

PAHO/WHO Response. 29 June 2020. Report ° 14

CONTEXT

Following an outbreak of a novel Coronavirus (COVID-19) in Wuhan City, Hubei Province of China, rapid community, regional and international spread has occurred with exponential growth in cases and deaths. On 30 January 2020, the Director-General (DG) of the WHO declared the COVID-19 outbreak a public health emergency of international concern (PHEIC) under the International Health Regulations (IHR) (2005). The first case in the Americas was confirmed in the USA on 20 January 2020, followed by Brazil on 26 February 2020. Since then, COVID-19 has spread to **all 54 countries and territories in the Americas**.

PAHO/WHO activated regional and country incident management system teams to provide direct emergency response to Ministries of Health and other national authorities for surveillance, laboratory capacity, support health care services, infection prevention control, clinical management and risk communication; all aligning with priority lines of action. The Organization has developed, published, and disseminated evidence-based technical documents to help guide countries' strategies and policies to manage this pandemic.

SITUATION IN NUMBERS IN THE AMERICAS

as of 29 June (15:00)

5,136,705

Confirmed cases*

247,129

Deaths*

54

Countries / areas / territories counted for epidemiological purposes

*Total includes both confirmed and probable for Ecuador (deaths), Puerto Rico (deaths) and the US (probable deaths in NYC)

RESPONSE PILLARS

Coordination, Planning, and Monitoring

Risk Communication and Community Engagement

Surveillance, Rapid Response Teams, and Case Investigation

Points of Entry

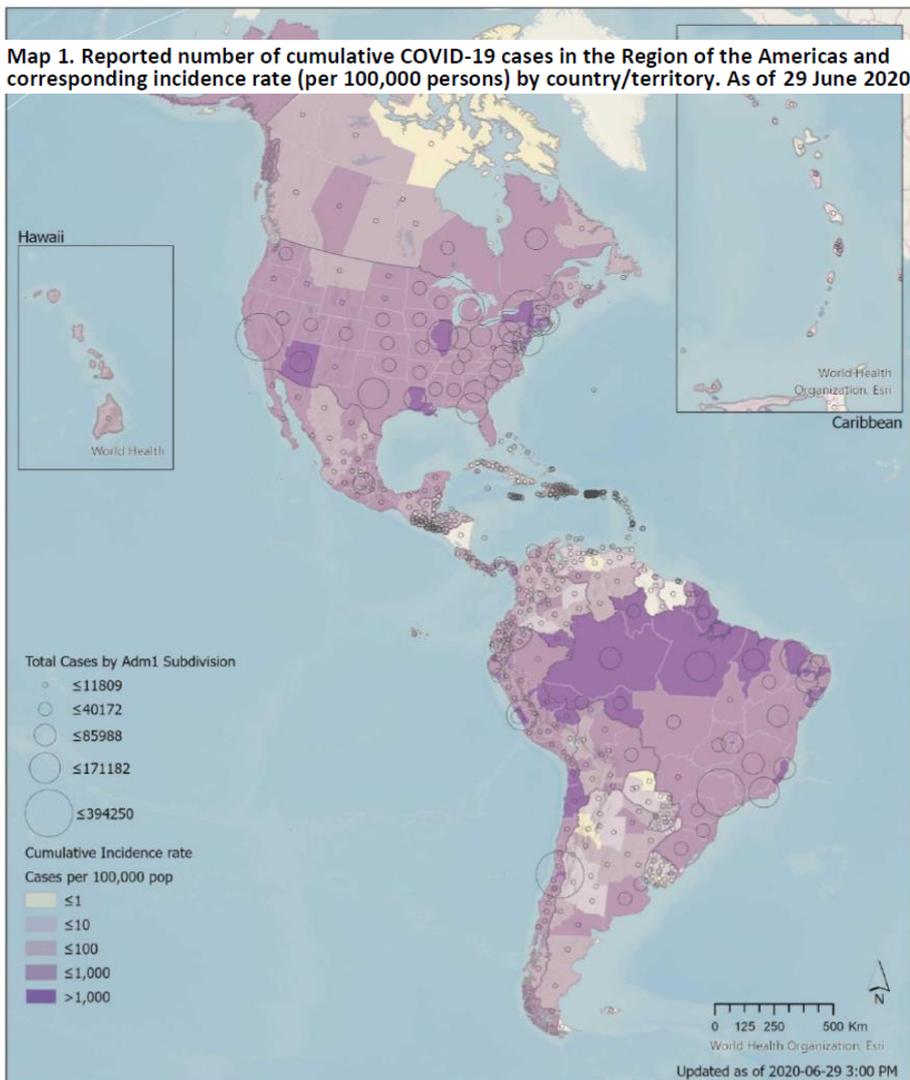
National Laboratory

Infection Prevention and Control

Case Management

Operational Support and Logistics

Maintaining Essential Health Services during the Pandemic



Key Figures: The Americas' Response to COVID-19

		PAHO has sent 54 PPE shipments to 26 countries and territories				
PAHO Response	92 Technical guidelines and recommendations developed or adapted from WHO	4.9M COVID-19 PCR tests sent to 36 countries and territories	>95 Virtual / in-person regional and country trainings on testing, tracking, care, and more	1.4M Gloves	418k Gowns	
				1M Surgical & N95 Masks	43k Goggles	
Regional Readiness	32/35 # Countries with national COVID-19 Preparation and Response Plans	37/51 # Countries and territories with molecular detection capacity to diagnose COVID-19	20/35 # countries using existing SARI/ILI surveillance systems to monitor COVID-19	17/22 # Reporting countries where at least 50% of health facilities have triage capacity	29/31 # Reporting countries with national IPC / WASH plans for health facilities	

PAHO/WHO Response (23 to 29 June 2020)

On 17 January 2020, the Pan American Sanitary Bureau activated an organization-wide Incident Management Support Team (IMST) to provide all its countries and territories with technical cooperation to address and mitigate the impact of the COVID-19 pandemic. The Organization's work to date falls under the nine pillars of the global Strategic Preparedness and Response Plan for COVID-19.



Country-level Coordination, Planning, and Monitoring

Regional

PAHO continued to collaborate with its partners within 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. PAHO's regional IMST also provided support and strategic guidance to countries' IMSTs as they coordinate and monitor their national response activities.

Country

In **Costa Rica** and **Jamaica**, PAHO collaborated closely with national authorities to implement its ongoing projects to support its efforts to combat COVID-19.



Figure 1: PAHO supported Panama to provide daily care for migrants and to implement measures to reduce the risk of COVID-19 infection. Source: PAHO, June 2020

PAHO remains a key partner in the Ministry of Health's Emergency Operations Center (EOC) in the **Bahamas** and **El Salvador**. The team shared technical advice and recommendations based on PAHO and WHO guidelines and protocols.

PAHO/WHO's COVID-19 response was made possible in part due to generous contributions from the governments of Azerbaijan, Belize, Canada, China, Germany, Japan, the United Kingdom of Great Britain and Northern Ireland, the United States of America, the Caribbean Confederation of Credit Unions, Development Bank of Latin America (CAF), Fundación Yamuni Tabush, World Bank, the World Food Program, the United Nations Central Emergency Response Fund, the UN Multi-Partner Trust Fund, and other small contributions, and to the invaluable collaboration from our partners within the Americas and beyond.

In **Haiti**, PAHO trained community-level health workers in collaboration with the Ministry of Health and other UN agencies. The team also conducted a training-of-trainers workshop in the Nord department, building capacities in 20 staff members from district health units from four communes. Further, PAHO focused on local-level public health measures in response to COVID-19, MSPP guidelines, early institutional triage, COVID-19 case definitions, follow-up of contacts, and community awareness and health education. An additional 330 community health workers (CHWs) from the Nord-Est department were trained in COVID-19 topics.

COVID-19 Courses Available on PAHO's Virtual Campus for Public Health (SPA-POR)

Emerging respiratory viruses, including COVID-19: detection methods, prevention, response, and control (SPA, POR)

COVID-19 operational planning guidelines: for UNCT systems and other partners (SPA)

Infection prevention and control (IPC) caused by COVID-19 (SPA, POR)

ePROTECT Respiratory Infections: Health and occupational health (SPA)

Course on the clinical management of Severe Acute Respiratory Infections (SARI) (SPA)

Severe Acute Respiratory Infection (SARI) Treatment Facility Design (POR)



Risk Communication and Community Engagement

Regional

As the communication needs of the region evolve during the pandemic, PAHO continued to disseminate key COVID-19 messages across multiple platforms, and to respond to media enquiries. The Director of PAHO called on countries to prepare to **closely manage the COVID-19 pandemic for another two years in the absence of effective treatments or a widely available vaccine.**

PAHO produced videos, infographics and media cards in different languages cover topics such as **COVID-19 and shoes; influenza and COVID-19; masks; stigma on health care workers; care at home; COVID-19 and Science; Health care workers; Mental health and kids; domestic violence in the context of COVID-19; save water and hand washing.**

During the weekly "Ask the Expert" session, PAHO specialists discussed **wearing masks: dos and don'ts**. In addition, PAHO collaborated in the weekly meeting with United Nations Communications Officers from Latin America to exchange information and identify common areas of work.

PAHO has extended its alliance with Twitter to provide factual, reliable information on the COVID-19 pandemic in the Americas. This is the first agreement PAHO has formalized with a social media company. Details of this alliance are available [here](#).

Country

PAHO provided health authorities from **Turks and Caicos Islands** with communication materials on environmental public health, mental health and psychosocial support, preventing gender-based violence during the pandemic, combatting harmful alcohol use, and other critical issues.

The image shows a promotional poster for a national television series. At the top, it says "BLIJF THUIS!!! TAN NA OSO!!" and "Maar... wat doe je als je thuis gefrustreerd of niet veilig voelt? Huiselijk geweld is zeker NIET de oplossing!". Below this is the title "“JIJ BENT NIET ALLEEN”" and the text "STEL JE VRAGEN (OOK VOORAF) AAN ONZE DESKUNDIGEN" with a WhatsApp number "PM SUPREME SURINAME | WHATSAPP 8596949". There are three photos of experts: Ruth Barron BSc., Carla Bakboord MSc., and Marcha Reumel MSc. A red banner at the bottom says "Tijdens de LIVE uitzending op maandag 22 juni a.s. wordt jouw vraag door deskundigen beantwoord." The bottom right corner has a caption: "Figure 2: PAHO participated in a national television series that promotes measures to boost mental health during the COVID-19 pandemic. Source: PAHO, 22 June 2020".

In **Peru**, PAHO disseminated critical information to the public on the evolution of the pandemic around the world via radio. PAHO has also used social media to further disseminate knowledge on the virus and on available resources for issues ranging from treatment for cases and emotional support for health workers. In coordination with WFP, PAHO developed a communication plan to use in the department of Ancash.



Figure 3: Due to the lack of electricity and phone service in their villages, Q'eq'chi and Mopan Maya voice artists traveled to Punta Gorda town for a virtual meeting with PAHO's Communication Team in preparation for recording of COVID-19 public service announcements in their language. **Source:** PAHO, 11 June 2020

The **El Salvador** risk communication team focused on educating the population on the importance of complying with recommendation from health authorities to physical distance and keep quarantining when needed. It has been rolled out in 14 departments of the country.

In coordination with UNFPA, PAHO has translated infographics on COVID-19 into different languages, including Miskito and Garifuna. These have since been disseminated among these populations in **Honduras**.

In **Suriname**, PAHO developed and updated key messages for distribution to NGOs, UN agencies, and the Ministry of Health to promote adherence to public health measures designed to limit the spread of the virus. This effort aimed to ensure that all stakeholders in the country shared the same information aligned with PAHO and Ministry of Health recommendations.

The **Mexico** team shared key information on the pandemic during two conferences with the Veracruz Institute of Public Health and the UNAM School of Law. In collaboration with national health promotion authorities, PAHO held a session with 77 federal health personnel working in health promotion and communications to assess public perceptions on the pandemic and devise risk communication strategies. The team worked with health promoters to formulate risk communication strategies for indigenous, Afro-Mexican and other ethnic group populations.

In **Paraguay**, PAHO worked with an inter-agency UN working group established together with the Ministry of Health and the Ministry of Technology and Communication (MITIC) to jointly formulate strategies for reaching the general public and educating them about COVID-19. PAHO reached over one million people via social media to disseminate messages on myths and realities about COVID-19, gender violence, and the use of face masks.

The **Trinidad and Tobago** team held a webinar to share tips on managing stress during the pandemic, aimed at young people and their parents.

The **Cuba** team disseminated critical information on preventing COVID-19 infections through newspapers and other media sources.



Surveillance, Rapid Response Teams, and Case Investigation

Regional

PAHO has developed a Geo-**Hub** for the region's COVID-19 data. It includes a series of dashboards and epidemiological data which are updated daily. It has four sub-regional and 54 country and territory geo-hubs for the Americas. PAHO has supported **Argentina, Belize, Chile, Guatemala, and Venezuela** to *enter* their country data and adapt their own GIS hubs to facilitate the monitoring of COVID-19 cases. During the week, PAHO supported **Ecuador and Guatemala** to update their country GIS Hub. The public can also consult PAHO's **interactive dashboard** showing cumulative cases, deaths, cumulative incidence rate, new cases and deaths, as well as several other epidemiological indicators reported by countries and territories.

PAHO works continuously with countries to boost surveillance systems while it conducts **Event-based Surveillance (EBS)** to complement countries' **Indicator-based Surveillance (IBS)**. Efforts continued to ensure that all countries in the Region **integrate COVID-19** into their routine severe acute respiratory illness / influenza-like illness (**SARI/ILI**) **surveillance systems**. To date, **20 countries** have integrated COVID-19 surveillance into their SARI/ILI systems. PAHO also publishes weekly reports detailing trends in influenza and other respiratory viruses, as well as SARS-CoV-2 surveillance indicators ([available here](#)). Further, PAHO continued to manage data of the line list of nominal cases reported by Member States.



Figure 4: PAHO joins a field visit with Suriname's epidemiological investigation team. Source: PAHO, June 2020

In collaboration with GOARN, PAHO has trained 31 countries and territories in the **Go.Data** app, and 20 of those are already implementing it. The Go.Data app is a tool that support suspect case investigation and management, display of transmission chains, and contact tracing. PAHO continued to provide technical cooperation for further Go.Data implementation in the region.

During the week PAHO conducted a survey among countries and territories on the use of COVID-19 probable case definition and laboratory diagnosis. Further, the regional team also contributed to a scientific release on Environmental Surveillance for COVID-19.

PAHO issued an **epidemiological update on COVID-19** in the Region of the Americas. It includes analyses by subregion and recommendations for consideration of national authorities on addressing the COVID-19 pandemic.

Country

The **Jamaica** team shared the Go.Data Implementation and Deployment Guide with Ministry of Health personnel from Bermuda, Cayman Islands, and Jamaica. In the **Bahamas**, PAHO provided technical cooperation to the Ministry of Health for COVID-19 outbreak data management using the Go.Data tool.



Points of Entry

Country

In coordination with the Ministry of Health, the **Jamaica** team produced educational materials, including pull-up banners, for posting at Points of Entry. These were designed to raise awareness among travelers and personnel at points of entry on quarantine, physical distancing, and infection prevention and control measures for stemming the spread of the virus.

In **Brazil**, PAHO supported the government of the state of Mato Grosso do Sul to develop a plan with criteria for adjusting nonpharmacological measures, such as physical distancing and travel restrictions, in response to the spread of COVID-19 in the state.

Figure 5: PAHO supported workers at Paraguay's land borders to implement measures to detect and manage COVID-19 cases. **Source:** PAHO, June 2020



National Laboratory

Regional

PAHO is implementing its SARS-CoV-2 sequencing project to generate more sequenced data and in a timely manner. This week, PAHO convened a meeting with counterparts in **Guatemala** to discuss the process and protocols for shipping samples to the reference laboratories.

During the week, PAHO provided additional troubleshooting sessions and follow up calls regarding diagnostic implementation to **Antigua and Barbuda, Dominica, El Salvador, Guatemala, Saint Vincent and the Grenadines** and **Suriname**. The team also provided theoretical SARS-CoV-2-PCR training to the National Public Health Laboratory in **Jamaica**, the second open platform testing site in the country.

PAHO convened a meeting with the National Institute of Health in **Colombia** regarding the pilot *Study of the first COVID-19/Influenza A (HxNx) Cases in Colombia*. The discussion included serology methods and the laboratory protocols to be utilized for the study.

Since the beginning of PAHO's response up to the date of this report, PAHO has provided primers, probes and/or PCR kits for approximately **4.940 million** reactions/tests. During the week, PAHO provided **Costa Rica, El Salvador, Guatemala, Jamaica, and Paraguay** with extraction kits, transport media, swabs, and internal controls (primers and probes). Reagents for molecular detection of SARS-CoV-2 were sent to **Guyana** and **Jamaica**.



Figure 6: PAHO supported Honduras in establishing a virology laboratory in San Pedro Sula. **Source:** PAHO, 24 June 2020



Figure 7: PAHO donated 3,000 COVID-19 PCR tests to Suriname's Central Laboratory. **Source:** PAHO, June 2020

Country

In **Bolivia**, PAHO donated laboratory supplies to conduct 10,000 COVID-19 PCR tests. PAHO also trained over 400 health workers in La Paz, Beni and Santa Cruz in biosafety protocols and handling suspected COVID-19 patients.

The **Honduras** team supported the Ministry of Health to establish a virology laboratory in San Pedro Sula, increasing its response capacity to 1,200 daily tests for COVID-19.

In **Suriname**, PAHO worked with national counterparts, the Regional Health Services (RGD), and hotline and clinical specialists to set up drive-through testing sites throughout the country. This was intended to lower the burden on health personnel who had to drive out to remote areas to sample suspected cases which were reported through the hotline. PAHO donated COVID-19 primers and probes to the Central Laboratory, the newly recognized National Influenza Center (NIC) for Suriname. This laboratory can now conduct an additional 3,000 tests.

In **Peru**, PAHO donated essential supplies to carry out an additional 200,000 COVID-19 PCR tests.



Infection Prevention and Control (IPC)

Regional

PAHO continued to support and promote the safety of health care workers in countries. During the week, the team conducted two IPC webinars. The first covered topics related to reopening and was directed at stakeholders in **Dominica**. The second targeted decision makers and health managers in **Paraguay**. PAHO's IPC experts also collaborated with the Communications Team to carry out the "Ask the Expert" session on the use of masks.

In addition, PAHO collaborated with the World Bank in a meeting to discuss various aspects of COVID-19, including the rational use of PPEs.

Country

In **Brazil**, PAHO and other UN agencies have shared guidelines and recommendations on assisting the judicial system to reduce COVID-19 infections among persons deprived of liberty.

The **Honduras** team worked with health authorities to develop guidelines for preventing and managing COVID-19 cases in homes for the elderly and for people living with disabilities.

In coordination with UNICEF, the team in **Suriname** donated PPE to the Ministry of Health for preventing the spread of the virus in the population.

The **Costa Rica** team worked with the Ministry of Public Education to formulate strategies for reducing the risk of infection as schools assess next steps for continuing education, as well as strategies to protect persons



Figure 8: PAHO delivered supplies to support Haiti in reducing the risk of infection among persons returning from abroad. Source: PAHO, June 2020

living in long-term care homes, including guidelines, inspections, and trainings.



Case Management

Regional

PAHO continued to support countries and territories with technical guidance for the management of COVID-19 cases. The regional team has published a revised version of the Ongoing Living Update of Potential COVID-19 Therapeutics, [available here](#).

PAHO has released recommendations on the [use of Ivermectin as a treatment for COVID-19](#), noting that studies on the use of ivermectin for treating COVID-19 cases were found to have a high risk of bias, very low certainty of the evidence, and that the existing evidence is insufficient to draw a conclusion on benefits and harms.

Country

The **Mexico** team worked with national partners to develop Operational Guidelines and instructions to enable Community Brigades to manage COVID-19 cases at the first level of care.

In **Costa Rica**, PAHO trained health workers in case management and health services, as well as ensuring the health and safety of health workers.



Operational Support and Logistics

Regional

PAHO continued to conduct technical assessments of different personal protective equipment (PPE) products as countries and multilateral agencies consider products for procurement and distribution across the Americas.

PAHO further worked with WHO and other partners to procure essential supplies and equipment for subsequent distribution to its Member States to enable the delivery of life-saving services and supplies to keep patients and health workers from Latin America and the Caribbean safe. COVID-19 kits were sent to **Guyana** and **Suriname**, and oxygen concentrators were delivered to **Ecuador**.

Country

In **Suriname**, PAHO trained personnel from the National Procurement Agency (BGVS) to use the PAHO COVID-19 Supplies Forecasting Tool to estimate medicines needed in the case of a surge of cases in ICUs.



Maintaining Essential Health Services during the Pandemic

Regional and Country

Health technology assessments (HTAs) are invaluable in guiding health authorities to use technologies relevant to the COVID-19 pandemic. PAHO convened a meeting of the Health Technology Assessment Network (RedETSA), during which 53 participants from across the Region were briefed on experiences in conducting health technology assessments (HTAs) from Argentina, Colombia, and Mexico. The session can be heard [here](#). The Regional Database of Health Technology Assessment Reports of the Americas (**BRISA**)

has 144 reports now available in its COVID-19 section.

Emergency medical teams (EMTs) are of significant value when a country's health system is overstretched. PAHO worked with Samaritan's Purse to disseminate experiences from EMT deployments in Italy, with 110 participants from the Region in attendance. PAHO additionally shared tools and templates to facilitate the deployment of EMTs. National experts from **Costa Rica** were trained to use the CICOM methodology for managing EMT deployments.

PAHO worked with authorities from **Costa Rica** and **Ecuador** on strategies to establish **alternative medical care sites (AMCS)** to manage COVID-19 cases to prevent overburdening existing health systems.



Figure 9: PAHO distributed supplies to a quarantine center in Sud-Est department, Haiti. Source: PAHO, June 2020

Country

In **Costa Rica**, PAHO worked with national health authorities to implement the “Friendly Cities for the Elderly” initiative. It seeks to create mechanisms in cities to protect these populations during the COVID-19 pandemic.

The **Bolivia** team trained 800 health workers the department of Oruro in COVID-19 topics via the Virtual Campus for Public Health, as well as 300 using a mixed virtual/in-person training mechanism. PAHO supported the reorganization and expansion of health services through conducting hospital readiness evaluations in 41 hospitals and health service delivery networks. PAHO also developed an equipment distribution plan that includes 47 items of equipment with their respective technical specifications.

In **El Salvador**, PAHO continued to support national authorities in reorganizing health services with a focus on ensuring continuity in the first level of care, hospital services, and key programs such as NCDs, HIV, TB, vector-borne diseases, the expanded immunization program, and mental health services, among others.

The **Belize** team launched campaigns to celebrate World Blood Bank Day in the COVID-19 context and delivered virtual training for health care workers and first responders in mental health and psychosocial support. PAHO also conducted training on monitoring the 'International Code of Marketing of Breastmilk Substitutes' to hospital staff. Six senior officers from the Northern Health Region now form the local monitoring team.

In **Honduras**, PAHO worked with national authorities to update national vaccination guidelines in the framework of the pandemic, in accordance with PAHO and WHO recommendations.

Mental health was a key priority for PAHO in **Suriname**. It supported a televised session (“*Jij bent niet alleen,*”

or “You are not alone”) that allowed the public to pose questions concerning mental health-related issues in the time of COVID-19. This television program is a series of four which will cover different aspects of mental health and psychosocial support. The second of the series of four was held on 22 June 2020, focusing on domestic violence.

In **Mexico**, PAHO worked with the Mexican Social Security Institute (IMSS) to estimate the consolidated needs of PPE and other medicine for procurement through global UN and WHO supply chains, and worked with national authorities to ensure that effective governance mechanisms are in place for access to medicines.



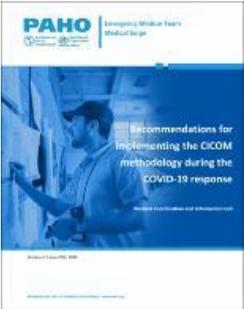
Research, Innovation, and Development

PAHO continued to review new evidence and information to build an evidence base to combat this virus. The public has access to PAHO’s [COVID-19 Technical Database](#), to further support countries and territories of the Americas and international partners with evidence-based information on science and technologies. This is the result of partnerships with WHO, Cochrane, McMaster University, Epistemonikos, and other partners.

PAHO also continued to maintain an updated document on [potential COVID-19 therapeutics](#), the product of a series of rapid systematic reviews. Considering the breadth of knowledge and evidence related to COVID-19, PAHO produced an [interactive infographic](#) to help external partners navigate PAHO and WHO’s technical material and compilations of evidence from the Americas and around the globe.

With WHO, PAHO coordinates to support countries from the Americas to participate in the **SOLIDARITY trial**, which aims to assess the efficacy of possible therapeutics for COVID-19. It is collaborating with WHO on developing a serioepidemiologic study, **SOLIDARITY II**, to study the prevalence of the virus.

NEW AND UPDATED PAHO/WHO Technical Materials on COVID-19

	<p>Ongoing Living Update of Potential COVID-19 Therapeutics: Summary of Rapid Systematic Reviews Updated: 16 June 2020</p> <p>This document includes the results of a rapid systematic review of current available literature on potential COVID-19 therapeutics. PAHO has examined 24 therapeutic options. Nearly 200 therapeutic options or their combinations are being investigated in more than 1,700 clinical trials. The information included in this review reflects the evidence as of the date posted in the document. Yet, recognizing that there are numerous ongoing clinical studies, PAHO will update it periodically.</p>
	<p>Recommendation Regarding the Use of Ivermectin as a Treatment for COVID-19 Published: 22 June 2020</p> <p>PAHO compiled an evidence database of potential COVID-19 therapeutics for which a rapid review was conducted of all COVID-19 in vitro (lab) and in vivo (clinical) human studies published from January to May 2020. The review concluded that the studies on ivermectin were found to have a high risk of bias, very low certainty of the evidence, and that the existing evidence is insufficient to draw a conclusion on benefits and harms.</p>
	<p>Recommendations for Implementing the CICOM Methodology during the COVID-19 Response Published: 20 June 2020</p> <p>Provides information on the methodology for setting up medical coordination and information cells (CICOM, Spanish acronym) as a key function of health emergency operations centers (EOCs). This will facilitate decision-making on how to increase surge capacity through the deployment of emergency medical teams (EMTs) and the installation of alternative medical care sites (AMCS), in cooperation with integrated health services networks and prehospital health care systems.</p>
	<p>Administrative controls to guarantee implementation of infection prevention and control measures in the context of COVID-19 Published: 18 June 2020</p> <p>This document focuses on administrative controls to aid in implementing infection prevention and control (IPC) measures during the COVID-19 pandemic. Administrative controls in IPC are part of a series of measures that need to be implemented in the health services to guarantee worker and patient safety during health care provision. These measures further the use of other IPC measures and make the results of their use measurable.</p>



GAPS

- **Surveillance systems:** More capacity-building and equipment for analysis.
- **Information systems:** Data management systems are essential for case monitoring and contact tracing while protecting confidentiality.
- **Strategic planning and response:** Countries need enough resources to implement national COVID-19 Preparedness and Response Plan and Risk Communication Plans.
- **Laboratory test kits and equipment:** National laboratories need more extraction kits and other supplies to keep testing.
- **IPC supplies:** PPEs and supplies (including for WASH) are urgently needed for isolation and quarantine wards. Healthcare workers are hesitant to work without PPE.
- **Health facility evaluations:** Countries must undertake additional assessments to guide measures for infection prevention and control (including WASH).
- **Resources for and access to populations in situations of vulnerability:** PPE and other supplies are needed in these communities. Logistical challenges must be overcome to deliver these critical goods.
- **Risk communications:** Key messages must be tailored to each country's context to resonate with intended audiences.
- **Subnational-level health workers:** A surge in medical personnel is needed to ensure countries can serve their whole populations and obtain more epidemiological data as it becomes available.
- **Intensive care units:** More ICUs will be needed to manage anticipated severe cases.
- **Migrant access to health services:** Countries are assessing how to serve these populations and better manage outbreaks.
- **Private sector coordination:** This is essential to ensure national protocols are followed.



CHALLENGES

- **Border closures:** This has seriously hampered the deployment of experts, shipment of samples for testing, and procurement of supplies and equipment for testing, case management, and infection prevention and control. This could also add pressure to countries undergoing complex political and socioeconomic transitions.
- **Competitive marketplace:** Countries and organizations are competing for limited supplies due to global shortages of PPE and other items.
- **Managing infections in healthcare settings:** Healthcare workers rely on PPE and other supplies to avoid infection. Global shortages are contributing to increasing cases and loss of life of frontline workers.
- **Infected healthcare workers:** Infected health workers who are sick or quarantined will strain health systems.
- **Test availability:** Epidemiological monitoring requires more testing. Counterfeit tests are creating risks in resources lost and incorrect analyses.
- **Health workforce limitations:** Insufficient human resources hamper countries' efforts to conduct contact tracing and manage patients in quarantine.
- **Risk Communication:** The risk perception is still low in some countries/territories.
- **Telephone referral systems:** Some countries are reporting overwhelming call volumes.
- **Logistics systems:** Many countries are still unprepared to manage the distribution of supplies and equipment.
- **Continuity in other health services:** The pandemic has diverted resources from other critical services for programs such as HIV, TB, and noncommunicable diseases (NCDs).
- **Stigma:** Countries must take steps to reduce stigma towards persons returning from abroad and others associated with higher likelihood of infection.