to the national epidemiological situation room and hired 13 officials to manage the databases at the provincial level.
- Provided technical advice and supported the creation of a risk assessment tool based on COVID-19 monitoring indicators.
- Hired professionals to support COVID-19 preparedness and response in eight provinces.

- Collaborated in the training and follow-up of a COVID-19 case database, in line with WHO's global pandemic monitoring actions.



Points of entry, international travel, and transport

- Provided guidance for updating contingency plans for designated entry points into the country; developed a list of key actions related to alerts, preparedness, and response for entry points without an official designation, but which may pose public health risks.



National laboratories

- Provided technical advice on molecular diagnostics to the country's network of decentralized laboratories in Guayaquil, Quito, and Cuenca; donated laboratory supplies to maintain the reference pattern for COVID-19 PCR diagnosis.
- Supported the deployment of a technical laboratory team from the Guayaquil branch of the National Institute of Public Health Research (INSPI) to Quito and Cuenca to strengthen the processing of samples from Guayaquil. Opened a branch laboratory in the province of Napo to strengthen diagnostic capacities in the Ecuadorian Amazon.



Infection prevention and control and protection of the health workforce

- Supported the MOH to develop and implement infection prevention and control guidelines for the health sector.
- Provided PPE and body bags to institutions to support the country's response to COVID-19 and the management of corpses; conducted in-person training on IPC.

- Conducted health promotion and risk communication activities among the Shuar, Achuar, Amazonian Kichwa, and Galápagos communities to reach these populations in the context of COVID-19. The objective was to prevent and control transmission through strategies encouraging the use of personal, family, and community protective measures.



Case management, clinical operations, and therapeutics

- Provided assessments for the reorganization and expansion of Ecuador's health services to respond to COVID-19, including provincial gap analysis and detection for 303 hospitals.
- Trained Ecuador's country teams to manage emergency medical teams, establish alternative medical care sites, and use triage-adapted tents and housing units.
- Trained health workers in public hospitals and the armed forces hospitals to assess their readiness to address the COVID-19 pandemic.
- Supported the development of guidelines for patient management, neonatal and pregnancy care.
- Provided the MOH and the Ecuadorian Institute of Social Security (IESS) with a tool to calculate the needs of hospitalized patients and define the capacity limits of the hospital response.
- Provided advice to the MOH on the requirements for participating in the Solidarity trial.
- Provided training to primary care medical staff in remote areas with a high proportion of indigenous populations and less access to health services on the use of the case management algorithm for suspected cases of COVID-19. Strengthened capacities in first-level health centers to provide oxygen therapy treatment in hard-to-reach areas.



Operational support, logistics, and supply chain

- Collaborated in training logistics technicians on the use of SUMA and SISTOCK computer programs to administer supplies and medicines during emergencies.



Maintaining essential health services during the pandemic

- Collaborated with the MOH and other partners to evaluate strategies to ensure continuity of vaccination, as well as malaria, tuberculosis, and HIV/AIDS programs.
- Helped formulate, revise, and adapt WHO and PAHO guidelines for vaccinations and maternal and childcare (including newborns) during the COVID-19 emergency.
- Trained primary health care staff in prioritized provinces to organize and maintain essential health services during the pandemic.
- Supported the implementation of psychosocial tele-support for the general population and the organization of a mental health response plan.
- Collaborated in creating a virtual course on mental health designed to reduce gaps in specialized service providers and strengthen competencies of health teams to respond to the demand for psychosocial care.
- Supported the Latin American Network of Organizations of People with Disabilities and their Families (RIADIS) to implement activities designed to empower people with disabilities so that they can be actors in an inclusive recovery from the ongoing impact of the COVID-19 pandemic.

- Provided support to the Pachamama Foundation to implement domestic violence prevention workshops targeting women and women's community-based enterprises from Pastaza and Morona Santiago provinces in the Amazon; and to conduct workshops on maternal and child health for health promoters.



Vaccination

- Provided up-to-date information on the status of the development of a COVID-19 vaccine and worked with the MOH to understand/utilize the COVAX Facility.
- Developed and transmitted guidance to plan for the introduction of a COVID-19 vaccine into the national Expanded Program on Immunization.
- Headed the group of cooperation agencies engaged in deploying vaccines along with the Ministry of Public Health. Participants in this effort include the World Bank, IDB, CAF, IOM, UNICEF, UNDP, and the office of the United Nations Resident Coordinator in Ecuador.



El Salvador



Country-level coordination, planning, and monitoring

- Provided ongoing support to national authorities in data analysis, preparedness for the response, and the monitoring of the evolution of the pandemic.
- Provided technical assistance to MOH on priority health issues, such as vaccination coverage, care for vulnerable populations, and maternal and child mortality.
- As the lead agency for Pillar 1 (Health First), followed up on the implementation of the WHO Response Plan (Partners Platform) and worked with the UN System to prepare the Socioeconomic Response Plan.
- Coordinated the health cluster of the Humanitarian Country Team. Approximately 20 institutions that work in health in El Salvador financially support the national response.
- Advised foreign missions of France, Canada, the USA, and others on which areas which could benefit from external support, within the framework of the National Preparedness and Response Plan.



Risk communication and community engagement

- Provided ongoing support for risk communications, using PAHO's in-country social media networks.
- Worked with the MOH Communications Unit to prepare the vaccination plan.
- Coordinated with UNICEF on the design of an integrated communications plan and supported the preparation of a national plan, complemented with coordination with civil society leaders to ensure a whole-of-society approach. Provided technical documents to communications teams in the nine member institutions that make up the National Health System, for incorporation into their institutional plans.
- Coordinated with civil society leaders on communication issues to establish lines of action against the pandemic. Strengthened the communications unit at the National Institute of Health in the face of the COVID-19 emergency.
- Developed a campaign to counter myths about COVID-19 vaccination and disseminated data, courses, technical documents, and key messages through social networks to combat misinformation.
- Provided technical cooperation to build capacity in the communications unit of the National Health Institute in the context of the COVID-19 emergency.



Surveillance, rapid response teams, and case investigation

- Provided technical support for the creation of the Situation Room to monitor behavior and analyze information.
- Monitored the implementation of case modeling using available tools. All information related to [COVID-19 in El Salvador is online](#).
- Collaborated in the definition of key epidemiological variables for their incorporation into the Epidemiological Surveillance Information System (VIGEPES).
- Beginning in February 2020, supported the Epidemiology Directorate to monitor cases of pneumonia in health facilities.
- Collaborated in the detection of cases of multisystemic inflammatory syndrome in children and adolescents (under 19 years of age) and in the implementation of the pilot application of the Perinatal Information System COVID-19 module in five hospitals.
- Engaged in constant communication with the National Reference Laboratory to constantly provide updates on diagnostic materials and available tests.
- Assisted in preparing protocols and standard operating procedures for the processing and interpretation of laboratory results.
- Supported the inclusion of El Salvador as a pilot country in the use of rapid antigen-based tests.
- Followed up the notification of the SARS-CoV-2 virus in the framework of sentinel surveillance of influenza and other respiratory viruses.
- Supported the definition of national guidelines for the implementation of surveillance and detection of variants of concern (VOC), through the use of Ag-RDT and PCR tests, once the national laboratory had the supplies for the generic detection of variants.
- Supported the transfer of samples, taken from hospitalized patients in serious or critical condition, to the national laboratory, to detect variants of concern in circulation. The results of the first 100 samples that were processed were pivotal in enabling the confirmation of the circulation of variants of concern within the country.



Points of entry, international travel, and transport

- Supported the country's IHR focal point and maintained constant communication with all countries and headquarters to monitor the pandemic.
- Shared updates on containment measures and WHO recommendations for working at air, sea, and land points of entry.



National laboratories

- Delivered RT-PCR tests and laboratory supplies and trained staff to use tools that allow for the extraction of the virus and processing of tests.



Infection prevention and control and protection of the health workforce

- Delivered a shipment of PPE to support authorities to care for patients.
- Distributed technical information and guidelines produced by PAHO on the management of COVID-19 infections and other infectious diseases.
- Coordinated virtual training on the approach to IPC and shared updated information, with an emphasis on the surveillance of IAAS in hospitals providing care for critically ill patients.



Case management, clinical operations, and therapeutics

- Delivered medical equipment to manage COVID-19 patients and for use in health facilities (wheelchairs, electrocardiographs, lecterns, medicine carts, among others).
- Systematically shared PAHO information and recommendations for treatment of cases.
- Supported the publication of clinical practice guidelines adapted for the care of critical adult patients with COVID-19 in the Americas, using the GRADE methodology, a WHO approach that entails a systematic review and quality assessment of evidence.¹



Operational support, logistics, and supply chain

- Supported hospitals to assess needs; provided advice on the acquisition of needed supplies, using funds for pandemic response.
- Provided technical assistance to the external cooperation office of the MOH to expedite shipments.
- Coordinated with the National Directorate of Medicines to define abbreviated procedures for the importation of equipment and supplies to respond to COVID-19.
- Provided equipment for the national hospital simulation room.
- Using the PAHO Revolving Fund mechanism, supported the country to procure equipment necessary to strengthen its cold storage capacities to ensure that COVID-19 vaccines are managed appropriately.



Maintaining essential health services during the pandemic

- Worked with the first level of care, the hospital directorate, and health promotion to ensure the continuity of all health services, especially those associated with NCDs, mental health, and access to medications.
- Supported the arrival of vaccines and supplies to ensure vaccination at all times despite restrictions on movement within the country.
- Supported the development of pandemic management plans for the progressive reopening of essential primary care services, for morbidities such as HIV, TB, and vector-borne diseases (such as malaria, dengue, among others). Acquired medications to ensure the management of patients with HIV/TB as a key area of focus in the context of the pandemic.
- Provided technical assistance to the vector control program to reactivate arbovirus vector control activities, with an emphasis on dengue and the malaria elimination process.
- Provided technical support for the continuity of the national strategy for the progressive reopening of basic health services at the first level of care, following PAHO guidelines.
- Provided support to national authorities for monitoring the impact of the COVID-19 pandemic and the evolving situation on the population's progress toward attaining universal health.

¹ World Health Organization. WHO Handbook for Guideline Development. 2012. Retrieved on 16 September 2021 at: https://apps.who.int/iris/bitstream/handle/10665/75146/9789241548441_eng.pdf;jsessionid=D8C66CA2B0D7335190DF501F0D4F0FE2?sequence=1

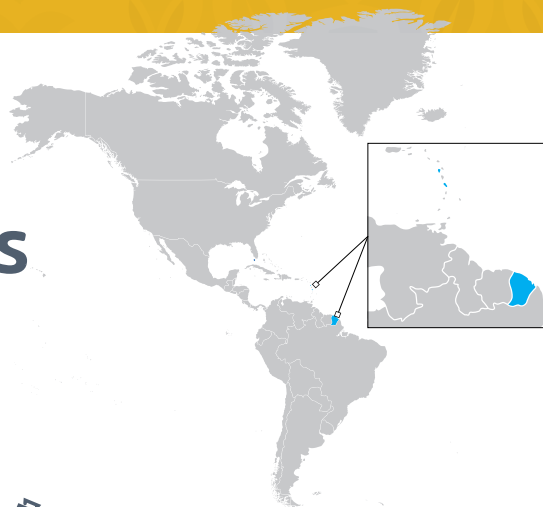


Vaccination

- Supported the implementation of the VIRAT/VRAF as a mechanism for the self-assessment of progress in vaccine preparedness.
- Worked with national authorities to develop the components of the National Deployment and Vaccination Plan for COVID-19 Vaccines.
- Supported the updating of National Immunization Technical Advisory Group (NITAG) as a fundamental step in the preparation of the plan.
- Supported the preparation of technical guidelines for purchasing supplies, cold chain equipment, information registration, and the activation of the EPI crisis room, either with national funds or donations from PAHO or other partners.
- Provided training to the MOH immunization team in the use of syringes and cold chain management as the country prepared to launch efforts to ensure that COVID-19 vaccines reach its population.
- Accompanied the processes required by COVAX to receive the vaccines in El Salvador and supported logistics and delivery of the COVID-19 vaccines through COVAX.

French Departments

French Guiana - Guadeloupe - Martinique



Surveillance, rapid response teams, and case investigation

- Shared PAHO's surveillance guidelines to facilitate the exchange of epidemiological information among 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, international travel, and transport

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



National laboratories

- Shared PAHO and WHO guidelines for laboratory molecular testing.

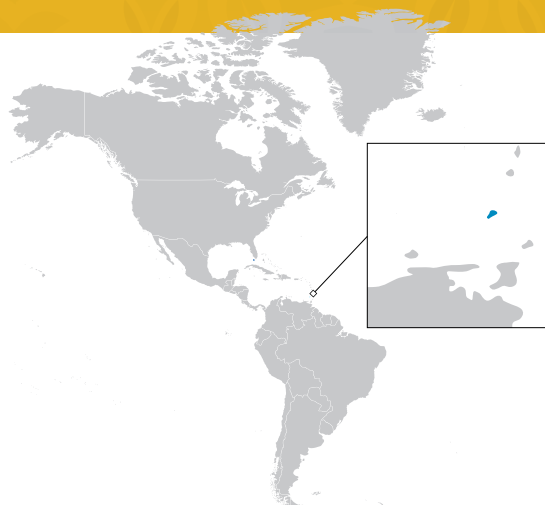


Case management, clinical operations, and therapeutics

- 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

- Adapted the national Influenza Pandemic Plan to COVID-19.
- Strengthened the coordination of the COVID-19 response at the national level.
- Launched consultations with national health authorities to develop country strategic preparedness and response plans, according to WHO guidelines.
- Continued publication of PAHO's country COVID-19 information bulletin, including measures taken by countries to contain the spread of the virus and highlights on PAHO's support to the Member States.
- Coordination with the UNRC system on COVID-19 initiatives.



Risk communication and community engagement

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

- Disseminated risk communication information to citizens and travelers.
- Provided technical support to develop and disseminate social media cards to support healthy nutrition.
- Developed a breastfeeding campaign using various media platforms; developed posters; and aired a video "Safe Breastfeeding during COVID-19" on national TV stations.
- Procured equipment to strengthen the Health Promotion Unit to produce and disseminate local communications materials.
- Produced video highlighting the contributions and issues faced by HCWs in the COVID-19 response.



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 and CovidSIM, mathematical models for short-term forecasting of COVID-19 cases.

- Contracted a short-term surveillance officer to strengthen contact tracing.
- Provided orientation for national epidemiologists and laboratory personnel on the PAHO regional program for influenza laboratory-based surveillance for SARI/ILI and its link to COVID-19.
- Collected weekly data on COVID-19 trends; contact tracing was improved by contracting a surveillance officer.
- Procured computers for data entry and analysis in the surveillance unit.
- Trained medical doctors and other health professionals on WHO guidelines for ICD-10 coding of COVID-19 mortality.
- Provided primers, probes, and PCR kits for reactions and tests, as well as swabs, sampling kits, and enzymes, among other critical supplies, needed to ensure laboratory capacity to detect COVID-19 cases and to scale up capacity as more cases are detected (including involving the country in a webinar on this issue tailored to the Caribbean).
- Collaborated with the regional team to establish an emergency stock of COVID-19 laboratory supplies for distribution to countries and territories in the subregion.
- Facilitated training by the regional team on molecular testing to establish on-island testing capacity.
- Disseminated updates on COVID-19 diagnostics, including recommendations for use of rapid antigen-based tests.



Points of entry, international travel, and transport

- Assessed capacity at the international airport to ensure effectiveness of surveillance systems.
- Provided technical guidance on considerations for the phased reopening of borders.
- Regularly reviewed entry protocols for the reopening of borders as they became available and provided feedback to national authorities.
- Provided equipment, such as IT tools, for data collection and case detection at points of entry.
- Hosted a webinar on “Considerations for resuming nonessential travel in the Caribbean.”



National laboratories

- Disseminated guidelines and protocols and provided training for RT-PCR detection.
- Provided technical cooperation to the national laboratory on diagnostics, including data review, troubleshooting sessions, and follow-up calls.



Infection prevention and control and protection of the health workforce

- Strengthened IPC capacity for HCWs through in-person and virtual training and provided PPE. This included the launching of a virtual IPC training course to provide Caribbean HCWs and personnel involved in other high-risk professions with knowledge of best practices and recommendations to reduce their risk of infection. PAHO additionally delivered IPC education and training to frontline health workers.
- Supported the country's reopening strategy by training hotel workers in situations where hotels are being used as quarantine sites for repatriated Grenadian nationals.
- Provided handwashing and hand sanitizing stations to health care facilities as part of ongoing support for protection of HCWs.



Case management, clinical operations, and therapeutics

- Provided training in hospital bed assessment and supply management tools.
- Strengthened the country's ability to deliver mental health and psychosocial support (MHPSS) to HCWs, in the context of COVID-19.
- Strengthened telehealth services and community engagement to provide psychosocial support.
- Improved the local health system's capacity and protected healthcare workers to safely diagnose COVID-19 and deliver healthcare services.
- Procured six vital signs monitors, six ventilators, two infusion pumps, and five oxygen concentrators to augment capacity for management of COVID-19 cases.
- Implemented a school policy to support the reopening of schools, reconfiguring school resources, and ensuring adequate physical activity which may be hampered by public health measures.
- Established a committee to scale up essential services to address gender-based violence (GBV); developed a work plan with multisector input and SOPs.
- Developed and subsequently updated guidance for IPC in shelters for survivors of GBV, which is being translated to Spanish.
- Developed a framework and SOPs to strengthen essential services provided to women and girls who have been victims of violence, offering clear directives to stakeholders involved in supporting and aiding victims/survivors.
- Retrofitted and equipped shelters managed by the CEDARS NGO for women and children to continue providing services in a safe and quality environment.



Operational support, logistics, and supply chain

- Supported the delivery of supplies and equipment through the Regional Security System.
- Supported the procurement of reactions and tests through PAHO's Strategic Fund.
- Delivered antigen-based rapid diagnostic tests (Ag-RDTs).
- Organized a panel discussion on the future of youth employment post COVID-19 for 42 participants.
- Strengthened the capacity of the vector control program to respond to the dengue outbreak by providing insecticide application equipment, insecticides, and entomological supplies.
- Training was conducted on the perinatal information system in preparation for the implementation of the program in 2021.
- Conducted a webinar on dengue response during the pandemic, targeting policymakers, health experts, and medical and public health practitioners.



Maintaining essential health services during the pandemic

- Using PAHO's Virtual Campus for Public Health, two case studies were tailored to HCWs.
- Conducted 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.
- Convened additional rounds of an EMT Coordination course tailored to the Caribbean (including three-day long online trainings and webinars) for MOH staff. This facilitated the adoption of the CICOM methodology for establishing medical coordination and information cells as part of the health emergency operations centers (EOCs).
- Supported the establishment of a technical working group for mental health and psychosocial support.



Vaccination

- Conducted training sessions on: ESAVI and cold chain management.
- Provided technical support for the development of COVID-19 National Deployment and Vaccination Plan, and for using the VIRAT to assess vaccine introduction readiness.
- Technical guidance was provided to complete the requirements of the COVAX Facility.
- Provided support to review the country's National Deployment and Vaccination Plan, designed to protect at-risk populations. Special attention was given to ensuring that frontline health workers, older persons, and those with underlying conditions were targeted for the first wave of the vaccinations.



Guatemala



Country-level coordination, planning, and monitoring

- Collaborated with coordinating mechanisms such as the EOC, IHR Committee, network of international health partners, and the Health Cluster.
- Supported the MOH in the organization and weekly (and later biweekly) operation of the Health Cluster and the formation of six working subgroups to support the coordination and response of the partners in the different areas of health.
- Contributed to the socioeconomic analysis of COVID-19 conducted by the UN System in Guatemala, as well as the preparation of the socioeconomic response plan.
- Within the framework of the Health Cluster and its working subgroups, supported the completion of analyses on the impact of COVID-19 on the continuity of essential services, in particular: TB, HIV, and malaria; mental health; maternal health and SRH; and indigenous peoples.
- Supported the MOH in the systematization of institutional practices in response to the COVID-19 pandemic in Guatemala.
- Participated in the development of the National COVID-19 Strategic Plan 2021–2022 with MOH officials. This plan includes each of the 10 pillars of the pandemic response and was an exercise in participatory and inter-programmatic work that has

made it possible to prioritize and quantify the main activities needed for the COVID-19 response.

- Co-led the health cluster with MOH, which led to significant resource mobilization, for example, in support of the Humanitarian Response Plan (HRP), requiring consultation with all MOH partners involved in the health sector response. This contributed to reinforcing MOH leadership and stewardship in the health sector.



Risk communication and community engagement

- Produced risk communication materials, including almost 70,000 posters on topics such as handwashing, isolation, and PPE; trained healthcare workers to better inform the public.
- Trained 260 journalists, in coordination with other UN agencies.
- Supported the MOH in the development of key messages and videos that were translated into five Mayan languages.
- Provided support in developing a campaign against stigma and discrimination, preparation of key messages for a strategy to track cases and contacts, and production of videos in support of vaccination during the pandemic and videos of handwashing and PPE donning.

- In coordination with UNICEF and with technical support from PAHO, inaugurated the virtual course for young communicators at community radio stations, with the participation of more than 400 people.
- Supported the MOH to develop a COVID-19 communication plan for the coming months, with the participation of allied partners, within the framework of the Risk Communication Subgroup.
- Held discussions to address risk communication with educators and health promoters; 300 people participated.
- In the framework of COVID-19, supported the MOH to review, update, and implement the multi-hazard risk communication strategy in Guatemala.
- Developed communication materials for the prevention of COVID-19 among indigenous peoples and prevention of violence against women in the context of COVID-19.



Surveillance, rapid response teams, and case investigation

- Trained 300 health workers in surveillance, laboratory, hospital, and social communication.
- 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.
- Supported the MOH in the development of the COVID-19 situation dashboard, a tool that provides epidemiological information updated daily.
- Supported the MOH and the Municipality of Guatemala to develop a strategy for tracking cases and contacts. This proposal was later adapted to the rural context.
- Continued to provide technical support to the MOHSP in the adaptation and implementation of the Go.Data platform as a tool to support the management of contact tracing and promote interoperability with other systems used at the national level. Trained supervisors and staff responsible for monitoring and gave technical support to the health area directorates and the creation of dashboards for monitoring contact tracing performance indicators. PAHO additionally established collaboration and partnerships between the MOH, local governments, and cooperating agencies to achieve the interoperability of information systems and automatization of the daily submission of contact tracing data based on the Go.Data platform.
- Supported the development of the methodology to analyze excess mortality from COVID-19.
- Provided technical support for the development, review, and regular update and dissemination of the surveillance protocols.
- Together with the MOH, carried out analysis of the epidemiological behavior of COVID-19 in the country and prepared a scientific article on the impact of the introduction of antigen tests on access to the diagnosis of SARS-CoV-2 infection in Guatemala.
- Provided computer and audiovisual equipment to the technical surveillance teams at the central and local level of the MOH to improve the ability to report information, as well as their participation in virtual meetings and workshops.
- Supported in the formation, training, and deployment of integrated rapid response teams to the areas of active community transmission of COVID-19 affected by storms Eta and Iota.
- Facilitated participation in PAHO's Regional Genomic Surveillance Network, strengthening sequencing and bioinformatics analysis capacity and allowing the country to share genomic sequencing data and to identify and describe the spread of variants of concern (VOC).
- Supported the implementation of the PAHOFLU information system for the management of epidemiological, clinical, and laboratory information for sentinel surveillance of influenza and other respiratory viruses. This will facilitate the development of COVID-19 vaccine effectiveness studies, disease burden analysis, and strengthening of the surveillance system.



Points of entry, international travel, and transport

- Supported the authorities and relevant government institutions to identify designated COVID-19 facilities, managing points of entry, and working with individuals returning from abroad.
- Supported the MOH in the planning and implementation of a simulation exercise to prepare for the response to outbreaks.
- Supported the MOH in discussions with counterparts and other stakeholders and in preparing a technical document with the public health considerations to resume international traffic.
- Provided cooperation to the MOH for the elaboration of guidelines for the reopening of entry points, (land and air border crossings).
- Supported the updating of national plans and guidelines for the health response to events of massive flow of people in a situation of migration in the context of COVID-19.



National laboratories

- Conducted training on laboratory response through subregional training in Mexico.
- Provided primers, probes, enzymes, and kits to conduct PCR tests.
- Accompanied the National Health Laboratory in the analysis and evaluation of delays in the processing of samples and in the flow of information with other laboratories.
- Supported the MOH in the integration of Guatemala into the regional network for genomic surveillance of the COVID-19 virus in the Americas.

- Strengthened diagnostic capacities (with the purchase of equipment, supplies, and reagents and training) for the detection of SARS-CoV-2 in the national laboratory and three sentinel laboratories for respiratory viruses.
- Supported the national laboratory by sending samples for SARS-CoV-2 genomic sequencing to the reference laboratory, Fiocruz in Brazil.



Infection prevention and control and protection of the health workforce

- Advised in the assessment of temporary facilities for people with COVID-19 in Guatemala City and in 51 hospitals (including 5 temporary hospitals).
- Trained 3,697 health workers on IPC measures. Provided IPC training to 420 medical students at the Universidad de San Carlos.
- Together with the Guatemalan Association for Infectious Diseases and the CDC, designed a free online course on prevention, control, and management of COVID-19. Three thousand health professionals participated, and staff were trained in three hotels designated for managing cases.
- Supported the country with the donation of PPE, including masks, disposable gowns, gloves, surgical masks, N95 masks, and goggles.
- Provided technical support to national and subnational health authorities in the establishment of triage, isolation, and strengthening of IPC practices in 22 prioritized health facilities in the framework of COVID-19.



Case management, clinical operations, and therapeutics

- Provided guidance on preparing staff in health facilities to treat infected persons and for intensive care.
- Trained more than 100 health workers on prehospital emergency services and 1,458 people in case management and reorganization of health services.
- Helped MOH to apply, in 22 hospitals, the readiness checklist to expand health services.
- Advised the Guatemalan Institute of Social Security on the evaluation and organization of its services, including the use of hotels for the management of patients with mild symptoms.
- Provided guidance on treating child and adult patients, pregnant women, newborns, adolescents, and for family planning.
- Trained more than 10,000 people in the handling of corpses, through the virtual course developed in coordination with the MOH, the INACIF School of Forensic Sciences, and the ICRC.
- Provided technical support on medical care to 46 hospitals in the network support for the organization of temporary hospitals and offering guidance on planning human resources for health.
- Supported the MOH in the organization and strengthening of the first level of care for the response to the COVID-19 pandemic, prioritizing the most vulnerable health services and focusing on the continuity of essential programs.
- Supported the MOH in the development of technical guidelines for the costing of health services for COVID-19 and the adaptation of the PERC (production, efficiency, resources, and costs) hospitals tool.



Operational support, logistics, and supply chain

- 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.
- Facilitated the distribution of personal protection supplies for health workers in the hospital network.
- Facilitated the clearance and distribution of donations of oxygen concentrators, PPE, COVID-19 tests, and reagents and other related supplies for COVID-19 care.



Maintaining essential health services during the pandemic

- Promoted measures to protect people in conditions of vulnerability, including people with disabilities, pregnant women, newborns, migrant populations, among others.
- Supported the country to develop strategies to address health-related issues arising from migrants, asylum-seekers, and persons returning from abroad, and measures to protect other persons in conditions of vulnerability, such as persons with disabilities and pregnant women.
- Supported the Health Cluster subgroups in preparing work plans for the continuity of essential services.
- In coordination with the Nutrition Cluster, coordinated discussions among national and international experts and national authorities on breastfeeding and COVID-19.

- Trained 4,600 professionals in maternal and newborn, adolescent and youth health, and family planning and contraception, together with UNFPA, UNICEF, and Tula Salud.
- In coordination with the MOH, supported the development of a virtual course to train health personnel to implement sociocultural measures for the prevention, containment, and management of COVID-19 cases at the community level in indigenous peoples of Guatemala.
- Provided technical support to strengthen the capacities of health workers, area managers, and hospitals, in mental health and psychosocial support in the context of COVID-19.
- Supported MOH to develop plans for the prevention of teenage pregnancy in the context of the COVID-19 pandemic. A document was also prepared to analyze the impact of COVID-19 on sexual and reproductive health, with an emphasis on maternal and neonatal health and to strengthen the continuity of essential maternal and child services.
- Provided support to the National Immunization Program to prioritize groups for the COVID-19 vaccine, diagnosis, and estimates of needs for vaccines and supplies, personnel, cold chain requirements, and logistics.
- Facilitated coordination and dialogue between health authorities and strategic partners and allies of the UN System, bilateral agencies, and other cooperation agencies, to support the introduction of the COVID-19 vaccine.
- The MOH, the Guatemalan Social Security Institute (IGSS) and PAHO signed an agreement to incorporate the IGSS into the COVAX Facility.
- Provided technical guidelines for the adaptation of the manual on Surveillance of Adverse Events Supposedly Attributable to Vaccination or Immunization (ESAVI) to the national context. A national committee was formed to evaluate serious adverse reactions to vaccines, strengthening vaccine safety surveillance capacities, and the preparation of analytical reports on vaccine uptake and monitoring.



Vaccination

- Established a national committee to support the introduction of the COVID-19 vaccine, with participation of the private sector, medical associations, and other UN agencies.
- Supported the revision of the surveillance protocol for measuring the effectiveness of the COVID-19 vaccine and the impact of its introduction.
- Delivered COVID-19 vaccines through the COVAX Facility, which has made it possible to advance and support the implementation of the national vaccination plan.



Guyana



Country-level coordination, planning, and monitoring

- Supported the activation of the Health Emergency Operations Center (HEOC); revised the terms of reference and standard operating procedures; and assisted in daily reporting.
- Supported coordination of health sector efforts to combat COVID-19 with other national EOCs with those of other partners. Supported the decentralization of HEOC to selected regions and provided need equipment.
- Assisted with the development of the COVID-19 Preparedness and Response Plan; developed guidance for subnational preparedness and response plans; contributed to a risk assessment of COVID-19 public health and social measures.
- Prepared a proposal for the creation of a National CDC Guyana.
- Assisted the Measures Assessment Committee to monitor phases through the pandemic.
- Coordinated with the Georgetown Public Hospital Corporation (GPHC) and the School of Medicine at McMaster University to launch a Community of Practice to weekly review suspected and confirmed COVID-19 cases and other complications. This initiative began with four Administrative Regions and was later expanded to include all regions.



Risk communication and community engagement

- Assisted in the preparation of the national risk communication plan.
- Conducted periodic press conferences with the local media, in collaboration with government authorities.
- Assisted with development and distribution of information and communication materials. Provided technical support for the development of COVID-19 ads on television and in print for all 10 regions.
- Conducted COVID-19 sensitization sessions with UN staff.
- Provided technical assistance and materials for the production of a COVID-19 sitcom.
- Coordinated, with the MOH, a social media campaign on the facts and myths surrounding COVID-19, with live Q&A.
- Developed a MHPSS information and communications campaign for the public and select target groups.
- Helped develop a campaign of IEC (information, education, and communication) materials for the rollout of the vaccination campaign.



Surveillance, rapid response teams, and case investigation

- Conducted training on contact tracing and case definitions.
- Provided support for the implementation of Go.Data for case management, contact tracing, and follow-up. Installed and configured Go.Data in the Surveillance Unit and provided training.
- Provided technical support and training on epidemic modeling to define potential disease scenarios and the implications on adopting, adjusting, and lifting of social distancing measures.
- Produced a weekly Epidemiological Bulletin; analyzed data; and prepared report on transmission rate.
- Analyzed data and provided advice related to testing rates and a modeling of the expected evolution of the pandemic in two remote regions.
- Developed SOPs for epidemiological case investigation and trained trainers.
- Developed a protocol for a seroprevalence survey.
- Helped expand the number of field surveillance officers in selected regions and provided the tools and equipment needed for data collection and reporting.



Points of entry, international travel, and transport

- Identified and mapped official and informal points of entry (POE) and helped carry out a baseline assessment of key capacities and resources needed for screening and referral of suspect imported cases.
- Assisted in the development of a POE screening tool and conducted training on case definitions.
- Provided technical support to estimate supplies, equipment, and needs for PPE required to establish an isolation area at all official and informal POEs.

- Defined the SOPs and algorithms for screening and testing all people entering the country through international airports in Guyana. Conducted site visits to selected POEs to provide on-the-job training for screening of travelers.
- Provided critical equipment to selected POEs.



National laboratories

- Provided critical lab supplies and training in theoretical aspects of molecular diagnostics. Expanded testing capacities by training an additional 50 medical technologists and medical personnel on the use of RDTs.
- Provided trouble-shooting support for testing procedures and sample collection.
- Helped to develop a costed list of supplies for diagnostic support.
- Supported the expansion of the laboratory testing capacity in the hinterland regions.
- Procured test kits and PPE for surge in the hinterland regions.



Infection prevention and control and protection of the health workforce

- Provided training to improve IPC standards in isolation units at hospitals managing COVID-19 patients.
- Estimated the demand and cost of PPE required at all levels of care.
- Conducted the Hospital Readiness Assessment.
- Visited five hospitals with isolation capacity and provided guidance on IPC measures.
- Assessed the capacity of human resources to provide intensive care services in 10 administrative regions.

- Provided guidance to the MOH in the preparation of the national public health plan for COVID-19.
- Briefed the President on COVID-19 trends and the continuation of social distancing measures.
- Reviewed national guidelines for cleaning, sterilization, and disinfection in health care facilities.



Case management, clinical operations, and therapeutics

- Supported the MOH to estimate COVID-19 cases using modeling tools; helped create a modeling team to undertake this function.
- Supported the MOH to estimate the expected demand for hospital care and determined additional ICU and intermediate care needs; costed all additional resources needed at the country's new COVID-19 hospital.
- Supported the government to prepare the first national COVID-19 Clinical Guideline and algorithms to manage patients at three levels of care (primary, secondary, tertiary).
- Implemented a regional survey on the impact of the COVID-19 response in general health services, using data from the four largest hospitals in the country and 33 health centers and all national health programs.
- Defined the SOPs and algorithms for the screening, testing, and clinical referral for all prisons and centers of detention in Guyana.
- Implemented a regional survey on the impact of COVID-19 response on the supply chain of medicines, identifying gaps and stockouts of essential medicines at all levels of care.

- Supported the drafting of the new National Health Strategy for 2030 and included, for the first time, the strengthening of emergency response as a strategic goal.
- Conducted a review of clinical characteristics, patient profiles, and clinical outcomes of all patients admitted at the of ICU of the COVID-19 main referral hospital.
- Carried out training on death certification and ICD coding for medical doctors.
- Held training on clinical management and intensive care treatment for 45 doctors at all levels of care.



Operational support, logistics, and supply chain

- Conducted an assessment of procurement processes; modeling of needs; and the coordination of donations.
- Provided the country with additional PPE and COVID-19 test kits.
- Assisted with the coordination of supplies/needs through global procurement mechanisms.
- Procured cold chain equipment, including cold storage boxes, for the national and regional authorities of the MOH.



Maintaining essential health services during the pandemic

- Trained national authorities on key aspects of building national EMT capacity and in techniques to estimate needs, and how to expand services.
- Supported the design and adoption of a telemedicine initiative for access to maternal/child services.
- Provided input into the design and adoption of mental health and psychosocial support (MHPSS) for affected populations and health workers.
- Commenced or continued the implementation of priority activities in MHPSS:
 - Developed a MHPSS response plan; resources for sustained implementation are being mobilized, in collaboration with UNDP'S Information, Education and Communication campaign.
 - Capacity building activities for MHPSS are ongoing for health care providers, students of the Master's in Psychology program at the University of Guyana, COVID-19 hotline operators and frontline health workers.
 - Established a multi-stakeholder Technical Working Group for MHPSS.
 - The Safe Space 24/7 MHPSS hotline was created as a referral mechanism for individuals who require first-line and long-term mental health and psychosocial support.



Vaccination

- PAHO collaborates with the national task force at biweekly meetings to discuss the introduction of COVID-19 vaccines.
- Completed the National Deployment and Vaccination Plan and Roadmap for introduction of COVID-19 vaccines. Target groups were identified, and include frontline health workers, persons with comorbidities, and persons aged 65 or older.
- National cold chain assessment completed for the introduction of the COVID-19 vaccines. Plans are in place for the procurement of additional cold storage equipment.
- Epidemiological training for the first phase of COVID-19 vaccines was completed and will continue as the vaccination campaign rolls out.
- Completed ESAVI surveillance training for health care workers.
- Assisted in the training of health workers to introduce the National Deployment and Vaccination Plan for COVID-19 vaccine through the Expanded Program on Immunization.
- Provided technical assistance to set up a national cold room and ultra-cold storage facilities for COVID-19 vaccination.



Haiti



Country-level coordination, planning, and monitoring

- Supported the National Emergency Response Unit of the Ministry of Public Health and Population (MOHP) to improve coordination between central and departmental levels.
- Supported the MOHP to continue using the crisis cell through 2021 (this was set up the National Multisector Commission for the Management of the COVID-19 Pandemic, which ended its mandate in September 2020).
- Supported crisis cells at departmental level to improve coordination and response to COVID-19 and other crises, notably during the hurricane season.
- Led coordination meetings with the MOHP and other partners to strengthen community response and engagement.
- Supported the Department of Health Promotion and Environmental Protection (DPSPE) and departmental health directorates in the community response to COVID-19 in public markets around the country.
- Planned jointly with DPSPE and Ouest Departmental Directorate, community level support to the displaced population from the Bel Air neighborhood considering the potential risk of infection with COVID-19 and other diseases.
- Conducted meetings in four departments with community leaders including boards of communal sections, assemblies of communal sections, voodoo priests, pastors, and traditional birth attendants.



Risk communication and community engagement

- Deployed field missions to train 3,000 community health workers in seven of 10 departments in risk communications, preventive measures, contact tracing, and the continuity of essential health services.
- Translated educational materials into Haitian Creole and supported their countrywide distribution.
- Continued supporting the MOHP Communication Unit to enable teleworking.
- Conducted community meetings with young people on COVID-19 risk prevention and reducing its impact on their health (early pregnancies, mental health, and GBV).
- Convened a consultation with the Health Director of the Ouest Department and the Municipal Health Office (BCS) of Carrefour to organize a training of community health workers.
- Supported the establishment of a working group by the Ministry of Public Health and Population's Communications Unit along with other UN agencies to monitor and quickly address rumors about COVID-19.



Surveillance, rapid response teams, and case investigation

- Supported the MOHP to develop plans to strengthen COVID-19 surveillance and response at the departmental level, including improving data management and information sharing.
- Supported the MOHP to develop a plan for the detection of COVID-19 cases and to implement a strategic plan to rapidly detect cases at all 68 sampling sites.
- Supported data analysis teams in the country's 10 departments and at central level to improve the information sharing systems currently set up nationally.
- Trained 100 national healthcare workers at specimen collection sites.
- Supported the establishment of 66 sampling sites throughout the 10 departments in the country.
- Supported the MOHP to keep quarantine centers functioning at the borders with the Dominican Republic for observation and investigation of suspected cases, collection of samples, and referencing patients with a confirmed diagnosis.
- Distributed PPE to workers at the point of entry of Ouanaminthe in the Nord-Est department.
- Trained field teams to use tablets to complete electronic forms and transfer data.
- Distributed masks for migrants at crossing points and strengthened awareness messages during the two-day binational market (Ouanaminthe/Dajabon).



National laboratories

- Continued to support the MOHP to strengthen laboratory capacity by providing the necessary reagents and equipment as part of the decentralization process. To date, eight regional laboratories (in addition to the National Laboratory and Gheskio) have the capacity to test for COVID-19 using the GeneXpert system.
- Supported the sampling of COVID-19 suspected cases and transportation of samples to the National Laboratory, using 18 Labo-moto nurses who normally work with the sampling of suspected cases of cholera. Between September and December, these nurses assisted with the testing of 4,697 samples.
- Strengthened laboratory capacities by providing enzymes, internal control primers, PCR tubes, and extraction kits to support early testing and detection of COVID-19 cases. Procured Ag-RDT tests kits for MOHP to support scaling-up of COVID testing.
- Supported the National Laboratory to develop an algorithm using Ag-RDTs to strengthen laboratory capacities at the regional sites and to scale up testing nationally.
- Provided troubleshooting support regarding testing procedures and sample collection.



Points of entry, international travel, and transport

- Continued supporting the MOHP to screen incoming passengers at the airport in Port-au-Prince and Cap-Haïtien, as well as migrants returning to Haiti through the four main ports of entry on the border with the Dominican Republic. At Port-au-Prince airport, suspected cases were referred to the MOHP, through a validated protocol for quarantine. Test results were provided to screened migrants, and PAHO supported health authorities to sensitize migrants regarding COVID-19 and corresponding prevention measures.
- Collaborated with partner international agencies IOM, UNFPA, UNICEF, and Zanmi Lasanté/Partners in Health to strengthen surveillance at the border with the Dominican Republic, including for a two-day binational market which transpired in 2020. PAHO trained workers at four official points of entry at the border with the Dominican Republic in the use of antigen-based rapid diagnostic tests.

- Supported the timely collection and transport of samples from suspected COVID-19 cases from health institutions to laboratories through an existing collaboration with Haiti's Directorate of Epidemiology, Laboratory, and Research (DELR) and the National Laboratory of Public Health (LNSP) to increase the country's testing capacity, especially in hard-to-reach areas.
- Strengthened existing initiatives to increase testing capacity for the COVID-19 response.
- Provided technical cooperation, including data review, troubleshooting sessions, and follow-up calls on laboratory diagnostics.
- Conducted the validation process for the COVID-19 antigen-based rapid diagnostic tests.
- Conducted supervisory visits to four sites (St. Luc, Grace Children, St. François, Anne Marie) in the Ouest department to evaluate the quality control system for the rapid antigen tests.
- Assisted the DELR with the sequencing of approximately 50 samples collected from confirmed COVID-19 cases. Samples continued to be shipped to the Regional Reference Sequencing Laboratory at the Gorgas Institute in Panama. Meanwhile, with PAHO support, 28 new SARS-CoV-2 sequences collected from Haiti were generated through the Genomic Surveillance Regional Network at the Sequencing Reference Lab in Fiocruz, Brazil. These sequences have been uploaded and made available at the GISAID database.
- Delivered molecular detection material and laboratory supplies (swabs, primers, probes, plastic materials, reagents, among others).
- Trained nurses from Labomoto program in the Nippes department in the use of rapid antigen tests.



Infection prevention and control and protection of the health workforce

- Given that all public health institutions from the 10 departments were covered by mid-November 2020, early detection set-up activities were halted. In total, of the 279 health institutions visited, 180 had set up a triage space and 113 also established an isolation space.
- For the above-mentioned reasons, training of healthcare workers in the appropriate use of PPE (both in COVID-19 case management health institutions and in institutions with triage and isolation capacities) has halted since mid-November 2020. In total, 1,830 staff from health institutions and ambulance services were trained. In 2021, an additional 300 persons were trained in general IPC measures, in addition to ongoing technical training of health care workers during national IPC program assessments.
- Implemented national IPC plans to reduce COVID-19 transmission at both the community and health facility levels.



Case management, clinical operations, and therapeutics

- Continued supporting the MOHP to follow up on the number of hospitalized patients, bed occupancy, and gaps and needs.
- Set up a medical call center with 24/7 service to follow up on suspected and confirmed cases of COVID-19 in home isolation.
- Conducted assessment of hospitalization and care capacity in the Centre, Grand'Anse, and Ouest departments.



Operational support, logistics, and supply chain

- Purchased pairs of gloves locally, due to an initial worldwide shortage.
- Distributed PPE kits to five COVID-19 case management health institutions.
- Distributed early detection kits to 123 health institutions with triage and isolation capacities.



Maintaining essential health services during the pandemic

- Conducted training sessions for healthcare providers working in emergency obstetric and newborn care services to manage pregnant COVID-19-infected patients (prenatal, labor and post-partum, family planning, GBV management) and for neonatal and infant care during the pandemic.
- Conducted training for first responders of the national ambulance service in the management of obstetric emergencies, particularly for the management of post-partum hemorrhage using the Non-Pneumatic Anti-Shock Garment (NASG).
- Provided support to maintain and update of the software of the GALILEO machine at the national Blood Safety Program and trained laboratory technicians to ensure continuous availability of secure blood products during health crisis and the pandemic.
- Provided technical guidance to the MOHP to develop a strategic framework document for district health units in the context of COVID-19 using integrated health services delivery networks.



Vaccination

- Deployed the Vaccine Introduction Readiness Assessment Tool (VIRAT/VRAF WHO/World Bank) to assess the progress of vaccine rollout readiness.
- Conducted an initial assessment using the Cold Chain Sizing Tool to assess gaps and needs in cold chain equipment in advance of receiving COVID-19 vaccines. Prepared a request for additional cold chain equipment to fill identified gaps.
- Supported the national Vaccination Coordination Unit to submit Haiti's application to the COVAX Facility.
- Provided technical recommendations and guidance on the regulatory preparedness and NDVPs.
- Provided training webinars and developed workshops on Events Supposedly Attributable to Vaccination or Immunization (ESAVI) surveillance in the Region of the Americas.
- Hosted a training session for vaccination supervisors at the central level to accompany the introduction of the COVID-19 vaccine. Topics covered were: ESAVI surveillance, cold chain management, and micro planning.
- Provided technical support for the development of vaccination strategic plans to administer COVID-19 vaccines to all 10 departments of the country.
- Provided trainings and information materials on all aspects of the COVID-19 vaccine introduction process.
- Developed FAQ documents and communication materials (in French and Creole) to advertise the availability of COVID-19 vaccines and their benefits.
- Supported the cold chain for Moderna vaccine doses at the central and departmental levels.
- Provided training on COVID-19 vaccines to the National Immunization Technical Advisory Group (NITAG).
- PAHO supported the government's strategy to introduce the COVID-19 vaccine through the GAVI Advance Market Commitment (AMC) Facility mechanism:



Honduras



Country-level coordination, planning, and monitoring

- Collaborated with authorities to prepare and update the COVID-19 Preparedness and Response Plan.
- Facilitated the visit of a mission of experts on health systems for emergencies and the protection of health workers.
- Helped national authorities to mobilize resources to support the response.
- Supported national health authorities in the planning and adaptation of health services in prioritized areas.
- Fostered coordination between national and international partners and health authorities to support the response.
- Promoted the inclusion of mental health in the country's response to COVID-19, establishing coordination mechanisms on mental health and psychosocial support. Coordinated efforts with the health cluster and UN agencies on mental health.
- Supported the mobilization of resources to manage the pandemic and the coordinated execution of multiple funds, both national and from international cooperation.



Risk communication and community engagement

- Coordinated the Health and Reform Partners Roundtable (CESAR) and facilitated the alignment of international cooperation and partnerships to meet health sector needs during the pandemic and emergencies caused by natural phenomena, mobilizing resources and prioritizing actions.
- In collaboration with UN agencies and the MOH, developed and implemented a risk communication strategy and plan and a communication plan for the introduction of the vaccine.
- Convened media briefings alongside counterparts; worked with journalists and health facilities; and positioned communication messages and training courses for large audiences using social media networks (Facebook, YouTube, and Twitter).
- Translated risk communication materials on COVID-19 infection prevention and biosafety measures into indigenous languages and supported the development of communication materials for the MOH.

- Supported training efforts in priority municipalities to improve care with the use of innovative tools, dialogue with indigenous communities, and the strengthening of volunteerism, as well as risk communication for health promotion and disease prevention.



Surveillance, rapid response teams, and case investigation

- Supported the country to improve strategic planning, using existing epidemiological data, models, and statistical projections.
- Deployed surveillance teams to the most affected departments to support and train rapid response teams (RRTs). Designed a course for RRTs to expand their coverage.
- Worked with authorities to adapt surveillance, laboratory, and case management guidelines and protocols to the country's context. Conducted training, together with GOARN, on the use of Go.Data for contact tracing.
- Provided technical and financial support for integrating COVID-19 surveillance into the SARI/ILI surveillance system, using a single information system (PAHO-Flu). Established situation rooms in each health region, and trained staff at sentinel sites.
- Hired epidemiology consultants to carry out technical cooperation in prioritized networks.



Points of entry, international travel, and transport

- Worked with multisector authorities to adjust points of entry according to the IHR, providing training, guidelines, equipment, risk communications materials, and PPE.
- Collaborated on the strategy to reopen airports and border points and to maintain surveillance of travelers entering the country.



National laboratories

- Strengthened laboratory capacity to improve timely detection, case traceability, contact tracing, and, in 2021, with a focus on the identification of the COVID-19 variants of concern. Partnered with health authorities to establish three additional virology laboratories in strategic locations, fully equipped, complemented with the donation of supplies for PCR tests.
- Established the Molecular Biology Laboratory Network in partnership with the Multi-Partner Trust Fund (MPTF) and USAID, quadrupling laboratory capacity in the country. PAHO additionally developed a barcode laboratory test registration system, which connects to the national information system, to guarantee the reliability of patient test results.
- Provided training to the virology laboratory on timely RT-PCR testing.
- Provided support and advice for maintaining laboratory equipment through the acquisition of materials and supplies and the repair of existing equipment.
- Provided support through the World Bank to strengthen the health network in the Department of Comayagua; seven health facilities were upgraded and equipped, providing benefits to residents in 21 municipalities in Comayagua.
- Donated reagents, antigen tests, and other essential supplies for timely detection of COVID-19 cases.



Infection prevention and control and protection of the health workforce

- Delivered PPE and hygiene supplies to hospitals and health centers.
- Designed courses for health workers on priority topics, in addition to widely disseminating courses that were developed by PAHO and WHO. To date, 25,000 people have been certified through different courses.

- Trained health professionals, NGOs, government officials, and other partners on IPC.
- Distributed more than 90 PAHO and WHO guidelines, protocols, and recommendations for managing the pandemic.



Case management, clinical operations, and therapeutics

- Strengthened infrastructure at priority hospitals and case detection and stabilization centers to respond to the emergency.
- Advised health facilities on treatment of persons with COVID-19.
- Prepared courses for the PAHO Virtual Campus for Public Health and YouTube on home care for confirmed or suspected COVID-19 patients with mild symptoms (145,000 views) and another on the care of pregnant women, those in labor, and the puerperium.
- Through courses available on PAHO Virtual Campus for Public Health, certified 5,565 people in courses on infection management, occupational health, basic precautions, use of PPE, and more.
- Delivered guidelines, protocols, and updates to the MOH.
- Donated medical instruments and equipment for case management.
- Mobilized teams of health workers for the early detection of cases to improve care in departments with high incidence and high case fatality.
- Supported modeling efforts to project the impact of the pandemic for planning purposes. Provided planning tools for estimating the number of beds, PPE, equipment, and supplies.
- Supported the MOH in planning, resource mobilization, and costing and procuring supplies, and provided financial support to acquire PPE.
- Collaborated in the design of priority projects; helped mobilize resources; and partnered in implementation.
- Contributed to the sustainability of the supply chain by purchasing through the PAHO Strategic Fund and the WHO Procurement Platform.
- Established an agreement with the Secretary of Health to equip health services to deal with the pandemic through the provision of equipment and PPE, the purchase of ambulances, specialized technical cooperation, laboratory supplies, and other forms of support.
- Strengthened the second level of care with clinical training and the provision of personal protective and biosafety equipment, biomedical equipment, antigen tests, and other supplies. Priority was given to obstetric and maternal care wards, clinical laboratories, and COVID-19 wards.



Maintaining essential health services during the pandemic



Operational support, logistics, and supply chain

- Analyzed the evolution of the pandemic, on an ongoing basis, and provided recommendations for the best approach.
- Supported the continuity of the approach to communicable and noncommunicable diseases (prevention of adolescent pregnancy, prevention and surveillance of maternal and infant mortality, safe hospitals, environmental determinants, etc.) and dialysis services nationwide for stage 5 kidney patients. Developed an asynchronous consultation strategy for the follow-up of patients with chronic diseases.



Vaccination

- Equipped and jumpstarted remote telehealth centers in 22 municipalities in four health regions and six telehealth operations centers in network reference hospitals.
- Helped develop and carry out training on guidelines and protocols for the protection of mental health and psychosocial support.
- Led the project to improve information systems and the framework for monitoring and clinical follow-up of diabetic patients.
- Supported the continuity of essential cancer services, screening, and early detection service; donated thermoablation and ambulatory electrosurgery equipment.
- Promoted dialogue with organizations of persons with disabilities, family associations, and assistance and rehabilitation institutions.
- Completed the safe hospitals and capacity-building project for the treatment of dengue in priority regions, the results of which are contributing to the management of COVID-19 patients.
- Mobilized resources that have enabled the MOH to mitigate the effects of hurricanes Eta and Iota in priority areas, and through the CERF project, 11 health facilities at the first level that were damaged by those hurricanes were rapidly reopened.
- Strengthened the first level of care for adolescent pregnancy prevention and sexual and reproductive health services.
- Partnered with the MOH and Global Links to provide furniture and supplies to the second level health services in two health regions, the central level, and the National Penitentiary and its health clinic in the women's penitentiary.
- Participated in the National Integration Team for the introduction of the COVID-19 vaccine.
- Advised health authorities on the preparation of the National Plan for the Introduction of the COVID-19 Vaccine.
- Participated in a national integration team for access to and introduction of the COVID-19 vaccine, serving as a link with international entities such as the COVAX Facility.
- Advised health authorities throughout the entire application process to the COVAX Facility, including national legislation processes.
- Advised on the development of technical and operational guidelines for the deployment of vaccines against COVID-19.
- Helped design training for health workers and regional, municipal, and local authorities to implement the Plan and developed guidelines for the introduction of the vaccine.
- Provided ongoing guidance and support for the introduction of vaccines and the vaccination process.
- Helped mobilize enough doses of COVID-19 vaccine through the COVAX Facility to cover 20% of the population, which was critical for protecting health workers and high-risk priority groups.
- Provided technical cooperation to the Expanded Program on Immunization for the design and implementation of a real-time COVID-19 vaccination monitoring system that provides daily information on the number and type of vaccines administered.



Jamaica



Country-level coordination, planning, and monitoring

- Bolstered technical cooperation with relevant ministries, departments, and agencies, with partnerships maintained with the UN system and the National Emergency Management Organization, in addition to leading the UN health sector response and working with the Foreign Ministry on health sector efforts with multilateral partners and foreign missions.
- Maintained a high level of engagement with the Prime Minister, Cabinet, and Senior Executives of the MOH and Wellness (MOHW), including the Minister of Health, Permanent Secretary, and the Chief Medical Officer.
- Provided technical leadership for health within the UN Country Team (UNCT) and Donor Group – including UN agencies, the diplomatic community, and international development partners.
- Collaborated with the national disaster mechanism led by the Prime Minister to provide guidance on health preparedness/response/recovery.
- Procured and distributed laboratory supplies and medical equipment and supplies for isolation areas, plus ICU beds, VHF radios, mobile phones, satellite phones, digital thermometers, hand-held non-contact infrared scanners and tablets to the MOHW.
- Briefed the MOHW at national and subnational levels on PAHO modeling exercise using EpiEstim and CovidSIM and on clinical management.
- Collaborated with UN staff to develop medical evacuation guidelines for COVID-19.
- Provided technical support for the implementation of the COVID-19 Response Plan and budget for health resource mobilization.
- Collaborated with teams from ministries of health in multidisciplinary and multisectoral participation in the finalization of the IHR States Party Annual Report and the annual monitoring questionnaire for the Plan of Action for Disaster Risk Reduction 2016–2021.
- Contributed to an assessment of critical areas of the COVID-19 response.
- Functioned as the technical lead for health within the UN Country Team (UNCT) and Donor Group, and as UN COVID-19 Coordinator.
- Provided staff support to the MOHW Emergency Operations Center (EOC) with 24-hour technical guidance and support.





Risk communication and community engagement

- Produced videos on: breastfeeding in the context of COVID-19 and print material for travelers; championing the healthcare worker in support of International Nurses Day; blood donations; and mental well-being/coping with stress during isolation.
- In collaboration with UNICEF, produced infographics tailored to pregnant women and lactating mothers and two videos tailored to seniors.
- Produced a one-pager on tobacco cessation: "COVID is no joke, it gets worse with smoke."
- Undertook a rapid risk assessment of communications needs for vulnerable groups to inform risk communications strategies in advance of the "new 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

- Collaborated with MOHW to determine epidemiological transition to community transmission.
- Provided equipment to support field epidemiology/data collection in priority parishes.
- Trained healthcare workers in the WHO surveillance protocol for SARS-CoV-2.
- Trained national and field teams to use Go.Data and provided 25 tablets to expand contact tracing.



Points of entry, international travel, and transport

- Worked with the MOHW to reinforce training on IHR compliance for health officials, airports/seaports, immigration, customs, and the Jamaica Defence Force.
- Collaborated with the MOHW to provide technical guidance on appropriate procedures at points of entry for the phased reopening of borders to international travelers and on designating appropriate areas for screening, quarantine, and isolation.
- Co-hosted, with the MOHW, four meetings of the IHR Stakeholders Advisory Group, with representatives of all ministries, departments and agencies, the airports and ports authorities, and Jamaica Defence Force on their roles within the IHR in the context of COVID-19.



National laboratories

- Provided technical advice and material to MOHW to update COVID-19 testing strategy and to national authorities to review the National Influenza Center's testing protocols.
- Strengthened laboratory capacities by providing enzymes, internal control primers, PCR tubes, and 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 and protection of the health workforce

- 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, clinical operations, and therapeutics

- Collaborated with MOHW to train managers and staff of 14 infirmaries, including on stressors faced by the elderly and self-care.
- Facilitated the completion and submission of the MOHW EMT National Response Matrix.
- Provided technical advice to national counterparts to identify potential isolation facilities and on 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 and communications equipment to assist with operations and logistics.
- Maintained consistent dissemination of up-to-date information. Conducted briefings with health teams daily, weekly, and bi-monthly on response operations.



Operational support, logistics, and supply chain

- Procured priority medical equipment, as well as supplies, including PPE, laboratory supplies and surveillance equipment, and supplies for the MOHW.



Maintaining essential health services during the pandemic

- Completed an assessment of mental health and life skills services that are provided to school-based adolescents by UN agencies and other NGOs. Supported school-based adolescents with train-the-trainers sessions for 46 persons. Provided access to training in psychological first aid for community health workers through PAHO's Virtual Campus for Public Health.
- Provided support to working groups on sickle cell disease and childhood cancers.
- Trained members of civil society organizations working in HIV/AIDS in IPC measures in collaboration with UNAIDS.
- Provided technical analysis/advice on the reorganization of health services.
- Worked with MOHW and the regulatory agency to share crisis management guidance.
- Supported the acquisition of antiretrovirals (ARVs) for maintenance of HIV treatment.
- Supported the upgrade of the information infrastructure in 110 health facilities.



Vaccination

- Facilitated involvement of Jamaica in the COVAX Facility through special national briefings.
- Facilitated the preparation of the Vaccine Introduction Readiness Assessment Tool (VIRAT), including planning and budgeting.
- Provided training for national immunization staff on vaccine efficacy, safety, logistics, cold chain strengthening, waste management, vaccine surveillance, and management and set up of the immunization stations and of ESAVI.
- Provided FAQs and other communication resources in support of the national demand planning and prioritization of target groups.
- Facilitated the procurement of additional cold chain storage equipment (e.g., freezers, fridges, and other supplies).
- Facilitated negotiations on price and quantities of vaccines to be made available through the COVAX Facility.



Mexico



Country-level coordination, planning, and monitoring

- Collaborated with the country's emergency operations centers, UN and multilateral partners, and foreign missions to coordinate health sector efforts to combat COVID-19.
- Developed recommendations to adapt PAHO and WHO response protocols for COVID-19 and the rational use of drugs and other related compounds.
- Made progress in defining and implementing response plans at the state level for prevention, mitigation, and care for COVID-19 and at the community level, with a primary health care (PHC) approach. In this framework:
 - Supported the HEARTS initiative to protect people with risk factors from contracting severe forms of COVID-19.
 - In Guerrero, collaborated on prevention and mitigation of maternal and neonatal mortality in pregnancies complicated by COVID-19.
- Collaborated on the mhGAP program and suicide prevention at the national level as part of the COVID-19 mental health response.
- Created a working group with national and international representatives to improve interventions to prevent, detect, and manage COVID-19 in migrants, asylum seekers, and forced returnees in border towns and land entry points.

- Supported the Senate Health Commission to organize two forums to exchange experiences on the health systems' response to COVID-19 among Latin American countries.
- Guided patient care, reactivated non-pharmacological preventive measures, and managed the COVID-19 vaccination campaign in municipalities with high incidence and mortality.
- Facilitated integration of local integrated health service delivery networks (IHSDNs) in the institutional structure of the state-level Secretariats of Health in Chiapas, Coahuila, and Guerrero.
- Broadened the scope of the "COVID-19 Panorama," increasing its utility as a tool for health authorities to develop strategic instruments for strengthening decision-making.



Risk communication and community engagement

- Improved country office media efforts to combat misinformation on COVID-19.
- Partnered with UNHCR, IOM, UNICEF, and the ICRC to ensure a coordinated approach to communicating risk to migrants, asylum seekers, and forced returnees. Capacities were also strengthened for the use of PPE.

- Scaled up the weekly analysis of risk perceptions analysis to support preparation of strategic reports for decision-making in the health sector.
- Designed and applied strategies to manage public perceptions about the vaccine and vaccination, and communications to improve public adherence to preventive measures.
- Collaborated with the National Institute of Indigenous Peoples to develop and disseminate radio COVID-19 prevention messages in 68 indigenous languages, reaching an estimated 16 million people. This was complemented with additional support for ethnically inclusive communication campaigns to raise awareness and improve capture and coverage.
- Positioned the environmental aspects of health in the context of COVID-19, in collaboration with UNEP, SEMARNAT, and state governments.
- Created a dialogue with the government of Mexico City to promote an agenda on urban governance that advances the right to health.
- Presented recommendations to improve pharmacovigilance and risk communication on the rational use of drugs in the management of COVID-19.
- Provided advice and assistance to the General Directorate for Health Promotion for the creation of the National Laboratory on Risk Perception and Communication, as well as risk communication laboratories in different federal entities, and facilitated the coordination of various activities, while helping to promote the creation of state versions of laboratories through targeted training, as seen in the states of Chiapas, Guanajuato, Guerrero, Veracruz, among others.
- Created a tactical group (coordinated by the General Directorate for Health Promotion) for the redesign of the communication strategy and the analysis and management of public perceptions, leading to changes in the evening press conference, which had been the main instrument for informing and communicating with the public since the declaration of the health emergency.



Surveillance, rapid response teams, and case investigation

- Implemented and hosted the Go.Data platform for outbreak investigation and training; trained 37 professionals from 10 states in the advanced course. Additionally, PAHO conducted accurate monitoring and timely detection of new outbreaks through the effective implementation by the MOH of platforms including Go.Data and training for the National Institute of Public Health as well as federal and state health workers.
- Supported the Sub-Secretariat for Prevention and Health Promotion in its daily evening briefings.
- Supported the revision of the Influenza Surveillance System (SISVEFLU) to incorporate COVID-19 into the Respiratory Diseases Surveillance System (SISVER).
- Contributed to updating guidelines for epidemiological and laboratory surveillance of viral respiratory disease with a new operational definition, to expand the diagnosis of suspected cases.
- Hired five epidemiologists to help build the following capacities: implementation of the Fluid platform; implementation of the Go.data platform; analysis of the information generated by the agrarian nuclei; identification of deaths and risk monitoring by the states.
- Helped implement the tool to measure excess mortality from all causes during the pandemic (326,610 excess deaths in 2020).
- Participated in the analysis of maternal mortality, and guidance on maternal death audits.
- Provided training on completing death certificates for those who died from or with COVID-19.
- Prepared terms of reference for the implementation of state emergency health centers.



Points of entry, international travel, and transport

- Coordinated with the MOH, IOM, UNHCR, and ICRC to design infection prevention measures to detect possible cases among returnees arriving at entry points and to implement preventive non-pharmacological measures.
- Prepared and disseminated a video on the resumption of non-essential international travel, with an emphasis on the recovery of the tourism sector.
- Reaffirmed institutional positions on non-interference in international trade and traffic within the framework of IHR and the promotion of preventive measures at points of entry.



National laboratories

- Provided guidance to the national laboratory to update guidelines and build capacities.
- Provided tailored training and troubleshooting on COVID-19 molecular detection testing.
- Donated laboratory test kits, extraction kits, enzymes, internal controls, and other supplies.
- Donated rapid detection tests for SARS-CoV-2 antigens, which are being applied in 32 states as part of a national evaluation for the implementation of Ag-RDTs nationwide.
- Consolidated the sequencing capacity of circulating SARS-CoV-2 strains to improve timely detection of variants of public health concern by hiring a specialized professional at the national laboratory and purchasing essential supplies.
- Performed an operational assessment of SARS-CoV-2 antigen rapid diagnostic tests (Ag-RDTs) and decentralized surveillance of the variants circulating in the country to guide patient care.



Infection prevention and control and protection of the health workforce

- Provided training on the use of PPE.



Case management, clinical operations, and therapeutics

- Helped draft a PHC-based strategy for the first level of care to identify warning signs of suspected cases of COVID-19 and maintain control of at-risk persons.
- Provided support to review and develop guidelines to improve clinical management of COVID-19 patients, including the review and dissemination of evidence on the use of pharmacological regimens.
- Contributed to drafting and implementing a strategy for the rotation of clinical personnel (doctors and specialized nurses) in a bid to strengthen clinical capacities, given the strain on health services.
- Strengthened capacities for protecting mental health, including measures to prevent suicide.
- Provided guidance on preparing healthcare facilities to treat people infected with COVID-19.
- Provided training on the diagnosis and clinical management of COVID-19 to health personnel, shelter officials, and UN staff.



Operational support, logistics, and supply chain

- Provided technical recommendations on the selection of equipment and medical devices for COVID-19 care.
- Trained health authorities in estimating PPE needs.



Maintaining essential health services during the pandemic

- Supported essential health services for persons with chronic diseases and coordinated the use of telemedicine with state authorities and other entities.
- Provided intersectoral support to address risk factors for NCDs in the context of COVID-19.
- Promoted measures to protect people in conditions of vulnerability, including a National Commission to Care for Vulnerable Populations in Emergency Conditions.
- Supported the drafting of a national guide for COVID-19 targeting pregnant women and newborns, and provided recommendations to health professionals at the state level. Shared the SIP-COVID tool and provided training. This was part of PAHO's wider efforts to support the strengthening and reorganizing of other priority services in the context of the pandemic, including healthy aging and maternal, perinatal, and sexual and reproductive health programs.
- Addressed health issues related to migrants, asylum-seekers, and persons returning from abroad (in coordination with UN agencies and NGOs).
- Supported the reformulation of actions for the continuity of essential services related to infectious diseases during the pandemic.
- Provided support to ensure the activities of the expanded immunization program during the pandemic and ensure vaccination coverage.
- Included the expanded role of nursing as a key strategy for implementing the SABI Model (Salud para el Bienestar, or Health for Well-Being) and tackling COVID-19 and other priority health problems, especially cardiovascular disease and diabetes, as risk factors for severe forms of COVID-19. This was accomplished through the integration of HEARTS as a dynamic element for coordinating care for NCDs. PAHO additionally supported the establishment of the high-level Inter-Institutional Roundtable for Transformation of the Health System, starting with the construction of IHSDNs, implementing the SABI Model, and including COVID-19 as a priority health problem to be addressed with a short-, medium-, and long-term vision.



Vaccination

- Participated in the generation of a national COVID-19 Deployment and Vaccination Plan and distributed guides and training material for its development and hired four consultants to prepare the vaccination deployment plan.
- Participated in the national technical advisory group (NITAG) on vaccines.
- Supported the country to prepare for the procurement of vaccines through the COVAX Facility. Provided support for the launch of vaccination campaigns against COVID-19 in municipalities with high incidence and mortality.
- Supported the implementation of an information system for nominal registration of vaccination in general and of COVID-19 vaccination, as well as intensified surveillance of adverse events following immunization.



Nicaragua



Country-level coordination, planning, and monitoring

- Prepared a technical cooperation proposal to contain COVID-19 and its impact on health services (signed in September 2020) and supported the negotiation process for two projects which have enabled the procurement of critical materials and supplies for the country's COVID-19 response.
- Provided technical recommendations on the development of 31 normative documents (norms, guides, and protocols) on the prevention and management of the response to COVID-19, incorporating regional and WHO international recommendations.
- Updated the emergency plans for Nicaragua local level health sector, using the STAR methodology¹ to evaluate risks to the sector, including COVID-19, in an effort to keep hospitals and health centers operating and able to meet demands for health care during the ongoing pandemic. Emphasis has been placed not only on keeping hospitals safe, but also on ensuring that hospital services are available during the pandemic. The evaluation considered 19 local health systems (SILAIS) and, based on the findings, the local emergency plans are being updated to include a multi-hazard approach.



Risk communication and community engagement

- As part of the regionwide Safe Hospitals initiative, provided support to the country to improve hospital safety, including training human resources and applying tools such as INGRID-H for inclusion of disaster risk management in hospitals.
- Designed communication materials to prevent COVID-19.
- Supported the Healthy Markets project with the purchase of billboards, signs, and communication equipment.



Surveillance, rapid response teams, and case investigation

- Worked with national authorities to comply with the IHR standards in the delivery of COVID-19 surveillance data.
- Revised the guide for monitoring COVID-19 transmission and trends.
- Donated computer equipment to strengthen the situation and health statistics rooms.

¹ The STAR method is a structured manner of responding to a behavioral-based interview question by discussing the specific situation, task, action, and result of the situation you are describing

- Provided technical cooperation to improve recording of COVID-19 mortality and excess mortality, and on the use of the CovidSIM platform.



Points of entry, international travel, and transport

- Revised guidelines for the entry of transport carriers, companions, and personnel at the formal land border points.



National laboratories

- Revised the laboratory biosafety guide related to COVID-19.



Infection prevention and control and protection of the health workforce

- Donated PPE for the MOH expanded immunization program.
- Revised guidelines for the management of dead bodies in the context of COVID-19; transfer of patients by ambulance; prevention of COVID-19 transmission in commercial food establishments; safety of the construction workers in health facilities; and prevention in pharmacies in the context of COVID-19.
- Purchased 9,250 N-95 masks.



Case management, clinical operations, and therapeutics

- Donated computer equipment to hospitals.
- Donated basic medical supplies, PPE, and hospital equipment.



Operational support, logistics, and supply chain

- Donated PPE to the Benemerito Fire Department and the Nicaraguan Red Cross.



Maintaining essential health services during the pandemic

- Supported Nicaragua to institutionalize the application of essential quality standards in the 153 municipalities of the country by preparing the National Strategy for the Quality of Health Services. Also supported the conducting of a metaevaluation to aggregate findings from this series of evaluations. This aims to reduce the costs of failures in the quality of services and redirect savings to investments in health, thus meeting the population's needs in a timelier manner.
- Developed a course with the MOH to train 2,700 Family and Community Health Teams at the first level of care and a training plan for 20,000 health professionals, using the PAHO Virtual Campus of Public Health. To date, 500 professionals have been trained as tutors and facilitators for future cohorts.



Vaccination

- Supported implementation the National Pharmacovigilance System.
- Provided input into the development of the national plan for the deployment of COVID-19 vaccines.
- Helped analyze the country's cold chain capacity.
- Collaborated in the development of a work plan to analyze and close gaps related to the effective deployment of vaccines.
- Supported the country to develop and implement the nominal electronic registry for COVID-19 vaccination and for the regular immunization program. This aims to reduce programmatic errors such as the duplication of administrative tasks, the late registration of doses, incorrect application of the vaccine, and the use of expired vaccines. Likewise, it will strengthen the country's ability to manage vaccine deployment in a timely and accurate manner and keep track of one's vaccination history, thus facilitating individualized follow-up.



Panama



Country-level coordination, planning, and monitoring

- Activated a PAHO/Ministry of Health joint situation room; supported national authorities to develop and implement the national COVID-19 response plan.
- Adapted protocols on surveillance, laboratories, case management, and risk communication to the national context.
- Collaborated with national authorities to assess the effectiveness of public health measures being implemented, while the government considers how to gradually resume activities in different sectors.



Risk communication and community engagement

- Supported the development of the risk communication management plan and the national strategy for the preparedness and response to COVID-19.
- Created an information portal with COVID-19 guidelines for the general public and health workers.
- Collaborated with the MOH and the office of the Presidency to develop, adapt, and disseminate COVID-19-related communication materials in Spanish and indigenous languages.



Surveillance, rapid response teams, and case investigation

- Trained health promoters in risk communication and maintained close coordination with the Ministry of Indigenous Affairs to reach the Guna-yala and Ngbe-buglé populations and with IOM and UNHCR to include migrants.
- Promoted dialogue and knowledge sharing on aspects related to treatments, medicines, clinical trials, and vaccine development to respond to the COVID-19 emergency.
- Collaborated with the UN Information Center on a national campaign to promote prevention measures.

- Trained epidemiology staff in COVID-19 surveillance and analysis.
- Supported the MOH to build a COVID-19 database and assisted in data analysis, focusing on the detection of imported cases.
- Contributed to the weekly preparation of progress reports on the pandemic, an analytical document that has been critical to the decision-making process of local and national authorities.



Points of entry, international travel, and transport

- Worked with health authorities, entry point officials, and the IHR focal point to establish systems to improve surveillance of possible cases; distributed PPE and other supplies to these frontline workers.



National laboratories

- Provided training and delivered supplies to the network of 11 laboratories to perform molecular analysis detection of SARS-CoV-2, essential for contact tracing and investigating outbreaks.
- Supported the country to formulate a strategy to expand testing countrywide.
- Donated 26,000 sample collection kits using nasopharyngeal swabs to the Gorgas Memorial Institute for Health Studies (ICGES).
- Created capacities for genomic sequencing and surveillance of SARS-CoV-2 variants by the Gorgas Memorial Institute for Health Studies (ICGES), both at the central level and at the decentralized level. A project is currently underway for genomic sequencing in three of the country's regions: Darién, Chiriquí, and Herrera (Divisa).
- Supported the country to host the Region's first mixed-modality (virtual and in-person) training on influenza/SARS-CoV-2 multiplex assay to generate expertise in laboratory methodologies for molecular detection. The training targeted representatives of the National Influenza Centers (NIC) and reference laboratories in the Region's countries.
- Strengthened the country's position as a collaborating laboratory in the response of Central American countries through the donation of tests, reagents, and personal protective equipment (PPE).



Infection prevention and control and protection of the health workforce

- Provided generators equipped with air conditioning and other equipment to establish field hospitals that can perform triage on patients from Panama's public hospitals.
- Made recommendations to mitigate the number of new infections as restrictions are gradually lifted.
- Sensitized security authorities and staff assigned to reception centers and migrant shelters on the prevention and control of COVID-19.



Case management, clinical operations, and therapeutics

- Analyzed the capacity of the health system; provided guidelines to help Panama reorganize and expand its health services; and created an information board to track health system indicators and the availability of ICU beds.
- Trained 17 MOH participants to use PAHO's tool to plan for the progressive expansion of hospital capacity.
- Strengthened the Operations Center for Community Control and Tracing of COVID-19: organized a training course and helped implement guidelines for the gradual return to normal, aimed at health promoters and local volunteers.
- Coordinated the donation of 70 oxygen concentrators and PPE for the management of patients with COVID-19.
- Strengthened Panama's emergency medical teams (EMTs) in a process that included exchanges with EMTs in Costa Rica.



Operational support, logistics, and supply chain

- Worked with health authorities to manage donations to a field hospital that serves and houses the general population and migrants.
- Coordinated, on behalf of national authorities, logistics related to reception and distribution of donations of PPE.
- Supported the purchase of PPE through the WHO Purchasing Platform.
- Advised the MOH on defining actions to include support for Panama's health sector in the World Bank budget.



Maintaining essential health services during the pandemic

- Supported the Ministry of Health in developing strategies to ensure continuity of essential health services and key programs (immunization, malaria, tuberculosis, dengue, and others) during the pandemic; designed mechanisms for health authorities and pharmacies to track chronic patients and deliver medicines.
- Supported the formulation of a plan for the mental health care of migrants and made recommendations on psychosocial support to volunteers working in the COVID-19 response; analyzed the availability of human resources for mental health.
- Collaborated on monitoring of essential medicines for ICU treatment of COVID-19 patients; revised the list of COVID-19 medicines in compliance with MOH treatment guidelines, and piloted the drug stock management system, a PAHO platform for monitoring the levels of stocks of medicines vital to ICU.

- Developed an intense mental health agenda that included capacity building, creation of clinical guidelines and care protocols, and updating of legislative instruments and regulations. Activities were aimed at suicide prevention, comprehensive measures to address risky behaviors, and stress management.
- Provided technical and strategic support to expand access to health services for vulnerable populations (refugees, asylum-seekers, migrants, the unemployed, and informal-sector workers).
- Facilitated an interagency project involving UNHCR and the Ministry of Health, and a proposal to provide insurance for domestic workers.
- Supported the definition of the Intercultural Comprehensive Care Model to strengthen primary health care in indigenous communities.
- Developed and implemented a series of virtual courses through The Virtual Campus for Public Health in the Panama Node, which facilitates the continuing education of health personnel on many topics, and in particular on the issue of strengthening PHC and maintaining essential services in a pandemic context.
- Supported the country to identify strategies and critical actions to raise its Safe Hospital Index in seven institutions throughout the country.



Vaccination

- Supported the country's application to the COVAX Facility to gain access to COVID-19 vaccines.



Paraguay



Country-level coordination, planning, and monitoring

- Collaborated with the Ministry of Public Health and Social Welfare (MOH) to develop and implement the national COVID-19 response plan; establish the national emergency operations center; and adapt PAHO protocols and methodologies to the country context.
- Collaborated with the emergency operations team to activate and guide emergency operations centers (EOCs) at the department level.
- Strengthened the MOH to improve access of health services for people with disabilities.
- Provided technical guidance to develop and adapt regulations and guidelines; to improve national capacities for diagnosis with new methodologies (antigen tests for the detection of SARS-CoV-2 and genomic surveillance); to review the tools used in planning for critical needs involving items such as medicines and oxygen; and to make methodologies available for improving current and prospective epidemiological analyses.
- Supported the adoption of a risk stratification strategy in over 40 municipalities to strengthen the involvement of local governments.



Risk communication and community engagement

- Provided support to the Ministry of Information and Communication Technologies to disseminate risk communication materials in Spanish and Guaraní.
- Trained 50 health communicators and 40 journalists in risk communication related to COVID-19.



Surveillance, rapid response teams, and case investigation

- Collaborated with national authorities to establish COVID-19 surveillance systems in shelters for migrant workers returning from abroad.
- Provided guidance for the establishment of a call center for individuals who may have contracted COVID-19.
- Supported the analysis and screening of cases in the national situation room and the health EOC.



Points of entry, international travel, and transportation

- Prepared communication materials for travelers and citizens returning to the country through land and air entry points.



National laboratories

- Provided training and guidance to the MOH to conduct PCR testing for COVID-19. Delivered supplies for PCR diagnostic tests and assessed capacity building needs.
- Worked in collaboration with the Central Public Health Laboratory and other national agencies to build capacity to test for COVID-19 within the veterinary reference laboratory, in accordance with PAHO protocols and guidelines.
- Provided ongoing support to update the country's COVID-19 diagnostic strategy, using RT-PCR testing and other methods.
- Provided guidance and collaborated with the Central Public Health Laboratory of the Ministry of Public Health and Social Welfare, laboratories of private hospitals, and other institutions such as SENACSA (National Service of Animal Quality and Health) to increase diagnostic capacity at over 12 public laboratories with PCR testing capacity. This incentivized the establishment of 10 private laboratories that, with technical endorsement from the MOH, enabled a more strengthened national response to the pandemic.
- Provided recommendations on the use of rapid diagnostic tests to respond to the country's needs.
- Endorsed advocacy for the promulgation of public health policies such as the National Policy on Human Resources in Health.



Infection prevention and control and protection of the health workforce

- Trained health workers to reduce infections in people with disabilities, with support from UNHCR and the Spanish Agency for International Development Cooperation.
- Distributed PPE and provided training in infection prevention and control to health workers; for Ministry of Justice personnel in relation to long-term care facilities; and for Ministry of Labor, Employment and Social Security in relation to workplaces.
- Provided support to adapt hotels and similar spaces for isolation and patient care.



Case management, clinical operations, and therapeutics

- Contributed to the training of more than 8,000 health workers to reorganize and expand health services (case management, safe handling of cadavers, etc.).
- Provided PAHO and WHO clinical management guidelines for adult and pediatric cases, both mild and critical.
- Provided guidance to the network of more than 808 Family Health Units on maintaining essential primary health care services and the management of mild cases of COVID-19.
- Helped reorient the flow of patients and health personnel within the network of services to improve safe case management.
- Assessed needs to expand Paraguay's health services to manage COVID-19 cases.
- Facilitated processes to integrate public sector services (MOH and the Social Security Institute) to respond effectively and efficiently to the increased demand for COVID-19 services.

- Supported national authorities to adapt military facilities, hotels, and other establishments on the country's borders and use them as alternative medical care sites.
- Supported the adoption of preventive measures in vulnerable groups, such as indigenous peoples, older persons, and those who are incarcerated.
- Advocated and provided high-level technical cooperation to establish a coordinated and collaborative workspace involving the MOH and the Ministry of Justice to guarantee priority care for prisoners suffering from neglected tropical diseases, as well as adopting measures to protect the health of the those deprived of their liberty and prison staff in the context of COVID-19.
- Collaborated with the MOH to implement protocols and guidelines to maintain essential services (maternal, child, and adolescent health, vaccination, etc.).
- Helped strengthen mental health services in the context of COVID-19 and reform the current mental health system in the country.
- Offered support to ensure the continuity of essential services in the public health care network.
- Provided technical cooperation to implement the national plan for healthy food in response to COVID-19, including the strengthening of the national capacity to provide universal access to nutrition services, with a focus on primary care.
- Supported the strengthening of nutrition clinics as part of primary care for women and children under the age of 5, and of the Comprehensive National Supplementary Food Program (PANI) by providing teams, tools, and inputs.



Operational support, logistics, and supply chain and logistical

- Supported the planning, coordination, and logistics management of critical supplies, drugs, and equipment.
- Ensured that donors and partners within the UN system adhered to the COVID-19 donation procedures of the MOH.



Maintaining essential health services during the pandemic

- Carried out communication campaigns on non-communicable diseases, mental health, violence, and COVID-19.
- Provided technical cooperation to maintain all activities related to communicable diseases (HIV infection, tuberculosis, neglected infectious diseases, and antimicrobial resistance).



Vaccination

- Supported the country's application to the COVAX Facility to gain access to COVID-19 vaccines.
- Provided technical cooperation to keep the COVID-19 vaccination plan on track. This included strengthening the information system, authorizing temporary vaccination stations, and implementing the system for surveillance of events supposedly attributable to vaccination or immunization (ESAVI) in a context of limited availability of biologics.

Peru



Country-level coordination, planning, and monitoring

- Supported response, coordination, and communication mechanisms at national and subnational health levels, as part of the government's integrated response to the emergency.
- Made recommendations on developing or adapting plans, strategies, and protocols on case management; telemedicine; epidemiological surveillance; IPC; biosecurity, procurement, and more.
- Supported the national Operations Command for COVID-19 to organize health services and define the roles and responsibilities of its multiple institutions and activities.
- Urged consideration of equity, gender, ethnicity, and human rights in the COVID-19 response.
- Collaborated with the regional governments of Loreto, Ucayali, Ancash, Tumbes, and Piura on the reopening of primary care services, rapid response teams, appropriate use of PPE, and services for refugees and migrants; designed a COVID-19 plan for health facilities on the borders with Brazil and Colombia to provide care for indigenous populations.
- Together with the private sector, carried out a plan with the regional government of Ancash and WFP to contain COVID-19 transmission at the primary level of care.

- Organized events to share primary care experiences in the context of COVID-19 along with the primary health care community and support from the Ministry of Health, the Social Security for Health program (ESSALUD), the Waynakay organization, and the Peruvian Family and Community Medicine Partnership. These events featured the sharing of over 60 experiences, from which best practices were selected and are being disseminated.



Risk communication and community engagement

- Collaborated on implementation of the MOH and the Council of Ministers' risk communication plans in 13 regions in Peru. Trained 300 journalists and 50 communicators; strengthened 10 risk communication plans.
- Designed, adapted, and distributed information materials for pregnant women, the elderly and caregivers on the use of PPE, hand hygiene, environmental health, COVID-19 prevention for the incarcerated, vaccination, risks of self-medication, and care for patients with mild symptoms. An eight-episode radio show was produced, translated, and adapted to Quechua speakers broadcast on six commercial and community radio channels.
- Coordinated the health sector position on COVID-19 through 94 prime-time media interviews, each of which reached an estimated 500,000 homes.

- Supported the development of a COVID-19 containment community engagement plan, with an intercultural approach, for three regions: Ancash, Ucayali, and Amazonas; supported its implementation in Ucayali; and strengthened community COVID-19 committees in Amazonas and Ancash in the referral of contacts, diagnostics and treatment.



Surveillance, rapid response teams, and case investigation

- Strengthened the surveillance system by supporting the updating of regulations and adapting national tools and protocols. Offered guidance on virological surveillance for the detection of SARS-CoV-2 variants of concern and alerts, under the IHR.
- Strengthened capacities in epidemiology, laboratories, case detection, monitoring, and outbreak control at the national level and in migrant host cities such as Tumbes, Lima, and La Libertad.
- Collaborated on the design of the COVID-19 seroepidemiological survey in Lima and Callao to determine the prevalence by age group.
- Reviewed the strategy for syndromic surveillance of acute respiratory infections and the surveillance of other events indirectly related to COVID-19, including mental health-related events.
- Strengthened health situation rooms in Loreto and Ancash with introduction of diagnostic technologies for epidemiological surveillance and contact tracing, the installation control boards, and telehealth.



Points of entry, international travel, and transportation

- Collaborated with the CDC-Peru and the National Liaison Center to formulate guidelines and procedures; supported surveillance at points of entry with Brazil and Colombia.



National laboratories

- Designed a plan to assess the testing needs, based on hypothetical situations and data modeling; strengthened quality control.
- Strengthened the capacity of the National Institute of Health laboratory and the network of laboratories in 12 regions to process molecular analysis samples. Provided supplies: 1,185,207 molecular reactions, RNA extraction cases and reverse transcription; international acquisition of 122,000 antigen tests through the Strategic Fund; purchase of 5,000 Standard-F antigen tests; purchase of 9,957 Standard-Q antigen tests and two analyzers; one 6B6C-1/HRD conjugate vial; two FIRST sets/ZIRV probes; 50 enzymes pair to molecular tests; 40 diphtheria Antitoxin 100 doses; and four positive SARS-CoV-2 controls.
- Collaborated on a biosecurity protocol for taking and transporting biological samples, including a flowchart for the rational use of laboratory materials and a best practices manual for their storage.



Infection prevention and control and protection of the health workforce

- Helped reactivate the committee on intra-hospital infections; made recommendations on infection prevention and control and protection of the health workforce measures (IPC) for the case management protocol.
- Updated clinical guidelines for patients with COVID-19; regulations for isolation centers and biosecurity; handling of contaminated materials; technical specifications and recommendations on the use and disposal of PPE.

- Collaborated with the MOH and the National School of Public Health to develop a virtual course on IPC. Trained health workers and 4,200 medical students on the clinical diagnosis of COVID-19, the use and disposal of PPE, and biosecurity measures.
- Donated substantial quantities of PPE to the Ministry of Health: (gowns, biodegradable bags, jackets, C-N95 respirators, shoe covers, gloves, glasses, three-ply surgical masks, N95 respirators, and face shields). These were distributed to national health agencies, the Peruvian Army, and the national prison institute, along with hospitals in five regions of the country.
- Collaborated in the preparation of a pharmacovigilance plan and monitored the use and safety of medicines and medical devices.
- Adapted regulatory measures to facilitate the availability and donation of technology, as well as authorizations for registering health products.
- Implemented WHO's evaluation tool to evaluate IPC in five hospitals in Callao, East Lima, La Libertad, Lambayeque, and Piura.
- Developed a protocol for the management of solid waste from households and hospitals, in the context of COVID-19.
- Implemented infection prevention and control programs, and personal protective equipment was provided to address health priorities, including COVID-19.
- Signed an agreement with the MOH to apply the Unified Emergency and Disaster System (SISMED) in the management of pre-hospital care for COVID-19 patients. Supported case management, calculated gaps and reorganized human resources for ICU care, and developed plans for the continuity of care and outpatient services.
- Supported amendment of the Rural and Urban Health Service Act (SERUMS) to allow professionals who studied abroad to become part of efforts to fight COVID-19.
- Strengthened primary health care; donated biomedical equipment to health facilities; collaborated in a review of protocols for the prevention, diagnosis, and treatment of COVID-19 in pregnant women and newborns; and organized a local network to support older persons and people with disabilities.
- Supported COVID-19 prevention and control policies in prisons, distributed PPE, and provided training in youth centers.
- Collaborated on a mental health plan in the context of COVID-19, which includes the assessment of the impact of quarantine on the mental health of the population.
- Delivered computer equipment and printers to facilitate telemedicine and teleconsultation processes and to help with patient care (appointment management).



Case management, clinical operations, and therapeutics

- Supported the reorganization of health care services in five hospitals to improve the care of COVID-19 patients. Provided PAHO /WHO guidelines, flowcharts, and the recommended set of basic services in the context of COVID-19.



Operational support, logistics, and supply chain

- Helped monitor the supply chain for pharmaceuticals, medical devices and other supplies. Coordinated with WHO's global platform, in line with the national demand for supplies. Estimated needs for essential COVID-19 and non-COVID-19 goods and monitored their availability and use.

- Contributed to storage strategies and the search for domestic and international suppliers of products with limited availability, including orphan drugs, using PAHO strategies (leprosy, Chagas disease, and others).
- Supported CENARES in the purchase of vaccines through PAHO's Revolving Fund, and medicines, medical devices, and diagnostic supplies through PAHO's Strategic Fund.
- Supported indigenous populations in Peru's Amazon region through the Condorcanqui and Coronel Portillo health networks in the Amazonas and Ucayali regions, in a joint effort with the Regional Health Directorates (DIRESA), by providing support for response capacity at the first level of care by procuring equipment for two blood banks (ELISA reader, freezer, preservative, centrifuge, and microcentrifuge, among others).



Maintaining essential health services during the pandemic

- Prepared a guide for COVID-19 home visits to support the recovery of essential services in Ancash, Ucayali, and Amazonas regions.
- Supported the rapid assessment of noncommunicable disease (NCDs) services. Trained primary healthcare workers to manage and monitor patients with cardiovascular diseases and diabetes using telemedicine.
- Monitored and supported the activation of response at the primary care level for priority communicable diseases in Loreto, and services for pregnant women and newborns.
- Evaluated services in Ancash, Ucayali, and Amazonas, and made recommendations to improve the maternal-neonatal services network.
- Analyzed care provided to older adults; developed an online course and provided medical history forms and mental health exercises.
- Monitored water, sanitation, and hygiene risk factors in first-level health facilities in Ancash and delivered chlorine-producing equipment and portable laundry facilities; supported health inspections in water, sanitation, solid waste providers, and closed community spaces in Ancash.
- Collaborated in voluntary donation campaigns and capacity building for human resources, providing basic equipment for primary care and for the intercultural adaptation of services, and implementing standardized tools to assess essential conditions and intercultural appropriateness in health facilities.
- Implemented standardized tools to evaluate essential conditions and intercultural appropriateness in five hospitals in the Amazonas region and eight health centers/posts in Ucayali.

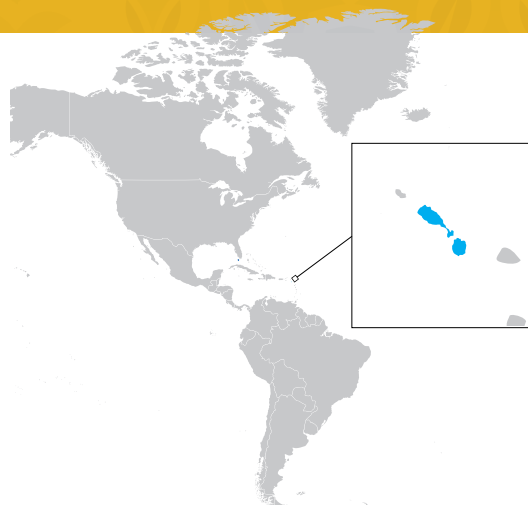


Vaccination

- Kept the MOH and other stakeholders abreast on progress in vaccine development and access mechanisms such as the COVAX Facility and the PAHO Revolving Fund.
- Supported adapting the National Vaccination Plan to the context of COVID-19; proposed content based on PAHO's guidelines to plan for the introduction of the COVID-19 vaccine.
- Supported national multisectoral efforts and coordination within the MOH and other agencies regarding the introduction of the vaccine (vaccines, immunization, INE, DIGIESP, DIGEMID, CENARES).



Saint Kitts and Nevis



Country-level coordination, planning, and monitoring

- Conducted a webinar on health emergencies and disaster risk management in the context of COVID-19.
- Held consultations with national health authorities on the development of country strategic preparedness and response plans, according to WHO guidelines.
- Continued publication of the Country Office COVID-19 information bulletin, including measures taken by countries to contain the spread of the virus and highlights of PAHO's support to Member States.
- Coordinated with the UNRC system on the implementation of COVID-19 initiatives to ensure a multisectoral approach to tackling the pandemic.
- Conducted psychological first aid training for COVID-19 hotline volunteers and community leaders to support individual and community resilience.
- Conducted a visit to and educational session for the country's prison population and prison staff.
- Carried out a three-month gender and violence awareness campaign in the context of COVID-19.
- Developed and disseminated social media cards on the prevention of noncommunicable diseases; mental health risk factors; healthy eating; how to provide mental health and psychosocial support; and prevent stigma during the COVID-19 pandemic.



Risk communications and community engagement

- Conducted risk communication training and reviewed messaging for COVID-19. Produced 500 posters on different aspects of COVID-19, including IPC and handwashing, and 800 parenting booklets.
- Provided support to develop the country's Risk Communication Plan.
- Convened a virtual PAHO COVID-19 presentation and update for journalists and media professionals from Saint Kitts and Nevis.
- Produced a video highlighting the contributions and issues faced by HCWs in the COVID-19 response; provided technical assistance to develop a short video targeting caregivers, children, adolescents, and the general population to promote confidence in the EPI program.
- Produced a teenage pregnancy awareness video in the framework of the Teenage Pregnancy Week and Youth International Day. These activities strengthened intersectoral collaboration between the MOH and the Ministry of Youth.
- Convened a Youth Impact Award Ceremony to celebrate young people's resilience, talents, skills, and creativity; 15 young people were awarded.



Surveillance, rapid response teams, and case investigation

- Procured a vehicle to support contact tracing activities in Nevis and contracted two workers to conduct contact tracing and surveillance.
- Delivered a webinar to share methods for the mathematical modeling of COVID-19.
- Provided orientation of national epidemiologists and laboratory personnel on the PAHO regional program for influenza laboratory-based surveillance for SARI/ILI and its link to COVID-19.
- Collected weekly data on COVID-19 trends and contact tracing; hired surveillance officers to support these efforts.
- Trained medical doctors and other health professionals on WHO guidelines for ICD-10 coding of COVID-19 mortality.



Points of entry, international travel, and transport

- Provided banners to raise awareness about COVID-19 at ports of entry.
- Reviewed, as necessary, entry protocols for the reopening of borders and provided feedback to national health authorities as appropriate.
- Provided necessary equipment, e.g., thermal imagers and IT tools for data collection to strengthen case detection at points of entry.
- Hosted a webinar on "Considerations for resuming nonessential travel in the Caribbean."



National laboratories

- Procured laboratory supplies for COVID-19 testing.
- Conducted a webinar on scaling up laboratory testing in the Caribbean.
- Facilitated training on molecular testing to establish on-island testing capacity. Strengthened laboratory diagnostic capacity for molecular testing through the procurement of GeneXpert cartridges; and provided in-country technical assistance to train staff and assess the laboratory at the JNF hospital to perform PCR testing.
- Disseminated updates on COVID-19 diagnostics, including recommendations for the use of rapid antigen tests.



Infection prevention and control and protection of the health workforce

- Trained staff (hospital and clinics) in the donning and doffing of PPE.
- Assessed the country's IPC system.
- Procured and disseminated PPE kits to reduce the risk of infection for health workers.
- Convened a webinar on protecting healthcare workers from COVID-19.
- Provided training in IPC for 100 frontline workers at points of entry and 180 workers in the hospitality industry.
- Trained staff to manage increased admissions to hospitals and ICUs and to consider infection prevention and control measures for health care workers.



Case management, clinical operations, and therapeutics

- 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.
- Convened a webinar on the response to dengue during the pandemic. The webinar targeted policymakers, health experts, medical and public health practitioners.
- Improved local health system capacity and protected healthcare workers to safely diagnose COVID-19 and deliver healthcare services.
- Procured three patient monitors for surveillance and case management of persons with COVID-19.
- Provided training on clinical management of COVID-19 and procured four ventilators, five vital signs monitors, and five oxygen concentrators to improve management capacity.
- Shared the Epidemic Needs Analysis Tool and provided virtual training to health workers.
- Worked with the Ministry of Health to support Family Health Day – Families in the time of COVID-19 in Nevis.
- Supported the establishment of a national MHPSS Coordinating Committee.
- Designed and printed WHO cardiovascular risk charts and body mass index charts to support the risk stratification process for health centers to identify and manage high-risk patients.
- Trained health personnel to implement the online Self-Management for Chronic Disease Program. Provided manuals and tablets to support implementation of the program.
- Conducted a webinar (73 participants) on scaling up the protection, promotion, and support to breastfeeding to address concerns of whether mothers with COVID-19 can transmit the SARS-CoV-2 virus to their babies.



Operational support, logistics, and supply chain

- Shared the COVID-19 Supply Management Tool to facilitate logistics for managing supplies, equipment, and medicines received for the national response.



Maintaining essential health services during the pandemic

- Worked with health authorities to highlight COVID-19 experiences and best practices, e.g., integrating environmental public health into the COVID-19

emergency; continuation of immunization programs and maternal and perinatal response during pandemic; paying attention to dengue.

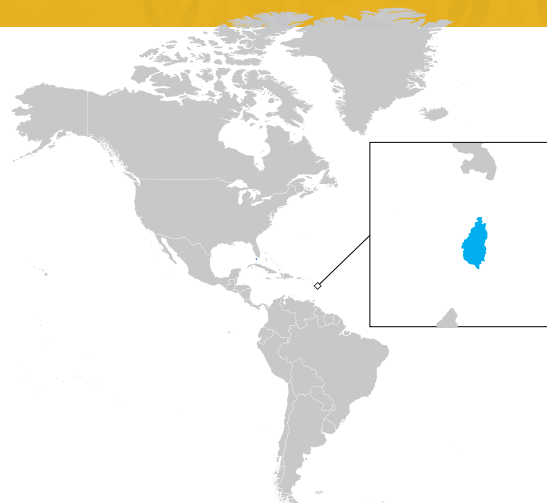


Vaccination

- Conducted training sessions on ESAVI and cold chain management.
- Provided technical support for the development of the COVID-19 National Deployment and Vaccination Plan and to support vaccine introduction readiness using the VIRAT.
- Technical guidance was shared and support was provided for the completion of the requirements of the COVAX Facility.
- Provided ongoing technical support to vaccine administration through the delivery of trainings, webinars, and individual country sessions.



Saint Lucia



Country-level coordination, planning, and monitoring

- Supported national authorities to develop the COVID-19 preparedness and response plan.
- Launched consultations with national health authorities on the development of country strategic preparedness and response plans, according to WHO guidelines.
- Continued publication of the Country Office COVID-19 information bulletin including measures taken by countries to contain the spread of the virus and highlights of PAHO support to Member States.
- Coordinated with the UNRC system on COVID-19 initiatives.



Risk communication and community engagement

- Supported the development of communication and community awareness materials for the public and vulnerable groups, including to better and control chronic diseases and reduce the risk of increased severity of symptoms.
- Produced and distributed posters and booklets on COVID-19 preventive public health measures.



Surveillance, rapid response teams, and case investigation

- Provided retractable information banners for placement at points of entry and disseminated risk communication information to the public and travelers.
- Created public service announcements (PSAs) on alcohol use and abuse and implications for COVID-19; disseminated a PSA (HEARTS jingle) on promoting a healthy lifestyle for persons with chronic diseases; and launched an anti-stigma communication campaign.
- Provided capacity building for healthcare workers on mental health and psychosocial support.
- Procured equipment to allow the Health Promotion Unit to produce and disseminate communications materials.
- Produced video highlighting contributions and issues faced by HCWs in the COVID-19 response.
- Disseminated COVID-19 surveillance technical guidance as well as SARI/ILI surveillance flow charts to all health care facilities.
- Introduced COVID-19 data collection tools, e.g., Excel line listing, revised reporting form, as well as a database to track vulnerable and high-risk population groups.

- Provided orientation on Go.Data, the WHO contact tracing software for data capturing and monitoring of 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.
- Trained medical doctors and other health professionals on WHO guidelines for ICD-10 coding of COVID-19 mortality.



Points of entry, international travel, and transport

- Conducted health surveillance training at ports for COVID-19.
- Reviewed entry protocols for the reopening of borders and provided feedback to national health authorities as appropriate.
- Procured necessary equipment and IT tools for data collection at main airports to strengthen infrastructure for case detection at points of entry.
- Convened a webinar on “Considerations for resuming nonessential travel in the Caribbean.”



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.
- Ensured laboratory capacity to detect COVID-19 cases with necessary tests and reagents, and to scale up capacity as more cases were detected.
- Convened a webinar on scaling up laboratory testing in the Caribbean.

- Led training on molecular testing to establish on-island testing capacity.
- Disseminated updates on COVID-19 diagnostics, including recommendations for use of Rapid Antigen-based tests (Ag-RDTs) for COVID-19.
- Procured GeneXpert cartridges, laboratory test kits, and consumables in support of laboratory strengthening for diagnosis of SARS-CoV-2.



Infection prevention and control and protection of the health workforce

- Conducted training on IPC for healthcare workers.
- Conducted training on the use of PPE.
- Delivered PPE to reduce the risk of COVID-19 infection among healthcare workers.
- Case management, clinical operations, and therapeutics.
- Improved local health system capacity and provided recommendations for healthcare workers to safely detect and deliver healthcare services.
- Procured infrared and digital contact thermometers, vital signs monitors, and oxygen concentrators for surveillance and case management of persons with COVID-19.
- Updated guidelines on maternal and child health and the management of pregnant women and neonates during the pandemic.
- Developed protocols for the management of COVID-19 cases, facilitated by stakeholder engagement and tabletop simulation exercises.



Case management, clinical operations, and therapeutics

- Improved local health system capacity and provided recommendations for healthcare workers to safely deliver healthcare services.
- Procured infrared and digital contact thermometers, vital signs monitors, and oxygen concentrators for surveillance and case management of persons with COVID-19.
- Updated guidelines on maternal and child health, and the management of pregnant women and neonates during the pandemic.
- Developed protocols for the management of COVID-19 cases, facilitated by stakeholder engagement and tabletop simulation exercises.
- Worked with the country's immunization program to ensure the continuation of vaccinations during the pandemic and to create a forum to exchange experiences and challenges in adjusting the delivery of immunization services. 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 in the Americas.
- Convened a webinar on dengue response during the COVID-19 pandemic, targeting policymakers, health experts, and medical and public health practitioners.
- Provided training on COVID-19 and its impact on children living with disabilities.
- Developed a UNICEF and PAHO Interagency work plan to ensure that children can safely return to school ("Safe Back to School").



Operational support, logistics, and supply chain

- Facilitated the international procurement of laboratory supplies, PPE, and essential cleaning and sanitation supplies for shipment to Saint Lucia.
- Conducted a webinar for youth and adolescents to raise awareness on COVID-19 and familiarize them with their roles in the country's response to the pandemic.



Maintaining essential health services during the pandemic

- Procured and distributed water testing kits to the MOH.
- Provided self-management strategies for patients with chronic disease to reduce the risk of increased severity of symptoms.
- Provided support to establish a multisectoral mental health and psychosocial support (MHPSS) coordination mechanism.
- Conducted situational analysis to determine the extent of drug use, characteristics of users, types of drugs used, and treatment needs.

- Helped expand Global HEARTS to improve the management of cardiovascular diseases at the primary care level.
- Provided support to strengthen vector control programs to respond to the dengue outbreak by providing insecticide application equipment, insecticides, PPE, and entomological supplies.

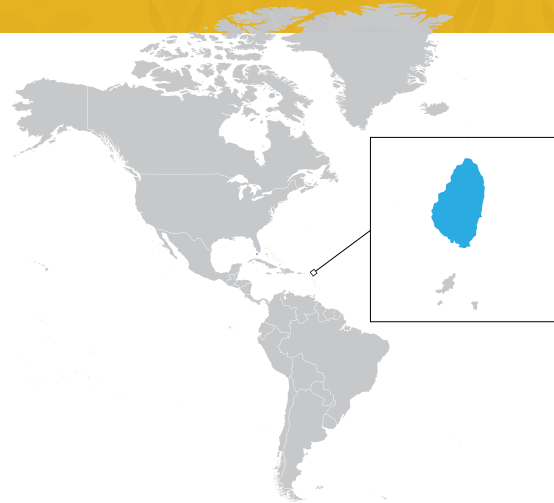


Vaccination

- Provided technical support for the development and subsequent implementation of the COVID-19 National Deployment and Vaccination Plan, and to support vaccine introduction readiness using the VIRAT.
- Provided training to health workers on the use of syringes; events supposedly attributable to vaccination or immunization (ESAVI); cold chain management; and the completion of the WHO/UNICEF electronic joint reporting form for the collection of immunization data, including data on COVID-19 vaccination.
- Support was provided for the completion of the requirements for accessing COVID-19 vaccines through the COVAX Facility.
- Continued supporting the Expanded Program on Immunization.
- Provided support to assess the cold chain capacity and address any identified gaps in key supplies for effective vaccine distribution and additionally provided vaccine carriers and cold chain equipment.
- Provided technical support to strengthen information systems and digital platforms to monitor immunization coverage, including vaccine safety.
- Launched a regional campaign to support vaccine uptake.



Saint Vincent and the Grenadines



Country-level coordination, planning, and monitoring

- Provided recommendations to national health authorities on the response to COVID-19.
- Procured A/C units for the PCR laboratory and the health EOC.
- Launched consultations with national health authorities on the development of strategic preparedness and response plans, according to WHO guidelines. Pre-populated templates were provided as working documents on which to base discussion with national health authorities.
- Continued publication of the Country Office COVID-19 information bulletin, including measures taken to contain the spread of the virus and highlights of PAHO support to the Member States.
- Coordinated with the UNRC system on COVID-19 initiatives.
- Conducted training with regional focal points to discuss public health considerations for children with disabilities and to offer guidance for continuation of specialized health services for these children and their families.
- Provided support for the safe reopening of schools, together with UNICEF.
- Convened a virtual dialogue in which more than 1,400 young people explored ways to adjust to this new way of living and how to cope with pandemic-related isolation.
- Participated in weekly meetings with the MOH and youth leaders and developed a work plan.
- Convened discussions with country focal points that resulted in agreed interventions to use as a framework to address gender-based violence in the region.
- Provided health authorities with a printer and scanner to support the preparation and dissemination of communications materials related to substance abuse and COVID-19. Communication equipment was also provided to support the continuity of nutrition services and activities and to scale up communication efforts with vulnerable populations.



Risk communication and community engagement

- Distributed 580 posters on COVID-19. Produced information, education, and communication (IEC) materials in the form of 250 posters for preprimary and primary school children.
- Produced a video to highlight the contributions and issues faced by healthcare workers in the COVID-19 response and another one to celebrate Nurses Week.

- Produced two public service announcements (PSA) to inform the general public on quarantine requirements for visitors and locals in addition to PSAs on hygiene and sanitation, mental health, and healthy eating during emergencies. PAHO worked closely to review the scripts and facilitate the production and airing of these PSAs.



Surveillance, rapid response teams, and case investigation

- Procured equipment for COVID-19 surveillance activities, including four desktop computers.
- Trained medical doctors and other health professionals on WHO guidelines for ICD-10 coding of COVID-19 mortality.



Points of entry, international travel, and transport

- Supported the production of information banners for points of entry.
- Reviewed, on a regular basis, protocols for the reopening of borders and provided feedback to national health authorities, as appropriate.
- Provided necessary equipment, e.g., IT tools for data collection, to strengthen case detection at points of entry.
- Conducted a webinar on "Considerations for resuming nonessential travel in the Caribbean."



National laboratories

- Procured materials including enzymes, internal control primers, PCR tubes, and extraction kits; 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 to implement the reference protocol. This marks the first time that Saint Vincent and the Grenadines' national laboratory has installed capacities for PCR laboratory testing.

- Strengthened the diagnostic/surveillance capacity of the molecular lab by providing a computer, printer, and related peripherals; installed two split air conditioning systems to support cold chain management of COVID-19 diagnostics.

- Conducted a webinar on scaling up laboratory testing in the Caribbean.

- Led training on molecular testing to establish on-island testing capacity, including training on the use of open platform molecular techniques for diagnosis and surveillance. This was feasible as PAHO strengthened laboratory diagnostic capacity for molecular testing through the procurement of 120 GeneXpert cartridges and a PCR machine used to conduct molecular detection of COVID-19.



Infection prevention and control and protection of the health workforce

- Conducted training on essential aspects of IPC.
- Reduced human-to-human transmission in health facilities through reorganization of health services.
- Provided handwashing stations, hand sanitizers, and sanitizing stations for eight schools to slow the spread of COVID-19.
- Launched a virtual IPC training course to reach Caribbean HCWs and personnel involved in other high-risk professions to disseminate best practices and recommendations to reduce the risk of infection from the virus.



Case management, clinical operations, and therapeutics

- Trained responders in the psychosocial aspects of COVID-19, including responders at points of entry and those working in basic needs services, inpatient, and long-term care facilities.
- Supported development of a national plan to address mental health needs.
- Improved local health system capacity and protected healthcare workers to safely diagnose COVID-19; provided recommendations for healthcare services.
- Procured three patient monitors, 10 infrared thermometers, 100 digital contact thermometers, six vital signs monitors, five oxygen concentrators, and two defibrillators for the surveillance and case management of persons with COVID-19.
- Procured infrared thermometers and face shields to support COVID-19 management in schools.
- Developed a gender-based violence campaign targeting the general public, policymakers, social service providers, violence survivors, and victims.
- Developed youth engagement activities to discuss their concerns related to the pandemic. Helped develop several activities to engage young people and address their concerns. Developed a virtual youth camp, provided tablets to youth leaders to facilitate weekly virtual training sessions and discussions. Provided IT equipment for adolescent health.
- Held training sessions for pharmacists, nurses, and physicians ahead of the arrival of NCD kits.



Maintaining essential health services during the pandemic

- Procured two water quality testing kits for environmental health.
- Conducted virtual training on the Self-Management for Chronic Disease Program. Provided manuals and tablets to support implementation of the program.
- Designed and printed WHO cardiovascular risk charts and body mass index charts to support the identification and management of high-risk patients.
- Supported the strengthening of the vector control program to respond to the dengue outbreak by providing one vehicle-mounted Ultra Low Volume (ULV) machine; six handheld fogging machines and insecticides. Produced a video on dengue prevention and control; printed and disseminated dengue clinical management guidelines; and procured two dialysis machines for the management of severe dengue cases.
- Conducted training sessions on ESAVI and cold chain management.
- Provided technical support for the development of COVID-19 National Deployment and Vaccination Plan and to support vaccine introduction readiness using the VIRAT.
- Support was provided to complete the requirements of the COVAX Facility.
- Provided technical cooperation to prepare the country's national authorities to access the COVID-19 vaccine through the COVAX Facility, given their eligibility for advance market classification (AMC) funds to cover their doses.



Vaccination



Suriname



Country-level coordination, planning, and monitoring

- Contributed to ongoing discussions with the COVID-19 Outbreak Management Team on strategies to control of the spread of the disease and shared technical guidance documents.
- Participated in weekly Incident Management System team meetings to coordinate PAHO's response to the COVID-19 pandemic; prepared and shared weekly situation reports with counterparts, including the MOH, UNCT, and the diplomatic corps.
- Supported the analysis and preparation of graphs and charts to describe the epidemiology of the pandemic in Suriname to help inform the response.
- Provided support to the national epidemiology unit on COVID-19 data analysis and in the preparation and review of the COVID-19 Response Mechanism Funding Request Concept Note, submitted to the Global Fund.
- Translated six online courses to Dutch from OpenWHO's "Serving Countries" series of online courses. The Serving Countries channel provides educational materials to support a country's response to the current COVID-19 outbreak and other health threats. To date, over 1,900 persons from Suriname have enrolled in these courses.



Risk communication and community engagement

- Developed, produced, and disseminated print material and media messages for radio and television on prevention measures for COVID-19, including the launch and implementation of a campaign to encourage mask wearing, handwashing, and physical distancing. Special sessions were conducted in indigenous and tribal villages and in goldmining camps in the interior.
- Produced several risk communication and awareness materials in Dutch and other local languages to continue raising awareness, including in indigenous, tribal, and migrant populations as well as among pregnant and lactating women.
- Developed and printed a manual on community engagement for risk communication and trained village and community leaders in its use.
- Supported and participated in media sessions (radio, television, and social media) on COVID-19 risk prevention measures; potential effects of COVID-19 on mental health and how to deal with these; NCDs; smoking and COVID-19; and the role of PAHO in supporting the COVID-19 vaccine.
- Provided laptops and a camera to strengthen the communications department of the MOH.



Surveillance, rapid response teams, and case investigation

- Provided ongoing technical cooperation for strengthening case detection, contact tracing, training of contact tracers and rapid response teams, and epidemiological analysis of COVID-19 cases.
- Supported the development of a country-specific COVID-19 database.
- Trained malaria service delivery workers to identify COVID-19 signs and symptoms; supported surveillance missions for case detection and investigation in the interior of the country.
- Conducted training in event-based surveillance and retraining on SARI/ILI surveillance.
- Initiated the joint surveillance and case detection of the malaria program and the medical missions for joint malaria and COVID-19 case detection. This was combined with awareness materials in English, French, Portuguese, and Spanish, focusing on the mobile migrant groups and contact tracing and case investigation in Portuguese and Spanish-speaking communities.
- Supported the national Epidemiology unit with analysis of the COVID-19 data.



Points of entry, international travel, and transport

- Provided technical guidance on surveillance among migrant populations at land borders.



National laboratories

- Provided test kits and other reagents and materials to the central laboratory on an ongoing basis.
- Provided 30,000 antigen-based rapid diagnostic test kits (Ag-RDTs), including readers; trained healthcare workers in their use.
- Supported the pilot study on the use of the antigen-based rapid diagnostic test kits and monitored its performance.
- Provided technical guidance on sample collection for the surveillance of variants of the SARS-CoV-2 virus.
- Endorsed advocacy for the use of rapid antigen-based tests with the Central Laboratory, which are now widely use in the interior of the country, when PCR testing is not available.



Infection prevention and control and protection of the health workforce

- Conducted ongoing training of hospital health personnel in IPC measures.
- Trained cleaning staff in hospitals, schools, and other government facilities in the principles and methods of cleaning and disinfection for effective IPC.
- Translated the OpenWHO course on environmental cleaning and disinfection into Dutch.
- Assessed IPC measures at elderly care homes to improve staff training; provided PPE and cleaning supplies to at least five of the largest elderly care homes.

- Donated PPE and other supplies to the MOH.
- Collaborated with the Nursing Inspectorate of the Ministry of Health and certified IPC nurses of the Diaconessenhuis Hospital to offer training sessions for nurses and assistant care personnel in elderly care homes, as well as to assess IPC preparedness of selected elderly care homes, resulting in a list of supplies and equipment that were lacking, and were subsequently procured and donated by PAHO.



Case management, clinical operations, and therapeutics

- Provided 20 oxygen concentrators, four ventilators, 20 patient monitors, 12 BiPaP machines, and aprons to hospitals to manage cases of COVID-19.
- Trained general practitioners in the triage and management of COVID-19 in the primary care setting and the home environment.
- Translated into Dutch the OpenWHO online courses on long-term care facilities in the context of COVID-19 and occupational health and safety.
- Supported the training of nurses in critical care to strengthen the management of severe/critical cases of COVID-19.
- Worked with a hospital care and supplies coordination working group to identify requirements for biomedical equipment, personal protective equipment, and hygiene supplies for the national response.



Operational support, logistics, and supply chain

- Provided equipment and online access to the distance education training platform for the School of Nursing.
- Provided access to an online platform for the MOH to virtual meetings.
- Collaborated with the World Food Program to facilitate the identification and delivery of Suriname's most-equipped ambulance, donated by the Brazilian government.
- Helped the development of technical specifications for a vehicle suitable for transporting patients from the interior of the country.
- Delivered 12 non-invasive and four invasive ventilators, 20 patient monitors, a three-month supply of essential medicines, accessories for infusion pumps, seven emergency trolleys/crash carts, and PPE donations to support health facilities throughout the country, including primary care facilities in the interior and coastal area.



Maintaining essential health services during the pandemic

- Provided ongoing guidance on maintaining essential health services; provided promotional materials for strengthening the immunization program; and collaborated with the Ministry of Health to monitor and report on the maintenance of essential health services.
- Collaborated with the Suriname Red Cross to promote safe blood donations and disseminated promotional materials to encourage blood donors.
- Provided technical cooperation for the surveillance, case detection, and management of malaria cases in villages in the interior.
- Supported the development of an action workplan for mental health and psychosocial support in the context of the COVID-19 outbreak in the Americas.



Vaccination

- Provided technical cooperation for the development of the National Deployment and Vaccination Plan (NDVP) for COVID-19 vaccines.
- Provided technical guidance on engaging with the COVAX Facility for the procurement of vaccines.
- Provided technical guidance, documentation, and cooperation to the National Drug Regulatory Committee and the National Immunization Technical Advisory Group in preparation for the implementation of the NDVP.
- Provided technical cooperation in collaboration with the University of Oslo to adapt and configure the DHIS2 database for data collection, collation, and analysis for COVID-19 vaccination.
- Facilitated collaboration and contribution by the private sector and businesses, in finances and in kind, to support the launch of the COVID-19 vaccination campaign.



Trinidad and Tobago



Country-level coordination, planning, and monitoring

- Made recommendations for reopening schools in the context of COVID-19 through a webinar for ministries of education and health, principals, and teachers in the Caribbean.
- Provided technical support to develop the National Policy on Immunization of Healthcare Workers.
- Updated the MOH Influenza Immunization Preparedness Plan.
- Collaborated with the World Bank and IDB to provide technical support to the MOH.
- Developed an assessment of the economic impact of COVID-19 on the health sector.



Risk communication and community engagement

- Developed a national COVID-19 risk communication campaign, using traditional and non-traditional media and tailored messages to key audiences.
- Reviewed and helped to implement the MOH communication plan. The communication campaign increased PAHO's visibility as a leader in the COVID-19 response, including a weekly slot on a popular television morning show, where the Organization provides ongoing updates and information.

- Participated in national press conferences with the MOH.
- Undertook community engagement activities via community interviews and solicited feedback on views about COVID-19.
- Collaborated with the health education and corporate communications division of the MOH to conduct the study "Knowledge, Attitudes and Behaviours of Young People in Trinidad and Tobago during the COVID-19 Pandemic" to assess perceptions of COVID-19 among young people.
- Supported the MOH to hire a graphic design artist, social media officer, visual communications assistant and website content assistant to improve their risk communication strategy.
- Collaborated with UNDP, UNICEF, and MOH to develop a television series ("Family Vibe"), focusing on families and children, their health, and coping strategies during COVID-19.



Surveillance, rapid response teams, and case investigation

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

- Delivered a presentation on surveillance of respiratory illnesses and interruption of virus transmission through a webinar for epidemiologists, persons working in surveillance, and contact tracers in the Caribbean.



National laboratories

- Procured RNA extraction kits, enzymes, internal controls, swabs, N95 masks, oxygen concentrators, and PPE.
- Supported the expansion of the diagnostic network through antigen-based detection tests.
- Trained 50 persons from the MOH and the Regional Health Authorities (RHAs) to upgrade their capacity for PCR testing, as part of an expansion of laboratory testing capacity.
- Strengthened the capacity to respond to health emergencies in the subregion by supporting the virology laboratory of the University of the West Indies (UWI), Saint Augustine, to boost virology laboratory capacities for genomic sequencing of variants. This included support to recruit laboratory research and coordination personnel as well as and laboratory reagents needed for sequencing and testing. Following the establishment of these capacities, PAHO designated the UWI, Saint Augustine, to serve as a PAHO Reference Sequencing Laboratory (PAHO-RSL) for the COVID-19 Genomic Surveillance Regional Network.



Infection prevention and control and protection of the health workforce

- Supported the development of several IPC guidelines for different settings, including homes for the aged and long-term care facilities, children's homes, residential facilities, and dialysis centers.

- Worked with the MOH to develop COVID-19 guidelines for homes for the aged and long-term care facilities.
- Supported the development of the MOH guidelines for quarantine and isolation of COVID-19-infected persons at home.



Case management, clinical operations, and therapeutics

- Supported capacity building, in collaboration with the UWI, of 50 registered nurses on the core competencies to function in the critical care setting.
- Established a mental health and psychosocial support (MHPSS) coordination mechanism.
- Conducted four webinars related to MHPSS with a range of target groups.
- Supported the development of a MHPSS Directory of Services, a one-stop hub for crisis support.



Operational support, logistics, and supply chain

- Worked with national counterparts to analyze available stocks of medicines for HIV, TB, and malaria.
- Developed and implemented a plan to address possible stock-outs of medications.
- Collaborated with the MOH to ensure availability of medications through the PAHO Strategic Fund and facilitate loans of medications from other countries.
- Provided technical support for the engagement of the MOH in the COVAX Facility.



Maintaining essential health services during the pandemic

- 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 PAHO Revolving Fund.
- Provided medical products (electrocardiogram and ultrasound) to an NGO working with the MOH in sexual and reproductive health, with an emphasis on vulnerable populations.
- Hosted a stakeholder consultation with organizations working for disabled people to discuss the impact of the COVID-19 pandemic on the health services.
- Supported the completion of a comprehensive occupational and environmental safety and health study (OESH) to determine risks to healthcare workers in the context of COVID-19.
- Hosted a Facebook Live session on breastfeeding and COVID-19 in recognition of World Breastfeeding Day to encourage continued breastfeeding.
- Facilitated the expansion and strengthening of mental health services by developing the national mental health policy plan 2019–2029, with a focus on community mental health services.
- Strengthened the management of NCDs in primary care.
- Expanded the HEARTS initiative from 35 to 58 implementing sites representing 56% of the primary care facilities. The initiative was further extended with the rollout of the Diabetes Module in two of the five RHAs. With more than 300 health staff trained in HEARTS through local master trainers and PAHO virtual courses.
- Hosted a virtual TB mission that produced actionable recommendations.
- Supporting the reduction in maternal mortality by expanding the perinatal information system to additional sites in the country.
- Hosted meetings on the development of a gender-based violence health information system, in collaboration with CLAP.
- Recruited a contractor to develop and initiate an electronic immunization record registry.
- Developed a situational analysis through a Nursing Policy Dialogue, a roadmap which identified the critical areas of human resources, capacity building, training, and assessment of needs.
- Trained persons representing several organizations in chronic disease self-management; enhanced capacity to manage and support persons with NCDs.
- Enhanced the disability program by hosting a national workshop on the United Nations Convention on the Rights of Persons with Disabilities. The workshop included the development of a comprehensive situational analysis. This initiative is supported by a grant funding from the UNPRPD Multi-Partner Trust Fund (MPTF).
- Strengthened the health system's response to violence, as part of the Spotlight Initiative. National Clinical and Policy Guidelines on Intimate Partner Violence and Sexual Violence were completed, based on consultations conducted with health care providers in the country's Regional Health Authorities (RHA) and the MOH. PAHO additionally reviewed other national policies and protocols and shared results with national stakeholders and UN agencies. The Organization facilitated consultations on family violence and held meetings with RHA to guide the methodology and implement a plan for a gender-based violence health information management system, based on the IT infrastructure of PAHO's Perinatal Information System. Additionally, PAHO distributed evidence-based communication products to the RHAs to promote good practices in the care and support of survivors of gender-based violence in the context of COVID-19.



Vaccination

- Provided technical support to prepare the COVID-19 Vaccine Introduction Readiness Assessment Tool (VIRAT) reports.
- Provided technical support at national COVID-19 Steering Committee meetings and to develop the National Deployment and Vaccine Plan.
- Strengthened the capacity for an effective and efficient COVID-19 vaccine rollout through key activities, including the development and implementation of simulation exercises, the adoption of Facilitators Handbook and Participants Guide, and capacity building for more than 100 health care workers, who participated in short courses of immunology, virology, and communications.
- Launched a quantitative and qualitative survey to ascertain concerns, attitudes, and practices of health care workers regarding COVID-19 vaccines.

United Kingdom Overseas Territories

Anguilla - Bermuda - British Virgin Islands - Cayman Islands
Montserrat - Turks and Caicos Islands



Country-level coordination, planning, and monitoring

- Provided technical guidance to national authorities in Bermuda and the Cayman Islands to coordinate health sector activities, conduct needs assessments, and identify priorities.
- Provided Bermuda, Cayman Islands, and Turks and Caicos Islands with technical guidance for documenting public health and social measures for all phases of the response.
- Provided technical advice on operational support for the national 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.
- Assisted with reprioritization of the biennium budget and work plan for COVID-19.
- Provided guidance on outbreak response and risk mitigation strategies to senior government officials.
- Collaborated the Ministry of Health and Wellness and Hazard Management in Cayman Islands to prepare a section for inclusion in the RESEMBID Project: Building Resilience in the Caribbean Overseas Countries and Territories to Face the COVID-19 Pandemic and Future Health Emergencies.



Risk communications and community engagement

- Distributed communication materials (posters, banners, and parenting booklets) in Anguilla, British Virgin Islands, and Montserrat.
- Distributed communication materials to Turks and Caicos Islands on mental health, cyber safety, COVID-19 prevention, prevention of substance abuse, and gender-based violence. Also distributed PAHO and WHO corporate risk communication and public education materials.
- Trained community leaders in Anguilla, British Virgin Islands, and Montserrat in psychological first aid.
- Facilitated a series of webinars on mental health and psychosocial support to build individual and community resilience.



Surveillance, rapid response teams, and case investigation

- Disseminated COVID-19 case definitions and guidelines for laboratory molecular testing in Anguilla, Bermuda, British Virgin Islands, Cayman Islands, Montserrat, and Turks and Caicos Islands.
- Trained national counterparts in Anguilla, Bermuda, and Turks and Caicos Islands 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 guidelines on epidemiological surveillance, contact tracing, case isolation, and quarantine of contacts for adaptation to the national context.
- Provided technical advice and support for expanding and strengthening contact tracing capacity in Turks and Caicos Islands, including access to an online training course, data management tools, and standard operating procedures.
- Training provided for medical doctors and other health professionals in Anguilla, British Virgin Islands, and Montserrat on WHO guidelines for ICD-10 coding of COVID-19 mortality.
- Disseminated latest updates on COVID-19 diagnostics, including recommendations for the use of rapid antigen tests for COVID-19 in Anguilla, British Virgin Islands, and Montserrat.
- Collaborated with the Global Outbreak Alert and Response Network (GOARN) and the U.S. Centers for Disease Control and Prevention (CDC) to conduct a workshop on contract tracing in the Americas, which included participants from Turks and Caicos Islands.



Points of entry, international travel, and transport

- Provided PAHO guidelines on COVID-19 and travel precautions at points of entry into Bermuda, Cayman Islands, and Turks and Caicos Islands.



National laboratories

- Strengthened laboratory capacities by conducting data reviews, troubleshooting sessions, and follow-up calls regarding laboratory diagnostics and theoretical

aspects of molecular diagnostics and laboratory testing procedures; molecular detection material and laboratory supplies (primers, probes, Ag-RDT, plastic material, reagents, other) were sent to Bermuda and Dominica to support early testing and detection. RT-PCR testing for SARS-CoV-2 was implemented at two laboratories in Bermuda and two in the Cayman Islands.

- Provided training, guidance, and trouble-shooting support in theoretical aspects of molecular diagnostics and laboratory testing procedures.
- 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 and external quality assessment samples after Public Health England provided equipment and training of staff to build real-time, in-country PCR capacity.
- Provided GeneXpert cartridges to strengthen molecular diagnostic capacity of laboratories in Anguilla, the British Virgin Islands, and Montserrat.



Infection prevention and control and protection of the health workforce

- Supported the protection of healthcare workers by providing and distributing PPE.
- Supported the MOH of the Turks and Caicos Islands by offering WHO and PAHO IPC and clinical management guidelines, on-line training resources, and virtual meetings.
- Donated PPE to Turks and Caicos Islands.
- Prepared Anguilla for a “soft” reopening of borders by providing IPC training for ferry operators, taxi drivers, and hotel housekeeping staff.
- Delivered an online IPC course for 20 healthcare workers.

- Provided general training to health workers from the Eastern Caribbean Countries to satisfy specific requests, such as IPC practices in intensive care units and for primary health care workers.
- Trained 20 staff from the Turks and Caicos Islands Ministry of Health on infection prevention and control.



Case management, clinical operations, and therapeutics

- Assisted the MOH of Turks and Caicos Islands to plan for clinical and hospital surge capacities.
- Supported MOH of Bermuda, Cayman Islands, and Turks and Caicos Islands with access to WHO and PAHO clinical management guidelines, online training resources, and virtual meetings.
- Held additional rounds of the Regional Caribbean EMT Coordination course (including three-day online trainings and webinars) to introduce CICOM to the Ministry of Health and coordinate the adoption of the CICOM methodology for setting up medical coordination and information cells as a key function of health emergency operations centers (EOCs). This course was made possible with participation of experts from UK Overseas Territories Bermuda, Cayman Islands, and Turks and Caicos Islands.



Operational support, logistics, and supply chain

- Delivered a shipment of masks to Anguilla, Montserrat, and the British Virgin Islands.
- Procured antigen test kits to support Anguilla.



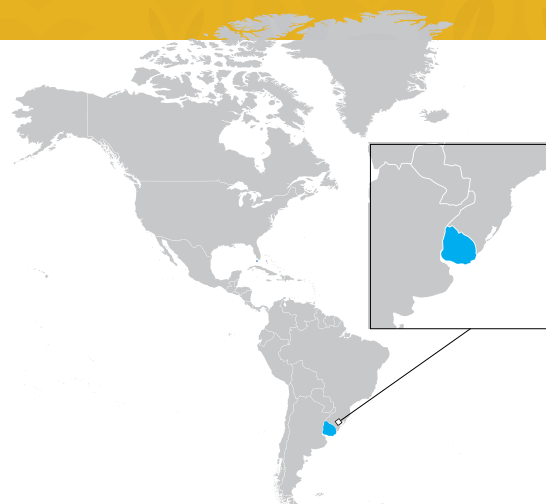
Maintaining essential health services during the pandemic

- Collaborated with teams from Ministries of Health of Bermuda and Cayman Islands in multidisciplinary and multisectoral participation in the finalization of the IHR States Party Annual Report.
- Provided PAHO and WHO guidelines to Turks and Caicos Islands on selecting and maintaining essential health services.
- Guided Bermuda in technical aspects of the procurement of pharmaceuticals for essential health services.
- Trained national counterparts in Anguilla, British Virgin Islands, and Montserrat to monitor the impact of COVID-19 on the national immunization programs and continued procurement of vaccines for the immunization program in Turks and Caicos Islands through the PAHO Revolving Fund. Meanwhile, PAHO oriented Anguilla, British Virgin Islands, Montserrat, and Turks and Caicos Islands on PAHO's recommendations for maintaining immunization programs in the context of COVID-19.
- Provided continued support on implementation of a mental health and psychosocial support (MHPSS) project which included a series of webinars for health and health-related personnel, as well as a communication campaign aimed at creating awareness and referral for mental health services for people affected by COVID-19 in the British Virgin Islands.



Vaccination

- Provided special briefings for health authorities from Bermuda and Cayman Islands on the COVAX Facility.
- Provided Turks and Caicos Islands with information on the COVAX Facility and its planned role in improving access to and future procurement of COVID-19 vaccines and the relationship of the COVAX Facility to the PAHO Revolving Fund.
- Supported the MOH of Turks and Caicos Islands to develop a national COVID-19 vaccination plan, using WHO and PAHO guidelines, as well as the communications strategy.
- Hosted a discussion on ultra-cold chain logistics and equipment.
- Supported a workshop for the introduction of COVID-19 vaccines, including cold chain management.
- Provided MOH of Turks and Caicos Islands and relevant stakeholders with updated information on the COVID-19 vaccines available from WHO, PAHO, and other scientific sites.
- Provided training for national immunization staff in Bermuda and the Cayman Islands on vaccine efficacy, safety, logistics, cold chain strengthening, waste management, vaccine surveillance system, and management and set up of immunization stations and of ESAVI.
- Provided FAQs and other communication resources to support national planning for vaccine demand and the prioritization of target groups.
- To address vaccine hesitancy, PAHO collaborated with Turks and Caicos Islands to release public service announcements on COVID-19 to bolster continued communication efforts via traditional channels and through social media.
- Conducted COVID-19 vaccine rollout training for EPI Managers, including reporting on ESAVI, in Anguilla, the British Virgin Islands, and Montserrat.



Country-level coordination, planning, and monitoring

- Supported the MOH Emergency Operations Center.
- Collaborated with the MOH to update Uruguay's national Coronavirus Plan.
- Participated in interdisciplinary advisory groups to provide expert advice on the response to the COVID-19 pandemic.
- Extended technical cooperation to the MOH for the development of a dashboard of epidemiological information aimed at the general public.
- Collaborated with the Latin American Center for Human Economy (CLAEH) and provided technical support to the development of a training course designed for epidemiologists, which was delivered to technicians working in various areas of the MOH.



Risk communication and community engagement

- Supported the design of informational and multimedia materials appropriate to the national context.
- Disseminated messages of critical importance on health, hygiene, physical distancing, mental health, and other issues to vulnerable groups through a variety of channels, including social media networks.



Surveillance, rapid response teams, and case investigation

- Trained surveillance staff and provided tools and equipment to strengthen the epidemiological surveillance system to detect cases of COVID-19.
- Supported the provision of essential materials as a contingency reserve.
- In coordination with a national university, trained the epidemiological team participating in a diploma program.
- Strengthened training in information analysis and dissemination.
- Supported the strengthening of SARS-CoV-2 genomic surveillance capacity through a training course for the virology section of the National Reference Laboratory. Genomic sequencing studies conducted at the MOH led to the publication of the first report on the complete SARS-CoV-2 genome in Uruguay.



Points of entry, international travel, and transportation

- Developed communication materials for travelers arriving at ground and air points of entry.
- Contributed to the launch of mass media campaigns to raise awareness of people arriving from abroad.



National laboratories

- Facilitated South-South cooperation between the governments of Chile and Uruguay to strengthen SARS-CoV-2 sequencing in Uruguay.
- Purchased and donated materials for COVID-19 testing.
- Supported the MOH to expand its diagnostic capacity with kits endorsed by PAHO that provide rapid diagnostic tests for the detection of SARS-CoV-2 antigens.
- Developed two training courses titled “Training Trainers,” delivered to health personnel from institutions in the country’s 19 departments.



Infection prevention and control and protection of the health workforce

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



Case management, clinical operations, and therapeutics

- Supported national health authorities to adopt and implement strategies for the care of patients with COVID-19.



Operational support, logistics and supply chain

- Consolidated the resource needs of the health sector and created a contingency reserve of PPE and materials to close critical gaps.
- Collaborated with the MOH to ensure the continuity of Uruguay’s vaccination programs and the purchase of vaccines.



Maintaining essential health services during the pandemic

- Provided up-to-date guidelines and recommendations on maintaining essential health services during the pandemic and strengthening the first level of care.
- Transmitted international best practices.
- Supported the sustainability of key public health programs.



Vaccination

- Developed a strategy to support implementation of the vaccination plan with the purpose of ensuring the quality of COVID-19 vaccines and combating the infodemic in regard to vaccination.
- Launched a campaign to encourage COVID-19 vaccination in the country and raise awareness on the topic. Another campaign was held in collaboration with UNICEF, which allowed children to direct questions and doubts to scientists.
- Developed an updated version of the COVID-19 vaccination course for the Uruguay Node of the Virtual Campus for Public Health in coordination with the Nursing School of the University of the Republic, and under the auspices of the MOH. As of August 2021, 5,219 health workers had enrolled in the course, and 3,311 people had graduated. Twenty four countries from various regions have also participated in the course.



Venezuela



Country-level coordination, planning, and monitoring

- Facilitated the signing of an agreement between national entities to protect the health of Venezuelans during the pandemic, focusing on surveillance, diagnostics, access to PPE, decentralization of testing, and prioritization of the most affected states.
- Implemented six projects related to COVID-19 with the following objectives: to serve the needs of the Venezuelan people; save lives; reduce contagion; give priority access to PPE; enable access to diagnostic tests; and strengthen hospitals.
- Worked with the Ministry of Popular Power for Health (MPPS) to strengthen health facilities designated as COVID-response sites in 24 States. Supported five health field offices that were created to carry out priority activities for COVID-19 prevention and control, especially at border crossings.
- Facilitated bilateral coordination meetings between health authorities from Colombia and Venezuela to formulate strategies to protect the health of people living in the border areas.
- Led the Health Action Group and five subnational groups, convening more than 65 partners (national and international NGOs, representatives of the UN system, and donors) to coordinate the health sector's humanitarian response to COVID-19.



Risk communication and community engagement

- Guided preparation of the health component of Venezuela's humanitarian response plan for 2020. Supported NGOs from the Health Action Group to present COVID-19 projects related to the Plan and in their field work with indigenous communities, oncology patients, and other vulnerable groups.
- Coordinated the improvement of technical capacity with national authorities in the context of COVID-19; the formation of work teams; the organization of services and actions aimed at saving lives; and the establishment of international agreements.
- Coordinated the management of resources from voluntary contributions and agreements with national and international political actors.
- Supported the country's national COVID-19 response plan, with an emphasis on strengthening prevention, primary health care, and the delivery of in-hospital services.
- Supported the MPPS to disseminate stickers with information on COVID-19 prevention measures and antigen-based rapid diagnostic tests; produced posters on handwashing (Spanish and English) for placement at airports and on the correct use of PPE and proper hospital hygiene.

- Partnered with Digital to send 1.5 million SMS messages to the public on COVID-19 prevention and living with quarantine measures.
- Designed communication materials aimed at pregnant women and the community: cards for social networks, posters, and flyers with information on pregnancy, childbirth, and breastfeeding during the COVID-19 pandemic.
- Adapted materials with information on alternatives for handwashing, in coordination with UNICEF; prepared an online video with messages about hygiene and infection control in hospitals.
- Organized a conversation with directors and journalists from 17 national media groups to brief them on the prevention campaign #TakeitSeriously.
- Produced COVID-19 prevention audio programs at the community level through a campaign called "Protect yourself and protect others."
- Supported the implementation of a national communication campaign aimed at mitigating the risks of COVID-19 related to IPC, mental health, family health, and the health of older persons, among others.
- Elaborated audiovisual materials with an intercultural and gender approach, aimed at the most vulnerable populations.



Surveillance, rapid response teams, and case investigation

- Advised and supported the MPPS to analyze the clinical-epidemiological database of confirmed cases of COVID-19.
- Provided support to establish a national central SIG core to facilitate the monitoring of COVID-19.
- Advised the MPPS on the use of the ICD coding system, updated by WHO, in which COVID-19 has been included as a cause of death.

- Equipped 10 health situation rooms in six border states with technology; provided training and training materials on the principles of epidemiology for disease control; offered technical advice on the analysis of epidemiological information of COVID-19 and other public health events.
- Provided orientation to the national data management teams on the analysis of COVID-19 cases, morbidity, comorbidity, and mortality indicators.



National laboratories

- Provided training, technical support, and supplies for the molecular detection of COVID-19 to the Rafael Rangel National Hygiene Institute, the country's reference laboratory.
- Worked with the MPPS, the Hygiene Institute, and regional governments to decentralize the collection of PCR tests and expand the country's diagnostic capacity.
- Acquired, with national funding, 340,000 antigen tests and 35 test readers.
- Trained laboratory technicians and helped formulate protocols on the use of antigen-based detection tests and equipment deployed to the national diagnostic network, in order to bring diagnostic testing closer to those areas where most needed, particularly those that are difficult to reach and with highly vulnerable populations.
- Provided technical advice to strengthen the national network of laboratories, including the National Laboratory, on diagnosis, training, and reporting of results; provided 48 rapid antigen diagnostic kits and 340,000 test kits.
- Provided support with advisory, capacity building, technical documents, preparation kits, logistics, and the donation of vehicles to the National Laboratory to strengthen its diagnostic capacity.



Infection prevention and control and protection of the health workforce

- Trained health workers in IPC; obtaining samples; isolating patients; and proper use of PPE. Organized a round table with the MPPS and the Venezuelan Society of Infectious Diseases to launch a program and carry out IPC actions and provided training.
- Distributed essential medicines, personal protective equipment, and hygiene kits to hospitals in Caracas and in three states. Distributed more than 82 tons of PPE for healthcare workers working on the frontlines of the pandemic.
- Supported the analysis of technical documents of the Venezuelan Society of Infectious Diseases to implement protocols for the use of PPE and hospital sterilization, as well as the MPPS documents on hospital-acquired infections.
- Standardized PAHO audiovisual materials with the MPPS and the Venezuelan Society of Infectious Diseases to launch a health risk communication campaign in hospitals.
- Supported the development of a respiratory infection prevention and control guide, with an emphasis on COVID-19.
- Provided materials and supplies aimed at improving hygiene and cleaning in hospitals in the management of COVID-19 cases.
- Carried out a joint assessment with health authorities on the readiness of hospitals to handle COVID-19 cases.
- Collaborated with Direct Relief in delivering life-saving supplies.
- Shared technical expertise on how to address COVID-19 with the academic community in the country context.
- Organized videoconferences on managing cardiovascular issues and diabetes and obesity during the pandemic.
- Supported the national case management commission to elaborate care protocols and organize personnel in health service networks for COVID-19 case management under the recommendations of PAHO.
- Provided technical advisory for the reorganization of health services and hospital beds, as well as capacity building according to the evolution of evidence.
- Provided training for health workers, epidemiology units, primary health care clinics, specialized centers, and hospitals to improve the capacity for early detection of COVID-19 cases.



Case management, clinical operations, and therapeutics

- Supported the MPPS committee on therapeutics on case detection and exchange of best practices for the clinical management and treatment of COVID-19.
- Trained health workers in case management, with a focus on therapeutics, and in the expansion and reorganization of health services.



Operational support, logistics, and supply chain

- Mobilized nearly 160 tons of medicines, diagnostic and laboratory supplies, PPE, medical equipment, medical supplies, and hygiene and communication materials to address the COVID-19 pandemic.
- Strengthened logistical management in the warehouses of 22 hospitals; provided office supplies, computers, and printers; and trained 122 staff to use the PAHO LSS/SUMA Logistics Support System, (a tool that, beyond the immediate emergency response, can be used to coordinate logistics on a day-to-day basis, without the need for Internet connectivity).

- Procured and facilitated freight, storage, and delivery of personal protective equipment, medicines, and supplies to COVID-19 healthcare centers.
- Provided PPE to 51 health institutions caring for COVID-19 patients. This was estimated to cover 80,000 health workers.
- Provided more than 500,000 units of medicines, supplies, and medical equipment, aimed at severe or moderate cases of COVID-19.
- Hired technical staff on logistics and operations to support actions of the COVID-19 response plan.
- Submitted the country's report to the Regional Commission for Monitoring and Re-Verification of the Elimination of Measles and Rubella for the Americas to advance the process of re-verifying the elimination of measles.
- Inaugurated a diploma program on women's, perinatal, childhood, and adolescent healthcare, with a life course and primary health care approach for 154 registered health workers from the country's 24 states.
- Continued implementation of the master plan to strengthen the response to HIV, STIs, tuberculosis, and malaria. Promoted linkages between the MPPS and Venezuelan organizations to reach agreement and improve the national therapeutic program for children and adults living with HIV, including training staff, estimating needs for medicines, and their distribution.
- Supported nutrition education and recovery services by training health and nutrition professionals in nutritional recovery strategies and providing basic supplies and essential medicines for children with nutritional needs.
- Provided advice on the reorganization of hospital services and beds. Additionally, situational training was provided for staff, as needs changed.
- Provided support to the regular immunization program focusing on diphtheria, yellow fever, and monitoring of outbreaks.
- Supplied hospitals and NGOs with medicines and supplies for noncommunicable chronic diseases, with an emphasis on the prevention and control of cardiovascular problems, diabetes, and cervical cancer, among others, in the context of COVID-19.
- Strengthened comprehensive care for women, children, and adolescents, with an emphasis on reducing maternal and child morbidity.
- Provided capacity building and developed a national campaign focused on mental health aimed at healthcare workers and the general audience.



Maintaining essential health services during the pandemic

- Facilitated the donation of 6,000 doses of anti-rabies vaccines for emergencies related to this zoonotic disease.
- Trained 99 health and community workers in the Mental Health Gap Action Program (mhGAP) for basic psychosocial support and mental health assistance.
- Deployed nearly 400,000 doses of fast-acting ASPART insulin for insulin-dependent patients in 19 hospitals across the country.
- Improved the response capacity of the emergency services in at least 27 hospitals, providing equipment, supplies, and medicines.
- Advanced the Integrated Vector Management Manual; maintained the weekly notification of these diseases through the Health Information Platform for the Americas. Established a national network of clinicians as part of a regional network to train national staff.
- Expanded the coverage of the malaria diagnostic and treatment network in prioritized locations; specific resources were mobilized from the Global Fund for Venezuela's malaria control project, set to start in 2021.



Vaccination

- Worked with the country to develop the COVID-19 Vaccine Deployment and Deployment Plan.
- Formed the National Coordination Committee with participation of different technical groups.
- Supported the country to define these priority groups, while considering different epidemiologic scenarios, and to develop vaccination strategies.
- Provided technical support to the national COVID-19 vaccination plan; the technical vaccination work group; and the COVAX mechanism, logistics, and capacity building for its implementation.
- Supported the implementation of the national strategy for the surveillance of adverse effects or those supposedly attributable to vaccines (ESAVI).
- Provided logistical support for the coordination of meetings, the installation of the national diagnostic capacity, management of outbreaks, and planning for the rollout of the COVID-19 vaccines.

Abbreviations

ACT-A	Access to COVID-19 Tools Accelerator
ACTO	Amazon Cooperation Treaty Organization
AEFI	Adverse Events Following Immunization
Ag-RDT	Antigen-based Rapid Diagnostic Test
AIESM	Health and Medical Equipment Infrastructure Agency (Bolivia)
AMC	Advance Market Commitment Mechanism
AMCS	Alternative Medical Care Sites
ARVs	Antiretrovirals
BDF	Belize Defense Force
BDMA	Belize Medical Dental Association
BRISA	Regional Database of HTA Reports in the Americas
CARICOM	Caribbean Community
CARPHA	Caribbean Public Health Agency
CCSS	Costa Rican Social Security Fund
CDC	US Centers for Disease Control and Prevention
CDEMA	Caribbean Disaster Emergency Management Agency
CEASS	Center for Health Provisions and Supplies (Bolivia)
CEN CINAI	National Education and Nutrition Centers and Comprehensive Child Care Centers (Costa Rica)
CENARES	National Center for the Provision of Strategic Health Resources (Peru)
CENETROP	National Center for Tropical Diseases (Bolivia)
CENOC	National Center for Community Organizations (Argentina)
CEPI	Coalition for Epidemic Preparedness Innovations
CERF	Central Emergency Response Fund
CFR	Case Fatality Rate
CHW	Community Health Worker

CICOM	Medical Coordination and Information Cells
CIEGES	Strategic Information Center for State Management (Brazil)
CIEVS	Strategic Health Surveillance Information Center (Brazil)
CME	Continuing Medical Education
CML	Central Medical Laboratory
CNE	National Commission for Risk Prevention and Emergency Response (Costa Rica)
COMISCA	Council of Ministers of Health of Central America
CovidSIM	COVID-19 Modeling Exercise
CRUEM	Regulatory Center for Medical Emergencies (Bolivia)
CVIC	Vaccine Introduction and Deployment Costing Tool
DIGIESP	General Directorate for Medicines, Supplies, and Drugs (Peru)
DPSPE	Department of Health Promotion and Environmental Protection (Haiti)
EBS	Event-based Surveillance
ECC	Eastern Caribbean Countries
ECLAC	Economic Commission for Latin America and the Caribbean
EIOS	Epidemic Intelligence from Open Sources
EMT	Emergency Medical Team(s)
EOC	Emergency Operations Center
EPI	Expanded Program on Immunization
EpiEstim	COVID-19 Modeling Tool
ESAVI	Events Supposedly Attributable to Vaccination or Immunization
EUL	Emergency Use Listing Procedure
FAO	Food and Agriculture Organization
FIND	Foundation for Innovative New Diagnostics
FLOD	First Line of Defense

GAVI	Global Alliance for Vaccines
GBV	Gender-based Violence
GISAID	Global Initiative on Sharing All Influenza Data Platform
HRH	Human Resources for Health
HTA	Health Technology Assessments
IAFA	Institute on Alcoholism and Drug Dependence (Costa Rica)
IBS	Incident-based Surveillance
ICAFE	Costa Rican Coffee Institute
ICAO	International Civil Aviation Organization
ICGES	Gorgas Memorial Institute for Health Studies (Panama)
ICTRP	International Clinical Trials Registry Platform
IGSS	Guatemalan Social Security Institute
IHR	International Health Regulations
IMAS	Joint Institute for Social Assistance (Costa Rica)
IMST	Incident Management Support Team
IMT	Incident Management Team (country level)
INAMU	National Institute for Women (Costa Rica)
INCIENSA	Costa Rican Institute of Research and Teaching in Nutrition and Health
INLASA	National Institute of Health Laboratories (Bolivia)
IOM	International Organization for Migration
IPC	Infection Prevention and Control
IVD	In Vitro Diagnostics
JRF	WHO/UNICEF Joint Reporting Format
KHMH	Karl Huesner Memorial Hospital (Belize)
LAC	Latin America and the Caribbean

LACEN	Central Public Health Laboratory of Amazonas (Brazil)
MERCOSUR	Southern Common Market
MFA	Ministry of Foreign Affairs
Mh-Gap	Mental Health Gap Action Program (WHO)
MHPSS	Mental Health and Psychosocial Support
MINSAP	Ministry of Public Health (Cuba)
MIS	Multi-inflammatory Syndrome
MOH	Ministry of Health
MOHW	Ministry of Health and Wellbeing
MPEA	Ministry of People Empowerment and Elder Affairs (Barbados)
MPTF	Multi-Partner Trust Fund
MSPAS	Ministry of Health and Social Assistance (Guatemala)
MSPP	Ministry of Public Health and Population (Haiti)
NCD	Non-communicable Diseases
NDVP	National Deployment and Vaccination Plan
NEMO	National Emergency Management Organization (Belize)
NIC	National Influenza Centers
NIP	National Immunization Program
NITAG	National Immunization Technical Advisory Group
NRA	National Regulatory Agency
OECD	Organization for Economic Cooperation and Development
ORAS	Andean Health Agency
PAHO	Pan American Health Organization
PCR	Polymerase Chain Reaction

PHC	Primary Health Care	SNS	National Health Services (Dominican Republic)
PHEIC	Public Health Emergency of International Concern	SPRP	Strategic Preparedness and Response Plan for COVID-19 (WHO)
PPE	Personal Protective Equipment	SUMA	PAHO/WHO Supply Management System
PRAIS	Regional Platform on Access and Innovation for Health Technologies	TAG	Technical Advisory Group
PROSUR	Forum for the Progress and Development of South America	UCC	Ultra-cold Chain
RCCE	Risk communication and community engagement	UNCT	UN Country Team
RDT	Rapid Diagnostic Test	UNESCO	UN Educational, Scientific and Cultural Organization
REVELAC-i	Network for Evaluation of Vaccine Effectiveness in LAC – influenza	UNHCR	UN Refugee Agency
RF	PAHO Revolving Fund for Access to Vaccines	UNHRD	UN Humanitarian Response Depot
RHA	Regional Health Authorities (Trinidad and Tobago)	UNICAMP	University of Campinas (Brazil)
SAGE	Strategic Advisory Group of Experts on Immunization	UNICEF	UN Children’s Fund
SARI / ILI	Severe Acute Respiratory Illness / Influenza-like Illness	UWI	University of the West Indies
SARS-CoV-2	Severe Acute Respiratory Syndrome Coronavirus 2	VCPH	Virtual Campus for Public Health (PAHO)
SEDES	Departmental Health Services (Bolivia)	VIGEPES	National Epidemiological Surveillance System (El Salvador)
SFC	Self-financing Countries	VIRAT	Vaccine Introduction Readiness Assessment Tool
SICA	Central American Integration System	VOC	Variants of Concern
SISMED	Unified Emergency and Disaster System (Peru)	VOI	Variants of Interest
SISVEFLU	Respiratory Diseases Surveillance System (Mexico)	VWA	Vaccination Week in the Americas
		WASH	Water, Sanitation, and Hygiene
		WFP	World Food Program
		WHO	World Health Organization

PAHO



Pan American
Health
Organization



World Health
Organization
REGIONAL OFFICE FOR THE
Americas