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QUINQUENNIAL REPORT 2018-2022 OF THE DIRECTOR OF THE PAN AMERICAN SANITARY BUREAU

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QUINQUENNIAL REPORT 2018-2022
OF THE DIRECTOR
OF THE PAN AMERICAN SANITARY BUREAU

Championing Health Equity
for Sustainable Development

Pan American Health Organization
Regional Office of the World Health Organization for the Americas

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To the Member States:

In accordance with the Constitution of the Pan American Health Organization, I have the honor to present the 2018-2022 quinquennial report on the work of the Pan American Sanitary Bureau.

This report highlights the technical cooperation undertaken by the Bureau during the period August 2017 through June 2022, within the framework of the 2014-2019 and 2020-2025 Strategic Plans of the Pan American Health Organization, as defined by its Governing Bodies.

The report is complemented by the Financial Report of the Director and the Report of the External Auditor for 2021.

Carissa F. Etienne
Director
Pan American Sanitary Bureau

PREFACE

July 2022

1. The period under review, August 2017 to June 2022, covers my second term as the Director of the Pan American Sanitary Bureau (PASB or the Bureau), which is the secretariat of the Pan American Health Organization (PAHO) and the Regional Office for the Americas of the World Health Organization (WHO). Thus, this is my second quinquennial report, and my last report as Director, to the Governing Bodies of PAHO.

2. I am very proud of the accomplishments that are summarized in the report, and most appreciative of the contributory efforts of the Bureau's dedicated team, our partners, and the PAHO Member States that we are privileged to serve in advancing the health and well-being of all peoples of the Americas.

3. During this period, we have functioned within the frameworks of two PAHO Strategic Plans, namely: 2014-2019, *Championing Health: Sustainable Development and Equity*, and 2020-2025, *Equity at the Heart of Health*. This emphasis on equity has been both deliberate and evidence-based. It is one of the core values of the Organization, the others being excellence, solidarity, respect, and integrity, and we have continued to hold these values as beacons to guide our technical cooperation, despite the challenges experienced over the past five years. Foremost among these challenges has been the coronavirus disease of 2019 (COVID-19) pandemic, which was declared in March 2020 and continues to the present time.

4. Like its predecessor, the current PAHO Strategic Plan operationalizes the main guiding frameworks for PAHO's technical cooperation with Member States over the five-year period. These frameworks have included the Sustainable Health Agenda for the Americas 2018-2030, the WHO Thirteenth General Programme of Work 2019-2023, and the United Nations 2030 Agenda for Sustainable Development and its Sustainable Development Goals, all of which emphasize the principle of "no one left behind" on the path to sustainable national development. This quinquennial report reflects PAHO's actions to reduce inequities (differences in health outcomes that are unfair, unjust, avoidable, and remediable); increase social inclusion; and give particular attention to persons and groups in situations of vulnerability, as the Region of the Americas continues its progress toward goals for health and sustainable development.

5. The emergence of SARS-CoV-2, the causative agent of COVID-19, together with national responses to contain it, severely affected lives and livelihoods. The pandemic has had devastating health, social, and economic impacts, highlighting and exacerbating existing inequities among and within countries. All aspects of PAHO's technical cooperation and operations were affected by the pandemic—which is ongoing—and the Organization re-tooled and innovated not only to guide and contribute to national responses, but also to support the maintenance of essential services for other public health priorities, several of which were reduced, suspended, or delayed, as Member States diverted resources to manage the COVID-19 pandemic.

6. Although many countries have lifted restrictions on the movement of persons within and between countries, the prevailing circumstances remain unsettling and far from the accustomed

norms of many, as the situation has been aggravated by the emergence of viral variants of concern, spikes in COVID-19 cases, and unrest and conflicts in various parts of the globe. Despite its negative impacts, the pandemic has provided opportunities for accelerated action, including the strengthening of health systems and primary health care to advance universal access to health and universal health coverage; a sharpened focus on noncommunicable diseases and mental health conditions, which have been significantly worsened by COVID-19; and the identification and implementation of integrated approaches that offer co-benefits for health, such as interventions to mitigate and adapt to climate change, and to enhance food and nutrition security.

7. It is noteworthy that this year, on 2 December, PAHO will be 120 years old—a super-centenarian. We have already begun celebrating this remarkable milestone, with gratitude for our continued relevance, while acknowledging our dedicated commitment and persevering determination to overcome the challenges that inevitably arise. Health for All is a vision that continues to inspire, and a goal to which we must all aspire as we continue to confront ongoing and emerging health priorities. We cannot, and will not, rest on our laurels.

8. In presenting this report, I am expressing my genuine appreciation to PAHO’s Member States for the confidence that they placed in me to lead this Organization; to Member States and staff in other WHO regions, other United Nations agencies, development partners, and other key stakeholders in health—including those in civil society and the health-supporting private sector—for their contributions, cooperation, and collaboration; and to all personnel of the Pan American Sanitary Bureau, both in countries and in Washington, D.C., for their sterling efforts.

9. We do look forward to continued partnerships in realizing the mission of the Pan American Health Organization: “To lead strategic collaborative efforts among Member States and other partners to promote equity in health, to combat disease, and to improve the quality of, and lengthen, the lives of the peoples of the Americas.”

Carissa F. Etienne
Director
Pan American Sanitary Bureau

EXECUTIVE SUMMARY

10. On 2 December 2022, the Pan American Health Organization (PAHO or the Organization) will celebrate 120 years of uninterrupted service in public health to the Region of the Americas. The Organization has continued to fulfill its purpose as a public health agency dedicated to advancing the health of the peoples of the Americas, through its technical cooperation with Member States to address their priority health issues. Over the past 120 years of working with Member States, both individually and collectively, PAHO has helped to establish ambitious health goals and has contributed to the achievement of many, with sustained excellence.

11. The planned technical cooperation of the Pan American Sanitary Bureau (PASB or the Bureau) with Member States during the period under review, 2018-2022, was thrown into a tailspin in March 2020, when the Director-General of the World Health Organization (WHO) declared the coronavirus disease of 2019 (COVID-19) a pandemic. Despite the diversion of resources in both Member States and the PASB to manage the pandemic, the Bureau adjusted its technical programs and enabling functions to ensure that its work with countries and territories, in collaboration with partners and regional and subregional networks of policymakers, managers, technocrats, civil society representatives, and persons in situations of vulnerability, responded to the pandemic and continued to address other priority health programs. PASB continued its technical cooperation to promote interventions for the performance of the essential public health functions (EPHFs), and to advance universal access to health (UAH) and universal health coverage (UHC)—universal health¹—using the primary health care (PHC) approach, in order to avoid reversal of hard-won public health gains in the Region.

12. The paragraphs that follow summarize the main achievements and challenges, as identified by the responsible PASB technical, administrative, and managerial entities, as well as conclusions and priority issues in looking forward to 2030.

Main achievements

Achieving universal access to health and universal health coverage

13. The PHC approach has been central to PAHO's strategy to achieve UAH and UHC in the Region. The Director of PASB launched the **Regional Compact on Primary Health Care for Universal Health, PHC 30-30-30**, in Mexico City in April 2019, calling on Member States to advance health sector reforms based on the PHC approach. PHC 30-30-30 established goals to eliminate barriers to access health by at least 30%; increase public spending on health to at least 6% of gross domestic product, with 30% of these resources to be invested in the first level of care; and transform health systems to provide equitable, inclusive, comprehensive, quality services based on the PHC strategy by 2030.

14. Since the **PAHO Revolving Fund for Strategic Public Health Supplies** (the Strategic Fund)² became a Special Program in 2019, it has focused on continuous improvement to its

¹ PAHO uses the term “universal health” to encompass universal access to health and universal health coverage.

² Available from: <https://www.paho.org/en/paho-strategic-fund>.

operations, including widening the number of countries and partners using the Fund, and expanding the range of medicines and health technologies that can be procured. This has resulted in a fourfold increase in procurement, totaling over US\$ 725 million³ in products procured since 2018, and 100 million people supported by the Fund. The Strategic Fund has helped mitigate stockouts caused by interruptions to global health supply chains, by responding to over 100 requests for loans and donations to treat human immunodeficiency virus (HIV), acquired immunodeficiency disease (AIDS), tuberculosis, and malaria through 18 multicountry collaborations. Its success in expanding access to lifesaving medicines and supplies has been reflected across a diverse range of therapeutic areas, including hepatitis, oncology, vector control, diabetes, and mental health disorders.

15. The Bureau collaborated with WHO to produce the first **Global Benchmarking Tool** (GBT) to evaluate national drug regulatory capacity. The GBT allows countries to identify strengths and gaps in their regulatory capacities and to prioritize critical areas for systematic and transparent institutional development. The GBT utilizes elements of PASB's own regional tool, which has been applied to regulatory systems in the Americas over the past 10 years, and which has been improved through extensive consultations with drug regulatory authorities from around the world. With support from PASB, in October 2019 national regulatory authorities in Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama launched the Central American Mechanism for the Joint Evaluation of Medicines Records to ensure the quality, safety, and effectiveness of medicines and health technologies. Building on prior advances and successes in regulation at the regional, subregional, and country levels, Member States improved collaboration and information-sharing on regulatory issues related to COVID-19 through the network of national regulatory focal points enabled by PAHO.

16. The **PAHO Virtual Campus for Public Health** (VCPH) has become a vital PASB-supported platform for ongoing capacity-building and information-sharing for health professionals in the Region, particularly during the 2020-2022 pandemic period, and the VCPH currently has 1.8 million users and 3 million registrations for courses. In 2018, the VCPH established a new node for the English-speaking Caribbean in collaboration with the Caribbean Public Health Agency, and updated its Central America node in collaboration with the Council of Ministers of Health of Central America and the Dominican Republic. In March 2020, the VCPH Caribbean node created the section Information and Capacity Building Resources on COVID-19, which included advice to the general public and COVID-19 technical guidance.

Responding to health emergencies and disasters, including the COVID-19 pandemic, and building core public health capacities under the International Health Regulations

17. The **COVID-19 Genomic Surveillance Regional Network** (COVIGEN) for the genomic surveillance of SARS-CoV-2 was created in March 2020. The Region's experience with influenza and other respiratory viruses, and its Severe Acute Respiratory Infections network (SARInet)—a regional collaboration of professionals who participate in SARI surveillance in the Americas—allowed PASB to spearhead the creation of COVIGEN. COVIGEN is open to all countries in the Americas through their national public health laboratories, and genomic sequencing of

³ Unless otherwise indicated, all monetary figures in this report are expressed in United States dollars.

SARS-CoV-2, along with the prompt release of the information, not only allowed the characterization of the etiological agent involved in the initial outbreak, but also facilitated the timely development of diagnostic protocols and close monitoring of the evolution of the COVID-19 pandemic.

18. The Bureau has since supported the strengthening of in-country capacity to carry out genomic surveillance within the COVIGEN framework. The Bureau has encouraged Member States not only to participate in the network, but also to implement and enhance their sequencing capacities, and to upload sequences to WHO's Global Initiative on Sharing All Influenza Data platform, a global database geared toward contributing to global research on the evolution and spread of the virus. The network in the Americas has significantly expanded to identify and track variants of SARS-CoV-2, and 31 laboratories from 28 countries now actively contribute to COVIGEN, generating their own sequences or shipping samples to reference laboratories.

19. With the **Smart Hospitals initiative**, PASB contributed to the establishment of safe, green, and sustainable health centers, optimizing resilience, strengthening structural and operational aspects, and providing green technologies to build climate-smart health facilities as the gold standard for resilient critical infrastructure. The health sector has a fundamental role to play in disaster risk reduction, and health facilities need to be safe and remain operational during and immediately after adverse events.

20. The Bureau began implementing the project in 2015, funded by the United Kingdom Department for International Development, with additional support from Global Affairs Canada (GAC). PASB coordinated and supported the retrofitting of 50 health facilities in the participating countries of Belize, Dominica, Grenada, Guyana, Jamaica, Saint Lucia, and Saint Vincent and the Grenadines. Six other facilities benefited from design phase interventions only, and an additional five are scheduled to complete retrofitting by the end of the project in December 2022. With financial support from the Government of Canada, the European Union (EU), the Inter-American Development Bank (IDB), and other partners, smart adaptations are now being implemented in other health facilities in the Caribbean subregion, including, for the first time ever, in Haiti, one of the most high-risk, disaster-prone countries in the Region.

Improving health along the life course

21. **Maternal mortality reduction** interventions were prioritized in 10 countries—Bolivia (Plurinational State of), Dominican Republic, Guatemala, Guyana, Haiti, Honduras, Nicaragua, Paraguay, Peru, and Suriname—based on their indicators of maternal mortality and social determinants, through the interprogrammatic Zero Maternal Deaths from Hemorrhage project. The project included the training of national and local teams to handle obstetric hemorrhages; the establishment and training of national teams to validate essential conditions utilizing maternal-perinatal service tools; contributions to the design of local improvement plans; and the monitoring of all instituted processes.

22. This initiative made it possible to update the maternal mortality reduction plans in eight of the participating countries—Bolivia (Plurinational State of), Dominican Republic, Guatemala,

Guyana, Honduras, Nicaragua, Paraguay, and Suriname—and reactivate the maternal mortality committees in nine of them (those mentioned immediately above, and Peru).

23. The Bureau promoted and contributed to maintenance of **routine immunization programs and the introduction of COVID-19 vaccination**, continuing its procurement of vaccines and supplies through the Revolving Fund for Access to Vaccines (the Revolving Fund)⁴ and annual observance of Vaccination Week in the Americas, using virtual platforms and social media.

24. Elimination of measles and rubella was sustained, despite the challenges of the COVID-19 pandemic. The Region of the Americas was the first to be declared free of measles, and 33 out of 35 Member States have sustained the elimination of this virus for more than 20 years, making the Americas the first region with such a long history of measles elimination. However, there was endemic measles transmission in the Bolivarian Republic of Venezuela in 2018 and in Brazil in 2019. The Bureau’s technical cooperation has also contributed to sustained elimination of rubella and congenital rubella syndrome since 2009.

25. As of 30 June 2022, all countries and territories of the Americas had established COVID-19 vaccination programs. At least 15 vaccines had been used in the Americas, more than 1.78 billion doses of COVID-19 vaccines had been administered, and 689 million people had completed their COVID-19 vaccination schedules, having received at least two doses of vaccine.

Reducing inequities in health, with a focus on ethnic groups and indigenous peoples, and persons living in situations of vulnerability

26. The Bureau developed several strategies and plans of actions in order to play a leadership role and guide technical cooperation in positioning **cultural diversity, equity, gender, and human rights** as components of the universal health agenda. The frameworks included Health Plan for Afro-descendant Youth in Latin America and the Caribbean (2018) and the Health Plan for Indigenous Youth in Latin America and the Caribbean (2018); the final report of the Commission on Equity and Health Inequalities in the Americas (2019), the recommendations of which proposed fundamental actions to enable progress to equity in health and address inequalities; the Strategy and Plan of Action on Ethnicity and Health 2019-2025; and a regional report on the health of Afro-descendant people in Latin America (2021). A special issue of the Pan American Journal of Public Health (PAJPH) in 2021 focused on health equity in the Americas after COVID-19, providing a body of evidence to lead strategic efforts to promote equity.

27. The Bureau promoted **knowledge dialogues**—also called intercultural dialogues—which are processes of communication and exchange between people, groups, or communities from different backgrounds or cultures, aimed at improving access to health services and building intercultural health. The dialogues emphasized solving previously raised problems and their causes, fostering mutual understanding, and providing an interface with indigenous populations and other groups in situations of vulnerability. They constituted an important tool for working with

⁴ Available from: <https://www.paho.org/en/revolvingfund>.

different populations, and the Bureau built national capacity in the application of the methodology in several countries.

28. In expanding **vaccine coverage in populations in situations of vulnerability**, PASB collaborated with GAC to implement the regional initiative Providing Access to COVID-19 Vaccines for Populations in Situations of Vulnerability in the Americas. With PASB's technical cooperation, the participating countries designed interventions to improve vaccination coverage among indigenous people; Afro-descendant people; migrants; refugees; persons deprived of liberty; lesbian, gay, bisexual, transgender, queer, and other persons of nonheterosexual orientation (LGBTQ+); people living in poverty; low-income communities; people living in favelas and slum settings; people living in hard-to-reach areas; and health workers.

29. The Bureau advanced **gender equality**, generating a 2020 report on progress with the implementation of the PAHO Gender Equality Policy that summarized advances in Member States and PASB itself on their commitments to gender equality in health. The self-assessment reported that countries had improved data collection, disaggregation, and analysis by sex from 53% to 75%, with the potential to significantly contribute to the visibility and targeting of health inequities, but the processes had not been institutionalized to the extent desired. The Bureau developed courses to improve capacities for integrating gender and health, making them available through the PAHO VCPH. In addition, PASB produced a regional report on masculinities and men's health in 2019, which was updated in March 2020.

30. The Bureau promoted **human rights and health** at the highest policymaking levels at regional, subregional, and multicountry levels, emphasizing the importance of legislation as a framework for the realization of the right to health and other human rights. The Bureau provided technical comments on legislative proposals and policies developed by Member States, as requested, in order to strengthen national legal frameworks for rights-based approaches to health issues, and in December 2021, published a series of technical notes on human rights and health. The notes summarized the main international human rights instruments and standards of the United Nations and the Inter-American Human Rights systems, and made recommendations for their effective implementation.

Reducing and eliminating the burden and impact of communicable diseases, including vaccine-preventable diseases, neglected infectious diseases, diseases covered by the Global Fund, and others

31. Over the last five years, the Region has made significant progress and reached key milestones in **disease elimination**. Argentina, El Salvador, and Paraguay were certified by the WHO as malaria-free, and Belize remained free of malaria transmission over the period 2019-2021. Guatemala achieved trachoma elimination, and both Brazil and the Dominican Republic interrupted the transmission of lymphatic filariasis. Rabies transmitted by dogs was eliminated as a public health problem in Mexico; Chagas disease transmission was eliminated in Guatemala, Honduras, Nicaragua, and Paraguay; and foot-and-mouth disease was eliminated in Brazil, Peru, and Uruguay.

32. Elimination of mother-to-child transmission (EMTCT) of HIV and syphilis was achieved in Anguilla, Antigua and Barbuda, Bermuda, Cuba, Dominica, Cayman Islands, Montserrat, and Saint Kitts and Nevis. Several other countries are near EMTCT of HIV, but congenital syphilis still represents a significant challenge.

33. The Bureau strengthened national capacity to address **antimicrobial resistance (AMR) using the One Health approach**, including through a Cooperation Among Countries for Health Development (CCHD) project involving Argentina and members of the Caribbean Community (CARICOM). The Latin American and Caribbean Network for Antimicrobial Resistance Surveillance was instrumental in successfully detecting the emergence of extensively antimicrobial-resistant microorganisms, and the Bureau worked with countries to strengthen infection prevention and control practices, enhance antimicrobial stewardship, and build the capacities of microbiology laboratories for the detection of AMR. All 35 Member States have national AMR action plans steered by One Health intersectoral committees, with varying levels of implementation.

34. The **Revolving Fund** has continued to provide crucial support in enhancing the prevention and control of vaccine-preventable diseases in the Region. Between 2018 and April 2022, 30 countries and territories accessed seasonal influenza vaccines for the Southern and Northern Hemispheres via this mechanism, and the Revolving Fund played a critical role in the planning and forecasting of the demand from countries for access to 127.2 million doses, at a cost of about \$381 million, including transportation. With the lowest price approach of the Revolving Fund, participating Member States ensure rapid expansion of their vaccine portfolios to protect their populations throughout the life course, while supporting the financial sustainability of their immunization programs.

Reducing the burden and impact of the chronic noncommunicable diseases and their risk factors

35. The Bureau has worked vigorously to emphasize the **economic dimensions of noncommunicable diseases (NCDs)**, undertaking technical cooperation with Member States to strengthen the capacity of health authorities to bring pertinent economic parameters and evidence into their dialogue with other sectors and advance whole-of-government action on NCD prevention and control. The Bureau partnered with WHO and the United Nations Development Programme (UNDP) to develop a series of investment cases for NCDs and mental health, neurological, and substance use (MNS) disorders to highlight the economic benefits—in addition to the health benefits—of investing in their prevention and control.

36. The Bureau advocated for, and contributed to, economic arguments for **fiscal and health policy coherence** regarding the application of excise taxes on unhealthy products such as tobacco, alcohol, and sugar-sweetened beverages (SSBs), including building the capacity of health and finance officials, and generating and disseminating regional- and country-level evidence on the use of health taxes and their economic impact. The Bureau established collaboration with international financial institutions and development agencies such as the World Bank, the International Monetary Fund, the Economic Commission for Latin America and the Caribbean (ECLAC), and UNDP, to build capacity on the use of excise taxes for health, particularly in

response to the pandemic. PASB also led a cutting-edge global effort to calculate the tax share for SSBs and alcoholic beverages, adapted from the well-established WHO methodology for monitoring tobacco taxes.

37. The Bureau catalyzed advances in **tobacco control**, scaling up its work in specific technical and legislative interventions, and in 2020 successfully mobilized resources from the Bloomberg Initiative to Reduce Tobacco Use. According to the WHO Global Report on Trends in Prevalence of Tobacco Use 2000-2025, the Region of the Americas is likely to achieve the goal of a relative reduction in current tobacco use rate of 30% by 2025. In 2019, Brazil became the second country in the world—after Türkiye—to implement all six measures of the WHO MPOWER policy package for tobacco control, and in that same year, Canada and Uruguay became the first countries in the Region to introduce plain packaging for tobacco products. In 2020, South America became the first subregion of the Americas—and the first multination continent globally—to enact regulations for completely smoke-free public spaces.

38. **Obesity prevention and control, including childhood obesity prevention**, was a priority for PASB’s technical cooperation, and the Bureau intensified support for the implementation of the PAHO Plan of Action for the Prevention of Obesity in Children and Adolescents 2014-2019. Among various measures, the Bureau provided guidance on breastfeeding in instances of suspected or confirmed COVID-19; collaborated with the Organization of American States (OAS) to introduce school-based NCD prevention and control activities aligned with the 2019-2022 Work Plan of the Inter-American Committee on Education; and leveraged the 2016 PAHO Nutrient Profile Model as a tool for the development and implementation of policies for front-of-package warning labeling (FoPWL), bans on SSBs and other unhealthy commodities in and around schools, and restrictions on the marketing of unhealthy products to children.

39. The Bureau promoted and contributed to the expansion of the **HEARTS program** throughout the Region, aimed at the prevention and control of cardiovascular diseases (CVDs), with 23 countries committed to adopting the WHO technical package and implementing it in PHC settings. The package aims to standardize hypertension treatment and improve the proportion of people with hypertension who are diagnosed, treated, and controlled. The Bureau built the capacity of primary care providers through HEARTS virtual courses, tools, and updated guidelines to improve standardization of treatment protocols, encourage utilization of validated blood pressure measurement devices, and strengthen patient monitoring.

40. The Bureau contributed significantly to progress in the areas of **MNS policies, plans, and legislation**, which aim to reduce the role of psychiatric hospitals through deinstitutionalization and the integration of mental health into PHC and community-based management; promote human rights; and develop programs to prevent MNS disorders and promote mental health. Recognizing mental health and psychosocial support (MHPSS) as a core component of the emergency response, the Bureau integrated this technical area into its overall emergency and disaster response, including in relation to the COVID-19 pandemic. The Governments of Argentina and Chile announced substantial increases in their mental health budgets and the launch of new mental health programs as components of their COVID-19 responses.

Utilizing evidence and intelligence for action in health

41. The Bureau led the strengthening of **information systems and digital transformation for health** in the Region through development of a framework for action and a standardized maturity assessment tool for Information Systems for Health (IS4H), which was applied in all countries and territories of the Americas. This motivated strong financing from IDB and the renewal of commitments from Canada, the Spanish Agency for International Development Cooperation, and the United States Agency for International Development, as well as new partners such as the Susan T. Buffett Foundation, the Robert Wood Johnson Foundation, and Vital Strategies.

42. The Bureau enhanced **health analysis and equity metrics** through the establishment of the SDG Steering Committee, the functions of which were to *a)* provide strategic guidance on developing indicators for the achievement of the Sustainable Development Goal (SDG) 3 Targets and monitoring progress toward their achievement, especially regarding the reduction of health inequalities at regional, national, and subnational levels; *b)* evaluate the implementation of evidence-based strategies and interventions aimed at achieving SDG 3 Targets; and *c)* coordinate collaboration among PASB entities to undertake technical cooperation with Member States in the implementation of strategies to achieve the SDG 3 Targets. This program was designed to manage the necessary information, including data collection and analysis of the SDG 3 indicators, and to generate evidence for action, with an emphasis on interventions to reduce inequalities.

Addressing the social determinants of health and ensuring healthy and safe environments

43. The approval of the PAHO Strategy and Plan of Action on Health Promotion within the Context of the Sustainable Development Goals 2019-2030 (Document CD57/10) provided a **framework for operationalizing the regional commitment to address the social and other determinants of health**—the underlying nonmedical factors that significantly impact health outcomes. The Strategy and Plan of Action defined the Bureau’s work in strengthening key healthy settings; enabling community participation and empowerment, and civil society engagement; enhancing governance and intersectoral work to improve health and well-being, and address the social determinants of health; and strengthening health systems and services through a health promotion approach.

44. The Bureau’s technical cooperation facilitated the strengthening of skills and competencies for effective **multisectoral, multi-stakeholder action** to address the social and other determinants of health, and reduce health inequities in the Region. Five countries in the Americas—Chile, Colombia, Costa Rica, El Salvador, and Peru—committed to work toward health equity addressing the social determinants of health at national and local levels, through the WHO Multi-country Special Initiative for Action on the Social Determinants of Health for Advancing Health Equity.

45. In the framework of the PAHO Plan of Action on Workers’ Health 2015-2025 (Document CD54/10, Rev. 1), and with the network of PAHO/WHO Collaborating Centres in Occupational Health, PASB surveyed and documented the impact of various occupations on **workers’ health** in the Region, including workers in informal sectors. In collaboration with WHO and the network of Collaborating Centres, the Bureau built capacities in occupational health and safety for health institutions, including implementation of the International Labour

Organization/WHO HealthWISE tool that addresses working and employment conditions for health workers.

46. The Bureau fostered progress on **climate change and health**, strengthening health and climate change governance and partnerships in the Region, and facilitating integrated planning, enhanced capacities, and increased investments. The Caribbean Action Plan on Health and Climate Change, the Andean Plan on Health and Climate Change 2020-2025, and the 2018 Declaration of Ministers of Health of the Southern Common Market (MERCOSUR) and Associated States on Health and Climate Change, are examples of concerted intersectoral actions. Most Member States now recognize health as a priority topic in their nationally determined contributions—national commitments within the United Nations Framework Convention on Climate Change—and several countries have finalized, or are in the process of finalizing, their health national adaptation plans for climate change.

Advancing PASB's institutional development and capacity

47. The Bureau ensured that effective **governance of the Organization** was maintained, through well-functioning and responsive Governing Bodies. The restrictions imposed by the COVID-19 pandemic tested the Organization's governance, but by incorporating technological advances and redesigning its work processes, the Bureau ensured that PAHO's Governing Bodies continued to meet and function effectively, including convening Special Sessions to discuss urgent issues. Over 100 PAHO resolutions were sunset during the period 2018-2022, including some for which the commitments had already been met; those that may have been superseded by other resolutions; and those that had reached the end of their lifespan.

48. The Bureau's institutional strengthening was made more systematic through the **organizational development initiatives** (ODIs) established by the Director in June 2020. The ODIs were informed by *a)* the outputs of the Member State Working Group that was established by Resolution CESS1.R2 of the May 2020 Special Session of the PAHO Executive Committee; *b)* recommendations from a Strategic Function Review conducted by an Internal Steering Committee that the Director established in June 2020 to identify possible adjustments in response to the difficult financial situation discussed at the Special Session; and *c)* input from PASB staff. Of the 20 approved ODIs, 12 targeted strategic functional optimization and eight aimed at ensuring that the PASB was on a sustainable financial footing for 2022-2023 and beyond. As of June 2022, 17 ODI workplans had been approved and, of those, 12 ODIs had had their final report issued.

49. An independent **Investigations Office** was established in January 2018, separating the Bureau's ethics and investigative functions, and facilitating increased vigilance for fraud. The Investigations Office became fully operational in March 2019 with the appointment of a Chief Investigator. The separation of functions allowed the Ethics Office to focus on its core mandate and activities, and **ethics-related policies** were either issued or revised and updated. The latter included expansion of the Declaration of Interest program to include all new hires and international and national consultants—previously it had applied only to all senior staff and personnel in designated employment categories. PASB conducted the first ethics and climate survey in 2021 to ascertain staff perception of the ethical climate and work environment in the Bureau.

50. The Bureau also updated the Asset Accountability Policy in 2020 to reduce the financial liability of staff due to the increasing use of PAHO-owned assets outside of the workplace to perform official tasks; the policy on Prevention and Resolution of Harassment in the Workplace was updated in 2020 to clarify the issue of intent and to specify that a complaint need not only be filed by the person alleging harassment; and a policy against retaliation was revised in 2021 to promote a “speak up” culture.

51. A new PAHO Policy on Preventing Sexual Exploitation and Abuse was issued in April 2021 to strengthen protection measures for the communities that the Bureau serves and ensure that PASB personnel adhere to the highest standards of conduct. The Bureau also implemented a new policy to guide personnel in the use of social media.

52. The Bureau improved its **strategic planning and accountability processes**, strengthening the consultative and participatory process to develop the PAHO Strategic Plan 2020-2025, with a record 21 Member States involved in the Strategic Plan Advisory Group. There was also greater accountability and transparency, as technical cooperation reports for the bienniums 2016-2017 and 2018-2019, published in 2018 and 2020, respectively, featured a more rigorous analysis at the impact level. The reports also showcased country-level success stories and the role of PASB’s technical cooperation in Member States’ progress toward national, subregional, regional, and international health goals.

53. The Bureau consolidated and enhanced results-based management at all levels, and sustained its commitment to consistently implement lessons learned and best practices throughout the development and implementation of PAHO Strategic Plans 2014-2019 and 2020-2025. Furthermore, the Bureau’s evaluation function transitioned beyond the previous advisory mode to incorporate strengthened monitoring of integration of the Organization’s crosscutting themes (CCTs) of equity, ethnicity, gender, and human rights, and the commissioning of corporate evaluations based on organizational priorities. The 2021-2022 corporate evaluation workplan was launched in March 2021.

54. The Bureau strengthened its **country focus**, adapting the global approach to the development of Country Cooperation Strategies (CCSs) to the regional context; ensuring the development of a CCS for each Member State to guide the Bureau’s actions in and with the country; and implementing the Key Country Strategy. The Bureau restructured its subregional programs to strengthen its engagement with subregional integration mechanisms at the highest levels and promote a more coordinated approach to address common health challenges, and strengthened its CCHD program to contribute to the sharing of experiences, lessons learned, and good practices in public health among PAHO Member States.

55. The Bureau’s **resource mobilization** efforts proved successful, with mobilization of about \$1.2 billion in voluntary contributions since 2018. The PAHO Resource Mobilization Strategy 2020-2025, launched in December 2020, provides clear biennial mobilization targets and a concrete way forward for the Organization to respond and adapt to a dynamic environment and the many challenges ahead in resource mobilization, including the transition from COVID-19 response to broader health financing. Over \$530 million was mobilized in a two-year period to support the COVID-19 response in the Americas, and an additional \$34.75 million was mobilized

in 2021 alone to support other emergency response operations and strengthen emergency preparedness, readiness, and risk reduction throughout the Region. \$75 million was awarded through a United States Congressional appropriation to respond to the COVID-19 pandemic.

56. The Bureau's **financial operations and management** during the Organization's severe budgetary crisis of 2019 and 2020 included the establishment of cost containment measures that maintained priority, effective technical cooperation with countries during most of 2020 and the beginning of 2021, while protecting PASB staff. Important efficiency measures were implemented, including enhanced efforts to "go paperless," a "one device policy" for the use of computers, and placing more financial operations online.

57. In 2020, PASB adjusted its **human resources management**, developing the People Strategy 2.0 to incorporate high-priority activities from the 2015-2019 People Strategy and the human resources-related ODI. The People Strategy 2.0 identifies functional optimization, innovation, and agility as three pillars in support of the PAHO Strategic Plan 2020-2025. The Bureau established the Advisory Committee on the Implementation of the People Strategy, which recommended that priority be given to keeping key positions filled, including by onboarding replacement staff prior to the separation of retiring staff. The Bureau developed and adopted new guidelines for reprofiling PASB positions to meet evolving programmatic needs and ensure that the Organization was fit for purpose, with reviews of workforce composition to determine the most efficient distribution of positions and skills. PASB also implemented iLearn, the WHO global learning management system, making it available to both employees and contingent workers.

58. The Bureau enhanced its **strategic communications**, improving knowledge-sharing and information dissemination through the utilization of digital platforms and methods, and implementing an open access policy, based on a Creative Commons license, which allows users to access PAHO publications and reuse and adapt their content, thus increasing their impact. The Bureau increased its outreach by creating a network of over 2,000 institutional partners in the Region and beyond. These partners shared PAHO content with their respective networks, reaching millions of end-users. By categorizing content, using predefined templates, and implementing industry best practices, PASB was able to move to a system of producing publications at lower cost, with estimated savings calculated at \$1.5 million per 200 publications.

59. With the implementation of streamlined processes, and expanded rosters and machine translation, PASB improved multilingualism, enhanced productivity, reduced costs, expanded the number of publications translated, and maintained translation support during meetings. There was increased availability of WHO guidelines and other technical publications in Portuguese and Spanish, and the continued provision of translation support during the pandemic resulted in timely access to COVID-19-related information and guidance. The Bureau's publication of the Spanish version of the *Control of Communicable Diseases Manual* provided a key tool for epidemiologists and experts in Spanish-speaking countries.

60. The Bureau provided timely support to health ministries in their communications efforts; revamped PAHO branding over the period 2018 to 2022, increasing the Organization's visibility across the Region; revitalized the PAHO website to be faster, more stable, and visually engaging; strengthened the Organization's social media presence, establishing and bolstering working

relations with Twitter Latin America; and participated in a WHO global initiative with Facebook Meta to access advertisement credits and design strategic campaign services.

61. Enhanced **information technology** played a significant role in the Bureau's successful navigation of the pandemic workplace. The transformation was swiftly and efficiently initiated in March 2020, due to in large part to cloud-based systems. As the pandemic evolved, PASB adapted with new business continuity procedures, including enhanced cloud backup systems and guidelines on managing telework; recommendations on masking, vaccinations, meetings and travel; and greater emphasis on awareness of and strategies for improving cybersecurity.

62. The Bureau transformed its **procurement function** and enabled the Bureau to meet the unprecedented demands of Member States for procurement of vaccines, other medical supplies, and equipment through the Revolving and Strategic Funds. The rising demand for procurement services reached its peak in 2021, making PAHO one of the top 10 United Nations agencies supporting Member States through procurement activities. The Bureau's procurement function also strengthened its market intelligence and logistics management in order to better anticipate market challenges and opportunities, and to establish the best and most cost-effective approaches to deliver health supplies within a context of unstable global logistics over coming years.

63. The Bureau's **legal services** contributed to strengthening PASB's policies and functions through—among other interventions—updating of the PAHO E-Manual; development of policy related to the Framework of Engagement with Non-State Actors (FENSA) and oversight of its implementation; negotiation of cost-saving contracts with third-party providers for human resources management functions; protection of financial resources; swift management of issues of reputational risk; and protection of PAHO's Privileges and Immunities, and its status as an independent health organization.

Main challenges

64. The COVID-19 pandemic and the Organization's financial crisis constituted the two major challenges encountered during this reporting period. Despite the differences in the nature of these challenges, both developed into emergency situations that jeopardized PASB's capacity to respond to priority health issues in the Region. Both crises necessitated substantial adjustments to the Bureau's operations in order to efficiently and effectively serve Member States.

65. The pandemic-associated infodemic resulted in misinformation and disinformation, and contributed to the spread of myths, distrust of international organizations, and vaccine hesitancy across the Region. PASB also faced the dual challenge of improving its communications in this new era of hybrid communication and capitalizing on gains made in media coverage to call attention to priority topics beyond health emergencies, as the pandemic continued.

66. Misunderstanding of the intergovernmental nature of PAHO and WHO led to erroneous perceptions and opinions of their roles, and the dissemination of false information about their leadership, especially on social media. The persistence of this aspect of the infodemic has the potential to undermine the credibility, reputation, and work of both organizations.

67. Changes in the political, social, and economic landscapes in the Region proved, in several cases, to be barriers to the Bureau's work. Changes in philosophical positions, perspectives, priorities, policies, and national counterparts, as well as the economic situation, required agile, creative, and innovative interventions.

68. Inadequate attention to, and resources for, strengthening advances in UAH, UHC, and PHC have hampered health systems' capacity to identify and serve persons and groups in situations of vulnerability, and enhance promotive, preventive, care, treatment, rehabilitative, and palliative services to meet their needs, especially at the first level of care.

69. Weak mechanisms for promoting effective multisectoral, multi-stakeholder, health in all policies approaches to address the social, economic, environmental, commercial, and other determinants of health have resulted in inadequate inclusion of, and engagement with, civil society organizations (CSOs) and people living with various disorders and affected by specific health policies, as well as inadequate protection of the policy space from industry interference and conflicts of interest.

70. Inadequate preparedness for and response to emergencies and disasters continued to impede the achievement of desired health outcomes. The unavailability or insufficiency of adequate quantities of lifesaving supplies and equipment, due in large part to the Region's dependence on external sources and importation of these essential commodities, hampered effective COVID-19 responses in many countries of the Americas. In addition, although the projected negative impact of climate change on the environment, health, and other critical developmental issues has been recognized, there are delays in the development and implementation of national climate change mitigation and adaptation plans, including for the health sector.

71. Constraints in resource mobilization remain, despite the significant resources mobilized to address the COVID-19 pandemic, and financing is still inadequate for priorities such as NCDs, human resources for health (HRH), and for addressing the social and other determinants of health. PASB must also exercise due diligence in its resource mobilization efforts to avoid or appropriately manage potential conflicts of interest with private sector partners that could damage the Organization's image and reputation.

72. Uneven progress in digital transformation of the health sector and the availability of information and communication technology is evident in countries and populations that are disadvantaged because of inadequate resources, limited technical capacities, and geographical barriers. This imbalance in digital transformation has the potential to aggravate inequities in health access both within and between countries.

73. The need for continued institutional strengthening of the Bureau in an environment of restricted flexible resources is an ongoing challenge, as PASB responds to changing needs of Member States, the threats of future pandemics, and its continuing responsibilities to promote and contribute to the fulfillment of established mandates, as well as the COVID-19 pandemic response.

Conclusions and looking forward to 2030

74. The Bureau has taken careful note of several lessons learned over the period, prominent among them the imperative of placing equity at the heart of health in order to leave no one behind. There must be meaningful actions to address the social, economic, political, environmental, commercial, and other determinants of health that strongly influence UAH, UHC, and health outcomes. In tandem with these efforts, strong social protection systems, including health insurance programs and financial safety nets, are essential, so that the plight of those in situations of vulnerability is not aggravated by factors over which they have little or no control.

75. Long-term investments in public health, in terms of financial, human, technical, infrastructural, and other resources, and—as importantly—multisectoral, multi-stakeholder involvement, are critical to prepare for, and mount a robust response to, external shocks and unexpected events such as the COVID-19 pandemic. The Region’s leaders must commit to increased and strategic investments in health, as continued underinvestment, including in the first level of care and in specific threats to health such as NCDs, hampers the implementation of more agile, consolidated, and efficient responses. Strengthened and reoriented health systems based on the PHC approach must be established and maintained to achieve the promise of universal health.

76. Regional solidarity, exemplified by the Revolving Fund, an integral pillar of the Bureau’s technical cooperation with countries, is essential. This pooled procurement platform has provided all Member States with access to quality and safe vaccines, at a single price for any product, regardless of countries’ economic status. Another regional public good that must be pursued is regional self-sufficiency in access to essential medicines, vaccines, and health technologies. The severe disruption in supply chains due to the pandemic put the health of the peoples of the Americas at serious risk, and sustainable, collaborative—rather than competitive—pathways to building manufacturing capacity for these essential products and reducing dependence on their importation must be a priority for regional health.

77. Other lessons learned include the critical importance of strong disease surveillance systems; efficient laboratory diagnostic and clinical management capacities; well-trained and equitably distributed HRH, with persons at the cutting edge of information and innovation; and strategic communication that targets key stakeholders, including the public, to counter and manage misinformation and disinformation. Investments in public health must therefore include resources to improve health literacy and develop and implement communication plans that address issues such as vaccine hesitancy and denial.

78. Looking forward to 2030, guided by the SDGs, the Sustainable Health Agenda for the Americas 2018-2030 (SHAA2030), the PAHO Strategic Plan 2020-2025, the PAHO policies, strategies and plans of action approved by the Governing Bodies, and other international, subregional, and national frameworks for health, the Bureau foresees accelerated action in the following areas, in close collaboration with strategic partners, emphasizing results at the national level, adequate resource allocation and mobilization, and strengthened integration of the CCTs:

- a) COVID-19 containment, treatment, and rehabilitation measures, including vaccination, and documentation and analysis of the pandemic's impact on health and equity, with recommendations and guidance for strategies to negate or minimize its effect;
- b) Advancing UAH, UHC, PHC, and performance of the EPHFs, with focus on increasing the resilience of health systems, innovative health financing, social protection, efficient IS4H, and adequately trained, distributed, and remunerated HRH;
- c) Promoting, advocating for, and supporting regional self-sufficiency in the provision of essential medicines, vaccines, and health technologies, including engagement with Member States and other key stakeholders, building and strengthening regional manufacturing capacities, and promoting the use of the Revolving and Strategic Funds, as appropriate, to enable equitable access to these lifesaving products;
- d) Emergency and disaster preparedness and response, including for pandemics, strengthening core capacities for implementation of the International Health Regulations (2005) and MHPSS, and including persons in situations of vulnerability in the planning cycle;
- e) Establishment of effective multisectoral, multi-stakeholder mechanisms and actions for addressing the social and other determinants of health, advancing the realization of the right to health and other human rights, furthering the reduction of inequities, and promoting policies to prevent and manage conflicts of interest;
- f) Health promotion and disease prevention through a life course approach, focusing on populations at higher risk and in situations of vulnerability;
- g) Prevention, effective management, and, where possible, elimination of communicable diseases, including neglected infectious diseases and vaccine-preventable diseases;
- h) Prevention and control of NCDs, including MNS disorders, focusing on risk factor reduction and management of NCDs, adopting and adapting, as needed, evidence-based policies and interventions;
- i) Digital transformation of the health sector, with equitable access to information and communication technology and communication products, and the establishment of efficient IS4H for effective decision-making and action, and accountability;
- j) Strengthening all the Bureau's enabling functions through continued implementation of the ODIs;
- k) Enhancing country focus and the CCHD program, in collaboration with the major subregional integration entities and their organs, and with other diverse partners, aligned with FENSA.

79. The Bureau is keenly aware of, and contributed to, discussions and agreements reached at the Seventy-fifth World Health Assembly in May 2022, which addressed priority issues for the Region, and will take appropriate action to align its technical cooperation with global frameworks, while adapting its work and tailoring interventions to the national, subregional, and regional situations in the Americas.

80. The Bureau must continue to function as a politically neutral technical agency and honest broker for the health of the peoples of the Americas, contributing to the realization of the right to health and other human rights, and the reduction of inequities, working with like-minded stakeholders and partners in achieving the goals of the 2030 Agenda for Sustainable Development and SHAA2030.

INTRODUCTION – PAHO AT 120 YEARS

81. The Pan American Health Organization (PAHO or the Organization) was established in December 1902 to undertake technical cooperation with the countries of the Region of the Americas in their efforts to prevent and control infectious (communicable) diseases. Over time, the Organization’s remit and scope have expanded to encompass other threats to the health and well-being of the Region’s peoples, such as noncommunicable diseases (NCDs), and the underlying causes of these threats, including the social, commercial, political, environmental, and other determinants of health.

82. In most PAHO Member States, NCDs such as cardiovascular diseases (CVDs), diabetes, cancer, chronic respiratory diseases, and mental health, neurological, and substance use (MNS) disorders have superseded communicable diseases as significant causes of illness and death. However, the emergence of SARS-CoV-2 and the global spread of the coronavirus disease of 2019 (COVID-19) have been grim reminders that effective systems to prevent, detect, and contain communicable diseases remain as necessary as ever, and that complacency has no place in the public health discourse.

83. This report highlights PAHO’s technical cooperation with its Member States for the period August 2017 to June 2022, aligned with the United Nations 2030 Agenda for Sustainable Development and the Sustainable Development Goals (SDGs);¹ the World Health Organization (WHO) Thirteenth General Programme of Work 2019-2023;² the Sustainable Health Agenda for the Americas 2018-2030,³ the highest-level strategic framework for health in Americas; and the impact goals and outcomes of the PAHO Strategic Plan 2020-2025 (*Official Document 359*). The report is presented by broad areas of technical cooperation and the internal, enabling functions of the Pan American Sanitary Bureau (PASB or the Bureau), and encapsulates achievements, challenges, and lessons learned in the period.

84. The report documents the results of technical cooperation with PAHO Member States at the Bureau’s regional, subregional, and national levels, including the enhanced support for the eight Key Countries—Belize, Bolivia (Plurinational State of), Guatemala, Haiti, Honduras, Nicaragua, Paraguay, and Suriname—where the Organization dedicates more resources for technical cooperation in order to close their health gaps. The report also looks to the future for continued technical cooperation that contributes to subregional, regional, and global goals, while simultaneously responding to unique national situations, as the country focus recognizes that “one size does not fit all.”

85. The COVID-19 pandemic has spurred numerous calls to “build back better” and “build back fairer,” and the report provides a summary of work done in response to the pandemic, with

¹ Available from: <https://sdgs.un.org/2030agenda>.

² Available from: [WHO-PRP-18.1-eng.pdf](#).

³ Available from: [Sustainable Health Agenda for the Americas 2018-2030 - PAHO/WHO | Pan American Health Organization](#).

examples of theme-specific COVID-19-related interventions and achievements spotlighted as appropriate.⁴

86. This quinquennial report anticipates accelerated progress to achieve the goals of the Sustainable Health Agenda for the Americas 2018-2030 (SHAA2030) and measures to ensure PAHO's continued relevance and excellence, as PASB and Member States hold firm to the values and traditions that have served the Region well, while innovating, building on achievements, and confronting new challenges, in the service of the health of the peoples of the Americas.

⁴ Additional information on PASB's response to COVID-19 can be found in: *a)* Pan American Health Organization. Pan American Health Organization response to COVID-19 in the Americas: January-December 2020. Washington, DC: PAHO; 2021 [cited 14 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/54013>; *b)* 2021 Annual Report of the Director of the PASB: Working through the COVID-19 pandemic (Document CD59/3), which covers the period July 2020 to June 2021. Available from: <https://www.paho.org/en/documents/cd593-annual-report-director-pan-american-sanitary-bureau>; *c)* Pan American Health Organization. Pan American Health Organization response to COVID-19: up to 31 December 2021. Washington, DC: PAHO; 2022 [cited 14 August 2022]. Available from: <https://www.paho.org/en/documents/pan-american-health-organization-response-covid-19-2021>; and *d)* Update on the COVID-19 pandemic in the Region of the Americas, 10 June 2022 (Document CE170/INF/2). Available from: https://www.paho.org/sites/default/files/ce170-inf-2-e-covid-19_0.pdf.

1. ACHIEVING UNIVERSAL ACCESS TO HEALTH AND UNIVERSAL HEALTH COVERAGE

Advances to universal access to health and universal health coverage

87. It is estimated that 30% of the population of the Americas lacks access to needed health care, owing to barriers that include financial, geographical, institutional, social, and cultural elements. On average, countries of the Region invest 4.2% of their gross domestic product (GDP) in health—less than the 6% minimum recommended by WHO—and allocate an average of 26% of their health budgets to the first level of care.

88. The regional report on health systems performance in the PAHO publication *Health in the Americas+ 2017*⁵ indicated that both barriers to access and socioeconomic inequalities persist across and within countries, even though insurance coverage and utilization of primary care services have improved in the Region. Current assessments consistently emphasize that increased health financing is necessary, but not sufficient, to improve access to quality health care. Other critical factors include effective health system governance, efficient utilization of financial and healthcare resources, and the relative distribution of health system inputs across service areas and subnational locations. These factors emphasize the importance of the primary health care (PHC) strategy in advancing to universal access to health (UAH) and universal health coverage (UHC).

89. Health systems in PAHO Member States have faced many external events and threats that negatively impacted their response capacities and the health of their populations. These include emergencies and disasters due to natural and human-caused events; disease outbreaks, the latter including the current COVID-19 pandemic; the impact of mass migration; and social and political unrest. Even as they pose challenges to progress, these threats underscore the need to strengthen advances and recommit to the achievement of universal health.⁶ During this review period, PASB's technical cooperation has sought to increase the surge capacity of health systems and services, and to support countries in the continued development of adaptive, responsive, resilient, and equitable health systems.

90. The Pan American Sanitary Bureau (PASB or the Bureau) engaged with key partners, including the World Bank, Inter-American Development Bank (IDB), Organisation for Economic Co-operation and Development (OECD), and Economic Commission for Latin America and the Caribbean (ECLAC), to examine the current context of health systems within the Region, and to work collectively on health system transformations based on the PHC strategy. A key component of the COVID-19 response was PASB's capacity to facilitate the sharing of experiences and innovative approaches to reorganize and provide care, and the rearrangement of clinical teams to coordinate and integrate health services provision.

⁵ Available from: <https://www.paho.org/salud-en-las-americas-2017>.

⁶ PAHO uses the term “universal health” to encompass universal access to health and universal health coverage.

Frameworks for action

91. In October 2014, PAHO Member States approved the regional Strategy for Universal Access to Health and Universal Health Coverage (Document CD53/5, Rev. 2), which has continued to serve as the main framework for the Organization's technical cooperation with countries to enable equitable access to quality health services. This strategy includes four strategic lines of action: *a)* expanding equitable access to comprehensive, quality, people- and community-centered health services; *b)* strengthening stewardship and governance; *c)* increasing and improving financing, with equity and efficiency, and advancing toward the elimination of direct payment that constitutes a barrier to access at the point of service; and *d)* strengthening intersectoral coordination to address social determinants of health.

92. UAH and UHC imply that all people and communities have access, without discrimination in any form, to comprehensive,⁷ appropriate, timely, quality health services determined at the national level according to needs, as well as access to safe, effective, and affordable quality medicines, while ensuring that the use of such services does not expose users to financial difficulties, especially persons in situations of vulnerability. These services should have the PHC strategy at their core, and mirror and expand on the key concepts of the groundbreaking 1978 Declaration of Alma-Ata.⁸ The PHC strategy encompasses the first or primary level of care, as well as referral to other levels and modalities of care—as appropriate. It includes principles related to equity and human rights; community participation and people-centered interventions; adequate health financing and considerations of cost-efficiency, cost-effectiveness, and affordability; provision of quality, comprehensive services close to where people live and work; and intersectoral coordination for health.

93. In April 2019, the Director of PASB launched Universal Health in the 21st Century: 40 Years of Alma-Ata,⁹ the report of the High-Level Commission on the topic that she established in 2017 to mark the 40th anniversary of the Declaration of Alma-Ata. The report highlighted the importance of the PHC strategy and the need to eliminate barriers to access, and provided recommendations to achieve universal health by 2030. These included the development of models of care that take into account human diversity, interculturalism, and ethnicity; creation of social participation mechanisms that are genuine, deep, inclusive, and accessible; addressing the social determinants of health through intersectoral interventions that promote improvements in environmental, social, economic, housing, and basic infrastructure conditions; recognition of human resources as essential for the construction and consolidation of PHC-based models of care; and developing a financing model that ensures sufficiency, quality, equity, efficiency, and sustainability.

⁷ This includes services and interventions to promote health, prevent disease, care for illness (diagnosis, treatment, and rehabilitation), and provide the necessary short-, medium-, and long-term care.

⁸ Available from:

<https://cdn.who.int/media/docs/default-source/documents/almaata-declaration-en.pdf>.

⁹ Pan American Health Organization. Universal health in the 21st century: 40 years of Alma-Ata. Report of the High-Level Commission. Revised edition. Washington, DC: PAHO; 2019 [cited 14 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/50960?locale-attribute=en>.

94. In conjunction with the launch of the report, the Director of PASB also launched the Regional Compact on Primary Health Care for Universal Health: PHC 30-30-30, which calls for action to eliminate barriers that impede health access by at least 30%; increase public spending on health to at least 6% of GDP, with 30% of these resources invested in the first level of care; and transform health systems to provide equitable, inclusive, comprehensive, quality services based on the PHC strategy by 2030.

Expanding equitable access to comprehensive, quality, people- and community-centered health services

Integrated health service delivery networks

95. Integrated health service delivery networks (IHSDNs) are essential for advancing universal health and providing comprehensive services that address health promotion and disease prevention, diagnosis, treatment, care, rehabilitation, and palliation.¹⁰ The purpose of the Bureau's IHSDN initiative is to contribute to the development of health systems based on PHC and the provision of more accessible, equitable, and efficient high-quality health services, including at the first level of care, that better meet people's expectations and ensure the inclusion of persons in situations of vulnerability.

96. In 2018, PASB developed the PAHO IHSDN Assessment Tool to determine progress, identify gaps, and define interventions to strengthen IHSDN management, and made available to all Member States a training course on IHSDNs and universal health through the PAHO Virtual Campus for Public Health (VCPH). The Bureau also updated its Productive Management Methodology for Health Services,¹¹ which aims to optimize the organization and management of health services as they transition to PHC-based health systems, making the associated tools available to all Member States. The tools included the Production, Efficiency, Resources and Cost tool for the analysis of productivity, efficiency, and cost of health services, and the Assessment of Essential Conditions, which analyzes the quality of health services, responds to emerging approaches and practices in health services management, and guides the optimal organization and management of services within the framework of health systems based on PHC and IHSDNs.

97. In 2019, the Bureau conducted extensive country and regional consultations and developed the regional Strategy and Plan of Action to Improve Quality of Care in Health Service Delivery 2020-2025 (Document CD57/12). The strategic lines of action of the Strategy and Plan of Action comprise: *a*) implement continuous processes to improve the quality of care to people, families, and communities in the delivery of comprehensive services; *b*) strengthen the stewardship and governance of health systems to develop a culture of quality and promote sustained quality

¹⁰ Pan American Health Organization. Integrated health service delivery networks: concepts, policy options and a road map for implementation in the Americas. Washington, DC: 2011; PAHO [cited 14 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/31216>.

¹¹ Pan American Health Organization. Productive management methodology for health services: introduction. Washington, DC: 2010; PAHO [cited 14 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/31219>.

improvement in the delivery of comprehensive health services; and *c*) establish financing strategies that promote improvement in quality of care in the delivery of comprehensive health services.

98. The Bureau supported the development of integrated health networks as part of the implementation of road maps for universal health in several Member States and provided integrated support in health systems and services competencies—policy, regulation, financing, human resources for health (HRH), health services organization, health information systems, and medicines and health technologies—to the Organization’s Key Countries, according to priority needs. As examples:

- a) The Plurinational State of Bolivia expanded the *Mi Salud* program, a national initiative to augment community-based, integrated health care within the existing health network and strengthen integrated health networks. Work was also undertaken to strengthen the national regulatory authority and improve health workforce planning.
- b) Haiti expanded the community-based model of care, and PASB continued its support with the management and performance improvement of the Program for Essential Medicines and Supplies, with the purchase of equipment for the cold rooms, upgraded security operations, and standardized financial reporting.

99. Although focused on increasing the resolution capacity of the first level of care, which often receives less attention than secondary and tertiary levels of care, the Bureau continued to recognize the importance of these latter levels and of equitable access to their services. This was exemplified by the development of the regional Strategy and Plan on Action on Donation and Equitable Access to Organ, Tissue, and Cell Transplants 2019-2030 (Document CD57/11). The strategic lines of action in the document comprised: *a*) strengthen health authority governance and stewardship in cell, tissue, and organ donation and transplantation, especially its oversight capacity; *b*) increase the availability of organs, tissues, and cells through voluntary nonremunerated donation; *c*) increase equitable access to organ, tissue, and cell transplants in health systems; and *d*) improve information management, monitoring, surveillance, risk evaluation, and risk management activities related to organ, tissue, and cell donation and transplantation.

100. In June 2022, the 170th Session of the PAHO Executive Committee considered a proposed Policy on Integrated Care for Improved Health Outcomes (Document CE170/16) to provide guidance on policy options for addressing health services fragmentation, improving integrated care, and strengthening health services overall.

Access to essential medicines and health technologies

101. The Bureau’s technical cooperation in this area was guided by the framework Access and Rational Use of Strategic and High-Cost Medicines and Other Health Technologies (Document CD55/10, Rev.1) and its policy options of: *a*) comprehensive national health and pharmaceutical and other health technology policies; *b*) strategies that improve transparency and knowledge for decision-making; *c*) strategies that improve pricing outcomes and efficiency; and *d*) strategies that promote the rational use of medicines and other health technologies.

102. In light of the shortages, disruptions in supply chains, and inequities in access due to the COVID-19 pandemic, and to enable the Region to become less dependent on imports of medical products during public health emergencies, in 2021 the Bureau developed the policy paper *Increasing Production Capacity for Essential Medicines and Health Technologies* (Document CD59/8), with the following strategic lines of action: *a)* strengthen coherence in multisectoral action and governance in health, science and technology, and industry; *b)* strengthen research, development, production, and logistic capacity; and *c)* strengthen regional and subregional collaboration and strategic partnerships.

103. As an essential pillar of the Bureau's technical cooperation, the Strategic Fund continued to provide timely access to medicines and other health technologies, ensuring a mechanism for their pooled procurement. PASB established multiyear long-term agreements with suppliers to offer unified and competitive prices and ensure timely delivery of products, making affordable, quality medicines available to PAHO Member States in the required presentation and quantities needed. Thirty-four of 35 PAHO Member States and 10 social security and public health institutions have signed agreements to use the Strategic Fund.

104. In 2019, the Strategic Fund supported negotiations—led by the Southern Common Market (MERCOSUR)—with manufacturers of hepatitis C virus medicines that resulted in reductions of up to 40% in the cost of a critical antiviral medicine, and collaborated with MERCOSUR Member States on a negotiating strategy for 2019 to procure hepatitis C virus and oncological medicines. Since July 2021, the Strategic Fund has facilitated the procurement of essential medicines and supplies worth over \$140 million, serving more than 13 million people across a variety of public health challenges.

105. The demand for COVID-19-related products significantly widened and increased the impact of the Strategic Fund, supporting more than 33 million people in ensuring access to diagnostic tests and essential medicines during the pandemic. The Strategic Fund, working with Member States, succeeded in preempting and minimizing the impact of pandemic-related supply disruptions resulting from country lockdowns and transport restrictions, as well as bans on specific medicines and active pharmaceutical ingredients.¹² It ably supported the COVID-19 response by helping to deliver COVID-19-related treatments and supplies worth over \$110.9 million, including 11.1 million COVID-19 polymerase chain reaction (PCR) tests and 1.6 million antigen rapid diagnostic tests.

106. Similarly, the Revolving Fund, as an integral pillar of PASB's technical cooperation, provided pooled procurement for countries and territories, with guarantees of quality, safe, and adequate supplies of vaccines at affordable prices. The Bureau engaged in direct negotiations with suppliers to reduce vaccine prices, and in 2019, the value of purchase orders issued by the Revolving Fund on behalf of Member States reached \$769 million. In 2020, 2021, and 2022, as of 27 June, the total values were, respectively, \$737.5 million, \$1,075.6 million, and \$649.4 million,

¹² Lal A, Lim C, Almeida G, Fitzgerald J. Minimizing COVID-19 disruption: ensuring the supply of essential health products for health emergencies and routine health services. *Lancet Regional Health – Americas*. 2022;6:100129. Available from: <https://doi.org/10.1016/j.lana.2021.100129>.

with 40 countries and territories¹³ utilizing the Revolving Fund Capital Account over the period 2019-2022.

107. In March 2018, the Government of Haiti and the Bureau signed an agreement for the country to observe the Revolving Fund processes and timely payments providing the opportunity for the country to use its national funds to access vaccines and related supplies. In 2020 and 2021, the Revolving Fund intensified efforts to strengthen Haiti's immunization program capacity in supply chain logistics, including receipt and nationalization processes, through interventions such as the update of the standard operating procedure (SOP) for receiving vaccines and syringes, and the release of containers of syringes and safety boxes held in customs since 2019.

108. In December 2019, PASB's advocacy and negotiations with the Government of Mexico regarding that country's participation in the Revolving Fund—ongoing since 2017—resulted in the signing of a declaration of intent to participate. Despite remaining legislative issues, in February 2022 the Bureau facilitated Mexico's procurement of 18 million doses of COVID-19 vaccine, representing that country's first acquisition through the Revolving Fund. Also in 2019, the Bureau, through the Revolving Fund, contributed to improvement of the management of vaccine procurement and the vaccination process in Argentina, generating SOPs and building capacity for rapid response to outbreaks of vaccine-preventable diseases (VPDs), especially measles and polio.

109. In the first quarter of 2020, the Bureau networked with Gavi, the Vaccine Alliance (Gavi) and contributed to the development of the middle-income country component of Gavi 5.0 2021-2025, the new five-year strategy. PASB's advocacy relayed PAHO Member States' concerns regarding the high prices of new vaccines—pneumococcal conjugate, rotavirus, and human papillomavirus—which constitute about 80% of the total cost of products for national immunization programs in Latin America and the Caribbean, threatening the sustainability of these programs.

110. The Bureau worked closely with Member States in preemptive planning for fluctuations in national vaccine demand forecasts for 2020 and 2021, triaging supply allocations, strengthening analytics to improve forecasting accuracy and risk mitigation, and monitoring national vaccine inventories. The Revolving Fund embarked upon a series of transformational projects, with the objective of improving demand and supply management tools; leveraging technology to simplify, automate, and accelerate processes, and improve quality; establishing digital platforms to deliver real-time information to Member States; and conducting market-shaping initiatives. Renewed partnerships with the UN Foundation, The Task Force for Global Health, and Vaccine Ambassadors facilitated the availability of critical vaccines for use during humanitarian emergencies in Colombia, Haiti, and the Bolivarian Republic of Venezuela.

¹³ Anguilla, Antigua and Barbuda, Argentina, Aruba, Bahamas, Barbados, Belize, Bermuda, Bolivia (Plurinational State of), Brazil, British Virgin Islands, Cayman Islands, Chile, Colombia, Costa Rica, Cuba, Curaçao, Dominica, Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Guyana, Haiti, Jamaica, Montserrat, Nicaragua, Panama, Paraguay, Peru, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Sint Maarten, Suriname, Trinidad and Tobago, Turks and Caicos Islands, Uruguay, and Venezuela (Bolivarian Republic of).

111. The selection, incorporation, and use of medicines and other health technologies are critical determinants of health outcomes, and the Bureau contributed to national institutionalization and strengthening of health technology assessments (HTAs). In November 2018, PASB organized a pricing meeting for members of the Regional Network of Health Technology Assessments for the Americas (RedETSA), focused on the role of health technology assessment in expanding effective and equitable access to medicines. Since June 2021, three new members of RedETSA have been incorporated,¹⁴ for a total of 40 members from 20 countries and territories.¹⁵ The main theme of the XII Meeting of the network, held virtually from 29 November to 3 December 2021 and jointly organized with Brazil's Ministry of Health, was innovation and access, with subthemes of social participation, public policies and regulation in HTA, synthesis of evidence and methods, decision-making, and health economics.

112. The Bureau has continued to update the first Regional Database of Health Technology Assessment Reports of the Americas (BRISA), which was established in November 2017, and has trained health professionals in the assessment and management of health technologies through PASB and RedETSA capacity-building activities. Since mid-April 2020, many of the reports published by members of RedETSA and available in BRISA have addressed COVID-19, and this dissemination and knowledge-sharing initiative generated significant increases in BRISA usage statistics early in the pandemic, related to the number of users, visits, and page views.

113. The Bureau developed a list of priority medical devices for the first level of care—the first such regional list—to guide countries in the rational selection and use of medical devices. The list comprised 257 medical devices identified through an evidence-based approach, with the objectives of increasing the availability of these devices at the first level of care and ensuring the responsiveness of the health centers within IHSDNs. PASB also proposed a new model for the assessment, selection, incorporation, prescription, dispensing, rational use, and monitoring of medicines and health technologies, and piloted the model in Paraguay.

114. In order to strengthen supply chain management capacities, PASB analyzed national supply chain management systems for medicines and other health technologies in nine countries—Bolivia (Plurinational State of), Cuba, Ecuador, El Salvador, Guatemala, Honduras, Nicaragua, Panama, and Paraguay—identified gaps, and contributed to the strengthening and implementation of relevant national plans. To assist countries in strengthening their supply chains and to promote sustainability, the Bureau developed the online QUANTMET platform for needs assessment, forecasting, and planning health technologies procurement.

115. The Bureau's technical cooperation to strengthen national regulatory authorities (NRAs) and improve drug regulatory management resulted in improved capacities, transparency, regulatory practices, and efficiency. The Bureau's work fostered an enabling environment for NRAs to share information and cooperate to ensure the quality, effectiveness, and safety of

¹⁴ Instituto Guatemalteco de Seguridad Social, Guatemala; Unidad Funcional de Evaluación de Tecnologías Sanitarias, Instituto Nacional de Enfermedades Neoplásicas, Peru; Universidad de la República, Uruguay.

¹⁵ Argentina, Bermuda, Bolivia (Plurinational State of), Brazil, Canada, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Panama, Paraguay, Peru, United States of America, and Uruguay.

medicines and other health technologies, and supported the strengthening of essential medicines lists in several countries. The 10th Conference of the Pan American Network for Drug Regulatory Harmonization took place in December 2021 under the theme of the regulatory systems in the health agenda post-COVID-19. It facilitated discussions on regional advances on regulatory system strengthening, the role of regulatory systems in the health response during the pandemic and in the postpandemic development agenda, and opportunities and gaps for strengthening regulatory systems.

116. Many PAHO Member States actively report to, and exchange information through, WHO's global rapid alert system for substandard and falsified products, and exchange pharmacovigilance alerts through the PASB-supported Regional Network of Pharmacovigilance Focal Points. Established in 2012, the network includes focal points from 35 countries¹⁶ working in close collaboration with the Latin American and Caribbean Network of Drug Information Centers to produce and evaluate safety information on medicines for regulatory decision-making.

117. In September 2019, NRAs from several countries in the Americas met in Bogotá, Colombia, to jointly develop strategies and exchange information on initiatives to strengthen the regulation of medical devices in the Region. The collaborative achievements of this regional working group include advances in capacity-building and the construction of a regional system for exchanging reports of adverse events of medical devices.

118. The Bureau collaborated with WHO to produce the first Global Benchmarking Tool (GBT) to evaluate national drug regulatory capacity. The GBT allows countries to identify strengths and gaps in their regulatory capacities and to prioritize critical areas for systematic and transparent institutional development. The GBT utilizes elements of PASB's own regional tool, which has been applied to regulatory systems in the Americas over the past 10 years and which has been improved through extensive consultations with drug regulatory authorities from around the world. PAHO Member States have adopted the GBT, implemented new e-learning opportunities, and applied South-South technical cooperation strategies in order to strengthen their regulatory systems.

119. The Bureau also managed the development and implementation of a regulatory exchange platform, a web-based tool for the exchange of nonpublic and confidential regulatory information on medical devices and the results of regulatory inspections, in collaboration with Australia, Brazil, Canada, Japan, and the United States of America. Further, the supply chain systems for national medicines and other health technologies were supported through a collaborative project between the Global Fund to Fight AIDS, Tuberculosis and Malaria (the Global Fund) and PASB that was extended until mid-2021.

¹⁶ Antigua and Barbuda, Argentina, Bahamas, Barbados, Belize, Bolivia (Plurinational State of), Brazil, Canada, Chile, Colombia, Costa Rica, Cuba, Dominica, Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago, United States of America, Uruguay, and Venezuela (Bolivarian Republic of).

120. In August 2018, as part of efforts to strengthen the NRAs in Central America and the Dominican Republic, a pilot project was initiated for the joint review of pharmaceutical product dossiers, supported by PASB, the World Bank, and the United States Agency for International Development (USAID). The project brought together technical personnel from each country's drug regulatory agency, with the goal of improving the registration process for new pharmaceutical products in the Central American subregion and creating synergies to increase access to safe and effective medications. With continued support from the three partner agencies, in October 2019 NRAs in Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama launched the Central American Mechanism for the Joint Evaluation of Medicines Records to ensure the quality, safety, and effectiveness of medicines and health technologies. The mechanism uses the multicountry approach to jointly assess and evaluate product dossiers for issuing market authorization, accelerating market entry, and improving the availability of quality medicines, while ensuring the efficient use of resources. PASB functions as permanent technical coordinator for the mechanism.

121. At Caribbean subregional level, PASB continued its collaboration with the Caribbean Public Health Agency (CARPHA) in the development and implementation of the Caribbean Regulatory System (CRS). Managed by CARPHA, the CRS has revealed regulatory challenges, provided a platform for updating knowledge and introducing international best practices, and spurred regulatory reforms in the Caribbean Community (CARICOM), accelerating access to quality medicines and monitoring the quality of medicines in the market. The CRS pharmacovigilance and postmarket surveillance program, VigiCarib,¹⁷ is supported by the CARPHA Medicines Quality Control and Surveillance Department and its drug testing laboratory. Like the CRS itself, VigiCarib was developed on the premise that a regional approach would facilitate pooling of resources, sharing of information, coordination of activities, and efficiencies of scale in CARICOM Member States, and contribute to overall health system strengthening.

122. As a result of the CRS, CARICOM Member States adopted efficiencies such as information-sharing, reliance, and digital systems, and a business plan was developed to support a sustainable CRS model. The CRS is increasingly recognized as an effective model for small island developing States (SIDS) with limited resources, and in February 2019, PASB and CARICOM presented the CRS initiative to ministers of health of the Pacific Islands at a meeting convened in Fiji by the WHO Regional Office for the Western Pacific. Based on the CRS experience, the Pacific Islands decided to move forward with their own regional regulatory approach, looking to CARICOM as a leader in this area.

123. The Bureau provided recommendations to Member States for improving quality, safety, and access regarding radiological services. The Bureau assessed these services in several countries and partnered with the International Atomic Energy Agency (IAEA) to conduct evaluations of radiotherapy photon beams and ensure their proper calibration to avoid mistreatment of cancer patients and prevent radiation accidents. The Bureau organized national courses, workshops, and educational activities on diagnostic imaging in some Member States, and conducted regional

¹⁷ Available from: <https://carpha.org/What-We-Do/CRS/VigiCarib>.

webinars and online courses on pediatric imaging and ultrasound, and on the role of radiology in tuberculosis management.

124. In June 2022, the 170th Session of the PAHO Executive Committee reviewed a proposal for a Policy to Strengthen National Regulatory Systems for Medicines and Other Health Technologies (Document CE170/17), aiming to renew the mandates and potential role of regulatory systems in promoting the production of health technologies and responding to health emergencies.

Human resources for universal health

125. Well-trained, motivated, adequately compensated, and equitably distributed HRH, including at the first level of care, are essential for universal health. Aligned with the PAHO Strategy for UAH and UHC, the PAHO Plan of Action on Human Resources for Universal Access to Health and Universal Health Coverage 2018-2023 (Document CD56/10. Rev, 1) identifies the following strategic lines of action: *a)* strengthen and consolidate governance and leadership in HRH; *b)* develop conditions and capacities in HRH to expand access to health and health coverage, with equity and quality; and *c)* partner with the education sector to respond to the needs of health systems in transformation toward UAH and UHC.

126. The Plan of Action on Human Resources for Universal Access to Health and Universal Health Coverage 2018-2023 calls for examination of needs regarding not only doctors and nurses, but also allied health professionals, including community health workers; collaborative action among the health, education, labor, and finance sectors, among others; long-term human resources planning and forecasting; increased public investment in human resources; widening of access to interprofessional teams in primary care settings; and reorienting education for the health professions toward PHC. It also specifically notes the need to ensure that gender, ethnicity, migration, and human rights issues are considered in health workforce policies and plans.

127. In 2019, the Bureau proposed strategic directions for the Region to manage complex nursing issues related to governance and leadership, workplace conditions and capacities, and the education system, in order to contribute to universal health.¹⁸ The proposals addressed three lines of action: *a)* strengthening and consolidating leadership and strategic management of nursing in the context of health systems and in policymaking and monitoring; *b)* addressing the working conditions and capacities of nurses to expand access and coverage with equity and quality, in order to promote a people-, family-, and community-centered model of care and strengthen both the primary level of care and integrated health services networks; and *c)* improving the quality of nursing education to respond to the needs of health systems focused on UAH, UHC, and the SDGs.

128. A major health service challenge facing the Region of the Americas is the deployment of multidisciplinary teams at the first level of care to address the needs of vulnerable populations in underserved areas. The Bureau coordinated a workshop on National Health Workforce Accounts

¹⁸ Pan American Health Organization. Strategic directions for nursing in the Region of the Americas. Washington, DC: PAHO; 2019 [cited 14 August 2022]. Available from: https://iris.paho.org/bitstream/handle/10665.2/50956/9789275120729_eng.pdf.

in October 2018, and, in 2019, provided training to all Member States on health workforce information management. These interventions strengthened capacity in HRH information systems and in data production, management, and workforce planning in countries, based on the needs of the whole health system, and all PAHO Member States were able to upload National Health Workforce Accounts data to contribute to the 2020 WHO report on nursing.¹⁹

129. In order to address and improve the skills mix within health systems, PASB launched an advanced practice nurse initiative as part of interprofessional education and collaborative practice. The Bureau also developed a publication on expanding nurses' roles in PHC,²⁰ which was launched on International Nurses Day in May 2019.

130. The movement of HRH continued in the Region, from rural to urban areas and from less-well-resourced countries to better-resourced ones. PASB worked with countries adversely affected by health workforce mobility to develop strategies to improve HRH planning and forecasting, and retention of the existing workforce. In the Caribbean subregion, the Bureau cooperated with the Caribbean Regional Nursing Body in the finalization of the Strategic Plan for Nursing and Midwifery 2020-2024 and finalized a study on migration of the health workforce in the Caribbean,²¹ to inform implementation of the Caribbean Roadmap on Human Resources for Universal Health 2018-2022.²² The preliminary findings of the migration study were presented to the Caucus of CARICOM Ministers of Health in September 2018, prior to the 56th Directing Council of PAHO, and showed that almost 60% of the health professionals who still resided in their home countries would migrate if given the opportunity.

131. The number of places available in nursing schools in the Caribbean subregion is estimated to be sufficient to meet the needs of the subregion, but shortages of nurses result from an attrition rate of 55% during training and the migration to other countries of 73% of those who graduate. These findings highlight challenges that Caribbean countries face with health workforce education and retention, especially regarding specialized nursing; health workforce planning; and regulation of migration. PASB has worked with countries in the subregion to address these issues, supporting the development and implementation of integrated HRH plans.

132. Another critical regional HRH issue relates to insufficient regulation of processes related to education in the health sciences, with concerns regarding the relevance of many academic programs, the quality of training and professional practice, and the social accountability of educational institutions. A socially accountable educational institution goes beyond being

¹⁹ World Health Organization. State of the world's nursing 2020: investing in education, jobs, and leadership. Geneva: WHO; 2020 [cited 14 August 2022]. Available from: <https://www.who.int/publications/i/item/9789240003279>.

²⁰ Pan American Health Organization. Expanding the roles of nurses in primary health care. Washington, DC: PAHO; 2018 [cited 14 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/34958>.

²¹ Pan American Health Organization. Health workers' perception and migration in the Caribbean. Working document. Washington, DC: PAHO; 2019 [cited 14 August 2022]. Available from: <https://www.paho.org/en/documents/health-workers-perception-and-migration-caribbean-region>.

²² Pan American Health Organization. Caribbean roadmap on human resources for universal health 2018-2022. Washington, DC: PAHO; [date unknown] [cited 14 August 2022]. Available from: <https://www.paho.org/en/documents/caribbean-roadmap-human-resources-universal-health-2018-2022>.

committed to the welfare of society and directing its education, research, and service activities toward explicitly identified health priorities. It works collaboratively with governments and other key stakeholders, including the public, to positively impact people's health, aiming to produce change agents with the capacity to work not only on people's health concerns, but also on health determinants, and to contribute to adapting the health system.²³

133. In late 2018, in recognition of the importance of intersectoral action for HRH, PASB developed a diagnostic instrument—the Indicators for Social Accountability Tool²⁴—to help health profession education institutions assess their progress toward social accountability. A product of the PASB-supported Consortium on Social Accountability in Health Professions Education in the Region of the Americas, the tool measures the extent to which education programs have curricula that are aligned with social needs; select students in targeted ways to guarantee diversity and gender equity; include training in the primary care context in which graduates are expected to serve; include regional postgraduate training and career pathways in underserved regions; offer interprofessional education and practice; and engage in meaningful partnerships with communities and other stakeholders. In March 2019, PASB participated in the 21st Pan American Conference on Medical Education in Cartagena, Colombia, and collaborated in the development of the Cartagena Declaration on Medical Education and Social Accountability, linking the challenges of medical education to the PHC strategy.

134. The Bureau strengthened its alliance with the Organization of American States (OAS) and the Coimbra Group of Brazilian Universities to support the establishment of permanent coordination mechanisms and high-level agreements between the education and health sectors in order to align the education and practice of HRH with the current and future needs of health systems. PASB also supported Argentina, Brazil, and Chile to establish the Regional Network for Interprofessional Education in the Americas and in 2018, with PASB's support, Argentina organized a meeting of the network to discuss implementation of its guidelines and workplan, resulting in webinars and technical documents to help countries develop their own interprofessional education plans. The Bureau developed guidelines to strengthen the resolute capacity of interprofessional teams, especially at the first level of care, which will be incorporated into the final regional report on emerging trends in health professions' education and training in the Americas, to be published in December 2022.

135. In 2019, PASB collaborated with the High Council of Central American Universities and SE-COMISCA, the Executive Secretary of the Council of Ministers of Health of Central America and the Dominican Republic (COMISCA), to prepare a road map for the accreditation of careers in health in Central America and the Dominican Republic, with a focus on family and community health programs. SE-COMISCA and the General Secretariat of the High Council of Central American Universities signed a memorandum of understanding that included the development and professional training of HRH in the Central American subregion, with identification of strategic

²³ Boelen C, Dharamsi S, Gibbs T. The social accountability of medical schools and its indicators. *Education for Health*. 2013;25(3):180–194. Available from: [10.4103/1357-6283.109785](https://doi.org/10.4103/1357-6283.109785).

²⁴ Pan American Health Organization. Indicators for social accountability tool in health profession education: self-assessment guide and tool. Washington, DC: PAHO; [date unknown] [cited 14 August 2022]. Available from: <https://socialaccountabilityhealth.org/wp-content/uploads/2021/04/ISAT-Implementation-Guide.pdf>.

lines of action. The latter included adaptation to health sector programs of the qualifications framework for higher education; identification of the criteria and process for accreditation of professional and technical careers in health; harmonization of subregional health curricula; and mobility of health professionals in Central America and the Dominican Republic. This subregional initiative resulted in a mapping of family and community health training programs in several countries and defined a pool of competencies for the first level of care and family health physicians.

136. In the South American subregion, PASB's technical cooperation provided opportunities for South-South cooperation and exchange of experiences, including a meeting of human resources observatories in the subregion, held in Uruguay in August 2018; a workshop on implementation of the Plan of Action for Human Resources for Universal Health for South American countries, held in Peru in November 2018; the launch of a new Latin American Network of Schools of Public Health, during the 5th International Medical Education Conference in Peru in May 2019; and a meeting on information systems, regulation of professional practice, and planning of medical residencies, held in Argentina in June 2019.

137. The Bureau conducted a joint study with WHO, *Impact of COVID-19 on Human Resources for Health and Policy Response: the Case of Plurinational State of Bolivia, Chile, Colombia, Ecuador, and Peru*, the results of which were published in December 2021²⁵ and presented in a webinar in February 2022.²⁶ Importantly, the policy responses required a coordinated approach by various entities within each country, specifically the ministries responsible for health, education, labor, and the economy, to address—among other issues—estimation of HRH needs for the initial response to COVID-19; availability of HRH; training and improved working conditions; and health and safety at work. In 2020, PASB contributed to the development of the WHO Simple Health Workforce Estimator surge capacity tool,²⁷ which estimates health workforce needs for COVID-19 responses relevant to humanitarian settings, and collaborated in its implementation in Peru.

138. The year 2021 was designated as the International Year of Health and Care Workers,²⁸ in appreciation of their unwavering dedication in the fight against the COVID-19 pandemic. WHO and PAHO launched a year-long campaign, under the theme *Protect-Invest-Together*. This called on countries to increase investment and protection of HRH, not only during health emergencies, but in nonpandemic times, noting that this type of investment pays off generously in terms of health, employment, and economic and social opportunities. In that context, on World Mental Health Day in October 2021, PASB implemented a social media campaign to raise awareness of the sustained burden the pandemic has placed on the mental health of front-line health workers,

²⁵ World Health Organization. *Impact of COVID-19 on human resources for health and policy response: the case of Plurinational State of Bolivia, Chile, Colombia, Ecuador and Peru. Overview of findings from five Latin American countries*. Geneva: WHO; 2021 [cited 14 August 2022]. Available from: <https://www.who.int/publications/i/item/9789240039001>.

²⁶ Pan American Health Organization. *Impact of COVID-19 on human resources for health and policy response*. Washington, DC: PAHO; 2022 [cited 14 August 2022]. Available from: <https://www.paho.org/en/events/impact-covid-19-human-resources-health-and-policy-response>.

²⁷ Available from: <https://healthcluster.who.int/publications/m/item/health-workforce-estimator-tool>.

²⁸ Available from: <https://www.paho.org/en/campaigns/year-health-and-care-workers-2021>.

inviting them to share their stories and strategies to better manage and cope with this added challenge. The campaign, Mental Health Now: Share Your Story!,²⁹ collected written and video stories from healthcare workers in the Americas through social media. These stories were then compiled and disseminated through PAHO's website and social media channels.

139. In January 2021, PASB organized a webinar on mental health care for health professionals during the COVID-19 pandemic to mark the launch of a self-learning course on self-care for front-line workers in the response to emergencies and the end of the Share Your Story campaign. In January 2022, PASB published The COVID-19 HEalth caRe wOrkErs Study (HEROES). Regional Report of the Americas,³⁰ a collaboration among the Bureau, the University of Chile, and the University of Columbia. The report evaluated the impact of the COVID-19 pandemic on the mental health of health service professionals in 11 countries and territories³¹ and the results showed high rates of depressive symptoms, suicidal ideation, and psychological distress. Risk factors included the need for emotional and economic support, concern about infecting their families, conflict with the families of infected persons, and changes in their usual work habits. In addition to producing quality scientific evidence, the study contributed to the development of policies, and individual and institutional interventions, to respond to the COVID-19 pandemic.

140. In building the capacity of HRH, the PAHO VCPH played a significant role, expanding its offerings of online courses and sessions to improve competencies in a flexible, cost-effective manner. In 2018, the VCPH established a new node for the English-speaking Caribbean in collaboration with CARPHA and updated its Central America node in collaboration with COMISCA. Currently, the VCPH has 1.8 million users and 3 million registrations for courses.

141. The VCPH's online courses and webinars proved invaluable during the peak of the COVID-19 pandemic to strengthen response capacity, given the travel restrictions, closure of schools and other learning institutions, and physical distancing that were significant components of national and international pandemic responses. In March 2020, the VCPH Caribbean node created the section Information and Capacity Building Resources on COVID-19, which included two subareas: *a)* advice to the general public; and *b)* COVID-19 technical guidance. In addition to links to official documents, this space included links to OpenWHO courses,³² PAHO webinars, case studies, and other PAHO-produced resources. Given the need to organize demand, promote educational planning, and facilitate interprogrammatic work, the VCPH implemented a new model of governance in December 2020.

Strengthening stewardship and governance

142. Effective national stewardship and governance are critical for developing, implementing, monitoring, and evaluating strategic policies, plans, and interventions for universal health. In 2020

²⁹ Available from: <https://www.paho.org/en/campaigns/mental-health-now-share-your-story>.

³⁰ Pan American Health Organization. The COVID-19 HEalth caRe wOrkErs Study (HEROES): Regional Report from the Americas. Washington, DC: PAHO; 2022 [cited 14 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/55972>.

³¹ Argentina, Bolivia (Plurinational State of), Brazil, Chile, Colombia, Guatemala, Mexico, Peru, Puerto Rico, Uruguay, and Venezuela (Bolivarian Republic of).

³² Available from: <https://openwho.org/>.

the Bureau updated the essential public health functions (EPHFs) framework³³ to enable capacity-building of national health authorities in these critical roles. The update was based on the experiences and lessons learned from the implementation and regional measurement of the EPHFs; new and persistent challenges for population health and its social determinants; and new institutional, economic, social, and political conditions affecting the Region of the Americas.

143. Of 11 EPHFs, EPHF 4 is “Development and implementation of health policies and promotion of legislation that protects the health of the population” and EPHF 10 speaks to “Equitable access to interventions that seek to promote health, reduce risk factors, and promote healthy behaviors.” Policies, legislation, and regulations are critical to create an environment that enables health, and are important governance tools that—like other public health strategies—must be implemented, monitored, and evaluated in order to gauge their efficiency and effectiveness. In 2021, capacity assessments for the development of national health plans were conducted in the Bahamas, the Plurinational State of Bolivia, Costa Rica, Dominican Republic, El Salvador, Peru, Saint Kitts and Nevis, Suriname, and Trinidad and Tobago; national health sector plans were developed in Sint Maarten (National Strategic Framework for the Health Sector 2021-2030) and Haiti (Plan Directeur Santé 2021-2031); and an EPHF webinar series was inaugurated.

144. In Haiti, PASB’s technical cooperation contributed to the elaboration and adoption in June 2021 of a National Framework for District Health Units based on the ten-year National Strategy for Community Health and the regional IHSDN strategy. The national framework and strategy aim to strengthen the first level of care and IHSDNs, incorporating Haiti’s Package of Essential Services. The achievement demonstrates the commitment by the Ministry of Public Health and Population (MSPP) to an integrated PHC approach, marking a departure from the disease-specific approaches promoted by some stakeholders.

145. The PAHO Strategy on Health-related Law 2015-2023 (Document CD54/14, Rev. 1) notes that health-related law encompasses a wide spectrum of legal standards and guidelines related to health issues, which lay the foundation for the promotion and protection of the right to health. The Strategy’s lines of action comprise: *a*) actions for health determinants; *b*) actions for the promotion, dissemination, and exchange of strategic information on health-related law; *c*) actions for UAH and UHC; and *d*) actions to strengthen coordination between the health authority and the legislative branch and other sectors.

146. The Bureau supported El Salvador in developing a next-generation legislation framework for constructing an integrated health system. The legislation provides for the measurement and improvement of quality in essential healthcare services, and enhancement of access to safe, effective, quality, and affordable medicines and vaccines for all, with a community-based primary care approach and guaranteed social participation. It also strengthens the stewardship role of the Ministry of Health, consolidates the work of diverse and fragmented institutions, provides a path

³³ Pan American Health Organization. The essential public health functions in the Americas: a renewal for the 21st century. Conceptual framework and description. Washington, DC: PAHO; 2020 [cited 14 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/53124>.

for participatory national health policy planning, and offers a wide array of tools for the integration and interaction of different institutions in the national health system.

147. At the Central American subregional level, PASB presented a follow-up initiative to an agreement signed by the Central American Parliament (PARLACEN) in 2015 to harmonize and strengthen legal frameworks for health, in alignment with the regional Strategy on Health-related Law. The follow-up initiative includes a model law and guidance for legislative revision in each Central American country and the Dominican Republic. PASB initiated discussions with MERCOSUR parliaments regarding similar strategies.

148. In the Caribbean subregion, in March 2020 the Bureau convened a workshop on the use of law to address NCDs in the Caribbean,³⁴ in collaboration with the International Legal Consortium at the Campaign for Tobacco-Free Kids and with support from the European Union (EU). The workshop sought to build capacity to advance the use of law and regulations to address NCDs and their risk factors in the subregion. As a direct result of the workshop discussions and recommendations, PASB and the Caribbean Court of Justice Academy for Law established the Caribbean Public Health Law Forum in June 2021,³⁵ with support from a grant managed by the International Union Against Tuberculosis and Lung Disease and funded by Bloomberg Philanthropies.

Increasing and improving financing, with equity and efficiency, and advancing toward the elimination of direct payment that constitutes a barrier to access at the point of service

149. EPHF 8 “Efficient and equitable health financing” demonstrates the importance of adequate funding for UAH, UHC, and PHC. It emphasizes that financing for health is not limited to the national health sector budget—although this component is of critical importance—and encompasses the institutional functions involved in raising funds from several sources and pooling, allocating, and strategically planning financial resources for health.

150. Health financing in the Region is below the recommended levels. Although there has been an increase in public expenditure on health—expressed as a percentage of GDP—the expenditure is still less than the 6.0% minimum recommended by WHO. On average, public expenditure on health as a percentage of GDP was 4.0% in the Region in 2017, the latest year for which data are available (3.7% when considering Latin America and the Caribbean only).³⁶ The Bureau estimated that by the end of 2019, only nine countries and territories in the Region—Argentina, Aruba, Canada, Cuba, Curaçao, Montserrat, Sint Maarten, United States of America, and Uruguay—had achieved public expenditure in health of at least 6% of GDP (based on 2017 data). Currently, only

³⁴ Pan American Health Organization. The use of law to address noncommunicable diseases in the Caribbean. Subregional workshop report. Miami, 3-5 March 2020. Washington, DC: PAHO; 2021 [cited 14 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/53821>.

³⁵ Pan American Health Organization. Launch of the Caribbean Public Health Law Forum – June 30th 2021 [2 July 2021]. Washington, DC: PAHO; 2022. Available from: <https://www.youtube.com/watch?v=eKiMjurC-rA>.

³⁶ World Health Organization. Global Health Expenditure Database (as of 29 June 2020). Geneva: WHO; 2020 [cited 14 August 2022]. Available from: <https://apps.who.int/nha/database>.

Cuba allocates 30% of those resources to the first level of care, but of the countries for which data are available, Argentina, Canada, and Uruguay are advancing, with allocations to the first level of care of 24%, 25%, and 22%, respectively.

151. Based on the 2017 data, out-of-pocket (OOP) expenditure on health represented 33% of total health expenditure in the Region—34% when considering Latin America and the Caribbean only³⁷—while WHO recommends that OOP expenditure on health be no more than 20% of total health expenditure. The high level of OOP spending on health in the Region constitutes catastrophic and impoverishing expenditures for families (expenditure is considered catastrophic when OOP health expenditure represents a substantial percentage of household spending). As measured in the context of the SDGs, this benchmark is 10% or 25% of total household expenditure.³⁸ In 2019, WHO and the World Bank reported that nearly 95 million people incur catastrophic health expenditures in Latin America and the Caribbean when the threshold reaches 10% of total household spending.³⁹

152. Most PAHO Member States do not have coverage schemes to provide all essential medicines without direct payment at the point of service, and OOP spending for medicines and health technologies ranges from 30% to 70% of overall OOP spending for health. Medicines and health technologies comprise the second-largest item—after human resources—in public health budgets, and, for a significant portion of the population, these payments constitute major barriers to access needed health services.

153. Many countries have limited capacity to adjust their health budgeting, due to rigid financial management systems and traditional line-item, rather than results- or performance-based, budgets. Economic recovery from previous global financial downturns, which has been slow in some countries, has now worsened in all countries of the Region due to the impact of the COVID-19 pandemic. In 2018, ECLAC estimated an average economic growth of 2.2% for Latin America and the Caribbean, and after a pandemic-related, historic contraction of 6.8% in 2020, regional economic growth rates of 5.9% and 2.9% were projected for 2021 and 2022, respectively.⁴⁰ Notwithstanding the anticipated—but slow—recovery in the Region, the economic downturns have resulted in even greater reductions in already insufficient allocations to national health budgets in most countries, which puts health gains at risk and delays progress in priority areas.

154. The Bureau's technical cooperation in health financing addressed budgeting, financial resources and fiscal space, insurance, segmentation, and health accounts, among other issues, and

³⁷ Ibid.

³⁸ Pan American Health Organization. Health financing in the Americas. In: Health in the Americas 2017. Washington, DC: PAHO; 2017 [cited 14 August 2022]. Available from: <https://www.paho.org/salud-en-las-americas-2017/>.

³⁹ World Health Organization, World Bank. Global monitoring report on financial protection in health 2019. Geneva: WHO and International Bank for Reconstruction and Development/The World Bank; 2020 [cited 14 August 2022]. Available from: <https://apps.who.int/iris/bitstream/handle/10665/331748/9789240003958-eng.pdf>.

⁴⁰ Economic Commission for Latin America and the Caribbean. Economic survey of Latin America and the Caribbean, 2021: Labour dynamics and employment policies for sustainable and inclusive recovery beyond the COVID-19 crisis. Santiago: ECLAC; 2021 [cited 14 August 2022]. Available from: https://repositorio.cepal.org/bitstream/handle/11362/47193/10/S2100607_en.pdf.

included discussions with Member States on issues related to resource allocation and the challenges faced in their efforts to increase public expenditure in health with equity and efficiency. PASB also supported dialogue and exchange of experiences among countries to inform policy options for improving health financing, including payment systems and strategic purchasing in health services. It also promoted the use of the standardized System of Health Accounts 2011 methodology, which tracks all health spending in a given country over a defined period, regardless of the entity or institution that financed and managed that spending.

155. In 2018, PASB coordinated a Caribbean Subregional Dialogue on Health Financing in support of CARICOM Member States' commitment to advance toward universal health. The Subregional Dialogue brought together high-level government officials from CARICOM countries, representatives from the main Caribbean subregional institutions, and international experts to discuss challenges in financing health services in the Caribbean and identify opportunities for strengthening subregional collaboration on the issue. PASB incorporated the Health Economics Unit of the University of the West Indies (UWI) as a PAHO/WHO Collaborating Centre, a milestone that extends and strengthens the Bureau's technical cooperation in health financing in the Caribbean.

156. In 2021, PASB supported capacity-building in health economics and financing for health systems managers from Aruba, Curaçao, Jamaica, Sint Maarten, and Trinidad and Tobago, to facilitate decisions on resource allocation and health system financing, and organized a series of webinars on public investment in health in the era of COVID-19. PASB also supported the publication of an analysis of catastrophic health expenditure in the Region, based on a standard methodology.⁴¹

157. Social insurance and social protection programs that allow people to access the first level of care and integrated health services when needed are an essential component of universal health. Chile, Colombia, Guyana, Haiti, and Peru included social protection in health as a basic tenet of their health systems, and Mexico, Peru, and Uruguay developed or updated their guaranteed healthcare benefit packages. The Bureau collaborated in the development of national health insurance (NHI) legislation in Anguilla; development of NHI and national health accounts in Antigua and Barbuda; NHI program expansion in Belize; NHI program implementation in the Bahamas and Grenada; national insurance plan development in Jamaica; and, in 2021, development of draft legislation for NHI and security in Saint Kitts and Nevis.

158. The National Health Accounts of Haiti 2014-2015 and 2015-2016 were completed with PASB's technical cooperation and validated by the end of 2019. The Bureau provided technical and advocacy support to that country for the health component of the National Policy for Social Protection and Promotion, a multisectoral collaborative effort under the leadership of the Ministry of Social Affairs and Labor that was adopted in June 2020. The policy enables health protection for populations in situations of vulnerability and addresses the barrier of OOP expenses for priority services, such as those related to maternal and neonatal health. An analysis of the health financing

⁴¹ Cid C, Flores G, Del Riego A, Fitzgerald J. Sustainable Development Goals: impact of lack of financial protection in health in Latin American and Caribbean countries. *Rev Panam Salud Publica*. 2021;45:e95. Available from: <https://iris.paho.org/handle/10665.2/54836>.

situation was conducted in Panama, for the first time, to serve as the basis for the national health financing strategy, and the results were made available in January 2022.⁴²

159. There was increased engagement between PASB and Member States, and between the Bureau and international financing institutions during 2020-2021 on advancing social protection, promoting the elimination of user fees, and reducing OOP expenditure on health services. Thirty-three countries⁴³ in Latin America and the Caribbean adopted a total of 468 noncontributory measures with unconditional cash transfers, either through new modalities or by increasing existing transfers, the latter being the most prevalent mechanism, representing 44% of all measures.⁴⁴ The effect of these measures in terms of financial protection in health remains to be evaluated, but they provided necessary support for households already impacted by income loss and increased need for care.

Strengthening multisectoral action to address the social determinants of health

160. Multisectoral, multi-stakeholder coordination, collaboration, and partnerships are critical for the achievement of priority health objectives given the influence of the determinants of health, including social determinants, on health outcomes at individual and population levels. Policy coherence across sectors is essential for coordinated government action, and the objectives of sectors other than health, such as finance and trade, may be at odds with public health objectives, as exemplified by the provision of incentives for private sector entities that produce health-harming commodities.

161. The Bureau strengthened regional capacity on the health in all policies (HiAP) approach, based on the PAHO Plan of Action on Health in All Policies (Document CD53/10, Rev. 1) and the PAHO HiAP Guide.⁴⁵ The Plan of Action on Health in All Policies 2014-2019 identified six strategic lines of action: *a)* establish the need and priorities for HiAP; *b)* frame planned action; *c)* identify supportive structures and processes; *d)* facilitate assessment and engagement; *e)* ensure monitoring, evaluation, and reporting; and *f)* build capacity.

162. The Bureau established an online HiAP platform to document Member States' experiences and good practices, and developed a virtual course for HiAP in the Region based on the WHO

⁴² Ministerio de Salud de Panamá. Análisis de la Situación del Financiamiento de Salud en Panamá 2021. Washington, DC: PAHO; 2022 [cited 14 August 2022]. Available from: <https://www.paho.org/es/documentos/analisis-situacion-financiamiento-salud-panama-2021>.

⁴³ Antigua and Barbuda, Argentina, Bahamas, Barbados, Belize, Bolivia (Plurinational State of), Brazil, Chile, Colombia, Costa Rica, Cuba, Dominica, Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago, Uruguay, and Venezuela (Bolivarian Republic of).

⁴⁴ Economic Commission for Latin America and the Caribbean. Social panorama of Latin America 2021. Santiago: ECLAC; 2022 [cited 14 August 2022]. Available from: <https://www.cepal.org/en/publications/47719-social-panorama-latin-america-2021>.

⁴⁵ Pan American Health Organization. Advancing the health in all policies approach in the Americas: what is the health sector's role? A brief guide and recommendations for promoting intersectoral collaboration. Washington, DC: PAHO; 2015 [cited 15 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/33975>.

Health in All Policies Training Manual,⁴⁶ to support sustained HiAP programming. This virtual course is the first example of an online adaptation of the WHO training manual to be rolled out, providing a unique opportunity for mainstreaming the crosscutting themes (CCTs) into intersectoral policymaking, and potentially serving as a model for other courses tailored for the Region.

163. The 2020 Plan of Action on Health in All Policies: Final Report 2014-2019 (Document CD58/INF/3) noted that although the indicator targets had been met and progress made—with most countries in the Region reporting strengthened health sector capacity to engage with other ministries and sectors, establishment of intersectoral coordination mechanisms, and stronger community participation in health decision-making processes—continued action was needed to improve health and well-being for all, and reduce persistent health inequalities. Recommended actions included: capacity strengthening for health and other government sectors; provision of additional tools and instruments to advance HiAP implementation at national and local levels; mechanisms for the exchange of good practices; and strengthening of monitoring and reporting systems to go beyond health outcomes and assess change in the social determinants of health and health inequalities. The final report also noted that continued implementation of the regional Strategy and Plan of Action on Health Promotion within the Context of the Sustainable Development Goals 2019-2030 (Document CD57/10) would provide support for Member States in addressing the social determinants of health through an HiAP approach.

164. In supporting multisectoral, multi-stakeholder action at subnational, national, subregional, and regional levels, PASB reactivated the Regional Network of the Americas for Healthy Municipalities, Cities, and Communities, and in 2018 piloted the Healthy Cities Action Toolkit that had been developed in 2017 to provide guidance to municipal leaders in planning health-promoting initiatives and policies. The Third Meeting of Mayors for Healthy Cities from the Region of the Americas, held in 2019 in Colombia, aimed to strengthen the capacities of mayors and local leaders to promote and implement a governance-for-health agenda, and more than 100 mayors committed to advance the regional network.

165. The Bureau's establishment of the Latin American and Caribbean Network of Health Promotion Managers⁴⁷ was instrumental in bringing health promotion to the local level. This network generated a new alliance of mayors committed to healthy municipalities and contributed to the sustainability of agreements on initiatives and actions to advance the sustainable development and health promotion agendas, across different political administrations.

COVID-19 Spotlight: PASB-ECLAC collaboration

166. The Bureau worked to reorient its technical cooperation in building resilient health systems that advance universal health in order to reinforce a comprehensive response to the COVID-19 pandemic. A notable aspect of these efforts was its collaboration with ECLAC to develop and

⁴⁶ Available from: <https://openwho.org/>.

⁴⁷ Ferrelli, RM. REDLACPROMSA: Latin American and Caribbean Network of Health Promotion Managers. In: Malagón de Salazar, L., Luján Villar, R. (eds) *Globalization and Health Inequities in Latin America*, pages 71-89. Cham: Springer; 2018 [cited 15 August 2022]. Available from: https://doi.org/10.1007/978-3-319-67292-2_4.

publish joint reports that recognized the interlinkages among the health, social, and economic effects of the pandemic. The collaboration provided high-level guidance for countries on the need for convergence between health and the economy,⁴⁸ and presented an update on the evolution of the pandemic and its implications for health, society, and the economy.⁴⁹

167. The 2020 joint report highlighted four core principles to help countries converge their health and economic policies: *a)* health and well-being as prerequisites for reactivating the economy; *b)* reduction of inequalities as a linchpin for all phases of the recovery process; *c)* strengthening health systems based on the PHC approach as the foundation of the recovery pathway; and *d)* strengthening interaction and agreements among government, civil society, and the private sector to formulate relevant strategies.

168. The 2021 joint report defined potential short- and longer-term scenarios for healthy and economic policy convergence, and elaborated on the recommended long-term lines of action to strengthen government's capacities to respond to people's health needs and address their determinants, in the context of a transformative recovery. The report emphasized the importance of PHC and the first level of care, with universal health as the guiding principle, and highlighted the need to strengthen mechanisms for coordination, regional integration, and international cooperation. It also called for strengthening health authorities' institutional capacities to establish a resilient health system capable of responding to current and future challenges. It further noted that, in order to achieve this objective, it would be essential to increase public spending on health, both equitably and efficiently, and to make the first level of care a strategic priority.

⁴⁸ Economic Commission for Latin America and the Caribbean, Pan American Health Organization. Health and the economy: a convergence needed to address COVID-19 and retake the path of sustainable development in Latin America and the Caribbean. COVID-19 report. Washington, DC: ECLAC-PAHO; 2020 [cited 15 August 2022]. Available from: https://repositorio.cepal.org/bitstream/handle/11362/45841/4/S2000461_en.pdf.

⁴⁹ Economic Commission for Latin America and the Caribbean, Pan American Health Organization. The prolongation of the health crisis and its impact on health, the economy and social development. COVID-19 report. Washington, DC: ECLAC-PAHO; 2021 [cited 15 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/54991>.

2. RESPONDING TO HEALTH EMERGENCIES AND DISASTERS, INCLUDING THE COVID-19 PANDEMIC, AND BUILDING CORE PUBLIC HEALTH CAPACITIES UNDER THE INTERNATIONAL HEALTH REGULATIONS

169. The Bureau continued its technical cooperation with Member States to prevent, prepare for, and respond to natural and human-caused emergencies and disasters, including a range of diseases with the potential to cause outbreaks, epidemics, or pandemics; chemical and radiological events; natural hazards; and the impact of mass migration and conflicts. The Bureau took the human security approach to building coherent intersectoral policies to protect and empower people, increase community resilience, and coordinate international health assistance to help Member States respond to emergencies when required.

170. The Bureau provided support to countries still recovering from the higher number of sudden-onset disasters and the record-setting Atlantic hurricane season in 2020, as well as to mitigate the many negative impacts of the COVID-19 pandemic that was declared in March 2020 and which continues at the time of writing. The Bureau focused on helping countries and territories to provide longer-term humanitarian assistance and to continue building core capacities for implementation of the International Health Regulations (IHR) and the detection of, and response to, disease outbreaks.

171. An important framework for the Bureau's technical cooperation was the PAHO Plan of Action for Disaster Risk Reduction 2016-2021 (Document CD55/17, Rev. 1), with its strategic lines of action: *a)* recognizing disaster risk in the health sector; *b)* governance of disaster risk management in the health sector; *c)* safe, smart hospitals; and *d)* health sector capacity for emergency and disaster preparedness, response, and recovery.

172. Complementing this guidance and building on its technical cooperation in the area of health systems strengthening and universal health, the Bureau developed a policy on Resilient Health Systems (Document CD55/9). This policy recognized the importance of health systems with the capacity to absorb shocks and disruptions, respond, recover, and provide needed services in a timely manner, in mounting an effective response to emergencies and disasters. The policy presented strategies comprising: whole-of-society commitment to achieving the SDGs; UAH and UHC; application of the IHR through strengthening of national core capacities as part of the EPHFs; health information systems that support identification and isolation of public health risks and delivery of appropriate responses; disaster and other risk-reduction strategies; investing in health system resilience, in particular the organization of adaptive networks of healthcare institutions; and research on resilience and health system performance.

173. Advances continued in the institutionalization of disaster management programs, with PASB's advocacy for, and contribution to, the development and implementation in countries and territories of formal health disaster management programs; health emergency response plans; establishment of health emergency response teams and emergency operations centers; and national emergency coordination committees within ministries of health. However, despite progress, gaps

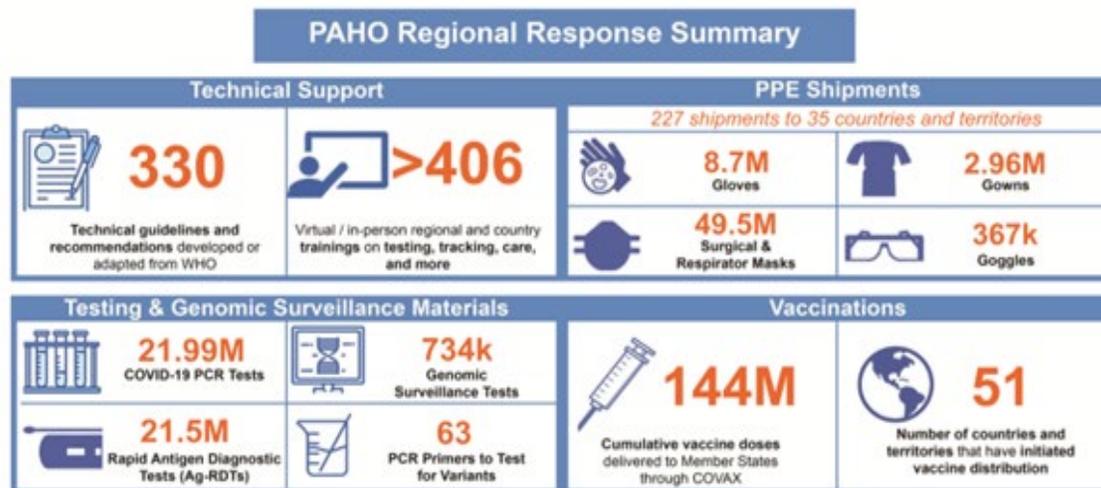
remain, as not all countries and territories with formally established disaster programs have full-time staff and a dedicated budget.

174. In November 2021, PASB contributed to the WHO publication Strategic Toolkit for Assessing Risks.⁵⁰ The toolkit offers a comprehensive, user-friendly approach to enable national and subnational governments to rapidly conduct a strategic and evidence-based assessment of public health risks for the planning and prioritization of health emergency preparedness and disaster risk management activities.

175. The Bureau's work to improve Member States' resilience to emergencies and disasters was undertaken in collaboration with key partners, including the Governments of Macao, China, New Zealand, and Switzerland; Spanish Agency for International Development Cooperation (AECID); United States Centers for Disease Control and Prevention (CDC); USAID's Office of United States (U.S.) Foreign Disaster Assistance (USAID/OFDA); United States (U.S.) Department of Health and Human Services (DHHS) Office of the Assistant Secretary for Preparedness and Response; United Kingdom's Department for International Development (DFID); EU European Civil Protection and Humanitarian Aid Operations (ECHO); United Nations Central Emergency Response Fund (CERF); and WHO Contingency Fund for Emergencies (CFE).

Responding to the COVID-19 pandemic

Figure 1. Summary of key statistics related to the PAHO COVID-19 response in the Americas since the start of the pandemic (as of 30 June 2022)



Cumulative regional response data as of 30 June 2022.

⁵⁰ World Health Organization. Strategic toolkit for assessing risks: a comprehensive toolkit for all-hazards health emergency risk assessment. Geneva: WHO; 2021 [cited 15 August 2022]. Available from: <https://www.who.int/publications/i/item/9789240036086>.

176. On 11 March 2020 the WHO Director-General declared a COVID-19 pandemic. The first case of COVID-19 in the Region of the Americas was confirmed in the United States of America on 20 January 2020, and by mid-June 2020 the Region of the Americas had become the epicenter of the pandemic, with three countries in the Region—Brazil, Peru, and the United States of America—being among the 10 countries reporting the highest number of cases and deaths globally, and Brazil and the United States of America ranking in the top three globally. All countries and territories in the Region have reported COVID-19 cases, and, as of 30 June 2022, the Region of the Americas had recorded a cumulative total of 162,968,878 cases of COVID-19, with cumulative deaths totaling 2,761,824, for a cumulative mortality rate of 270 per 100,000 inhabitants.⁵¹

177. On 17 January 2020, PASB activated an organization-wide Incident Management Support Team (IMST) to undertake technical cooperation with countries and territories in the Region to address and mitigate the impact of the COVID-19 pandemic. The rapidly evolving nature of the pandemic required the Bureau to be agile, innovative, and adaptive in its response (Figure 1), in an environment dominated by travel restrictions, lockdowns, and physical distancing. As an important component of its technical cooperation, the Bureau established the PAHO COVID-19 pandemic web page⁵² to provide, and keep updated, relevant information and resources.

178. The Bureau's technical cooperation was undertaken within the framework of the 10 pillars of the PAHO COVID-19 Response Strategy,⁵³ which is closely aligned with the WHO COVID-19 Strategic Preparedness and Response Plan.⁵⁴ The pillars are: *a)* coordination, planning, financing, and monitoring; *b)* risk communication, community engagement, and infodemic management; *c)* surveillance, epidemiological investigations, contact-tracing, and adjustment of public health and social measures; *d)* points of entry, international travel and transport, mass gatherings, and population movement; *e)* laboratories and diagnostics; *f)* infection prevention and control, and protection of the health workforce; *g)* case management, clinical operations, and therapeutics; *h)* operational support and logistics, and supply chain; *i)* strengthening essential health services and systems; and *j)* vaccination.

Coordination, planning, financing, and monitoring

179. In addition to activating its regional IMST, the Bureau activated IMSTs located in all 27 PAHO/WHO country offices, and all 35 Member States activated intersectoral coordination mechanisms in response to the COVID-19 pandemic in order to mount a comprehensive response. These national mechanisms involved political leadership at the highest level, officials in key sectors, and the active engagement of local governments and authorities, as well as the activation

⁵¹ Pan American Health Organization. Geo-HubCOVID-19 – Information system for the Region of the Americas. Washington, DC: PAHO; 2022 [cited 15 August 2022]. Available from:

<https://paho-covid19-response-who.hub.arcgis.com/>.

⁵² Available from: <https://www.paho.org/en/topics/coronavirus-infections/coronavirus-disease-covid-19-pandemic>.

⁵³ Pan American Health Organization. Response to the COVID-19 pandemic in the Americas: response strategy and donor appeal. January-December 2021. Washington, DC: PAHO; 2021 [cited 15 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/53540>.

⁵⁴ World Health Organization. COVID-19 Strategic preparedness and response plan. Geneva: WHO; 2021 [cited 15 August 2022]. Available from: <https://www.who.int/publications/i/item/WHO-WHE-2021.02>.

of crisis management plans and emergency response mechanisms. PASB supported Member States' development of national COVID-19 response plans to facilitate their strategic action and resource mobilization efforts in confronting the pandemic.

180. Using primarily virtual methods at the national and regional levels, PASB built the capacity of thousands of health professionals across the Americas on a range of issues critical to stemming the spread of SARS-CoV-2. This was complemented by the Bureau's publication of numerous evidence-informed public health guidelines targeting decisionmakers, technical personnel, health workers, and the public, geared toward the development of national strategies, policies, and protocols for an effective response to the pandemic. As of 30 June 2022, PASB had published about 330 COVID-19-related guidance documents, scientific publications, and research protocols.

181. The Bureau established frequent interactions with national authorities and key stakeholders, including engagement between the Director and Executive Management and Presidents, Prime Ministers, and Ministers of Health, to advocate for leadership and multisectoral approaches, provide the most current advice based on available evidence and science, and seek consensus on regionwide approaches to tackle the pandemic. PASB also provided guidance on technical and financial issues to subregional coordination mechanisms such as CARICOM, the Central American Integration System (SICA), and MERCOSUR, as well as the OAS and other regional multilateral organizations.

182. Several countries in the Region announced some degree of financial protection against COVID-19 during 2020, ranging from the inclusion of COVID-19 diagnosis and treatment in the public health services covered by benefits to the elimination of co-payments for social security and mandating health insurance companies to guarantee coverage for COVID-19 patients without co-payment. PASB's technical cooperation in this area encompassed guidance based on its collaboration with WHO in March 2020 to provide assistance to countries in line with Priorities for the Health Financing Response to COVID-19,⁵⁵ including the elimination of user fees for treatment in public health facilities, a measure aimed at allowing greater and more equitable access to the services required to respond to COVID-19.

183. Importantly for the COVID-19 response, especially given the pandemic's economic impact, PASB expanded its partnerships and resource mobilization, launching a \$200 million appeal through the end of 2020 and establishing a new donation page on its web page for the PAHO COVID-19 Response Fund.⁵⁶ This web page, for the first time in PAHO's history, allowed individuals to donate directly to support the Organization's emergency assistance and technical cooperation. In response to its donor appeals, as of 30 June 2022, PASB had mobilized more than \$442 million from strategic donors and partners, including \$75 million awarded through a U.S. Congressional appropriation to respond to the pandemic, achieving 71.4% of the estimated funding requirements for priority public health needs of countries in the Region for 2020-2022. The Bureau also received \$227 million from international financing institutions and bilateral

⁵⁵ World Health Organization. Priorities for the health financing response to COVID-19. Geneva: WHO; 2020 [cited 15 August 2022]. Available from:

<https://www.who.int/docs/default-source/health-financing/health-financing-response-to-covid-19.pdf>.

⁵⁶ Available from: <https://www.paho.org/en/paho-covid-19-response-fund>.

donors to support the procurement, on behalf of Member States, of essential supplies and equipment critical to the response, including personal protective equipment (PPE), laboratory tests, reagents, and clinical care supplies. An additional \$34.75 million was mobilized in 2021 alone to support other emergency response operations and strengthen emergency preparedness, readiness, and risk reduction throughout the Region.

184. In addition to contributions from individuals, collaboration with traditional partners, and strategic partnerships and in-kind donations from Direct Relief, Facebook, Global Citizen, Mary Kay Cosmetics, Sony Music Latin, Twitter, Alisson Becker, and Salomón Beda, PASB received financial contributions to support its response to the COVID-19 pandemic in the Americas from the following partners: Governments of Belize, Canada, Colombia, Jamaica, Japan, New Zealand, Republic of Korea, Spain, Sweden, Switzerland, United Kingdom of Great Britain and Northern Ireland, and United States of America; World Bank Group; EU; WHO, and its donors; World Food Programme; United Nations agencies—CERF, United Nations Children’s Fund (UNICEF), United Nations Development Programme (UNDP), United Nations Multi-Partner Trust Fund (MPTF), United Nations Office for South-South Cooperation (UNOSSC), United Nations Resident Coordinator’s Office, and United Nations Development Coordination Office; International Organization for Migration (IOM); IDB; Development Bank of Latin America; Caribbean Development Bank (CDB); Central American Bank for Economic Integration; Global Fund; Gavi; Caribbean Confederation of Credit Unions; Mixed Fund for Technical and Scientific Cooperation Mexico-Spain; WHO Foundation; Foundation for Innovative New Diagnostics; Alma Jean Henry Charitable Trust; Ford Foundation; Foundation MAPFRE; The Rockefeller Foundation; and, Yamuni Tabush Foundation.

185. The Bureau coordinated with and guided 19 countries⁵⁷ in the Region to generate and submit proposals to the Global Fund’s COVID-19 Response Mechanism,⁵⁸ in line with the needs defined in their national COVID-19 response plans. The mechanism supports countries to mitigate the impact of COVID-19 on programs to fight human immunodeficiency virus (HIV), tuberculosis (TB), and malaria, and based on the proposals submitted, the Region received \$130 million. The funds were allocated to the COVID-19 response pillars addressing health services, laboratories, case management, and infection prevention and control (IPC).

Risk communication, community engagement, and infodemic management

186. The COVID-19 pandemic has been characterized by challenges in the dissemination of lifesaving messages amid the infodemic caused by the deluge of misinformation and disinformation, especially on social media and mobile messaging applications. Risk communication is an integral part of PASB’s response to the pandemic, enabling all audiences to receive accurate information in the language and through the medium most familiar to them. The Bureau developed and disseminated risk communication strategies and tools to assist in

⁵⁷ Belize, Bolivia (Plurinational State of), Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Guyana, Honduras, Jamaica, Nicaragua, Panama, Paraguay, Peru, Haiti, Suriname, and Venezuela (Bolivarian Republic of).

⁵⁸ Available from: <https://www.theglobalfund.org/en/covid-19/response-mechanism/>.

the production and implementation of national risk communication and community engagement plans and products that considered all population segments in Member States.

187. The Bureau conducted risk communication surveys of ministries of health and other authorities involved in COVID-19 communications to assess needs and identify potential synergies among countries. The Bureau created a risk communication package for healthcare workers and conducted virtual training in English and Spanish for ministry of health staff; briefed high-level policymakers, including ministers of health, on relevant issues; and developed COVID-19: Guidelines for Communicating about Coronavirus Disease 2019: A Guide for Leaders.⁵⁹

188. The Bureau's leadership instituted frequent discussions with high-level decision- and policy-makers in countries and territories, and organized similar briefings with ambassadors of Member States to the OAS. The Bureau responded to media enquiries on the pandemic and, under the aegis of the Director, held weekly press briefings to spotlight critical issues, including those related to the health needs of persons in situations of vulnerability that countries should continue to address, notwithstanding the necessary attention being given to COVID-19. The Bureau advocated for and encouraged simultaneous focus on priority health programs such as immunization and the care and treatment of persons with underlying health conditions, in order to protect the Region's public health gains. The press briefings were broadcast live and shared on social media sites such as Facebook, Twitter, and YouTube, reaching over 1.2 million people regionally and globally, as well as national, regional, and global media outlets, and other partners and stakeholders.

189. The Bureau organized weekly "ask the expert" sessions on Facebook Live that addressed a variety of topics, and developed an alliance with Twitter to provide factual, reliable information on the pandemic—the Bureau's first formal agreement with a social media company. The Bureau also participated in weekly meetings with United Nations communications officers from Latin America to exchange information and identify common areas of work.

190. The Bureau conducted webinars and online sessions that covered a wide variety of topics related to COVID-19, and communication products and materials were developed in multiple languages, including sign language. The Bureau developed fact sheets for persons living with NCDs, who proved to be at higher risk of severe disease and death due to COVID-19, and contributed to and disseminated a storybook entitled *My Hero Is You: How Kids Can Fight COVID-19!*⁶⁰ which promoted indoor physical activity for young persons. The book was a project of the United Nations Inter-Agency Standing Committee Reference Group on Mental Health and Psychosocial Support in Emergency Settings, and was translated into more than 100 languages. The Bureau also made available eight online WHO courses in the PAHO VCPH on various COVID-19-related topics.

⁵⁹ Pan American Health Organization. COVID-19: guidelines for communicating about coronavirus disease 2019: a guide for leaders. Washington, DC: PAHO; 2020 [cited 15 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/52391>.

⁶⁰ Patuck H. My hero is you: how kids can fight COVID-19! Inter-Agency Standing Committee; 2020 [cited 15 August 2022]. Available from: <https://www.paho.org/en/documents/my-hero-you-how-kids-can-fight-covid-19>.

191. The Bureau participated in the Working Group on COVID-19 and Educational Institutions within the WHO Research Network on COVID-19 for Maternal, Newborn, Child and Adolescent Health, which prepared a protocol to study barriers to and facilitators of adherence to guidelines on public health measures to prevent COVID-19 in schools. This collaborative implementation research included PASB, the United Nations University International Institute for Global Health, and the London School of Hygiene and Tropical Medicine.

192. Additionally, PASB collaborated with artists from nine countries in the Region—Bolivia (Plurinational State of), Brazil, Chile, Colombia, Ecuador, Mexico, Paraguay, Peru, and United States of America—and France to produce a collection of graphics advising on the prevention of COVID-19 infection, combating misinformation and myths about the disease, and promoting mental health during the pandemic. The initiative grew out of a collaboration between IMPAQTO, a social innovation laboratory and co-working network; NEXUS, a network of young philanthropists; and the PVBLIC Foundation, which mobilizes media, data, and technology for sustainable impact.

193. The Bureau collaborated with CDB and the Caribbean Broadcasting Union (CBU) in July 2021 to host a virtual training series for Caribbean journalists and communicators on ethical reporting during the pandemic,⁶¹ and in November 2021 PASB released the technical guide Risk Communication and Community Engagement for Contact Tracing in the Context of COVID-19 in the Region of the Americas.⁶²

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

194. The Bureau worked with countries and territories in the Region to strengthen their surveillance systems, an essential pillar of the response to the COVID-19 pandemic, continuing event-based surveillance, while helping to boost national indicator-based surveillance.⁶³ This joint approach ensured that public health risks beyond countries' routine surveillance systems were captured, improving case detection capacity.

195. The Bureau collaborated to integrate SARS-CoV-2 surveillance into countries' sentinel-based, syndromic, severe acute respiratory infections (SARIs)/influenza-like illness surveillance

⁶¹ Pan American Health Organization. Caribbean journalists and communicators prepare for challenges of reporting on mental health issues during the COVID-19 pandemic. Washington, DC: PAHO; 2021 [cited 15 August 2022]. Available from: <https://www.paho.org/en/news/30-7-2021-caribbean-journalists-and-communicators-prepare-challenges-reporting-mental-health>.

⁶² Pan American Health Organization. Risk communication and community engagement for contact tracing in the context of COVID-19 in the Region of the Americas. Washington, DC: PAHO; 2021 [cited 15 August 2022]. Available from: <https://www.paho.org/en/documents/risk-communication-and-community-engagement-contact-tracing-context-covid-19-region>.

⁶³ Event-based public health surveillance looks at reports, stories, rumors, and other information about health events that could be a serious risk to public health. Such information may be described as unstructured information because the information obtained is nonstandardized or subjective. Indicator-based public health surveillance is a more traditional way of reporting diseases to public health officials.

systems, in order to facilitate characterization of COVID-19 transmissibility, severity, and impact, and allow effective evaluation of seasonal influenza and COVID-19 vaccination initiatives. The Bureau maintained a dashboard displaying seroprevalence studies in Latin America and the Caribbean—including information on individual studies—which provided valuable data on the spread of the virus. Most recently, PASB’s regional team undertook technical cooperation with Brazil and Peru regarding seroepidemiological studies and the coordination of COVID-19 UNITY Studies.⁶⁴

196. Tracking, analyzing, and forecasting epidemiological trends are key to an effective response, and one of the tools that PASB utilized for evaluating the pandemic’s regional trends was the Epidemic Intelligence from Open Sources initiative.⁶⁵ This initiative is a unique collaboration among various public health stakeholders around the globe, aimed at building a strong public health information community. It brings together new and existing initiatives, networks and systems to create a unified, all-hazards, One Health approach⁶⁶ to early detection, verification, assessment, and communication of public health threats using publicly available information. This tool allowed PASB to sift through print and social media using artificial intelligence and machine-learning for swift detection of rumors and alerts regarding events of public health concern.

197. The Bureau maintained the COVID-19 line listing—a critical tool for managing the confirmation and isolation of COVID-19 patients and for tracing and isolating their contacts—using the WHO-recommended format and captured nominal data on 70% of all confirmed and probable cases, more than any other WHO Region. The Bureau analyzed regional trends each week based on the collection of COVID-19 line listings and the daily collection of cases and deaths, and maintained a regional geo-hub with publicly available dashboards.⁶⁷ The dashboards include subregional and country epidemiological curves, utilizing cases, incidence rates, other epidemiological information, and cumulative data, which are updated daily. Recognizing the value of geographical information system (GIS) data in monitoring the spread and scale of the pandemic, PASB supported Argentina, Belize, Chile, Costa Rica, Ecuador, Guatemala, Guyana, Nicaragua, Suriname, and the Bolivarian Republic of Venezuela to establish their own GIS hubs—linked to the regional hub. PASB also generated specific hubs to examine the evolution of COVID-19 and the humanitarian crisis in the tri-border area of Brazil, Colombia, and Peru. These efforts contributed to the initial monitoring of COVID-19 vaccine deployment.

⁶⁴ UNITY Studies is a global seroepidemiological standardization initiative that aims to increase evidence-based knowledge for action. See: World Health Organization. Coronavirus disease (COVID-19) technical guidance: the Unity Studies: early investigation protocols. Geneva: WHO [date unknown] [cited 15 August 2022]. Available from: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/early-investigations#:~:text=generic>.

⁶⁵ Available from: <https://www.who.int/initiatives/eios>.

⁶⁶ The One Health approach recognizes and addresses the intersection between animal health and human health, and requires intersectoral, interprogrammatic, and interdisciplinary governance of initiatives to promote and protect the health of people, animals, and the environment in an integrated manner. The approach extends beyond zoonotic diseases to include pathologies with an impact on public health and food security.

⁶⁷ Pan American Health Organization. Geo-HubCOVID-19 – information system for the Region of the Americas. Washington, DC: PAHO; 2022 [cited 15 August 2022]. Available from: <https://paho-covid19-response-who.hub.arcgis.com/>.

198. The Bureau monitored specific population groups, including healthcare workers, indigenous populations, and Afro-descendant people, as well as priority topics such as COVID-19 variants of concern (VOC) and variants of interest, multisystem inflammatory syndrome (MIS) in children and adults, COVID-19 in pregnant women, and mucormycosis infections associated with COVID-19. PASB began monitoring confirmed cases of MIS in children and adolescents (MIS-C) in June 2020, and at the end of November 2021, a total of 8,686 confirmed cases had been reported, including 165 deaths. The Bureau, WHO, and clinical researchers from the Hospital Universitario Infanta Sofía and the Instituto de Investigación Sanitaria Hospital 12 de Octubre, both in Madrid, Spain, organized a series of webinars to disseminate the clinical characteristics, diagnosis, and treatment of MIS-C.

199. The Bureau developed a COVID-19 risk assessment tool⁶⁸ for health authorities in large cities to assess their vulnerability and the risk of spread of COVID-19, and trained personnel in selected countries in its application. PASB collaborated with the London School of Hygiene and Tropical Medicine Centre for Mathematical Modelling of Infectious Diseases to develop a COVID-19 comorbidities tool.⁶⁹ This tool, launched in February 2021, enabled countries to determine the number of individuals at increased risk of severe COVID-19 due to underlying conditions; formulate possible strategies to shield extremely vulnerable people from infection; manage chronic conditions; and guide vaccine allocation for those at highest risk. Application of this model to estimate the regional population at increased risk revealed that 250 million persons—about 24% of the population of the Americas—were at increased risk of severe COVID-19 outcomes.

200. The Bureau partnered with Harvard Analytics to develop tools to calculate the effective reproductive number (R_t)⁷⁰ using the EpiEstim application,⁷¹ and to project possible new infections and better understand the dynamics of the pandemic using a corresponding web-based application. R_t calculations are essential to feed the simulator CovidSIM,⁷² an online platform that assists in generating short-term projections of the number of COVID-19 cases, and the Bureau developed a user guide for CovidSIM.⁷³ PASB trained persons from several countries in the use of these tools, conducted ad hoc analyses, helped selected countries to ramp up their capacities for tracing and quarantine of contacts, and issued pertinent points for consideration by national health

⁶⁸ The tool (preconfigured with data for Córdoba, Argentina) is available from: Pan American Health Organization. Herramienta de evaluación de riesgos COVID-19 – Provincia de Córdoba, Argentina. Washington, DC: PAHO; 2022 [cited 15 August 2022]. Available from: <https://paho-who.shinyapps.io/cordoba/>.

⁶⁹ Pan American Health Organization. COVID-19 and comorbidities in the Americas: hands-on tool to estimate the population at increased and high risk of severe COVID-19 due to underlying health conditions for the Americas. Washington, DC: PAHO; 2021 [cited 15 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/53254>.

⁷⁰ The effective reproductive number (R_t) is the average number of secondary cases per infectious case in a population made up of both susceptible and nonsusceptible hosts.

⁷¹ Imperial College London. EpiEstim app. London: ICL [date unknown] [cited 15 August 2022]. Available from: <https://shiny.dide.imperial.ac.uk/epiestim/>.

⁷² Available from: <http://covidsim.eu/>.

⁷³ Pan American Health Organization. COVID-19 modeling exercise: a “how to” guide for CovidSIM. Washington, DC: PAHO; 2020 [cited 15 August 2022]. Available from: <https://www.paho.org/en/documents/covid-19-modeling-exercise-how-guide-covidsim>.

authorities undertaking ethical and effective contact-tracing for COVID-19, as a complement to WHO recommendations.

201. In collaboration with the Global Outbreak Alert and Response Network, PASB trained persons from several countries and territories in the use of the WHO Go.Data application,⁷⁴ a tool that supports suspected case investigation and management, display of transmission chains, contact-tracing, and monitoring of adherence to quarantine, and a number of those countries implemented Go.Data as part of their COVID-19 response. In May 2021, the Bureau unveiled its contact-tracing hub,⁷⁵ a multidisciplinary knowledge center for all activities related to contact-tracing and an updated repository available to a wide variety of stakeholders, including national policymakers, responders, researchers, educators, affected communities, and the public.

202. The Bureau assisted Member States in rapid assessments of excess mortality by developing tools to estimate the full scale of mortality from COVID-19. The provision of guidance for mortality surveillance using existing country data and interactive dashboards contributed to increased capacity for analysis of excess mortality at national and subnational levels, disaggregated by geographical area, age, sex, education, and other variables. PASB trained more than 1,250 health personnel from Member States to certify and classify deaths due to COVID-19 using the emergency codes assigned for laboratory-confirmed and suspected cases. The Bureau's technical cooperation also enabled Member States to appropriately code other diseases, deaths, and conditions, according to the WHO Family of International Classifications.

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

203. With vaccines only becoming available during the first quarter of 2021, initial COVID-19 control strategies centered on the use of nonpharmaceutical interventions, including personal and environmental protective measures, physical distancing, and international travel restrictions. As COVID-19 spread rapidly across the globe, and imported cases became more prevalent, international travel-related measures were established to prevent further importations.

204. The Bureau issued a series of guidance notes, aligned with WHO global strategies, on a range of physical distancing and travel-related measures, including testing protocols for travelers, and provided a framework to inform Member States' decision-making for adjusting measures to reinitiate travel in 2020.⁷⁶ The Bureau supported countries in promoting, advocating for, and educating on nonpharmacological measures to prevent and control COVID-19 at points of entry in efforts to control their borders, including the production of educational materials designed to

⁷⁴ Available from: <https://www.who.int/initiatives/eios>.

⁷⁵ Pan American Health Organization. Contact tracing knowledge hub. Washington, DC: PAHO; 2020. Available from: <https://www.paho.org/en/contact-tracing-knowledge-hub>.

⁷⁶ For technical publications related to travel-related measures see: Pan American Health Organization. Technical documents – coronavirus disease (COVID-19). Washington, DC: PAHO; 2022. Available from: <https://www.paho.org/en/technical-documents-coronavirus-disease-covid-19>.

raise awareness among travelers and personnel about quarantine, physical distancing, and IPC measures for stemming the spread of the virus.

205. The Bureau gave particular attention to the Caribbean in light of the importance of tourism for the economy of that subregion,⁷⁷ and, through CARICOM and WHO, respectively, established contact with the cruise ship industry in the Caribbean and the International Maritime Organization, the latter regarding issues specific to seafarers' occupational health. PASB collaborated with several civil aviation working groups regarding potential strategies for resuming nonessential travel. In September 2020, the Bureau presented the limitations of SARS-CoV-2 testing as a requirement to resume nonessential travel in a webinar for national civil aviation and health authorities from the Americas, in collaboration with the South American office of the International Civil Aviation Organization. PASB's guidance on resuming nonessential international travel in the context of the COVID-19 pandemic contributed to countries' evaluation of testing requirements before or after international travel as a measure to reduce the risk of imported COVID-19 cases.

206. The Bureau also contributed to the WHO document *Considerations for Implementing a Risk-Based Approach to International Travel in the Context of COVID-19*,⁷⁸ which was published in December 2020, and, with the rollout of COVID-19 vaccines early in 2021, the Bureau collaborated with WHO to issue *Interim Guidance for Developing a Smart Vaccination Certificate—Release Candidate 1*⁷⁹ in March 2021. Noting the multiple and rapid changes since the resumption of nonessential international traffic in mid-2020, and the spread of SARS-CoV-2 VOC in the Region, PASB has continued to monitor the range of international travel-related measures implemented by Member States in order to guide the formulation of policy and technical recommendations.

Laboratories and diagnostics

207. The laboratory network of national influenza centers (NICs) provided a foundation for the COVID-19 response, in particular by making possible the swift introduction of molecular testing for the emerging virus throughout the Region. The inaugural regional laboratory meeting in October 2019 of the Severe Acute Respiratory Infections network (SARInet),⁸⁰ the regional collaboration of professionals within hospitals, laboratories, and associated organizations who participate in SARI surveillance in the Americas, added significant value to the Region's preparedness and efforts to manage COVID-19. The meeting improved the capacity of countries

⁷⁷ Pan American Health Organization. *Considerations for resuming non-essential international traffic in the Caribbean in the context of the COVID-19 pandemic*. Washington, DC: PAHO; 2020 [cited 15 August 2022]. Available from: <https://www.paho.org/en/documents/considerations-resuming-non-essential-international-traffic-caribbean-context-covid-19>.

⁷⁸ World Health Organization. *Considerations for implementing a risk-based approach to international travel in the context of COVID-19*. Geneva: WHO; 2020 [cited 15 August 2022]. Available from: [WHO-2019-nCoV-Risk-based_international_travel-2020.1-eng.pdf](https://www.who.int/publications/i/item/WHO-2019-nCoV-Risk-based_international_travel-2020.1-eng.pdf).

⁷⁹ World Health Organization. *Interim guidance for developing a Smart Vaccination Certificate*. Geneva: WHO; 2021 [cited 15 August 2022]. Available from: [WHO-2019-nCoV-Risk-based_international_travel-2020.1-eng.pdf](https://www.who.int/publications/i/item/WHO-2019-nCoV-Risk-based_international_travel-2020.1-eng.pdf).

⁸⁰ Available from: <https://www.sarinet.org/en/>.

and territories, which are part of the WHO Global Influenza Surveillance and Response System network,⁸¹ to face the challenges of managing the transmission of influenza viruses that evolve and co-circulate with other respiratory viruses in the Americas, and their ability to incorporate COVID-19 testing algorithms from the outset of the pandemic. Currently, all of the Region's NICs and national reference laboratories are supporting the COVID-19 response, and, with access to the SARInet pool of expertise, knowledge, and resources, the NICs have facilitated the speedy rollout of testing and reporting for SARS-CoV-2.

208. The Bureau supported the strengthening or installation of SARS-CoV-2 virus laboratory diagnostic capacity in countries and territories, and all 35 Member States continued leveraging the installed capacity for molecular diagnostic testing. PASB not only built diagnostic capacity in the NICs and SARI laboratory network to detect SARS-CoV-2, but also included wider health and laboratory systems, and donated essential laboratory reagents and supplies to establish or strengthen surveillance and confirmation of the virus. The Bureau disseminated a clear algorithm for SARS-CoV-2 testing that built on existing influenza surveillance systems, and provided guidance on testing strategies, quality assurance procedures, and genomic surveillance. PASB developed and shared technical guidance on the interpretation of laboratory results for COVID-19 diagnosis, conducted technical and refresher training exercises, and followed up to provide troubleshooting and analysis of results.

209. The Bureau provided guidance on the design of laboratory spaces designated for COVID-19 testing; built capacity through training of staff and deployment of laboratory experts to selected countries, including the Bahamas, Barbados, Colombia, Dominica, Guyana, Haiti, Jamaica, Suriname, and the Bolivarian Republic of Venezuela; and proposed a strategy to expand the diagnostic network through implementation of antigen rapid diagnostic tests (Ag-RDTs) at points of care. The Bureau provided relevant guidelines and virtual training, donated Ag-RDTs to countries, and procured these tests, as well as PCR tests, for several Member States through the Strategic Fund—over 4.2 million Ag-RDTs were procured between July 2021 and April 2022.

210. Since the start of the pandemic there has been a global effort to sequence SARS-CoV-2 and monitor its evolution by sharing sequenced genomes on WHO's Global Initiative on Sharing All Influenza Data platform, an open-access database that shares data freely with researchers to foster understanding of the virus and contribute to vaccine development. Several PAHO Member States participated in the regional pilot SARS-CoV-2 genomic surveillance project, and three laboratories in the Region—Oswaldo Cruz Foundation (Fiocruz), Brazil; Institute of Epidemiological Diagnosis and Reference, Mexico; and CDC—were designated as WHO COVID-19 reference laboratories.

211. The Bureau coordinates the COVID-19 Genomic Surveillance Regional Network (COVIGEN),⁸² which was established in 2020 to monitor SARS-CoV-2 and detect changes in its sequence that may influence its transmissibility, infectivity, and severity, as well as vaccine

⁸¹ Available from: <https://www.who.int/initiatives/global-influenza-surveillance-and-response-system>.

⁸² Available from: <https://www.paho.org/en/topics/influenza-and-other-respiratory-viruses/covid-19-genomic-surveillance-regional-network>.

effectiveness, treatment, and diagnostics. The Bureau supported several Member States to strengthen SARS-CoV-2 genomic sequencing and upload resulting data to the Global Initiative on Sharing All Influenza Data platform, and, as of 28 June 2022, 376,852 full genome sequences of SARS-CoV-2 had been uploaded to the platform from PAHO Member States in Latin America and the Caribbean, providing a clearer picture of the variants circulating in the Region. Through COVIGEN, sequences were reported from the Plurinational State of Bolivia, Dominican Republic, Haiti, and Honduras for the first time, and 31 laboratories from 28 countries and territories⁸³ now participate in the network.

212. Although not all countries and territories have in-country capacity to sequence the virus, all have access to sequencing from selected laboratories outside their borders, and PASB provided equipment and supplies for in vitro diagnostics (IVD) despite the shortage of products available on the market. The Bureau facilitated the expansion of the SARS-CoV-2 Genomic Surveillance Network to include four sequencing reference laboratories: Institute of Epidemiological Diagnosis and Reference, Mexico; Gorgas Memorial Institute for Health Studies, Panama; UWI St. Augustine, Trinidad and Tobago; and CDC, in addition to the existing two—Fiocruz, Brazil, and Public Health Institute, Chile. PASB convened the first virtual meeting of the network in April 2021, with almost 295 participants from across the Region in attendance—in addition to participants from Singapore, South Africa, Spain, and Switzerland—to discuss current sequencing capacity in the Region, opportunities for expanding the network and including new partners, and next steps. Some countries have extended their molecular diagnostic capacity toward next-generation sequencing, an advanced form of full genome sequencing that enables single cases to be linked to transmission chains, which provides a more complete picture of the interconnectedness of COVID-19 and other pathogens circulating within and across countries.

213. In July 2021, PASB published Recommendations for Reporting and Notification of SARS-CoV-2 Variants of Concern and Variants of Interest,⁸⁴ which provides operational recommendations for reporting these SARS-CoV-2 variants through IHR official channels. In November 2021, in response to the emergence of a new and fast spreading VOC, PASB published Detection and Diagnosis of SARS-CoV-2 in the Context of the Circulation of the Omicron Variant of Concern,⁸⁵ with recommendations from the PASB laboratory response team for the timely detection and reporting of this new, highly transmissible variant.

⁸³ Argentina, Bahamas, Barbados, Belize, Bolivia (Plurinational State of), Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, French Guiana, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Suriname, Trinidad and Tobago, Uruguay, United States of America, and Venezuela (Bolivarian Republic of).

⁸⁴ Pan American Health Organization. Recommendations for reporting and notification of SARS-CoV-2 variants of concern and variants of interest. Washington, DC: PAHO; 2021 [cited 15 August 2022]. Available from: <https://www.paho.org/en/documents/recommendations-reporting-and-notification-sars-cov-2-variants-concern-and-variants>.

⁸⁵ Pan American Health Organization. Detection and diagnosis of SARS-CoV-2 in the context of the circulation of the Omicron variant of concern. Washington, DC: PAHO; 2021 [cited 15 August 2022]. Available from: <https://www.paho.org/en/documents/detection-and-diagnosis-sars-cov-2-context-circulation-omicron-variant-concern>.

214. In June 2022, the 170th Session of the PAHO Executive Committee considered a proposed Strategy on Regional Genomic Surveillance for Epidemic and Pandemic Preparedness and Response (Document CE170/18) to consolidate and extend the advances achieved, to date, in order to prepare for and respond to emerging and existing pathogens with epidemic and pandemic potential.

Infection prevention and control, and protection of the health workforce

215. IPC practices are critical to containing the spread of emerging and reemerging pathogens. PASB worked closely with health authorities to reiterate the need for consistent and robust IPC practices as important COVID-19 containment measures, including standard precautions, hand hygiene during the provision of care, rational use of PPE, cleaning and disinfection of medical devices, and water, sanitation, and hygiene (WASH) in health facilities and the community. All countries implemented procedures to reinforce IPC, and all PAHO Member States reported having a national IPC program and WASH standards in health facilities.

216. Health workers are on the front lines of care for potential and confirmed COVID-19 patients, where, in the process, they put their own health and safety at risk. PASB issued guidelines on care for health workers exposed to COVID-19 in health facilities,⁸⁶ and provided in-person and virtual training to ministries of health and health workers on various topics. These topics included IPC concepts; rational use of PPE; technical and regulatory aspects for the extended use, reuse, and reprocessing of respirators; and transmission-based precautions and measures for different settings. The Bureau also provided IPC training to logisticians, hospitality workers, and other persons at higher risk of exposure to COVID-19 from across the Region, and worked with ministries of health to estimate needs for PPE, essential medicines, and other supplies, based on epidemiological trends and projections. PASB developed medPPE,⁸⁷ a mobile application for the adequate and rational use of PPE to protect healthcare workers and avoid misuse of essential supplies.

217. In strengthening multisectoral approaches to the pandemic, PASB developed recommendations for reducing the risk of infection beyond the health sector, focusing on persons living in long-term care facilities, workers at points of entry, persons managing corpses, election workers, and emergency preparedness personnel planning for hurricane shelters,⁸⁸ as well as for the general population seeking guidance on how to avoid COVID-19.

Case management, clinical operations, and therapeutics

218. With the Bureau's technical cooperation, Member States accelerated actions to adopt digital solutions for the timely, quality management of persons with, and at high risk of,

⁸⁶ Pan American Health Organization. Care for health workers exposed to the new coronavirus (COVID-19) in health facilities. Interim recommendations. Washington, DC: PAHO; 2020 [cited 15 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/52032>.

⁸⁷ Available from: <https://www.paho.org/en/health-emergencies/medical-personal-protective-equipment>.

⁸⁸ Pan American Health Organization. COVID-19 infection prevention and control in shelters for women and children survivors of domestic and family violence in the Caribbean. Washington, DC: PAHO; 2020 [cited 15 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/52774>.

COVID-19. Platforms and applications for telehealth, including teleconsultations, telemedicine visits, remote monitoring of patients, and remote communication, enabled health workers, particularly those at the first level of care, to manage medical care and facilitate home monitoring of persons with COVID-19 and other conditions, including NCDs.

219. The urgent need for evidence-based measures to respond to the COVID-19 pandemic led to a rapid escalation in studies to test potential therapeutic options, with hundreds of such options or their combinations investigated in numerous clinical trials and observational studies. The Bureau collaborated with the Chile-based Epistemonikos database⁸⁹ to identify systematic reviews relevant to COVID-19 and conducted rapid reviews of emerging evidence on the effectiveness, therapeutic benefits, and harms of possible treatments. The Bureau compiled, updated, and disseminated available evidence on the efficacy and safety of therapeutics for managing COVID-19 through the publication *Ongoing Living Update of COVID-19 Therapeutic Options: Summary of Evidence—Rapid Review*,⁹⁰ which identifies, assesses, and synthesizes evidence on the most recent therapeutic options, to facilitate clinical decision-making. PASB also issued recommendations on the initial care of persons with acute respiratory illness due to COVID-19 in health facilities⁹¹ and on the reorganization of services for patient management.⁹² Additionally, the Bureau developed evidence-informed guidance for the prophylaxis and management of patients with mild and moderate COVID-19,⁹³ as well as for the care of critically ill patients with the infection,⁹⁴ including an essential medicines list.⁹⁵

220. The COVID-19 pandemic posed challenges for the provision of health services, where patient care must be coordinated with and integrated into primary, secondary, and tertiary care levels, across all geographical areas, including remote localities. All Member States took significant measures to rapidly strengthen their public health systems by—among other measures—increasing the availability of beds, providing essential equipment and human resources to health facilities, and establishing respiratory clinics. PASB’s technical cooperation provided guidance on strategies to expand health services to meet these unprecedented needs, including

⁸⁹ Available from: <https://www.epistemonikos.org/>.

⁹⁰ Pan American Health Organization. *Ongoing living update of COVID-19 therapeutic options: summary of evidence—rapid review*. Washington, DC: PAHO; 2022 [cited 15 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/52719>.

⁹¹ Pan American Health Organization. *Initial care of persons with acute respiratory illness (ARI) in the context of coronavirus disease (COVID-19) in healthcare facilities: assess the risk, isolate, refer*. Washington, DC: PAHO; 2020 [cited 15 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/52031>.

⁹² Pan American Health Organization. *Recommendations for reorganization and expansion of hospital services in response to COVID-19*. Washington, DC: PAHO; 2020 [cited 15 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/52244>.

⁹³ Pan American Health Organization. *Guidelines for prophylaxis and management of patients with mild and moderate COVID-19 in Latin America and the Caribbean*. Washington, DC: PAHO; 2021 [cited 15 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/55068>.

⁹⁴ Pan American Health Organization. *Guidelines for care of critically ill adult patients with COVID-19 in the Americas. Summary, version 3*. Washington, DC: PAHO; 2021 [cited 15 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/53895>.

⁹⁵ Pan American Health Organization. *Essential medicines list for management of patients admitted to intensive care units with suspected or confirmed COVID-19 diagnoses (update 10 August 2020)*. Washington, DC: PAHO; 2020 [cited 15 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/52640>.

training of health workers in case management and therapeutics, and the Bureau worked with national health authorities to adapt recommendations and policy options on clinical management, including for populations in situations of vulnerability.

221. The Bureau collaborated with WHO and other partners and stakeholders to advance clinical research, expand knowledge, and facilitate the exchange of experiences and expertise of front-line clinicians from across the globe. The Bureau also worked directly with countries and partners to utilize the WHO Global Clinical Platform for COVID-19,⁹⁶ which collects anonymized clinical data on hospitalized, suspected, or confirmed COVID-19 cases.

222. The Bureau created an Oxygen Technical Group to evaluate limitations that countries and territories were experiencing as the number of patients requiring oxygen therapy increased during the pandemic. In response to country requests, the group undertook tailored, comprehensive technical cooperation with 10 countries and territories—Antigua and Barbuda, Argentina, Bolivia (Plurinational State of), Colombia, Guyana, Panama, Paraguay, Peru, Suriname, and Turks and Caicos Islands—resulting in locally adapted recommendations covering clinical approaches; organization of health services to optimize existing infrastructure; assessment of local capacities; and strengthening of technical capacities and work in integrated networks. Additionally, PASB conducted periodic webinars on the topic that reached health professionals and authorities in all Member States.

223. Work was done with Member States to provide guidance on the quality and use of COVID-19 IVD, considering authorizations from the WHO Emergency Use Listing (EUL) and recommendations from leading NRAs worldwide. NRAs ensured that robust mechanisms were in place to adapt to a rapidly changing environment as new products became available for treatment, diagnostics, and other COVID-19-related uses. PASB convened all NRAs in the Region to establish the COVID-19 Regulatory Network. This network met frequently to exchange information, share updates on critical areas such as approaches for issuing regulatory emergency authorizations for medical devices, and identify potential collaboration for the approval and oversight of new therapeutic products. PASB presented the WHO EUL information outcomes to the NRAs and enabled access to COVID-19 EUL vaccine dossiers for all NRAs that signed a confidentiality agreement with WHO, facilitating countries' reliance on WHO recommendations and expeditious access to vaccines and information to engender trust and enable appropriate pharmacovigilance activities.

224. HTAs provided invaluable guidance for health authorities on the use of technologies relevant to the COVID-19 pandemic, and the BRISA database had accumulated 2,539 reports as of April 2022, with 405 reports tabled in its COVID-19 section. PASB maintained and updated a list of prioritized (or approved under the WHO's EUL) IVD for proprietary and open platforms, and also monitored alerts and updates as part of its postmarketing surveillance on

⁹⁶ World Health Organization. The WHO Global Clinical Platform for COVID-19. Geneva: WHO; 2022 [cited 15 August 2022]. Available from: <https://www.who.int/teams/health-care-readiness-clinical-unit/covid-19/data-platform>.

COVID-19-related products to provide updated, timely information to regulatory authorities.⁹⁷ The Bureau also developed a virtual course (Assessment, Selection, Rational Use, and Management of Health Technologies) concerning COVID-19, tailored primarily to Caribbean health personnel, and shared recommendations, considerations, and over 300 HTAs of commodities for the management of COVID-19, produced by regulatory agencies from the EU, Australia, and other countries.

225. The pandemic brought bioethics to the forefront in prioritizing scarce resources for critical care, such as ventilators, and in using unproven interventions outside of research settings. PASB expanded its previous guidance documents to provide Member States with tools to ensure that interventions not previously proven safe and effective for COVID-19 were used ethically,⁹⁸ and to respond to emerging scientific evidence that might justify the need to modify, suspend, or even cancel ongoing studies.⁹⁹ In April 2022, WHO adopted the recommendations for the ethical use of unproven interventions for COVID-19 for emergencies beyond the pandemic.¹⁰⁰

226. Also in April 2022, researchers, health authorities, and members of ethics committees from across the Region participated in PASB-facilitated dialogues to discuss challenges and opportunities for conducting COVID-19 research and share lessons learned, given the ongoing need to strengthen ethical research and the integration of ethics and evidence into decision-making.¹⁰¹ The discussions focused on the preliminary recommendations and content of the upcoming PAHO publication *Catalyzing Ethical Research in Emergencies. Ethics Guidance, Lessons Learned from the COVID-19 Pandemic and Pending Agenda*.

227. In 2020, PASB led an assessment of COVID-19 studies in Latin America and the Caribbean,¹⁰² based on the trials registered in WHO's International Clinical Trials Registry Platform, and found that greater coordination would avoid the conduct of studies that duplicate efforts and risk further straining limited resources for clinical trials. The Bureau also provided guidance and key information to Member States interested in participating in the international

⁹⁷ Pan American Health Organization. Regional platform on access and innovation for health technologies. Washington, DC: PAHO; 2022 [cited 15 August 2022]. Available from: <https://prais.paho.org/en/home>.

⁹⁸ Pan American Health Organization. Emergency use of unproven interventions outside of research. Ethics guidance for the COVID-19 pandemic. Washington, DC: PAHO; 2020 [cited 15 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/52429>.

⁹⁹ Pan American Health Organization. Guidance for ethics oversight of COVID-19 research in response to emerging evidence. Washington, DC: PAHO; 2020 [cited 15 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/53021>.

¹⁰⁰ World Health Organization. Emergency use of unproven clinical interventions outside clinical trials: ethical considerations. Geneva; WHO; 2022 [cited 15 August 2022]. Available from: <https://apps.who.int/iris/handle/10665/352902>.

¹⁰¹ For information and a video of the dialogues, see: Pan American Health Organization. Regional dialogue: catalyzing ethical research in emergencies. Ethics guidance, lessons learned from the COVID-19 pandemic and pending agenda. Washington, DC: PAHO; 2022 [cited 15 August 2022]. Available from: <https://www.paho.org/en/events/regional-dialogue-catalyzing-ethical-research-emergencies-ethics-guidance-lessons-learned>.

¹⁰² Carracedo S, Palmero A, Neil M, Hasan-Granier A, Saenz C, Reveiz L. The landscape of COVID-19 clinical trials in Latin America and the Caribbean: assessment and challenges. *Rev Panam Salud Publica*. 2020;44:e177. Available from: [10.26633/RPSP.2020.177](https://doi.org/10.26633/RPSP.2020.177).

Solidarity clinical trial that WHO and its partners initiated to assist in finding effective treatments for COVID-19.¹⁰³

Operational support and logistics, and supply chains

228. The protracted pandemic and peaks in cases have been challenging both logistically and in terms of the availability of medical supplies and diagnostics. The COVID-19 pandemic created severe interruptions in supply chains, exacerbated by more stringent export controls and frequent disruptions in the commercial flights that PASB relies on to deploy its experts and ship medicines, supplies, and equipment. Furthermore, product quality required verification, as the market was flooded with supplies of dubious quality.

229. PASB worked with other United Nations agencies, partners, international nongovernmental organizations (NGOs), and donors to secure resources needed for countries to prevent infections and mitigate deaths. It also provided technical guidance and recommendations on the quality assurance and postmarket surveillance of items procured directly through national mechanisms. PASB was instrumental in the procurement and distribution of supplies, equipment, and materials for the COVID-19 response, including PPE and testing kits, through the Strategic Fund and in collaboration with various partners such as UNICEF. The Bureau also strengthened national procurement, supply, and distribution chains.

230. As of 22 April 2022, the Bureau had coordinated and dispatched more than 210 shipments to support countries' COVID-19 responses. The Strategic Fund leveraged close relationships and existing long-term agreements with suppliers to better plan deliveries and shipments, and expanded supply chain options that provided Member States with needed flexibility. The Strategic Fund also coordinated alternative modes of transport to take advantage of the most cost-effective and timely methods of shipment, amid continuously evolving disruptions related to COVID-19.

231. The Bureau streamlined, strengthened, and expanded its regional strategic reserve, which is based in Panama in the United Nations Humanitarian Response Depot.¹⁰⁴ The strategic reserve has proved to be extremely valuable in multiple response operations to acute emergencies throughout the Region, by facilitating the rapid dispatch of critically needed emergency items, and COVID-19 highlighted its value in a context of extreme global market constraints and supply chain management challenges.

232. Since 2020, the Bureau's strategic reserve has supported the delivery of over 747 tons of medical supplies to affected countries and territories in 348 international and national shipments, and in the last nine months, about 135 tons valued at \$11,725,000 have been dispatched in 98 shipments to 34 countries and territories.

¹⁰³ World Health Organization. WHO COVID-19 Solidarity therapeutics trial. Geneva; WHO; 2022 [cited 15 August 2022]. Available from: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/global-research-on-novel-coronavirus-2019-ncov/solidarity-clinical-trial-for-covid-19-treatments#>.

¹⁰⁴ Available from: <https://unhrd.org/>.

233. Amid the breakdown of global supply chains and severe challenges to freight forwarders, scarcity of cargo space, exceedingly high demand for containers, rising demand for air cargo space, and volatile costs, this regional strategic reserve and its diverse approaches to having a minimal stock available proved effective to support emergency response in PAHO Member States, providing a bridge between suppliers' lead times and delivery of relief supplies.

Strengthening essential health services and systems

234. The COVID-19 pandemic placed unprecedented stress on countries' health systems and services, and the priority given to managing the pandemic interrupted essential health services and programs. PASB prioritized the development of guidance and tools to support countries in assessing existing resources and formulating strategies to bridge identified gaps, without jeopardizing the fight against COVID-19. As part of the monitoring process for universal health, in late 2021 the Bureau participated in the third round of the Global Pulse Survey on Continuity of Essential Health Services during the COVID-19 Pandemic.¹⁰⁵ Among other findings, the survey showed that, despite early evidence of service recovery, nearly all countries were still affected by the COVID-19 pandemic, with 92% reporting disruption to services, primary care and community care being among the most affected services.

235. The pandemic confirmed the critical need for universal health, clearly demonstrating that the PHC strategy and use of all the resources of the health services network, including the first level of care, are essential for an effective response. The Bureau utilized epidemiological models to estimate needs for human resources and hospital beds; supported countries to analyze options for reorganization and expansion of hospital services and to share experiences; and developed tools and guidance for managing HRH, adapting the first level of care, and reorganizing different levels of care to address the needs of the pandemic. PASB supported the WHO Suite of Health Service Capacity Assessments in the Context of the COVID-19 Pandemic,¹⁰⁶ which is an update of the May 2020 Harmonized Modules for Health Facility Assessment Modules in the Context of the COVID-19 Pandemic, and worked with Paraguay, Peru, and Suriname to implement this set of tools. The Bureau also published the Checklist for the Management of Health Workers in Response to COVID-19¹⁰⁷ in November 2020 and Considerations for Strengthening the First Level of Care in the Management of the COVID-19 Pandemic¹⁰⁸ in January 2021.

¹⁰⁵ World Health Organization. Third round of the global pulse survey on continuity of essential health services during the COVID-19 pandemic: November-December 2021: interim report. Geneva: WHO; 2022 [cited 15 August 2022]. Available from: <https://apps.who.int/iris/handle/10665/351527>.

¹⁰⁶ World Health Organization. Suite of health service capacity assessments in the context of the COVID-19 pandemic. Geneva: WHO; 2020 [cited 15 August 2022]. Available from: <https://www.who.int/publications/i/item/harmonized-health-service-capacity-assessments-in-the-context-of-the-covid-19-pandemic>.

¹⁰⁷ Pan American Health Organization. Checklist for the management of health workers in response to COVID-19. Washington, DC: PAHO; 2020 [cited 15 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/53261>.

¹⁰⁸ Pan American Health Organization. Considerations for strengthening the first level of care in the management of the COVID-19 pandemic. Washington, DC: PAHO; 2021 [cited 15 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/53190>.

236. In 2021, the 59th Directing Council approved the regional Strategy for Building Resilient Health Systems and Post-COVID-19 Pandemic Recovery to Sustain and Protect Public Health Gains (Document CD59/11), with strategic lines of action comprising: *a)* transform health systems, based on the PHC approach, to accelerate pandemic recovery, recuperate and sustain public health gains, and retake the path toward universal health; *b)* strengthen leadership, stewardship, and governance through a renewed focus on the EPHFs; *c)* strengthen capacities of health service delivery networks to expand access and improve preparedness and response to public health emergencies; and *d)* increase and sustain public financing in health and social protection, including for actions to address the social, environmental, and economic determinants of health.

237. The COVID-19 pandemic provided a timely opportunity to improve the EPHFs, particularly those related to preparedness and response to public health emergencies. All countries and territories implemented measures to expand hospital capacity, including executive decisions at national level to integrate country capacities to the extent possible, especially for critical care; centralized management of beds; repurposing, retrofitting, and upgrading of beds; and strengthening clinical management within the network for continuity of care and efficient use of hospital resources. PASB's technical cooperation supported the reorganization and progressive expansion of health services for the response to the COVID-19 pandemic, particularly for triage, isolation, and intensive care in adults.¹⁰⁹

238. Countries confirmed the incorporation of the first level of care into the health response to COVID-19 through education and communication, case investigation and contact-tracing, triage, testing, referral, and follow-up of cases and contacts in the community. The main actions undertaken for the continuity of essential services related to the care of pregnant women and neonates; immunizations; dispensing of medications; and monitoring of patients with chronic conditions by teleconsultation or home care.

239. Emergency medical teams (EMTs) play a critical supplementary role in expanding the capacity of national health systems, and EMTs contributed significantly to the medical surge capacity required during the COVID-19 pandemic. Building on its March 2020 recommendations for the deployment of EMTs and the selection and establishment of alternative medical care sites,¹¹⁰ PASB worked with its partners and the regional network of EMT focal points to coordinate local responses and compliance with COVID-19 recommendations. Although EMTs were primarily national, given the unavailability of international EMTs due to travel restrictions and countries' need to support their own national health systems, regional EMTs contributed to clinical care in border and remote areas, providing access to services for migrants and indigenous populations. Since September 2020, the Bureau has maintained updated information on deployed

¹⁰⁹ Pan American Health Organization. Recommendations for the reorganization and expansion of hospital services in response to COVID-19. Technical working document, version 5. Washington, DC: PAHO; 2020 [cited 15 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/52244>.

¹¹⁰ Pan American Health Organization. COVID-19: recommendations for medical surge capacity and deployment of emergency medical teams. Washington, DC: PAHO; 2020 [cited 15 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/52144>.

EMTs and alternative medical care sites regionwide through the COVID-19 EMT Response hub¹¹¹ and, through the EMT Ignite platform, fostered the dissemination of best practices and recommendations for the consideration of EMT partners and health authorities.

240. Many countries established legal and normative tools for the management of HRH, declaring COVID-19 an occupational disease and/or providing economic and noneconomic incentives for health personnel responding to the pandemic. PASB published Human Resources for Health and the COVID-19 Response in the Caribbean¹¹² in August 2020, aiming to share information related to the COVID-19 response and health workforce in Caribbean countries, facilitate monitoring of HRH policy interventions related to COVID-19, and inform HRH policy development in terms of lessons learned and areas for improvements. In 2021, PASB conducted a survey on COVID-19 vaccine hesitancy among healthcare workers in selected Caribbean countries to inform the development and implementation of strategies to increase vaccine uptake and promote advocacy for vaccination among this priority group. The study showed that vaccine hesitancy was consistently expressed by higher proportions of nurses and allied health professionals than physicians, and by higher proportions of younger respondents than older ones.¹¹³ The Bureau also collaborated with CARICOM to launch the Human Resources for Health Action Task Force for the Caribbean in April 2021¹¹⁴ as part of the response to COVID-19 and other health emergencies in the subregion.

241. One of the priority lines of action of PASB's pandemic response was research and innovation, with the aim of learning, improving, and developing better ways to manage COVID-19. The Bureau participated in WHO's global research coordination efforts and collaborated with multiple partner institutions at global and regional levels in COVID-19 research, including universities, nonprofit organizations, and PAHO/WHO Collaborating Centres.

242. In March 2021, PASB established a new searchable database COVID-19 Guidance and the Latest Research in the Americas¹¹⁵ targeting decisionmakers, policymakers, researchers, health professionals, and the general public. The database complements the WHO database COVID-19 Global Literature on Coronavirus Disease to facilitate access to and use of evidence-based information to strengthen health systems and services, and to promote research. It is organized into three main categories: Save Lives, Protect Healthcare Workers, and Slow the Spread, and includes best practices, studies, and research protocols; up-to-date guidance; and scientific publications from the Americas and other regions. The scientific papers and technical recommendations

¹¹¹ Pan American Health Organization. COVID-19 EMT response 2020-2022 up to today. Washington, DC: PAHO; 2022 [cited 15 August 2022]. Available from: <http://bit.ly/COVID-19-EMT>.

¹¹² Pan American Health Organization. Human resources for health and the COVID-19 response in the Caribbean. Washington, DC: PAHO; 2020 [cited 15 August 2022]. Available from: <https://www.paho.org/en/documents/human-resources-health-and-covid-19-response-caribbean>.

¹¹³ Puertas EB, Velandia-Gonzalez M, Vulcanovic V, et al. Concerns, attitudes, and intended practices of Caribbean healthcare workers concerning COVID-19 vaccination: a cross-sectional study. *Lancet Regional Health – Americas*. 2022;9:100193. Available from: <https://doi.org/10.1016/j.lana.2022.100193>.

¹¹⁴ Pan American Health Organization. Human Resources for Health Action Task Force launched in the Caribbean. Washington, DC: PAHO; 2021 [cited 15 August 2022]. Available from: <https://www.paho.org/en/news/25-5-2021-human-resources-health-action-task-force-launched-caribbean>.

¹¹⁵ Pan American Health Organization. COVID-19 guidance and the latest research in the Americas. Washington, DC: PAHO; 2022 [cited 15 August 2022]. Available from: <https://covid19-evidence.paho.org/>.

available in the database come primarily from PAHO, WHO, and national authorities of countries and territories in the Americas, such as CDC and ministries of health, as well as from articles and evidence studies selected from other databases. These databases include Evidence Aid, Cochrane Database of Systematic Reviews, PubMed, and the Latin American and Caribbean Health Sciences Literature (LILACS),¹¹⁶ which is PAHO's bibliographic index of the Region's scientific and technical health literature.

Vaccination

243. The COVID-19 Vaccines Global Access (COVAX) Facility,¹¹⁷ launched in June 2020, is the vaccines pillar of the Access to COVID-19 Tools Accelerator, the integrated global solution to end the pandemic that WHO and its partners created in April 2020. COVAX is co-led by WHO, Gavi, and the Coalition for Epidemic Preparedness Innovations, along with UNICEF as a key delivery partner. In the Americas, the Revolving Fund is the recognized procurement mechanism for COVAX. In September 2020, WHO published Fair Allocation Mechanism for COVID-19 Vaccines through the COVAX Facility,¹¹⁸ establishing the mechanism for equitable allocation of vaccines among countries.

244. From May 2020 onward, PASB has supported several countries to evaluate their cold chain capacities and update their cold chain equipment inventories, including logistics requirements for vaccine distribution. As the scale of anticipated needs for the vaccine rollout became clearer, PASB developed and disseminated Guidelines to Plan for COVID-19 Vaccine Introduction¹¹⁹ in July 2020 to assist national immunization programs, and supported the development and costing of comprehensive COVID-19 vaccination plans. The Bureau provided the national immunization programs with up-to-date technical guidance and recommendations for the eventual arrival of COVID-19 vaccines, as well as information on maintaining immunization services during the pandemic, which entailed monitoring the status of these services and assessing the impact of the pandemic on their functioning. The Bureau conducted a series of surveys in selected Member States over the period April-December 2020 and summarized the findings in the report COVID-19: Summary of the Status of National Immunization Programs during the COVID-19 Pandemic.¹²⁰

245. The Bureau's technical advisory group (TAG) on VPDs encouraged countries to strengthen their cold chain capacities, information systems, and vaccine safety surveillance, and lay the groundwork for generating demand for COVID-19 vaccination through community engagement,

¹¹⁶ Latin American and Caribbean Health Sciences Literature LILACS, scientific health information from Latin America and the Caribbean countries. São Paulo: LILACS; 2022 [cited 15 August 2022]. Available from: <https://lilacs.bvsalud.org/en/>.

¹¹⁷ Available from: <https://www.gavi.org/covax-facility>.

¹¹⁸ World Health Organization. Fair allocation mechanism for COVID-19 vaccines through the COVAX Facility. Geneva: WHO; 2020 [cited 15 August 2022]. Available from: <https://www.who.int/publications/m/item/fair-allocation-mechanism-for-covid-19-vaccines-through-the-covax-facility>.

¹¹⁹ Pan American Health Organization. Guidelines to Plan for COVID-19 Vaccine Introduction. Version 1. Washington, DC: PAHO; 2021 [cited 15 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/52532>.

¹²⁰ Pan American Health Organization. COVID-19: Summary of the status of national immunization programs during the COVID-19 pandemic. Washington, DC: PAHO; 2021 [cited 15 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/52544>.

among other measures. The PASB TAG on VPD developed guidance to prioritize populations for early access to vaccination, and in January 2021, the Bureau issued *Introducing COVID-19 Vaccination: Guidance for Determining Priority Groups and Microplanning*,¹²¹ and organized virtual capacity-building on COVID-19 vaccine research ethics.¹²²

246. The TAG also recommended strengthening of national capacities for the surveillance of events supposedly attributable to vaccination or immunization (ESAVI) and adverse events following immunization (AEFI) in relation to COVID-19 and other vaccines, and the establishment of a regional ESAVI/AEFI surveillance system. PASB helped countries to adopt these recommendations and strengthen country readiness in the Americas. It also established a regional vaccine safety group to support countries in matters pertaining to regulatory readiness for vaccine introduction and surveillance, ESAVI/AEFI surveillance, and communication related to COVID-19 vaccines in the Americas. This group enabled PASB to assess the maturity of country ESAVI/AEFI surveillance systems and implement national-level capacity-building to ensure their effectiveness. In February 2021, the Bureau issued *Guidance for Implementing the Regional COVID-19 Vaccine AEFI/AESI Surveillance System*¹²³ to aid Member States' efforts.

247. In September 2020, PASB established the Task Force for COVID-19 Vaccination in the Americas to provide strategic, technical, and operational guidance for the successful planning and rollout of COVID-19 vaccinations in the Region. The Bureau also leveraged existing global and regional advisory bodies to ensure that actions taken in the Americas were aligned with evidence-based recommendations. PASB worked with global partners WHO, UNICEF, and Gavi to drive the development of streamlined guidance, training, and approaches to better respond to country needs for the introduction of COVID-19 vaccines. The Bureau collaborated with WHO to develop the Vaccine Introduction Readiness Assessment Tool, a planning road map to prepare for COVID-19 vaccine introduction, and translated the tool into French, Portuguese, and Spanish. PASB disseminated the tool in October 2020 and encouraged countries to use it to self-assess their readiness, enabling the results to populate the tool's dashboard and provide an overview of regional readiness.¹²⁴

248. The Bureau utilized WHO's COVID-19 vaccine introduction and deployment costing tool in selected countries to undertake early estimates of the need for resources for a COVID-19 vaccination campaign. This information was critical for identifying and addressing technical cooperation needs to support vaccine rollout, particularly for cold chain and regulatory capacities. The Bureau undertook relevant capacity-building in countries, and in November 2020, in

¹²¹ Pan American Health Organization. *Introducing COVID-19 vaccination: guidance for determining priority groups and microplanning*. Version 1. Washington, DC: PAHO; 2021 [cited 15 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/53318>.

¹²² Pan American Health Organization. *COVID-19 vaccine research ethics*. Washington, DC: PAHO; 2020 [cited 15 August 2022]. Available from: <https://www.campusvirtualsp.org/en/webinar/covid-19-vaccine-research-ethics>.

¹²³ Pan American Health Organization. *Guidance for implementing the Regional COVID-19 Vaccine AEFI/AESI Surveillance System*. Washington, DC: PAHO; 2021 [cited 15 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/53340>.

¹²⁴ Pan American Health Organization. *COVID-19 Vaccine Introduction Readiness Tool (VIRAT) dashboard*. Washington, DC: PAHO; 2022 [cited 15 August 2022]. Available from: https://ais.PASB.org/imm/IM_VIRAT.asp.

collaboration with UNICEF, announced a global tender to procure COVID-19 vaccines for countries in the COVAX portfolio. Additionally, the Organization worked closely with countries to navigate COVAX country participation requirements, including indemnification and liability requirements, estimates of needs for syringes and other supplies, and finalization of procurement agreements with manufacturers. It also disseminated WHO's guidance for national deployment and vaccination plans;¹²⁵ and provided in-country support to develop such plans. As of 31 March 2022, PASB had delivered over 100 million doses (including donations) through COVAX to 32 participating countries and territories,¹²⁶ and several Member States had self-procured an additional 39 million doses through the facility.

249. In July 2021, PASB developed and published Recommendations on Regulatory Processes and Aspects Related to the Introduction of Vaccines during the COVID-19 Pandemic and Other Emergencies,¹²⁷ and, through a consultation process that included 25 NRAs, recommendations were made to improve regulatory capacities related to authorization, importation, lot release, and pharmacovigilance of COVID-19-related medicines. PASB developed, and maintains updated, a website for pharmacovigilance of COVID-19 vaccines,¹²⁸ and built capacity in 17 countries¹²⁹ for the formulation of institutional development plans to strengthen regulatory capacities for the surveillance and control of medicines, as part of their vaccine deployment.

250. From March 2021 onward, the Bureau has prepared and disseminated weekly updates on vaccine safety reports to regulatory authorities and immunization programs, and in April 2021 it established a website dedicated to COVID-19 vaccines,¹³⁰ integrating updated information with one-stop access to information on the authorization status, efficacy, safety, administration, and logistics of available vaccines. The website, which targets a variety of audiences, provides access to the dashboard of vaccination in the Americas and the WHO dashboard on the global COVID-19 situation. PASB also began exploring how best to support countries to leverage and adapt existing regional influenza surveillance and vaccine effectiveness networks, such as SARInet and the Network for the Evaluation of Vaccine Effectiveness in Latin America and the Caribbean – Influenza,¹³¹ to assess the effectiveness and impact of COVID-19 vaccines. In

¹²⁵ World Health Organization. Guidance on developing a national deployment and vaccination plan for COVID-19 vaccines. Geneva: WHO; 2020 [cited 15 August 2022]. Available from:

https://www.who.int/publications/i/item/WHO-2019-nCoV-Vaccine_deployment-2020.1.

¹²⁶ Antigua and Barbuda, Argentina, Bahamas, Barbados, Belize, Bermuda, Bolivia (Plurinational State of), Brazil, Colombia, Costa Rica, Dominica, Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago, Uruguay, and Venezuela (Bolivarian Republic of).

¹²⁷ Pan American Health Organization. Recommendations on regulatory processes and aspects related to the introduction of vaccines during the COVID-19 pandemic and other emergencies. Washington, DC: PAHO; 2021 [cited 15 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/54516>.

¹²⁸ Available from: <https://covid-19pharmacovigilance.paho.org/index.php>.

¹²⁹ Argentina, Bolivia (Plurinational State of), Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, and Venezuela (Bolivarian Republic of).

¹³⁰ Available from: <https://www.paho.org/en/covid-19-vaccines>.

¹³¹ Available from: <https://www.paho.org/en/network-evaluation-vaccine-effectiveness-latin-america-and-caribbean-influenza-revelac-i>.

September 2021, the Bureau launched the REVELAC-COVID-19 Generic Protocol: Evaluation of the Effectiveness of COVID-19 Vaccines in Latin America and the Caribbean.¹³²

251. The value of the Revolving Fund was again demonstrated during the peak of the COVID-19 pandemic, not only with the procurement of traditional vaccines to enable continuity of immunization programs, but also with the acquisition of COVID-19 vaccines, as a critical aspect of the pandemic response. In August 2021, PASB announced that the Revolving Fund would purchase COVID-19 vaccines to expand access in Latin America and the Caribbean. Through the Fund, the Bureau not only procured COVID-19 vaccine doses to supplement those supplied by COVAX but was also proactively involved in planning and operations related to bilateral donations, and in accessing vaccines donated to COVAX by other countries. These actions benefited countries without necessary resources and negotiating power to secure adequate vaccine doses, directed resources to where they were most needed, and removed bottlenecks to donations. PASB successfully advocated for regional dose-sharing with Canada, Japan, Spain, other European countries, and the United States of America, and supported the reallocation of COVAX-procured doses between participating countries.

252. The Bureau has demonstrated its considerable technical expertise and experience in immunization program management in the deployment of COVID-19 vaccines to its Member States. As of 30 June 2022, over 1.91 billion COVID-19 vaccine doses had been administered and more than 706.8 million persons had received at least two doses of COVID-19 vaccine in the Americas. In Latin America and the Caribbean, 69.2% of the population had been vaccinated with two doses, and more than 431 million additional doses had been administered. Forty countries and territories in the Americas had achieved the WHO global target for vaccination coverage of 40% and 17 of them¹³³ had already achieved the 70% vaccination target set for 30 June 2022.

253. Despite the important advances, many countries continue to struggle, and persisting gaps keep the Region at risk during future waves of COVID-19. Throughout the Americas about 230 million people have yet to receive the first shot of COVID-19 vaccine, and as of 8 July 2022, 11 countries and territories were still below the 40% vaccination target. Reasons for this delay include limitations in human resources to administer COVID-19 vaccines, insufficient antigens and cold chain equipment for the routine immunization program, and vaccine hesitancy or denial.

254. In 2021, conscious of the need to strengthen vaccination uptake and regain ground lost in routine immunization programs since the pandemic, PASB developed the policy Reinventing Immunization as a Public Good for Universal Health (Document CD59/10), with strategic lines of action: *a)* strengthen governance, leadership, and financing of immunization programs; *b)* enhance monitoring of vaccine coverage and surveillance, incorporating digital intelligence strategies into routine analysis; *c)* strengthen the integration of immunization programs into the PHC system toward universal health; *d)* develop innovative and strategic communication approaches to build

¹³² Pan American Health Organization. REVELAC-COVID-19 generic protocol: evaluation of the effectiveness of COVID-19 vaccines in Latin America and the Caribbean. Washington, DC: PAHO; 2021 [cited 15 August 2022]. Available from: <https://www.paho.org/en/documents/revelac-covid-19-generic-protocol>.

¹³³ From highest to lowest coverage rate: Cayman Islands, Puerto Rico, Chile, Cuba, Saba, Peru, Nicaragua, Uruguay, Argentina, Canada, Costa Rica, Bonaire, Ecuador, Aruba, Brazil, Panama, and Colombia.

social awareness and trust in vaccines and increase access to services; *e*) strengthen human resource capacities for immunization programs; and *f*) use scientific evidence to guide decision-making and program implementation.

255. In order to contribute to the establishment of messenger RNA (mRNA) vaccine manufacturing capacity globally, WHO launched an initiative supporting the transfer of technology necessary to produce mRNA vaccines in low- and middle-income countries and enable all WHO regions to produce vaccines as an essential preparedness measure against future infectious threats. Under this initiative, WHO and PASB collaborated to establish mRNA vaccine manufacturing capacities in Latin America and the Caribbean, and in August 2021, PASB unveiled the Regional Platform to Advance the Manufacturing of COVID-19 Vaccines and other Health Technologies in Latin America and the Caribbean.¹³⁴ The platform supports collaboration across countries and cooperation agencies, applying existing regional biomanufacturing capacity to the production of COVID-19 vaccines and other medical technologies.

256. In October 2021, PASB opened a call to manufacturers in the Region of the Americas for expressions of interest in participating in a regional consortium to ensure that mRNA vaccines can be sourced in the Region, from raw materials to finished product. In March 2022, scientists from Sinergium Biotech in Argentina and the Bio-Manguinhos Institute of Technology in Brazil, the first two organizations selected, received training in manufacturing processes, data analytics, and control practices for mRNA vaccines at the Afrigen Biologics laboratory in South Africa, as a key component of the regional platform.

257. The Bureau stressed the importance of integrating an ethics component in work to advance COVID-19 vaccination, and launched the video *Why Should We Get a COVID-19 Vaccine?* targeting the public in September 2021.¹³⁵ In December 2021, PASB convened a Regional Public Health Ethics Workshop: Lessons to be Learned from the COVID-19 Pandemic,¹³⁶ which included discussions on the ethical aspects of COVID-19 vaccination mandates and the vaccination of children and migrant populations.

Responding to other disease outbreaks, emergencies, and disasters

Disease outbreaks

258. The Bureau assisted several Member States in responding to outbreaks of other infectious diseases such as yellow fever, diphtheria, measles, and malaria. PASB's response to these

¹³⁴ Pan American Health Organization. Regional platform to advance the manufacturing of COVID-19 vaccines and other health technologies in the Americas. Washington, DC: PAHO; 2021 [cited 15 August 2022]. Available from: <https://www.paho.org/en/events/regional-platform-advance-manufacturing-covid-19-vaccines-and-other-health-technologies>.

¹³⁵ Pan American Health Organization. *Why should we get a COVID-19 vaccine?* Washington, DC: PAHO; 2021 [cited 15 August 2022]. Available from: <https://www.youtube.com/watch?v=uxcb9s0dpJg>.

¹³⁶ Pan American Health Organization. Regional public health ethics workshop: lessons to be learned from the COVID-19 pandemic. Washington, DC: PAHO; 2021 [cited 15 August 2022]. Available from: <https://www.campusvirtualsp.org/en/webinar/regional-public-health-ethics-workshop-lessons-be-learned-covid-19-pandemic>.

outbreaks included activation of the Emergency Operations Center (EOC) and Incident Management System at country level, and, if needed, at the regional level; deployment of specialized technical experts; updating of emergency response plans; capacity-building in epidemiology, surveillance, contact-tracing, health information management, IPC, laboratory testing and support, and clinical management of the disease; procurement of vaccines, medicines, and other supplies, as appropriate, through the Revolving and Strategic Funds; and monitoring of immunization and other interventions.

259. Transmission of influenza and other respiratory viruses has been at historically low levels in the Americas since the start of the COVID-19 pandemic. Although the public health and social measures enacted for COVID-19 control, along with innovative strategies for seasonal influenza vaccination, have probably combined to cause the low or absent transmission of influenza and other respiratory viruses, since the second quarter of 2021, respiratory syncytial virus activity has increased.

260. In 2019, in addition to the first regional SARI-net meeting, the Bureau convened a Caribbean subregional meeting on influenza, the first such initiative for this subregion. The Bureau also coordinated a regional sequencing project aimed at increasing the number and timeliness of sequenced influenza virus data to be used in the Vaccine Composition Meeting for the yearly formulation of the vaccine destined for application in the Southern Hemisphere, and conducted the phylogenetic analyses of these data, which were presented at the 2019 Vaccine Composition Meeting.

261. In July 2020, PASB published the guidance document *Influenza at the Human-Animal Interface: PAHO Recommendations to Strengthen Intersectoral Work for Surveillance, Early Detection, and Investigation*,¹³⁷ and worked with national health authorities to devise and guide strategies and procedures for surveillance, monitoring, early detection, general case investigation, and reporting of influenza viruses at the human-animal interface. In September 2020, PASB convened a meeting on influenza preparedness and incorporated COVID-19, the first such initiative combining surveillance and immunization, which supported the strengthening of national capacities for influenza surveillance and preparedness. In October 2020, the Bureau convened a virtual regional SARI-net laboratory meeting, enabling countries to improve their competencies to face the challenges of influenza surveillance in face of the COVID-19 pandemic. CDC and the WHO Pandemic Influenza Preparedness Framework provided funding for both meetings.

262. Also in October 2020, the Bureau published *Influenza and Other Respiratory Viruses: Surveillance in the Americas 2019*,¹³⁸ a regional landscape of surveillance capacities for influenza and other respiratory viruses. The Bureau also disseminated a weekly influenza situation report;¹³⁹

¹³⁷ Pan American Health Organization. *Influenza at the human-animal interface: PAHO recommendations to strengthen intersectoral work for surveillance, early detection, and investigation*. Washington, DC: PAHO; 2020 [cited 16 August 2022]. Available from:

https://iris.paho.org/bitstream/handle/10665.2/52563/PAHOPHEIHM20041_eng.pdf.

¹³⁸ Pan American Health Organization. *Influenza and other respiratory viruses: surveillance in the Americas 2019*. Washington, DC: PAHO; 2020 [cited 16 August 2022]. Available from:

https://iris.paho.org/bitstream/handle/10665.2/52741/9789275122792lowres_eng.pdf.

¹³⁹ Available from: <https://www.paho.org/en/influenza-situation-report>.

convened a SARInet Caribbean meeting and a SARInet laboratory meeting, both in November 2021; hosted a SARInet webinar in January 2022 to provide an update on the global influenza situation and pandemic influenza severity assessment; and, in April 2022, hosted a webinar on updated guidelines for the clinical management of severe illness due to influenza.

Focus on the Bolivarian Republic of Venezuela and neighboring countries

263. Between 2015 and 30 April 2022, over 6.1 million persons emigrated from the Bolivarian Republic of Venezuela due to the ongoing political and socioeconomic situation in that country. About five million of those persons migrated to other parts of Latin America and the Caribbean, particularly to 17 countries and territories.¹⁴⁰ Neighboring countries—Brazil, Chile, Colombia, Ecuador, and Peru—continued to receive the largest numbers of Venezuelan migrants and served as the first stop for those in transit to other locations, and although some countries began limiting migrant access in 2019, Colombia kept its borders open to the Venezuelan population.

264. The health system in the Bolivarian Republic of Venezuela, while retaining some capacity, has been under stress due to several factors, including frequent interruptions in the supply of core public services at health facilities, such as water and electricity; health workforce migration; and shortages of medicines and health supplies, particularly at the secondary and tertiary levels of care. The situation has been aggravated by the ongoing response to the COVID-19 pandemic, which has overburdened the scarce health resources and tested the capacity maintained over the past few years by the international humanitarian response.

265. The COVID-19 pandemic increased the complexity of implementing response operations due to important flows of migrants returning to the Bolivarian Republic of Venezuela, as well as the measures—ranging from a total lockdown to curfew and restrictions on mass gatherings—that were enacted to halt the spread of SARS-CoV-2. The global lockdowns to stem the spread of COVID-19 dramatically reduced the demand for transportation and travel, and consequently, for crude oil, resulting in negative oil prices in April 2020, for the first time in the country’s history. As a result, the Venezuelan economy, which relies heavily on oil production, faced new risks and challenges, including a detrimental impact on the national health system.

266. In collaboration with regional and international partners, including subregional integration bodies in South America and the Global Fund, and guided by the strategic objectives of the 2020 Humanitarian Response Plan with Humanitarian Needs: Overview Venezuela,¹⁴¹ PASB intensified its technical cooperation with the Ministries of Health of the Bolivarian Republic of Venezuela and the Latin American and Caribbean countries hosting migrants. The Humanitarian Response Plan was updated in 2021 under the leadership of the United Nations Office for the Coordination of Humanitarian Affairs, with the Bureau’s support as the United Nations lead for the health sector. PASB’s technical cooperation addressed health systems management; prevention

¹⁴⁰ Argentina, Aruba, Bolivia (Plurinational State of), Brazil, Chile, Colombia, Costa Rica, Curaçao, Dominican Republic, Ecuador, Guyana, Mexico, Panama, Paraguay, Peru, Trinidad and Tobago, and Uruguay.

¹⁴¹ United Nations Office for the Coordination of Humanitarian Affairs. Humanitarian response plan with humanitarian needs: overview Venezuela. OCHA; 2020 [cited 16 August 2022]. Available from: https://reliefweb.int/sites/reliefweb.int/files/resources/venezuela_hrp_2020_en_vf.pdf.

and control of communicable and noncommunicable diseases; sexual and reproductive health, with a focus on reducing maternal and neonatal mortality; emergency management; and procurement of medicines, vaccines, laboratory reagents, and other supplies.

267. The Bureau mobilized financial resources from the international community to support the adaptive capacity of national and local health systems, organized more than 20 international experts to provide support to the Venezuelan health authorities, and supported over 150 missions by PASB national experts in various technical areas. By the end of 2019, 1,476 obstetrics and gynecology professionals had been trained in immediate post-obstetric contraception and the management of post-obstetric events, with the aim of applying updated family planning strategies in the most vulnerable populations. However, important gaps remain in ensuring availability and nondiscriminatory access to critical health services for groups in situations of vulnerability.

268. Beyond the procurement and delivery of critically needed health materials, and aiming to strengthen the capacity of local organizations to adequately store and manage stocks of essential medicines and medical supplies, PASB facilitated the rollout of its humanitarian supply management system/logistics support system (SUMA/LSS) in prioritized hospitals and trained over 150 professionals from health facilities and national NGOs in supply management, inventory control, logistics, and good storage practices for medicines and other health supplies.

269. In addressing disease outbreaks, PASB strengthened health system responses in border areas and epidemiological surveillance at local and national levels, in order to detect and respond effectively to the needs of both Venezuelan migrants and the host population. The Bureau established field offices in, or deployed additional personnel to, border areas; improved access to vaccines, medicines, and supplies; and focused on the needs of indigenous people, border communities, migrants, other mobile groups such as undocumented miners, and persons living in difficult-to-reach areas.

270. In 2018, the Bureau collaborated with national stakeholders, the Joint United Nations Programme on HIV/AIDS (UNAIDS), and other partners to develop the Master Plan for Strengthening the HIV, Tuberculosis and Malaria Response in the Bolivarian Republic of Venezuela from a Public Health Perspective.¹⁴² PASB's technical cooperation contributed to implementation of the master plan, and there was an increase in the number of people on HIV treatment from 21,370 in 2018 to 56,254 by the end of 2021, with the provision of TB treatment to more than 10,000 people each year. The Global Fund has granted financial resources to enable continuity of the master plan for 2022-2023.

271. The Bureau supported the Venezuelan Ministry of Popular Power for Health to develop and implement the 2018-2021 Plan of Action for the Control of Malaria, national plans for rapid response to measles and diphtheria, and the national plan to increase routine vaccination coverage among indigenous communities. PASB strengthened the cold chain network, building capacity and procuring equipment, vaccines, and syringes through the Revolving Fund. Between July 2019

¹⁴² World Health Organization. Master Plan for Strengthening the HIV, Tuberculosis and Malaria Response in the Bolivarian Republic of Venezuela from a Public Health Perspective. Geneva: WHO; 2018 [cited 16 August 2022]. Available from: https://www.theglobalfund.org/media/7839/bm39_edp11_annex_en.pdf.

and March 2020, it deployed vaccinators and national consultants to support national immunization efforts to control the measles and diphtheria outbreaks in the country, implementing a wide-reaching vaccination campaign that immunized close to 9 million children aged 1-4 years old. Between April and June 2020, the Bureau contributed to national implementation of vaccination strategies in the context of the COVID-19 pandemic, reverification of the interruption of the measles outbreak, and investigation of vaccine-related adverse events, and also coordinated the donation to the Bolivarian Republic of Venezuela of yellow fever and oral polio vaccines. At the beginning of 2022, PASB coordinated and secured a new donation of 1,750,000 doses of yellow fever vaccine from the Government of Brazil to support emergency vaccination campaigns of unvaccinated susceptible persons in the Bolivarian Republic of Venezuela aged from 6 months to 59 years old and located in at-risk areas. The Bureau provided technical and logistic assistance to ensure the transportation, storage, and internal distribution of the vaccines.

272. From the first semester of 2020, PASB's technical cooperation with the Bolivarian Republic of Venezuela expanded to support the development and implementation of the COVID-19 Preparedness and Control Plan, including scaling up epidemiological surveillance, strengthening laboratory capacity and points of entry, implementing risk communication strategies, and improving clinical management of COVID-19 patients. The Bureau also coordinated evaluation of the COVID-19 reference hospitals to assess the level of preparedness and increase the capacity of essential services. PASB procured and delivered significant amounts of PPE and other supplies to the country through coordination of the health cluster and activation of stand-by partnerships, which reduced delays and mitigated the risk of health commodity scarcities.

273. The Bureau's funding partners for its intensified technical cooperation with the Bolivarian Republic of Venezuela included the Government of Canada; AECID; Public Health Agency of Canada (PHAC); Swiss Agency for Development and Cooperation (SDC); USAID/OFDA; Direct Relief; CDC; CERF; CFE; ECHO; Global Fund; Measles and Rubella Initiative; The Task Force for Global Health; United Nations Foundation; and Vaccine Ambassadors.

Volcanoes, hurricanes, tornadoes, and earthquakes

274. In June 2018, September 2021, and March 2022, the Fuego volcano in Guatemala erupted, the 2018 incident being the most severe. The June 2018 eruption affected 1.7 million people, with more than 12,000 evacuated, more than 200 killed, 27 injured, and 260 missing. The 2021 and 2022 eruptions produced moderate and mild blasts, respectively, with reports of pyroclastic flows in 2021. In December 2020, the La Soufrière volcano in Saint Vincent and the Grenadines began effusive eruption, culminating in an explosive eruption in April 2021.¹⁴³ The eruptions produced ash columns, pyroclastic flows, lava, mud, ballistic (small rocks) emissions, and fiery clouds that resulted in evacuation and displacement of communities located near to the volcanic domes.

¹⁴³ Pan American Health Organization. Volcano La Soufriere eruption in Saint Vincent and the Grenadines. Washington, DC: PAHO; 2021 [cited 16 August 2022]. Available from: <https://www.paho.org/en/volcano-soufriere-eruption-saint-vincent-and-grenadines>.

Ashfall from the Fuego eruptions in 2018 reached Guatemala City, and ashfall from La Soufrière in 2020 affected air operations and air quality in neighboring islands such as Barbados.

275. The Bureau's technical cooperation in addressing the impact of these eruptions focused on strengthening the response capacity of the health sector. It included the deployment of response experts to assist national and local health authorities in conducting damage assessments, coordinating information management and health response operations on the ground, and facilitating healthcare provision in shelters, including mental health assistance. PASB activated its subregional Incident Management System; distributed PPE, hygiene and water quality monitoring kits, and sterile materials for burn patients; provided departmental health authorities with technical guidance on the management of dead bodies; and procured supplies and equipment for the establishment of field EOCs and situation rooms.

276. The Bureau mobilized resources from CERF to support the health emergency response and prevent further degradation of the health status of the communities, focusing on public health and epidemiological surveillance and disease prevention in shelters and affected communities; access to mental health and psychosocial support (MHPSS) for the victims of the disasters; access to safe water; interventions to prevent water- and vector-borne disease outbreaks; and risk communication and health information.

277. In Saint Vincent and the Grenadines, in order to improve daily syndromic surveillance, the Bureau, jointly with CARPHA, supported the Ministry of Health, Wellness and the Environment in piloting an early warning alert and response system (EWARS in a box)¹⁴⁴ in six shelters to aid rapid detection of, and response to, outbreaks and other events of public health significance. Given the increased risk of acute respiratory conditions due to exposure to ash and toxic gases and particulates, the Bureau, in partnership with the International Volcanic Health Hazard Network,¹⁴⁵ facilitated analyses of volcanic ash samples and provided recommendations to mitigate health risks.

278. In September 2019, the strongest storm in the modern history of the Bahamas, Hurricane Dorian, made landfall as a Category 5 storm. It caused severe flooding and destruction of residential, industrial, and commercial properties, and had an official toll of 69 persons dead and 346 persons missing. PASB monitored Hurricane Dorian's passage through the Caribbean before its landfall in the Bahamas and activated contingencies, including assessment and preparation of available emergency stocks in PASB's logistics hub in Panama, initiation of coordination with health partners in the field, and maintenance of permanent communications with the Bahamas Ministry of Health. This continuous collaboration, supported by USAID/OFDA and the CFE, resulted in the implementation of short-term, high-impact interventions to save lives and reduce suffering among the most vulnerable populations affected by the hurricane.

279. In August 2019, a few weeks before Hurricane Dorian struck, PASB had supported the Government of the Bahamas in developing SOPs for MHPSS in preparation for the 2019 hurricane season. This enabled MHPSS services to be rapidly established in affected areas after Hurricane

¹⁴⁴ Available from: <https://www.who.int/emergencies/surveillance/early-warning-alert-and-response-system-ewars>.

¹⁴⁵ Available from: <https://www.ivhnh.org/home>.

Dorian, and, fortuitously, the SOPs facilitated the integration of MHPSS into the Bahamas' COVID-19 response.

280. The Bureau deployed experts to the Bahamas to provide surge capacity in the technical areas of project coordination, communications, epidemiology, entomology, vector control, environmental health, WASH, SUMA/LSS, field logistics, MHPSS, procurement, civilian-military liaison, health systems and services, and communicable diseases. The efforts resulted in continued access to health care for affected populations; procurement of essential medicines, supplies, and equipment; provision of field logistics support for the receipt and distribution of donations, supplies, and equipment; planning and coordination of MHPSS interventions, including for first-responders; strengthening of disease surveillance for early detection of respiratory, water-, and vector-borne diseases or outbreaks, and other public health concerns; establishment of health EOCs for coordination and a situation room for analysis and tracking of public health issues; repair and surveillance of the water supply; and planning to restore the safe disposal of healthcare waste.

281. In November 2020, Hurricane Eta made landfall along Nicaragua's Caribbean coast as a Category 4 storm, and although the system weakened to a tropical storm shortly thereafter, it caused extensive damage in Belize, Colombia, Costa Rica, El Salvador, Guatemala, Honduras, Jamaica, and Panama. On 16 November 2020, Hurricane Iota, a Category 5 storm, made landfall along the Colombian archipelago of San Andres, Providencia, and Santa Catalina, weakening to a tropical storm on 17 November and moving into Guatemala and southern Honduras.

282. These hurricanes directly affected more than 9.9 million persons in Central America and damaged health facilities across Colombia, Guatemala, Honduras, and Nicaragua, further reducing the response capacities of national health systems already overstretched by the COVID-19 pandemic. Reduced access to drinking water, loss of adequate sanitation, and power outages were also reported, including in some shelters.

283. Prior to the passage of Hurricanes Eta and Iota, PASB activated its emergency teams for surge capacity and predeployed rapid-response team experts to support health authorities and humanitarian response as needs were identified. The Bureau worked alongside local authorities in the rapid evaluation of health facilities, using the PAHO Rapid Assessment of Health Facilities tool, and promoted the maintenance of public health measures to contain COVID-19 and other endemic diseases. In collaboration with other humanitarian partners and local authorities, PASB mobilized public health experts to the affected areas; mobilized emergency supplies and medicines from its reserve center in Panama, including COVID-19 kits, and antigen and PCR tests, WASH equipment and supplies, clinical modules with equipment, first aid and PPE kits, biosecurity and hygiene supplies; and facilitated the coordination of EMTs. At the request of the Ministry of Health of Honduras, the Bureau deployed five international EMTs¹⁴⁶ to that country to reestablish health system surge capacity in specific departments and provide emergency clinical care to persons in situations of vulnerability. In Guatemala, the Bureau deployed response teams to selected departments to provide support in shelters and conduct health damage and needs assessments.

¹⁴⁶ Canadian Red Cross, CMAT/Humanity First (Canada), Heart to Heart International (United States of America), Samaritan's Purse (United States of America), and SAMU Sevilla (Spain).

284. The Bureau's interventions contributed to restoring healthcare provision capacity and access to health services—including mental health care—in the most affected areas; strengthening epidemiological surveillance to bolster the early detection and timely management of disease outbreaks; and reestablishing access to safe water, emergency sanitation, and vector control measures in the affected communities.

285. In January 2019, a tornado categorized as EF4 (out of five levels on the Enhanced Fujita Scale) hit Havana, Cuba, directly affecting about 532,000 inhabitants and causing significant infrastructural damage, including to critical health facilities and public service systems. In response, the Bureau activated its emergency response mechanism and mobilized experts in damage assessment to accompany ministry of health officials in field visits and determine the most urgent actions to be taken. Repairs to damaged infrastructure and procurement of essential health supplies and equipment, including for vector control, epidemiological surveillance, and laboratory functioning, were identified as priorities for the restoration and strengthening of affected health services. PASB provided support to the Cuban Ministry of Health to monitor water quality in affected municipalities and mobilized resources from the Government of Switzerland and CERF to support priority health sector responses, including rapid restoration of critical services in the damaged health facilities; strengthening of epidemiological surveillance; and control of water- and vector-borne diseases to prevent outbreaks.

286. On 14 August 2021, a 7.2 magnitude earthquake struck the southern peninsula of Haiti, killing over 2,000 people and injuring more than 12,000. In all, 600,000 people required immediate humanitarian assistance, 150,000 homes were destroyed, and more than 80 hospitals and health centers were damaged. Through its country teams in Port-au-Prince and the rapid deployment of 15 international experts in health emergency management, PASB provided effective support to the Haitian Government in the emergency and immediate recovery phases of the response, within the complex context of the ongoing COVID-19 pandemic and growing social unrest.

287. The Bureau's technical cooperation with Haiti focused on damage and needs assessment, emergency response coordination, procurement of emergency supplies and equipment, logistic support and supply chain management, intensification of epidemiological surveillance and COVID-19 screening in affected areas and assembly points, and MHPSS, including the establishment of mental health coordination units that organized integrated mobile clinics to provide immediate support. PASB experts assisted the MSPP in rapidly assessing structural, water, and sanitation damage to health infrastructure, with more detailed damage assessments of three major hospitals in the earthquake-affected area conducted by a PASB consultant for the Smart Hospitals initiative.

288. The Bureau leveraged its global supply chain and network of strategic partners to receive and dispatch emergency medical products and equipment, and supported the MSPP in establishing the first early warning and response system in Haiti. Local personnel were trained, and mobile data collection devices and Internet access were provided at assembly points to enable local data analysis and regular reporting to the departmental and central levels. The Bureau continues to collaborate with the MSPP to strengthen the resilience and operational readiness of the health sector to face future large-scale emergencies, through the establishment of national EMTs and the

development of national and local health sector earthquake contingency plans and response mechanisms.

Strengthening health sector responses

Emergency medical teams

289. The Bureau continued its EMT initiative, which aims to enhance emergency preparedness and support the rapid and efficient deployment of national and international medical teams to provide coordinated, quality clinical care, in order to significantly reduce loss of life and prevent long-term disability from disasters due to natural hazards, outbreaks, and other emergencies.

290. The Bureau enabled the development of operational tools and medical information and coordination cells, which are designed to facilitate the handling of information and coordination of EMTs during emergencies and disasters, and the strengthening of the logistic and operational capacities of EMTs. The Bureau's work with Member States involved the identification, registration, mentoring, strengthening, and classification of local and national EMTs, and the adoption of the initiative's global standards. The initiative includes over 30 NGOs from Latin America and the Caribbean involved in humanitarian health assistance.

291. An EMT national focal point has been designated in most of PAHO's Member States, and over 120 experts from various countries and territories in the Region, and three from Spain, are part of the regional roster of EMT coordinators. The coordinators have been trained with PASB's support and deemed competent to be deployed during an emergency to assist national authorities in coordinating requests for, and reception of, external medical assistance. In 2019, the Barbados Defence Force was classified as EMT Type 1 Fixed, becoming the first team in the Caribbean and the first military unit in the Region to qualify.

292. Of the EMT teams based in the Region, WHO has classified seven according to global EMT classification standards, including Costa Rica Social Security (Type 1), Ecuador Ministry of Health (two Type 2 and one Specialized Team), Barbados Defence Force (Type 1), and Team Rubicon (Type 1), and the International Medical Corps (Type 1) in the United States of America, the latter having achieved its classification in May 2021. EMTs, especially national EMTs, have been instrumental in contributing to medical surge capacity during the pandemic.

293. Financial support for the work on the EMT initiative was provided by the Government of China, the Government of the United States of America, WHO Health Emergencies Programme, AECID, and DHHS.

Enhancing laboratory capacity

294. Adequate laboratory diagnosis and detection capacities are critical for countries to detect and report public health emergencies of international concern, as required under the IHR, and PASB, with support from IDB and CDC, strengthened the Region's laboratory networks and improved responses to the increased regional threat posed by emerging and reemerging viral and bacterial pathogens. These efforts resulted in access to standardized protocols for the safe,

accurate, and timely detection of chikungunya, Zika, yellow fever, and influenza viruses; at least one laboratory professional certified for the safe shipment of infectious substances, including Category A pathogens, in all Member States, and for the detection of *Vibrio cholerae* O1 and other enteric pathogens, in several countries; update of SIREVA II¹⁴⁷ SOPs for the diagnosis of meningococcal disease; and complete laboratory assessments in priority countries, including installed capacities, general laboratory management, quality assurance policies, and availability of equipment and reagents in national reference laboratories.

295. The laboratory assessments identified areas for improvement, particularly in terms of training and supplies, and PASB trained laboratory professionals at subregional levels to enhance detection capacities. In the English-speaking Caribbean, hands-on training sessions were focused on molecular detection of yellow fever and Mayaro viruses, and distribution of critical laboratory reagents and materials. Additionally, CDC trained personnel from Brazil, Colombia, Paraguay, and Peru in the use of new serology detection kits for yellow fever diagnosis, and, with PASB's technical cooperation, personnel from various laboratories in Brazil were trained in histopathological diagnosis and immunohistochemistry protocols to diagnose and differentiate emerging arboviral diseases. The training courses were conducted at Colombia's National Institute of Health.

296. Quality improvement is a critical aspect of effective laboratory services. The results of an external quality assessment panel, conducted during the first semester of 2018 in selected countries in the Region, rated the laboratories' performance positively, including in the molecular detection of yellow fever. In order to further enhance capacity-building and continuous quality improvement, PASB convened an expert advisory meeting in Washington, D.C., in June 2018 to review, update, and validate the current diagnostic algorithms, protocols, and regional guidelines for yellow fever, and the assessment panel was expanded to include endemic and emerging viruses, and ensure the accuracy of serological and molecular laboratory platforms for the diagnosis of arboviral diseases and influenza.

297. The Bureau was also instrumental in providing laboratory supplies to countries to address the challenges that many face—including budgetary constraints, insufficient providers, and customs regulations—in obtaining critical laboratory reagents and materials.

Smart and safe hospitals and other health facilities

298. The Smart Hospitals project, funded by DFID, with additional support from Global Affairs Canada (GAC), was implemented over the period 2015-2022 in seven countries: Belize, Dominica, Grenada, Guyana, Jamaica, Saint Lucia, and Saint Vincent and the Grenadines. The initiative aimed to strengthen health facilities by combining improvements in safety and greening—the latter addressing, for example, renewable and sustainable energy and water use—to address gaps, boost resilience, and generate operational savings. The Smart Health Care Facilities initiative has become the gold standard for resilient health facilities, as it combines the capacity to withstand and operate before, during, and after disasters and epidemics (“safe”) with the adoption of climate

¹⁴⁷ Pan American Health Organization. Informe regional de SIREVA II, 2018. Washington, DC: PAHO; 2021 [cited 16 August 2022]. Available only in Spanish from: <https://iris.paho.org/handle/10665.2/54567>.

change mitigation and adaptation standards (“green”). The initiative has generated much interest in and outside of the participating countries on integration of the “smart” concept into sectors other than health, and is evolving from a “smart concept” into a “smart movement,” with PASB’s technical expertise and EU funding to apply the smart standard to other types of critical infrastructure, including laboratories and shelters. Over 300 health facilities in several countries and territories have been assessed using the Smart Hospitals Toolkit, and evaluators trained in its use.

299. Health facilities were retrofitted to improve their resilience to disasters and reduce their impact on the environment in Dominica, Grenada, Guyana, Jamaica, Saint Lucia, and Saint Vincent and the Grenadines. Fifty facilities have been retrofitted since the project began, and about 10% of them serve groups in situations of vulnerability, specifically, homes for young persons, older persons, and persons with mental health conditions. Six other facilities have benefited from design phase interventions only, and an additional five are scheduled to complete retrofitting by the end of the project in December 2022.

300. As part of the pandemic response, several retrofitted smart health facilities were used as respiratory clinics or COVID-19 vaccination centers. This was possible due to their strategic location, improved functionality, and ability to safely guarantee the cold chain for vaccine storage, given the availability of backup electricity. Additional measures, such as the installation of sneeze guards, were taken to ensure physical distancing in clinics and pharmacies, and prevent direct contact with the public.

301. Within the context of the Safe Hospital Initiative, PASB updated and published the Hospital Safety Index guidelines in Spanish and English, and trained persons from several countries in the use of the updated guidelines. Various technical documents were produced and modified over the course of the project, including the recent addition of a guide on smart retrofit measures for COVID-19 to the repository of all available smart technical documents.¹⁴⁸

302. Emergencies disproportionately affect populations in situations of vulnerability, including persons with disabilities, who are usually omitted from disaster risk management policymaking and planning. This exclusion further increases their vulnerability and creates difficulties in responding to their needs after a disaster. In order to address this situation, PASB supported countries’ efforts for greater involvement of persons with disabilities and their families in health emergency risk management. In line with Article 11 of the United Nations Convention on the Rights of Persons with Disabilities—Situations of risk and humanitarian emergencies—the Bureau supported the implementation of corrective measures in prioritized hospitals, focusing on both the structural adaptation and the psychosocial needs of persons with disabilities to ensure their inclusion, and preparing health personnel to respond to emergencies and disasters with a “leave no one behind” approach.

303. The Bureau developed practical tools to ensure that hospital response plans incorporate arrangements for persons with disabilities, and supported the piloting of the guidelines in Chile,

¹⁴⁸ Pan American Health Organization. Smart hospitals toolkit. Washington, DC: PAHO; 2022 [cited 16 August 2022]. Available from: <https://www.paho.org/en/health-emergencies/smart-hospitals/smart-hospitals-toolkit>.

Ecuador, and Mexico. The methodology used—disability inclusion in hospital disaster risk management—is a simple, practical, and results-oriented methodology to assess and improve the level of inclusiveness of a health facility in regard to persons with disabilities, in the event of a disaster. The piloting included assessment of health facilities, training of staff, and procurement of basic supplies to make the facilities more inclusive, and contributed to finalization and publication of the guidelines.¹⁴⁹ The Bureau plans to apply the methodology to other areas, including EMTs and community responses.

304. In September 2021, PASB, in collaboration with the Latin American Network of Non-Governmental Organizations of Persons with Disabilities and Their Families (RIADIS), implemented an eight-session virtual course on disability inclusion in hospital disaster risk management, with the participation of several organizations, including the International Disability Alliance, Christoffel-Blindenmission, People with Disabilities Guatemalan Association, and German humanitarian assistance. In October 2021, in coordination with the network, PASB convened the first regional meeting on inclusive health emergency management in Guatemala to promote inclusive emergency response strategies and systematize best practices around inclusive disaster risk management.

305. The Northern Triangle of Central America, comprising El Salvador, Guatemala, and Honduras, has one of the highest rates of violence in the world for a nonconflict area, with homicide rates that WHO classifies as epidemic. With financial support from the Disaster Preparedness Programme of the European Civil Protection and Humanitarian Aid Operations Department, PASB improved safe access to health services in violence-prone areas of the three countries.

306. The Bureau supported the ministries of health in the three countries to develop and strengthen multisectoral and interinstitutional tools for the diagnosis of the causes and effects of violence in the health systems, and the design of relevant public policies. Through close coordination with health authorities and institutions at national, regional, and local levels, a total of 43 health facilities—39 health facilities and four migrant care centers—located in violence-prone areas have benefited since the project began in April 2016, strengthening capacity for the safe provision of health care. Interventions included safety assessments using the Rapid Preparedness Assessment for Health Care Facilities tool, which was developed by the International Committee of the Red Cross, under the Health Care in Danger global initiative; development of protocols based on the assessment results; rehabilitation work and provision of equipment and supplies to improve safety conditions and protect health workers and patients, including devices to control access and reinforce video surveillance and identification of patients, family members, and visitors; implementation of national campaigns to protect health services; and training of more than 1,500 people in areas such as clinical management of violence-related medical emergencies and MHPSS.

¹⁴⁹ Pan American Health Organization. Disability inclusion in hospital disaster risk management. Washington, DC: PAHO; 2018 [cited 16 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/51059>.

307. Based on the experiences of this project, PASB implemented an open-access virtual course, Evaluation of Hospital Preparedness against Violence,¹⁵⁰ aiming to train evaluators who apply the Rapid Preparedness Assessment for Health Care Facilities tool to verify the preparedness of health facilities located in areas of violence and social insecurity, and enable adequate mitigation and preparation actions to increase the capacity and security of the facilities.

International Health Regulations

308. The Bureau continued its work on strengthening countries' core capacities to implement the IHR, which provide the overarching framework for Member States to collaborate in addressing global health security. The legally binding regulations require States Parties to notify the WHO IHR focal point—hosted by the PASB for the Region of the Americas—of any event, irrespective of origin or source, that may have international public health implications. Such an event may eventually be determined to constitute a public health emergency of international concern, based on defined criteria.

309. In order to foster countries' sense of ownership of the IHR, PASB actively promoted the engagement and participation of States Parties in PAHO and WHO Governing Bodies' processes related to the IHR Monitoring and Evaluation Framework and the development of a draft five-year global strategic plan to improve public health preparedness and response. States Parties from the Americas provided significant contributions during the formal consultative processes in the period 2015-2018, and PAHO's Member States increasingly highlighted the need to frame the application and implementation of the IHR within the context of health system strengthening.

310. A critical aspect of the fulfillment of the IHR is the capacity of countries to communicate efficiently and accurately, both internally and externally, regarding events that may constitute a public health emergency of international concern, on a 24-hour basis. The IHR reporting tool, which facilitates the mandatory submission of States Parties' annual reports to the World Health Assembly, pursuant to Article 54 of the IHR, was revised in 2018, and includes changes in the delineation of EPHFs related to the IHR core capacities.

311. PAHO Member States' annual IHR reports to the World Health Assembly between 2011 and 2019 showed steady improvements in, or plateauing of, the scores in all core capacities. In 2021, 29 (83%) of the 35 States Parties in the Region of the Americas submitted their IHR annual report to the Seventy-fourth World Health Assembly. Possibly due to the demands imposed on national authorities by the COVID-19 pandemic, the submission rate observed in 2021, which was the same as in 2020, was the second lowest since 2011. For all 13 core capacities, the average regional scores were above 60%, with the lowest average score (62%) for radiation emergencies and the highest average score (81%) for laboratory and surveillance. Comparing the average regional scores of 2021 with those of 2019, varying levels of increase were registered for all 13 core capacities.

¹⁵⁰ Pan American Health Organization. Herramienta de evaluación de la preparación hospitalaria frente a la violencia.. Washington, DC: PAHO; 2022 [cited 16 August 2022]. Available only in Spanish from: <https://www.campusvirtualesp.org/es/curso/herramienta-de-evaluacion-de-la-preparacion-hospitalaria-frente-la-violencia-2020>.

312. The status of the core capacities of countries across subregions remains heterogeneous, with the highest average subregional scores for all 13 core capacities consistently observed for North America, and the lowest average scores registered in the Caribbean subregion for 10 core capacities (legislation and financing, zoonotic events and the human-animal interface, food safety, surveillance, human resources, health service provision, risk communication, points of entry, chemical events, and radiation emergencies); in Central America for one core capacity (IHR coordination and national focal point functions); and in South America for three core capacities (laboratory, national health emergency framework, and health service provision). Comparing the average subregional scores of 2021 with those of 2019, in the Caribbean subregion there were increases or no changes for all core capacities except points of entry; in Central America increases were registered for all 13 core capacities; in South America, increases were registered for eight core capacities, except legislation and financing, IHR coordination and national focal point functions, zoonotic events and the human-animal interface, human resources, and chemical events; and in North America increases or no changes were registered for all core capacities except legislation and financing, zoonotic events and the human-animal interface, and human resources.

313. The Bureau joined forces with the IAEA and the WHO Collaborating Centre for the Public Health Management of Chemical Exposures, which is hosted by UK Health Security Agency, to support two initiatives: Establishing and Strengthening Sustainable National Regulatory Infrastructure, and Strengthening Cradle-to-Grave Control of Radioactive Sources, and 12 of the 14 States Parties in the Caribbean now have IAEA membership.¹⁵¹ The IAEA-PAHO collaboration is recognized as a model worldwide.

314. The 2018 IHR Monitoring and Evaluation Framework includes one mandatory component—the State Party annual report—and three voluntary ones: after-action review of public health events, simulation exercises, and voluntary external evaluations. In 2019 the Bureau organized training on the methodological approach to after-action review and simulation exercises for States Parties and territories in the Caribbean subregion. PASB supported simulation exercises in several countries and a multicountry simulation exercise in the Caribbean in which several countries and territories, and nine departments of Haiti, participated, focusing on the Virtual Medical Coordination and Information Cell. In Haiti, the simulation exercise emphasized the newly established EOCs, known as “crisis cells.” After-action reviews were held in selected countries, and a multicountry after-action review for Hurricane Dorian, involving the Bahamas, Canada, and United States of America, also took place. While no voluntary external evaluations were conducted at the peak of the COVID-19 pandemic, action reviews of the COVID-19 response were undertaken in eight states of Brazil, encompassing surveillance, laboratory, communication, and assistance, and the reports, including findings and recommendations, were presented to the authorities of the implementing states.

315. Epidemic intelligence—the cycle of organized and systematic collection, analysis, and interpretation of information from all sources to detect, verify, and investigate potential health risks—is a core function under the IHR. PASB strengthened human resource capacity in the Caribbean in surveillance and basic and advanced epidemiology, using online, facilitator-led

¹⁵¹ Antigua and Barbuda, Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, Saint Lucia, Saint Vincent and the Grenadines, and Trinidad and Tobago.

courses through the PAHO VCPH. PASB issued epidemiological alerts and updates, mainly related to VPDs and dengue, but also including publications related to COVID-19; disseminated information on events in the Region on the Event Information Site for IHR National Focal Points and on the WHO Disease Outbreak News site; and registered events in the Event Management System, undertaking rapid risk assessment when required as part of the documentation, including a regional assessment for COVID-19.

316. Between 1 July 2020 and 30 June 2022, of the 240 acute public health events considered in the Americas for their potential international implications, 184 (77%) were determined to be substantiated, and 78 (42%) of those were related to COVID-19: 41 to SARS-CoV-2 variants, 18 to MIS among children and adolescents, and 19 to COVID-19 vaccination adverse effects.

317. Strengthening IPC is another core capacity under the IHR, and PASB provided training on IPC, outbreak investigation, and surveillance and containment of healthcare-associated infections in several countries and territories. The Bureau advocated for national prioritization of the IPC and healthcare-associated infections agenda, use of the WHO framework for implementation of IPC core components, and nomination of IPC national focal points.

318. The Bureau's work under the IHR umbrella was implemented with support from the Government of the Netherlands, European Commission Directorate-General for International Cooperation and Development, AECID, PHAC, CDC, and Brazil's national voluntary contributions.

Tools and guidelines

319. In addition to strengthening national capacities in emergency preparedness and disaster risk reduction through training in mass casualty management and incident command management systems, and the development and finalization of multihazard disaster management plans, the Bureau developed, disseminated, and promoted guidelines and tools to strengthen Member States' capacity to prepare for and respond to health emergencies and disasters. These included: *a*) Health Sector Multi-Hazard Response Framework, 2019;¹⁵² Preparedness Index for Health Emergencies and Disasters, 2019,¹⁵³ for countries to assess their capacity to respond to natural, human-caused, and epidemic events; *b*) information on how to reduce exposure to volcanic ash¹⁵⁴ and new protocols for respiratory epidemiological studies to be conducted in volcanic crises;¹⁵⁵ *c*) measures to take in a heat wave,¹⁵⁶ aimed at enhancing health sector capacities to prepare for and respond

¹⁵² Pan American Health Organization. Health Sector Multi-Hazard Response Framework. Washington, DC: PAHO; 2019 [cited 16 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/51497>.

¹⁵³ Pan American Health Organization. Preparedness Index for Health Emergencies and Disasters. Washington, DC: PAHO; 2019 [cited 16 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/51449>.

¹⁵⁴ International Volcanic Health Hazard Network. How to protect yourself from breathing volcanic ash. IVHHN; 2021 [cited 16 August 2022]. Available from: <https://www.paho.org/en/documents/how-protect-yourself-breathing-volcanic-ash>.

¹⁵⁵ Mueller W, Cowie H, Horwell CJ, et al. Standardized epidemiological protocols for populations affected by volcanic eruptions. *Bull World Health Organ* 2020;98:362–364. Available from: <https://www.paho.org/en/documents/epidemiological-protocols-populations-affected-volcanic-eruptions>.

¹⁵⁶ Pan American Health Organization. Heatwaves: a guide for health-based actions. Washington, DC: PAHO; 2021 [cited 16 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/54979>.

to this threat, in coordination with meteorological services (this became particularly relevant, given that, between December 2018 and February 2019, seven countries in the Region—Argentina, Brazil, Chile, Mexico, Paraguay, Peru, and Uruguay—declared a heat wave alert almost concurrently, an occurrence not previously seen in the Region); *d*) the Incident Command System for hospitals, which was introduced in all Central American countries; and *e*) Concepts of Incident Command System for the Caribbean Region: A Manual for Participants.¹⁵⁷

¹⁵⁷ Concepts of Incident Command System for the Caribbean Region. A manual for participants. Washington, DC: PAHO; 2021 [cited 16 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/53262>.

3. IMPROVING HEALTH ALONG THE LIFE COURSE

320. The life course approach for improving health analyzes and addresses health and its determinants from preconception to old age, identifies specific needs at key stages of life, and works to address them to improve health outcomes. This approach demonstrates the people-centered approach that is one of the core components of PHC, and is essential for advancing UAH and UHC, and for the reduction of inequities and realization of human rights. The Bureau's technical cooperation in this area sought to accelerate reductions in maternal, neonatal, infant, and child mortality; promote the comprehensive development of children from infancy to adolescence; address sexual and reproductive health; and maintain the health of older persons.

321. Much of PASB's technical cooperation in this area, except for the health of older persons, was aligned with Every Woman, Every Child Latin America and the Caribbean (EWCE-LAC),¹⁵⁸ a regional interagency mechanism for coordinating the adaptation and implementation of the Global Strategy for Women's, Children's and Adolescents' Health (2016-2030)¹⁵⁹ and its three objectives: *a*) survive (end preventable deaths); *b*) thrive (ensure physical and mental health and well-being); and *c*) transform (expand enabling environments). EWEC-LAC supports countries' efforts to reduce inequities in access to health for women, children, and adolescents, and works in coordination with the global movement.

322. In making the EWEC-LAC framework operational, the Bureau developed the regional Plan of Action for Women's, Children's, and Adolescents' Health 2018-2030 (Document CD56/8, Rev. 1), which has the following strategic lines of action: *a*) strengthen a transformative policy environment to reduce health inequities among women, children, and adolescents; *b*) promote universal, effective, and equitable health and well-being for all women, children, and adolescents in their families, schools, and communities throughout the life course; *c*) expand equitable access to comprehensive, integrated, quality health services for women, children, adolescents, and families that are people-, family-, and community-centered; and *d*) strengthen information systems for the collection, availability, accessibility, quality, and dissemination of strategic information, including health data and statistics on the health of women, children and adolescents, within the framework of the principles proposed in the plan.

323. The PASB-GAC Integrated Health Systems in Latin America and the Caribbean (IHSLAC) project,¹⁶⁰ which was implemented 2016-2019, aimed to improve the health of children, young girls, and women (including mothers) in situations of vulnerability in Latin America and the Caribbean, and provided significant support to the Bureau's technical cooperation. The project was implemented in 11 countries¹⁶¹ and supported the development of policies, plans, standards,

¹⁵⁸ Available from: <https://www.everywomaneverychild-lac.org/e/>.

¹⁵⁹ Every Woman Every Child. Global Strategy for Women's, Children's and Adolescents' Health (2016-2030). EWEC; 2015 [cited 16 August 2022]. Available from: https://www.everywomaneverychild.org/wp-content/uploads/2017/10/EWEC_GSUpdate_Full_EN_2017_web-1.pdf.

¹⁶⁰ Available from: <https://www.paho.org/en/canada/integrated-health-systems-latin-america-and-caribbean-ihslac>.

¹⁶¹ Bolivia (Plurinational State of), Colombia, Ecuador, Guatemala, Guyana, Haiti, Honduras, Nicaragua, Paraguay, Peru, and Suriname.

guidelines, and tools based on equity, ethnicity, gender, and human rights approaches, reflecting PAHO's CCTs.

324. Through the IHSLAC project, PASB worked on the validation of a tool to promote culturally safe birth in four countries—Guatemala, Honduras, Paraguay, and Peru—and, in collaboration with indigenous communities, integrated this intervention with a series of knowledge dialogues to address key public health issues affecting women and young persons. PASB promoted the inclusion of the tool for culturally safe birth in the Assessment of Essential Conditions tool that is used to analyze the quality of health services.

325. IHSLAC project results included: 100% exclusive breastfeeding of children born to mothers in maternity homes; provision of basic equipment, commodities, and other materials to support service provision in health facilities and through community networks; community action, including support for the implementation of telemedicine services; provision of deworming treatment; screening of children under 15 years of age for Chagas disease and of women for cervical cancer; building awareness on empowerment issues among women, including entrepreneurship, leadership, participation, and the right to paid work; and human resources capacity-building, with more than 11,000 health providers benefiting from training and/or awareness activities. The project's benefits, overall, have been identified as: improved access to, and quality of, care, through consideration of community practices, behaviors and social norms; increased knowledge and practices among mothers, pregnant women, and the broader community to identify at-risk pregnancies, support timely access to health services, and promote pre/post-natal visits; and improved collaboration to address maternal health and reduce maternal mortality through culturally sensitive approaches toward safe birth, including a focus on the empowerment of indigenous women.¹⁶²

326. In April 2021, PASB published *Building Health Throughout the Life Course: Concepts, Implications, and Application in Public Health*,¹⁶³ which offers a new way of thinking about health in terms of building capacities. It describes how health develops and changes throughout the life course, and how the life course approach can be used to improve the health and well-being of individuals, families, and communities, and to ensure that health as a human right is achieved for all individuals. The Bureau initiated the development of a webinar series on the topic.

327. PASB collaborated with several partners to develop recommendations for continuity of services in maternal and newborn health, and sexual and reproductive health care, including, but not limited to, WHO, International Federation of Gynecology and Obstetrics, Latin American and Caribbean Neonatal Alliance, Regional Task Force on Maternal Mortality Reduction, State

¹⁶² World Health Organization. A results-based approach to improving health in Latin America and the Caribbean. Inaugural WHO partners forum case study. Geneva: WHO; [date unknown] [cited 16 August 2022]. Available from:

https://www.who.int/docs/default-source/un-high-level-meeting-on-tb/2-paho-results-based-approach.pdf?sfvrsn=af5acea9_2.

¹⁶³ Pan American Health Organization. *Building health throughout the life course. concepts, implications, and application in public health*. Washington, DC: PAHO; 2020 [cited 16 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/53409>.

University of Campinas of Brazil, Brazilian Federation of Gynecology and Obstetrics Associations, and Center for Global Health at the Colorado School of Public Health.

Promoting maternal, neonatal, child, and adolescent health

Maternal health

328. As part of its technical cooperation to reduce maternal deaths, PASB employed an interprogrammatic approach and multilevel action across the Bureau to accelerate implementation of the Director's Zero Maternal Deaths by Hemorrhage initiative, which aims to reduce the equity gap in maternal mortality in 10 priority countries with at-risk maternal mortality indicators: Bolivia (Plurinational State of), Dominican Republic, Guatemala, Guyana, Haiti, Honduras, Nicaragua, Paraguay, Peru, and Suriname. The interventions were supported by funding from the respective ministries of health, the International Federation of Gynecology and Obstetrics, and the Latin American Federation of Societies of Obstetrics and Gynecology.

329. The Bureau placed an additional advisor on women's health and maternal mortality reduction in each of these priority countries, conducted capacity strengthening to reach women most at risk and in situations of vulnerability, and updated the curriculum with new evidence, considering the clear linkages between gender inequalities and high rates of maternal mortality among indigenous women in the Region. One hospital in each of four countries—Bolivia (Plurinational State of), Dominican Republic, Guatemala, and Peru—implemented the project's comprehensive package, and over a two-year period, all the participating hospitals showed a decrease in maternal mortality due to hemorrhage. In 2019, maternal mortality declined in the Plurinational State of Bolivia, Dominican Republic, Guatemala, Honduras, Nicaragua, Paraguay, Peru, and Suriname, with reductions ranging from 9% in Paraguay to 27% in Suriname.

330. Related PASB-supported interventions included:

- a) Development of a protocol to analyze the relationship between maternal mortality due to hemorrhage and the availability and management of blood and its components. Piloting of the protocol showed that this cause of mortality was highest among mothers under 30; availability of blood kits for such emergencies was low or nonexistent; providers had little knowledge of blood components in obstetric emergencies; and the relationship between maternal units and the transfusion service ranged from weak to nonexistent. This pointed to the need for training in comprehensive blood supply, emergency blood management, compliance with obstetric emergency management protocol, reorganization of blood service networks according to clinical needs, and improvement in the efficiency of these networks;
- b) Assessment of costs for the regionalization of blood services in the Andean Region, in collaboration with the Andean Health Organization (ORAS), and in Guatemala. The results indicated that it was more costly and less efficient for hospitals to have their own blood banks than to centralize, in a dedicated institution, the tasks of obtaining voluntary donors, processing blood, and distributing certified blood to one or more hospitals;

- c) Strengthening of technical capacities to manage the main obstetric emergencies, through the training of trainers in several countries, including persons from schools of medicine, nursing, and midwifery;
- d) Promotion of updated family planning strategies, such as immediate post-obstetric, long-acting reversible contraception, to the most vulnerable populations, including adolescents and indigenous, rural, and resource-poor women.

331. The Bureau consolidated the Regional Network for the Surveillance of Maternal and Neonatal Mortality, which aims to improve the analysis of data on maternal and neonatal health in the Region of the Americas, the only WHO region that has implemented this surveillance initiative. The Bureau supported national capacity-building for improved maternal mortality surveillance based on the 2015 Guidelines for Maternal Death Surveillance and Response (MDSR): Region of the Americas.¹⁶⁴ The initiative was funded by USAID, with technical cooperation from the World Bank, WHO, UNICEF, United Nations Population Fund (UNFPA), and other partners. A virtual course to improve maternal death surveillance and response skills was developed and made available through the PAHO VCPH in 2020.

332. The Bureau undertook technical cooperation with several countries to improve maternal health surveillance related to COVID-19, including identification and audit of maternal deaths among COVID-19-positive cases; implement strategies for caring for pregnant women with COVID-19; design local forms in countries for monitoring maternal mortality, if not using the Perinatal Information System (SIP) COVID-19 form;¹⁶⁵ alert national authorities regarding the risk for increased mortality in pregnant women with COVID-19; and analyze the impact of service interruption on all pregnant women. The Bureau also established a Latin American collaborative database on maternal health and COVID-19.

333. In June 2020, PASB alerted WHO to observed effects of the pandemic on maternal health in the Region of the Americas, having noted an increased risk among pregnant women of presenting with severe COVID-19, and, therefore, of being hospitalized and requiring intensive care, including intubation, putting both mother and child at high risk. In August 2020, the Bureau published an epidemiological alert on maternal mortality related to the pandemic¹⁶⁶ for the first time, urging governments to take special action to safeguard the health of pregnant women and enabling Member States to promptly issue warnings on the negative impact of the pandemic on maternal health.

¹⁶⁴ Regional Task Force for Maternal Mortality Reduction. Maternal death surveillance and response (MDSR): Region of the Americas. Panama City: GTR; 2015 [cited 16 August 2022]. Available from: <https://msh.org/resources/guidelines-for-maternal-death-surveillance-and-response-mdsr-region-of-the-americas/>.

¹⁶⁵ Available from: <https://www.paho.org/en/latin-american-center-perinatology-women-and-reproductive-health-clap/perinatal-information-system>.

¹⁶⁶ Pan American Health Organization. Epidemiological alert: COVID-19 during pregnancy. Washington, DC: PAHO; 2020 [cited 16 August 2022]. Available from: <https://www.paho.org/en/documents/epidemiological-alert-covid-19-during-pregnancy-13-august-2020>.

334. In May 2022, the results of a PASB-supported study in eight Latin American countries on maternal mortality and COVID-19¹⁶⁷ showed barriers in pregnant women’s access to critical care, with 35% of pregnant women who died from causes associated with COVID-19 not being admitted to intensive care. The study further highlighted the need to pay special attention to pregnant women as a vulnerable group during the pandemic, improve systems to avoid delays in referral for intensive care, and encourage vaccination among this population group.

Neonatal and child health

335. In its technical cooperation to enhance neonatal and child health, the Bureau collaborated with the World Bank, WHO, UNICEF, Plan International, Bernard van Leer Foundation, and others to promote integrated policies and services to accelerate progress on child health and development through sharing lessons learned from best practices in countries; update countries on evidence-based approaches and strategies for multisectoral action; engage health and social development ministries in current global efforts to improve the development of young children; and provide training on responsive caregiving.

336. The Bureau contributed to the development of the framework for nurturing care that addresses early childhood development, which was unveiled at the 2018 World Health Assembly,¹⁶⁸ and participated in the WHO-led Global Scale for Early Development team. The team comprises experienced statisticians and child development experts from various institutions, including the World Bank, UNICEF, and IDB. It has created the largest global bank to date of child development instruments and items. The Bureau also established a network of experts and institutions on early childhood development that includes the United Nations Educational, Scientific, and Cultural Organization (UNESCO), UNICEF, and research centers and universities from various countries.

337. The Bureau conducted advocacy to strengthen interprogrammatic work and increase child-focused actions in disease-specific programs such as those addressing the prevention and control of communicable diseases, NCDs, and injuries and violence, and collaborated with IDB and UNICEF to disseminate evidence-based interventions on parenting and fatherhood, recommendations on physical activity for children under 5 years of age, and considerations of the links between environmental risks and child development.

338. In working to reduce preventable deaths of neonates and children under 5 years of age, PASB focused on improving the quality of care and developing tools and strategies to strengthen information systems related to neonatal and fetal mortality, including assessment of essential conditions for neonatal intensive care units and training in neonatal and fetal mortality audits. The Bureau collaborated in enhancing the quality of perinatal care, informed by identification of the main causes of neonatal death and disability—linked to prematurity, retinopathy of

¹⁶⁷ Maza-Arnedo F, Paternina-Caicedo A, Soda CG, et al. Maternal mortality linked to COVID-19 in Latin America: results from a multi-country collaborative database of 447 deaths. *Lancet Regional Health – Americas*. 2022;8:100269. Available from: <https://www.sciencedirect.com/science/article/pii/S2667193X22000862>.

¹⁶⁸ World Health Organization, United Nations Children’s Fund, World Bank Group. *Nurturing care for early childhood development: a framework for helping children survive and thrive to transform health and human potential*. Geneva: WHO; 2018 [cited 16 August 2022]. Available from: <https://apps.who.int/iris/bitstream/handle/10665/272603/9789241514064-eng.pdf>.

prematurity, birth defects, infections, and sepsis—and an assessment of the availability of relevant programmatic and regulatory tools.

339. In February 2022, PASB launched the eCBB mobile application on the care of neonates,¹⁶⁹ and also created another application on the care of pregnant women, which was in the testing phase at the time of writing. The Bureau developed advocacy and training materials and evidence-based clinical guidelines, and conducted training of trainers in selected countries, in coordination with experts and partners, including WHO, UNICEF, and March of Dimes. More than 350 nurses, neonatologists, pediatricians, ophthalmologists, and general practitioners received virtual and face-to-face training in various topics, and an evidence-based guideline on caring for extremely premature neonates with risk conditions was developed. The Bureau improved access to quality services for reducing blindness due to retinopathy of prematurity in selected countries through policy and guideline development, human resources capacity-building, and enhancement of services.

340. The Bureau implemented the 28 Days, Time to Care and Love campaign (Figure 2),¹⁷⁰ seeking to increase the knowledge, skills, and self-confidence of parents, families, and caregivers of neonates, and to make health professionals aware of the importance of quality care practices to reduce neonatal mortality. The Bureau also promoted the establishment of a network of groups of families of premature neonates in the Region to increase their participation in the care of neonates, generate evidence-based clinical practice guidelines, and enable information-sharing. To date, 40 groups of families from 14 countries¹⁷¹ have participated.

Figure 2. Poster for the 28 Days, Time to Care and Love campaign



Source: Pan American Health Organization. The 28 day campaign - newborn health. Washington, DC: PAHO; 2022 [cited 2 September 2022]. Available from: <https://www.paho.org/en/campaigns/28-day-campaign-newborn-health>.

¹⁶⁹ Available from: <https://apps.apple.com/ar/app/ecbb/id1595340182>.

¹⁷⁰ Available from: <https://www.paho.org/en/campaigns/28-day-campaign-newborn-health>.

¹⁷¹ Argentina, Brazil, Canada, Costa Rica, Colombia, Chile, Dominican Republic, Ecuador, Guatemala, Jamaica, Mexico, Nicaragua, Peru, and Uruguay.

341. The Bureau's technical cooperation also included preparation of an advocacy document promoting surveillance for birth defects, the second-most prevalent cause of neonatal and infant mortality; training for the establishment of national surveillance systems for birth defects, including those linked to the Zika virus; mapping of the availability and characteristics of the surveillance systems; development and dissemination of tools for the coding and registration of birth defects using the SIP; and preparation of a regional report presenting the current situation and the challenges to be addressed in the short and medium term.¹⁷² Several countries established national registry systems for birth defects, and PASB worked closely with WHO, USAID, International Clearinghouse for Birth Defects Surveillance and Research, CDC, and March of Dimes to present the experiences and lessons learned in the Region, which have been included in capacity-building interventions in countries outside of the Americas.

342. The Bureau undertook direct technical cooperation at national and/or institutional level related to the SIP, and provided remote virtual support to the countries regarding information technology (IT) issues and SIP implementation. A major achievement was the finalization and implementation of SIP Plus,¹⁷³ the expanded, web-based version of the SIP. This has added value to clinical data as it increases accessibility to data entry from distant services at the first level of care; makes individual patient data available at all times, at all levels of care, through the Internet or national governmental networks; allows clinical registration and access from multiple wireless devices, and updates all information online; can be used in real time; and provides interoperability with all electronic format records, including national vital statistics, providing an opportunity to trace trends in cohorts of individuals, contribute to better understanding of gaps in population health, and improve the monitoring of health policies and services.

343. The new SIP Plus version can be customized to country specificities, while maintaining a basic regional standard of data, and PASB's interprogrammatic work resulted in the development of a series of automatic reports that can be generated from SIP Plus data with "one click." SIP Plus has strengthened the quality and monitoring of women's, maternal, adolescent, and neonatal care. In some countries, SIP Plus has been integrated into the undergraduate and postgraduate curricula of medical, midwifery, and nursing schools. Argentina, the Plurinational State of Bolivia, Colombia, Dominican Republic, Nicaragua, and Panama are among countries that have integrated SIP Plus with other digital forms of information.

344. The Bureau supported COVID-19 surveillance among pregnant women and neonates, developing a specific form and associated software for registering and monitoring pregnant women with acute respiratory infections and their neonates, using the SIP platform. This SIP-COVID-19 form was made available in English, Portuguese, and Spanish, and allows the services using it to become sentinel centers for any other respiratory infection of public health concern that may emerge.

345. In October 2019, the Bureau implemented a course on maternal and perinatal death surveillance and response through the PAHO VCPH. The course targets professionals involved in

¹⁷² Pan American Health Organization. Present and future of birth defects surveillance in the Americas. Washington, DC: PAHO; 2019 [cited 16 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/51899>.

¹⁷³ Available from: <http://www.sipplus.org/>.

care, management, and institutional administration related to maternal and perinatal health, and, as of 30 June 2022, 24,353 participants from 97 countries across the globe had enrolled.

346. Since the beginning of the pandemic, PASB has assessed and documented a significant reduction in accessibility to health services, including essential sexual and reproductive health and antenatal care services. Through the network of care for women in abortion situations, the Bureau generated a clinical registry of abortions in order to build a solid database to support clinical, administrative, and policy decision-making processes through application of the EviSIP strategy.¹⁷⁴ The Bureau also developed three online courses on maternal, newborn, and sexual and reproductive health: *a)* Competency-Based Education, May 2021, in collaboration with the University of Virginia, which provides training in maternal health for teachers of midwifery, nursing, or medicine; *b)* Immediate Post-Obstetric Event Contraception' June 2021, which incorporates WHO guidelines for contraception in the immediate postpartum and postabortion period;¹⁷⁵ and *c)* Family Planning for the First Level of Care, June 2021, which incorporates content from the Global Provider Handbook¹⁷⁶ and offers clear, up-to-date information and advice to help providers meet clients' contraceptive needs.

347. Also in June 2021, PASB conducted two regional consultations to discuss a WHO proposal on a comprehensive framework for health and well-being during the first two decades of life. A wide group of key stakeholders, including representatives of governments, NGOs, young persons, professional associations, persons living with disabilities, academia, and United Nations agencies, discussed the relevance of the proposal and the challenges of putting into practice its recommendations. The regional report informed the final version of the 2021 WHO-UNICEF report Investing in Our Future: A Comprehensive Agenda for the Health and Well-Being of Children and Adolescents.¹⁷⁷

348. Although the 2021 child mortality report¹⁷⁸ found no evidence of excess mortality due to the indirect effects of the COVID-19 pandemic, it is important to consider that the pandemic affected the registration and reporting of mortality, and, as a result, the timing, level of completeness, and the quality of the reported data are likely to have been negatively impacted.

¹⁷⁴ Serruya SJ, Ponce de León RG, Bahamondes MV, et al. EviSIP: using evidence to change practice through mentorship—an innovative experience for reproductive health in the Latin American and Caribbean regions. *Global Health Action*. 2020;13:1,1811482. Available from: <https://doi.org/10.1080/16549716.2020.1811482>.

¹⁷⁵ World Health Organization. Programming strategies for postpartum family planning. Geneva: WHO; 2013 [cited 16 August 2022]. Available from: https://apps.who.int/iris/bitstream/handle/10665/93680/9789241506496_eng.pdf.

¹⁷⁶ World Health Organization. Family planning – a global handbook for providers. Geneva: WHO; 2018 [cited 16 August 2022]. Available from: <https://www.who.int/publications/i/item/9780999203705>.

¹⁷⁷ World Health Organization and the United Nations Children's Fund. Investing in our future: a comprehensive agenda for the health and well-being of children and adolescents. Geneva: WHO and UNICEF; 2021. [cited 16 August 2022]. Available from: <https://apps.who.int/iris/handle/10665/350239>.

¹⁷⁸ United Nations Inter-agency Group for Child Mortality Estimation. Levels and trends in child mortality. Report 2021. New York: UNICEF; 2021 [cited 16 August 2022]. Available from: <https://www.who.int/publications/m/item/levels-and-trends-in-child-mortality-report-2021>.

Adolescent health

349. Adolescents face many barriers to receiving the full range of quality, age-appropriate preventive, promotional, and curative services that they need. Where services exist, they may be fragmented, inappropriate, and not aligned with the health needs of young people. Multisectoral, multi-stakeholder, inclusive, equity- and rights-based approaches, and interventions targeting families, schools, and communities, with efforts to identify and target the most at-risk groups and those living in situations of vulnerability with evidence-based interventions, remain limited in number and scope.

350. The Bureau worked with countries to review and update their adolescent health strategies and plans, and promoted and contributed to the development and implementation of standards for adolescent health services, to operationalize the guidance of the 2017 United Nations multi-agency Global Accelerated Action for the Health of Adolescents (AA-HA!).¹⁷⁹ AA-HA! provides direction for developing comprehensive, evidence-based, multisectoral adolescent health plans and strategies that are aligned with the SDGs and the Global Strategy for Women’s, Children’s and Adolescents’ Health. The Bureau provided technical cooperation on the use of the WHO Innov8 tool¹⁸⁰—which supports the operationalization of the SDGs’ commitment to “leave no one behind” and the realization of UAH, UHC, and the right to health—to analyze adolescent health programs and to review interventions for the reduction of adolescent pregnancies. PASB also trained teams from selected countries to apply AA-HA! principles and recommended interventions, and introduced the e-Standards tool, a web-based platform to monitor global standards for adolescent health services.

351. It is estimated that about 2% of women in Latin America and the Caribbean initiate sexual activity before the age of 15 years, and this is the only area in the world where the estimated number of pregnancies among girls under 15 years of age is increasing. Adolescents continue to face legal, societal, policy, and health system-related barriers that deny them access to confidential and quality sexual and reproductive health services and commodities. The Bureau promoted the availability and accessibility of adolescent-friendly health services and aligned its work with the findings and recommendations of the 2017 regional report Accelerating Progress Toward the Reduction of Adolescent Pregnancy in Latin America and the Caribbean.¹⁸¹

352. In 2018, the Bureau supported Honduras’ use of the WHO Innov8 tool to review its National Plan to Reduce Adolescent Pregnancies. The Bureau also undertook technical cooperation with the Dominican Republic—the country with the highest adolescent fertility rate in the Region—for equity-based analysis of the status of adolescent pregnancy and development of a new adolescent pregnancy prevention plan. In Colombia, the Health for Peace United Nations

¹⁷⁹ World Health Organization. Global Accelerated Action for the Health of Adolescents (AA-HA!): guidance to support country implementation. Geneva: WHO; 2017 [cited 16 August 2022]. Available from: <https://www.who.int/publications/i/item/9789241512343>.

¹⁸⁰ Available from: <https://apps.who.int/iris/handle/10665/250442>.

¹⁸¹ Pan American Health Organization, United Nations Population Fund, United Nations Children’s Fund. Accelerating progress toward the reduction of adolescent pregnancy in Latin America and the Caribbean. Report of a technical consultation (Washington, D.C., USA, August 29-30, 2016). Washington, DC: PAHO, UNFPA, UNICEF; 2017 [cited 16 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/34493>.

interagency project, implemented through a partnership among PAHO/WHO, IOM, UNFPA, and the Ministry of Health with funding from the United Nations Post-Conflict MPTF, built the capacity of health professionals in health centers and health posts to improve and expand sexual and reproductive health services, with an emphasis on preventing gender-based violence and pregnancy in adolescent girls. In June 2022, PASB collaborated with GAC and the Ministry of Health in Guyana to initiate action to address that country's high rate of teenage pregnancies.

353. In September 2020, Latin American Adolescent Pregnancy Prevention Week was commemorated for the first time, followed by the Caribbean equivalent in October 2020. Both observations included a series of activities to enhance awareness, highlight promising practices, and share lessons learned regarding this issue. PASB and UNFPA jointly published a technical brief on adolescent pregnancy,¹⁸² a social media campaign was developed in collaboration with young persons, and several webinars were convened.

354. In June 2021, the Bureau presented the results of the equity-based study of adolescent pregnancy in SICA Member States to the countries and to COMISCA. The preliminary analysis confirmed inequalities in the distribution of adolescent fertility along social gradients defined by income, education, and residence, with the data indicating that adolescents in the lower social gradients had a higher risk of early pregnancy than those at the most advantageous end of the scale. The analysis found that this pattern of inequality was repeated within (at subnational and national levels) and between countries. The study, funded by USAID through the EWEC-LAC initiative, reinforced the need for the implementation of pro-equity interventions to address adolescent pregnancy.

355. The Bureau developed the 2018 report *The Health of Adolescents and Youth in the Americas*¹⁸³ based on 19 regional indicators and information on the implementation of the PAHO report *Plan of Action on Adolescent and Youth Health 2010-2018* (Document CD49/12). The report revealed that significant progress had been made at regional and country levels in the development and implementation of actions for adolescent and youth health, including the establishment of adolescent health programs in most countries; the availability and use of strategic information; expansion of health services for adolescents; capacity-building of stakeholders in a range of adolescent health topics; and introduction of school- and family-based interventions. However, the report also noted that not all groups had benefited equally from this progress, and adolescent mortality had remained stagnant, with homicides, suicides, and traffic fatalities as leading causes of death in this age group.

356. The report's recommendations included provision of adequate funding for multisectoral adolescent and youth health programs that address the social determinants of health; establishment of an adolescent-responsive health system; implementation of school-, family-, and community-based interventions to protect and promote children's and adolescents' health;

¹⁸² Pan American Health Organization, United Nations Population Fund. Adolescent pregnancy in Latin America and the Caribbean. Technical brief. Washington, DC: PAHO, UNFPA; 2020 [cited 16 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/53133>.

¹⁸³ Pan American Health Organization. *The health of adolescents and youth in the Americas*. Washington, DC: PAHO; 2019 [cited 16 August 2022]. Available from: <https://www.paho.org/en/documents/health-adolescents-and-youth-americas>.

utilization of evidence-based approaches that target groups in situations of vulnerability; monitoring and evaluation to inform strategic planning and timely adaptation of programs and services; and engagement of young people as agents of change.

357. Also in 2018, PASB undertook technical cooperation in the development of health plans for indigenous and Afro-descendant young persons, based on self-identified priorities (see Chapter 4, Reducing inequities in health). The Bureau supported the translation and implementation of the WHO 2019 publication Handbook for Conducting an Adolescent Health Services Barriers Assessment (AHSBA) with a Focus on Disadvantaged Adolescents.¹⁸⁴ The Adolescent Health Services Barriers Assessment is a methodology for identifying subpopulations without effective health service coverage and the most important barriers that they face.

358. In 2019, PASB announced the PAHO Youth Leaders Initiative, which aimed to bring together people under age 25 years from across the Region to seek innovative ideas and solutions for health challenges faced by adolescents and young people in the Americas, and established the PAHO Youth for Health group, aiming to institutionalize the engagement and empowerment of young people in the Bureau's work. The group participated in various interventions, including several related to mental health and tobacco control, as well as monthly live social media sessions. In light of increasing demands for the group's engagement in the Bureau's work, the membership was expanded, with 15 new additions early in 2021.

359. The Bureau collaborated with CARICOM and other regional and international partners to organize the first Caribbean Congress on Adolescent and Youth Health, held in Trinidad and Tobago in October 2019. Convened under the theme Championing our Wealth: Promoting the Health and Well-Being of Adolescents and Youth in the Caribbean, the multi-stakeholder congress brought together about 200 young people, policymakers, technical representatives, and civil society advocates. The Bureau supported the development of a road map to address critical issues identified at the congress related to physical, mental, and social well-being, substance use, violence and injuries, nutrition, sexual and reproductive health, and climate change and the environment, ensuring attention for the most vulnerable groups. The congress and road map contributed to enhanced collaboration among Caribbean stakeholders, including the development of an interagency workplan to support implementation of the road map. Currently, an assessment of progress is being conducted, the results of which will serve as input for the agenda of the second Caribbean congress, scheduled for October 2022 in Kingston, Jamaica.

360. The Bureau strengthened the capacity of Member States to develop and implement evidence-informed digital solutions to improve the health and well-being of young people. In 2021, the Bureau coordinated the translation into Spanish of the WHO 2020 guidance Youth-Centered Digital Health Interventions: A Framework for Planning, Development and Implementing

¹⁸⁴ World Health Organization. Handbook for conducting an adolescent health services barriers assessment (AHSBA) with a focus on disadvantaged adolescents. Geneva: WHO; 2019 [cited 16 August 2022]. Available from: <https://www.who.int/publications/i/item/9789241515078>.

Solutions with and for Young People,¹⁸⁵ and organized the training of country teams from 15 countries and territories¹⁸⁶ in the design, implementation, monitoring, and evaluation of digital solutions for the health and well-being of young people.

361. The pandemic has had a profound effect on the daily life of young people, including a narrowing of the social environment and exchanges at a critical time in their psychosocial development, and disruption of needed services, related in particular to mental health and sexual and reproductive health. With the aim of supporting the implementation of an effective response, in September 2021 the Bureau published the document *Mitigating the Direct and Indirect Consequences of COVID-19 on the Health and Well-Being of Young People in the Americas*,¹⁸⁷ in English, French, Portuguese, and Spanish. The document was widely disseminated, and its content shared through webinars.

362. Supported by the IHSLAC project, the Strong Families (*Familias Fuertes*) program (Figure 3),¹⁸⁸ which targets adolescents aged 10-14 years, aiming to prevent risky behaviors, promote and strengthen parent-child communication, provide advice on parenting and home teaching skills, and support the mental health and development of adolescents, was updated and strengthened. These efforts were based on an external evaluation of the program that the Bureau commissioned in 2017—conducted by the Johns Hopkins University—and were done in close collaboration with the program’s original developers at Iowa State University. As a result, two additional manuals and eight videos on program management and competency-based training of human resources for the program were produced. These products contributed to strengthening of the program in Colombia, Dominican Republic, and Peru, countries with national-scale programs, and renewed interest from other countries to introduce or reintroduce the program. In the period 2017-2022, the program reached more than 150,000 families and adolescents, mainly families in situations of vulnerability.

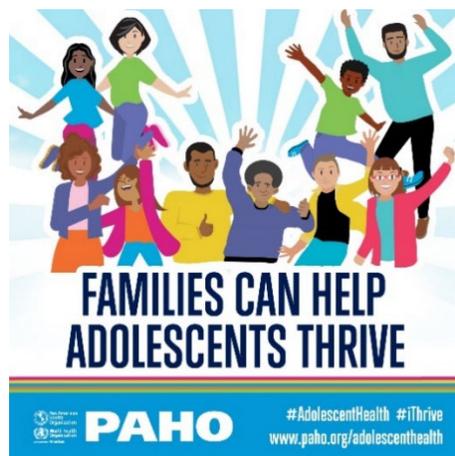
¹⁸⁵ World Health Organization. Youth-centred digital health interventions: a framework for planning, developing and implementing solutions with and for young people. Geneva: WHO; 2020 [cited 16 August 2022]. Available from: <https://apps.who.int/iris/handle/10665/336223>.

¹⁸⁶ Anguilla, Antigua and Barbuda, Argentina, Barbados, Brazil, Chile, Colombia, Dominica, Dominican Republic, Guatemala, Guyana, Honduras, Mexico, Paraguay, and Saint Lucia.

¹⁸⁷ Pan American Health Organization. *Mitigating the direct and indirect consequences of COVID-19 on the health and well-being of young people in the Americas*. Washington, DC: PAHO; 2021 [cited 16 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/54815>.

¹⁸⁸ Pan American Health Organization. *Familias Fuertes*. Washington, DC: PAHO; 2022 [cited 16 August 2022]. Available from: <https://www.paho.org/es/temas/salud-adolescente/familias-fuertes>.

Figure 3. Social media card for the Strong Families program



Source: Pan American Health Organization. Strong families social media card. Washington, DC: PAHO; 2020 [cited 2 September 2022]. Available from: <https://www.paho.org/en/documents/strong-families-social-media-card>.

363. The Region of the Americas has the highest homicide rate in the world, resulting in almost 194,000 deaths in 2019.¹⁸⁹ In November 2020, PASB, in collaboration with UNESCO, UNICEF, and the Global Partnership to End Violence Against Children, published the Regional Status Report 2020: Preventing and Responding to Violence Against Children in the Americas,¹⁹⁰ the first of its kind for the Region. The report noted that homicide rates for boys under the age of 18 years were almost four times the global average in 2017, and the comparable rate for girls was almost double the global average. Beyond homicide, high rates of nonfatal violence persist in the Region, and, with the COVID-19 pandemic, there was new urgency to take action on domestic violence, including violence against children in the home.

364. The regional status report on violence against children benefited from the collaboration of Member States and multiple partners and experts, and informed a series of virtual workshops aimed at strengthening capacity in Member States to apply and adapt the INSPIRE framework,¹⁹¹ on which the report was based. The capacity-building was organized through collaboration among the World Bank, UNICEF, United Nations Office on Drugs and Crime (UNODC), PASB, End Violence against Children, Plan International, Save the Children, and Together for Girls, and targeted representatives of multiple government sectors and civil society from several countries in South America between November 2020 and May 2021. In addition to strengthening multisectoral and multicountry dialogue on INSPIRE, the series also highlighted the numerous experiences and

¹⁸⁹ World Health Organization. The Global Health Observatory. Global health estimates: leading causes of death. Geneva: WHO; 2021 [cited 16 August 2022]. Available from: <https://www.who.int/data/gho/data/themes/topics/topic-details/GHO/burden-of-violence>.

¹⁹⁰ Pan American Health Organization. Regional status report 2020: preventing and responding to violence against children in the Americas. Washington, DC: PAHO; 2020 [cited 16 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/53038>.

¹⁹¹ World Health Organization. INSPIRE: Seven strategies for ending violence against children. Geneva: WHO; 2016 [cited 16 August 2022]. Available from: <https://www.who.int/publications/i/item/inspire-seven-strategies-for-ending-violence-against-children>.

good practices available in the Americas, and reiterated the need to document and evaluate lessons learned. The Bureau has initiated collaboration with partners to undertake such an exercise.

Health of older persons

365. The PAHO Plan of Action on the Health of Older Persons, Including Active and Healthy Aging 2009-2018 (Document CD49/8) provided guidance for PASB's technical cooperation in this area, aligned with the following strategic areas: *a)* health of older persons in public policy and its adaptation to international instruments; *b)* adapt health systems to the challenges associated with the aging of the population and the health needs of older persons; *c)* train the human resources necessary for meeting the health needs of older persons; and *d)* strengthen the capacity to generate the necessary information for executing and evaluating activities to improve the health of older persons. The United Nations Decade of Healthy Ageing 2021-2030¹⁹² provides a more recent framework, with its four action areas: age-friendly environments, combating ageism, integrated care, and long-term care.

366. The PASB-developed course International Accreditation of Competences in Health Care for Older Persons, originally produced in Spanish and implemented in early 2019, was also made available in English and Portuguese on the PAHO VCPH. Since its launch in early 2019, the course has reached over 60,000 health professionals, providing competences to improve the care of older persons. Furthermore, two new subject-specific subpages were made available under the PAHO healthy aging program web page:¹⁹³ Decade of Healthy Aging in the Americas, and Older Adults and COVID-19, both of which are constantly updated, with the preparation and publication of relevant resource materials in English, Portuguese, and Spanish.

367. The Region of the Americas has largest representation in the WHO Global Network for Age-Friendly Cities and Communities, and there was an increase in participation of countries in Latin America. Currently, about 800 cities and communities in 13 countries and territories¹⁹⁴ in the Americas are part of the network, representing over 50% of all the WHO age-friendly cities worldwide. After the United States of America, Chile has the largest number of participating cities, and over 12 municipalities in Costa Rica are certified as members of the network, a result of intersectoral collaboration among ministries and civil society.

368. The Bureau participated in the Diabfrail LatAm Consortium, which is funded through the European Commission's Horizon 2020 program and aims to implement multimodal interventions for older people with diabetes in Latin America and to build better strategies and care, culminating in improved quality of life and fewer comorbidities. PASB also designed the methodology for the Assessment of the Health System's Responsiveness Regarding the Needs of Older Persons and supported the first phase of assessment in four countries—Barbados, Brazil, Chile, and Mexico.

¹⁹² Available from: <https://www.who.int/initiatives/decade-of-healthy-ageing>.

¹⁹³ Pan American Health Organization. Healthy aging. Washington, DC: PAHO; 2022 [cited 16 August 2022]. Available from: <https://www.paho.org/en/healthy-aging>.

¹⁹⁴ Argentina, Bolivia (Plurinational State of), Brazil, Canada, Chile, Colombia, Costa Rica, Cuba, Mexico, Peru, Puerto Rico, United States of America, and Uruguay.

369. With PASB's technical cooperation, several countries and territories implemented the Chronic Disease Self-Management Program (CDSMP), which was updated with new evidence-based strategies and adapted for virtual platforms, the latter to enable its continued use despite COVID-19 restrictions. In collaboration with the Administration for Community Living, which is part of the DHHS, the Bureau piloted the virtual program in selected countries in each subregion and it has been a key strategy to support self-care and self-management during the pandemic. Over 150 people with chronic conditions, mostly older adults, have participated in the program.

370. The Bureau collaborated with WHO, Christoffel-Blindenmission, and Orbis International to address geographical and economic inequities in eye and ear healthcare services, generating evidence of inequality in the distribution of ear, nose, and throat specialists in Latin American countries and contributing to strengthened ophthalmology services in selected public hospitals. A study on inequities in the subnational distribution of ophthalmologists and ear, nose, and throat specialists¹⁹⁵ provided baselines to improve the recruitment, training, and retention of the health workforce in the underserved areas.

371. Following the launch of the first World Report on Hearing¹⁹⁶ in March 2021, PASB initiated technical consultations with countries in Latin America and the Caribbean in the area of ear and hearing health. The report is a global evidence-based tool that provides epidemiological information, guidance, and recommendations to enable Member States to integrate ear and hearing care into their national health plans.

Maintaining and enhancing immunization programs

372. Immunization is a cornerstone for the prevention and control of many communicable diseases, an essential component of efforts to maintain health throughout the life course, a critical program in the PHC strategy, and a driving force for universal health. The Bureau's technical cooperation focused on maintaining quality immunization programs and timely and quality notification of the performance of national immunization systems through the PAHO/WHO-UNICEF Joint Reporting Form. There was also emphasis on promoting the incorporation of newer vaccines, including those for COVID-19, especially in the face of increasingly strident antivaccination campaigns and the misinformation and disinformation that accompanied the development and rollout of COVID-19 vaccines.

373. PASB was guided by the regional Plan of Action on Immunization 2016-2020 (Document CD54/7, Rev. 2) and its strategic lines of action: *a)* sustain the achievements; *b)* complete the unfinished agenda in order to prevent and control VPDs; *c)* tackle new challenges in the

¹⁹⁵ Bright T, Mújica OJ, Ramke J, et al. Inequality in the distribution of ear, nose and throat specialists in 15 Latin American countries: an ecological study. *BMJ Open*. 2019;9:e030220. Available from: <http://dx.doi.org/10.1136/bmjopen-2019-030220>.

¹⁹⁶ World Health Organization. The world report on hearing. Geneva: WHO; 2021 [cited 16 August 2022]. Available from: <https://www.who.int/publications/i/item/world-report-on-hearing>.

introduction of vaccines and assess their impact; and *d*) strengthen health services for effective vaccine administration.

374. In the last decade, while immunization programs have been strengthened with the introduction of several vaccines, Latin America has faced a decline in the coverage of diphtheria-tetanus-pertussis (DTP3-cv) in infants under the age of 1 year, from 92% in 2010 to 85% in 2019. This was largely due to reductions in coverage in countries with large cohorts of children, which decreased the regional average, consequent on changes in methods for vaccine coverage reporting (administrative data versus survey data); vaccine stockouts for DTP-cv; physical barriers to access; limited resources for operational activities; and sociopolitical situations, among other factors.

375. Notwithstanding the COVID-19 pandemic and its various challenges, including disruption of supply chains, PASB continued its close working relationships with countries and undertook technical cooperation through evidence-based advocacy at the political level; provision of tools to evaluate missed opportunities for vaccination and to conduct integrated monitoring of coverage of health interventions such as vaccination and deworming, for more efficient use of resources; reinforcement of surveillance and laboratory networks; strengthening of vaccination information systems; provision of scientific evidence to support immunization; development of risk communication strategies; guidance on strategies to address gaps in cold and supply chains; provision of support for the introduction of new vaccines; and provision of guidance to strengthen immunization programs in the context of outbreaks and disasters.

376. The Bureau tracked the impact of the COVID-19 pandemic on vaccination coverage, which, using the number of doses of DTP3 applied in 2019 as the baseline, saw decreases of 15% in 2020 and 9.35% in 2021 in several countries and territories in the Region. Based on the tracking, the Bureau provided guidance for maintenance of essential vaccination during the pandemic, including technical documents that were adopted by countries, such as *The Immunization Program in the Context of the COVID-19 Pandemic* (March 2020, updated April 2020);¹⁹⁷ *Vaccination of Newborns in the Context of the COVID-19 Pandemic*;¹⁹⁸ and *Immunization Throughout the Life Course at the Primary Care Level in the Context of the COVID-19 Pandemic*.¹⁹⁹

377. The Bureau also provided guidance to prevent the spread of COVID-19 through routine immunization programs and recommended innovative vaccine provision strategies such as the use of nontraditional locations, including cars (“drive through”), empty schools, pharmacies, and banks, and the use of health facilities based on prescheduled appointments. The Bureau disseminated guidance on how to close the gaps once vaccination services are reestablished;

¹⁹⁷ Pan American Health Organization. *The immunization program in the context of the COVID-19 pandemic*. Version 2. Washington, DC: PAHO; 2020 [cited 16 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/51992>.

¹⁹⁸ Pan American Health Organization. *Vaccination of newborns in the context of the COVID-19 pandemic*. Washington, DC: PAHO; 2020 [cited 16 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/52226>.

¹⁹⁹ Pan American Health Organization. *Immunization throughout the life course at the primary care level in the context of the COVID-19 pandemic*. Version 1. Washington, DC: PAHO; 2020 [cited 16 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/52291>.

tracked the development of candidates for COVID-19 vaccines; provided guidance to develop national plans for the introduction of COVID-19 vaccines; prepared a guide on preventing COVID-19 transmission at construction sites, in collaboration with the United Nations Office for Project Services; provided insights into WHO guidance documents; and translated those documents into French, Portuguese, and Spanish.

378. The Bureau continued its work with Member States to maintain elimination of polio, rubella, congenital rubella syndrome, measles, and neonatal tetanus, and to control other VPDs—the Bureau’s technical cooperation has contributed to sustained elimination of rubella and congenital rubella syndrome since 2009. PASB advocated for, and supported, the addition of newer vaccines, such as those against human papillomavirus (HPV) for cervical cancer prevention and pneumococcus, to national immunization programs. A total of 44 countries and territories²⁰⁰ in the Region now use the HPV vaccine, but HPV vaccine hesitancy still presents a challenge, with less-than-optimal uptake of the vaccine among the targeted age groups of girls and boys. In 2019, one of the two global suppliers announced its exit from the regional and global markets, leaving only one source of supply for the vaccine, at least until 2022, and causing concern regarding the supply and price of the vaccine, which PASB has been procuring through the Revolving Fund. The changing landscape of the vaccine market could have a negative impact on the operations of the Revolving Fund.

379. The Bureau supported an external evaluation of its regional immunization program by an independent committee. Recommendations for improvements included increased assertiveness in promoting vaccination and increased responses to the arguments of vaccine hesitancy groups; assessment of program staff needs, with improvements in training and provision of incentives; more frequent performance assessment of country immunization programs, particularly in Key Countries; and review of the program’s financial arrangements, especially the relative contributions of external donors and the Organization, with the possibility of mobilizing new financial resources from both existing and new partners.

380. The Bureau mounted an extensive response in the field to outbreaks of VPDs in the Region, including the mobilization of technical experts to assist the response to outbreaks such as measles in Argentina, Brazil, Colombia, Ecuador, Peru, and the Bolivarian Republic of Venezuela; diphtheria in Haiti and the Bolivarian Republic of Venezuela; and yellow fever in Brazil.

381. In 2019, there was a resurgence of measles in the Region. The Bureau, in collaboration with ministries of health and other partners, coordinated the administration of 450,000 doses of measles vaccine in the Region, including targeting high-risk groups. PASB established the Regional Committee for Monitoring and Re-verification of Measles and Rubella Elimination in the Americas as a response to the reestablishment of endemic transmission of measles in Brazil and the Bolivarian Republic of Venezuela; developed manuals, guidelines, and case studies to

²⁰⁰ Anguilla, Antigua and Barbuda, Argentina, Aruba, Bahamas, Barbados, Belize, Bermuda, Bolivia (Plurinational State of), Bonaire, Brazil, British Virgin Islands, Canada, Cayman Islands, Chile, Colombia, Costa Rica, Dominica, Dominican Republic, Ecuador, El Salvador, Grenada, Guadeloupe, Guatemala, Guyana, Honduras, Jamaica, Mexico, Montserrat, Panama, Paraguay, Peru, Puerto Rico, Saba, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Sint Eustatius, Sint Maarten, Suriname, Trinidad and Tobago, Turks and Caicos, United States of America, and Uruguay.

strengthen national capacity in rapid response to measles outbreaks; and supported training in these tools in all countries in the Region. Partners in this work included UNICEF, Measles and Rubella Initiative,²⁰¹ and CDC.

382. As a welcome counterpoint, on 24 October 2019 the global eradication of wild poliovirus type 3 was declared, a milestone to which all countries of the Americas contributed. PASB continued to support Member States in their surveillance of polio, and in 2019 vaccination campaigns were conducted in four countries of the Region—Dominican Republic, Guatemala, Haiti, and Venezuela (Bolivarian Republic of)—during which 7.5 million children received the bivalent oral poliovirus vaccine, with coverage equal to or greater than 90%. The Bureau mobilized resources to support these campaigns through the Global Polio Eradication Initiative, a public-private partnership led by national governments with six partners: WHO, UNICEF, Gavi, CDC, Rotary International, and Bill & Melinda Gates Foundation.

383. In 2019, given the measles outbreak in the Region, PAHO's flagship annual Vaccination Week in the Americas (VWA) program took on special urgency under the theme Protect Your Community. Do Your Part. In 2020, the VWA slogan was Love. Trust. Protect. #GetVax, and, due to COVID-19 pandemic-related restrictions, PASB encouraged Member States to focus on vaccination against seasonal influenza (in the Southern Hemisphere) and outbreak-prone diseases, such as measles; adapt their vaccination strategies, canceling mass outreach activities and introducing innovative vaccine delivery strategies; establish measures to protect health personnel administering vaccines, to prevent COVID-19 transmission; and promote the use of social and traditional media in promoting VWA and the importance of vaccination.

384. In 2021, the VWA theme was Vaccines Bring Us Closer, and VWA celebrated its 20th anniversary in April 2022 under the call to action: Are You Fully Vaccinated? #GetAllYourShots. The Bureau held an in-person and online launch in Dominica in which the Director of PASB participated, and produced and disseminated communication materials in several languages, as is customary for each VWA. The 2022 observance aimed to accelerate COVID-19 vaccine uptake and close coverage gaps for VPDs. Results showed that 12 million COVID-19 vaccine doses were administered across countries and territories in the Americas between 23 and 30 April 2022, with preliminary data indicating that over 68 million people were reached with lifesaving vaccines.

385. Although the theme of VWA varies each year, all observances encourage special efforts to vaccinate populations in situations of vulnerability, including adolescents, pregnant and postpartum women, health workers, older adults, indigenous populations, persons living with NCDs, and prisoners and prison workers, a strategy that is especially relevant during the COVID-19 pandemic. Maintaining routine immunization programs and vaccination coverage threshold are key to preventing the emergence of new epidemic outbreaks of infectious diseases currently under control, which could threaten the Region's health security. In December 2021, the Bureau published the report Regional Risk Assessment on Vaccine-Preventable Diseases in the

²⁰¹ Available from: <https://measlesrubellainitiative.org/>.

Context of the COVID-19 Pandemic: Implications for the Region of the Americas,²⁰² which assesses the risk of occurrence of new outbreaks of VPDs of varying magnitude, vaccination coverage, and the principal capacities and vulnerabilities that exist in each subregion.

COVID-19 Spotlight: Protecting young people’s health

386. In the context of the COVID-19 pandemic response, WHO identified young people as a priority target group with specific concerns, experiences, and behaviors, as the pandemic has disrupted the lives of millions of young people around the world.²⁰³ Restrictions on movement, physical distancing, loss of jobs, closure of schools and community facilities for sports and recreation, with—for many—increased screen time and attention to social media and its potential to both harm and help, have placed stresses on children, adolescents, and young persons. This has resulted in, for some, challenges to their physical, mental, and social health. A UNICEF poll conducted through a digital platform showed that the COVID-19 crisis is having a significant impact on the mental health of adolescents and young people in Latin America and the Caribbean.²⁰⁴

387. In 2020, PASB and UNICEF collaborated to implement weekly virtual Hangouts with Youth,²⁰⁵ taking advantage of the PAHO Youth for Health group and providing a virtual, safe space for young people in the Region to interact with experts from both agencies to talk about life as a young person during the COVID-19 pandemic. From June to November 2020, the PASB Youth for Health group actively contributed to the development of appropriate COVID-19 messages and materials targeting young people, and led the organization of the hangouts.

²⁰² Pan American Health Organization. Regional risk assessment on vaccine-preventable diseases in the context of the COVID-19 pandemic: implications for the Region of the Americas. Washington, DC: PAHO; 2021 [cited 16 August 2022]. Available from:

<https://www.paho.org/en/documents/regional-risk-assessment-vaccine-preventable-diseases-diphtheria-measles-yellow-fever-and>.

²⁰³ World Health Organization. Young people and COVID-19: behavioural considerations for promoting safe behaviours. Policy brief. Geneva: WHO; 2021 [cited 16 August 2022]. Available from:

<https://apps.who.int/iris/handle/10665/341695>.

²⁰⁴ United Nations Children’s Fund. The impact of COVID-19 on the mental health of adolescents and youth. UNICEF; [date unknown] [cited 16 August 2022]. Available from: <https://www.unicef.org/lac/en/impact-covid-19-mental-health-adolescents-and-youth>.

²⁰⁵ Available from: <https://www.paho.org/en/events/youth-covid-19-hangouts>.

4. REDUCING INEQUITIES IN HEALTH, WITH A FOCUS ON ETHNIC GROUPS AND INDIGENOUS PEOPLES, AND PERSONS LIVING IN SITUATIONS OF VULNERABILITY

388. PAHO's Strategic Plan 2020-2025 retained the Organization's four CCTs—equity, ethnicity, gender, and human rights—to be incorporated across all aspects of the Bureau's technical cooperation. The CCTs highlight the requirement to focus on persons in situations of vulnerability who require differentiated and targeted support to address their health needs, so that no one is left behind. These persons include, but are not limited to, marginalized communities such as indigenous people, Afro-descendant people, other ethnic groups, and lesbian, gay, bisexual, transgender, queer, and other persons of nonheterosexual orientation (LGBTQ+); women, children, and older persons; persons with disabilities; and migrants.

Improving the health of persons and groups living in situations of vulnerability

Equity and health

389. In 2019, the report of the Commission on Equity and Health Inequalities in the Americas—established by the Director of PASB in 2016 and charged with analyzing the impact of factors influencing health and proposing actions to improve equity in health—was published.²⁰⁶ The Commission's report provided examples of national policies, programs, and actions aimed at reducing inequities, and made recommendations for advancing health equity, including for multisectoral, multi-stakeholder interventions to address the social determinants of health and for robust monitoring systems to assess the effects of the recommended policy changes.

390. The Commission's 12 recommendations were framed around three principal factors influencing health equity: *a*) structural drivers (political, social, cultural and economic structures, structural racism, and climate change); *b*) conditions of daily life (early life and education, working life, income and social protection, violence, environment and housing, and health systems); and *c*) governance systems and the observance of human rights. The report also recognized the intersection and compounding effects of various forms of disadvantage. In response, PASB established an interprogrammatic group to propose optimal alignment of the Bureau's work with the Commission's recommendations.

391. In 2018, the Bureau refined a pro-equity methodology called the Cross Cutting Themes Criteria Tool that had been developed in 2017 under the IHSLAC project. PASB piloted a more integrated version of the instrument, creating an online platform with user-friendly guidance and examples to facilitate use of the methodology. The new version was applied in PAHO/WHO country offices for reporting on the IHSLAC project at the end of 2018, and the new methodology and platform were used more widely to create, monitor, and keep updated a database of the

²⁰⁶ Commission of the Pan American Health Organization on Equity and Health Inequalities in the Americas. Just societies: health equity and dignified lives. Report of the Commission of the Pan American Health Organization on Equity and Health Inequalities in the Americas. Washington, DC: PAHO; 2019 [cited 17 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/51571>.

approaches used by both the Bureau and Member States to address the CCTs. PASB also developed Windows of Knowledge²⁰⁷—sources of information that can be accessed from the PAHO Virtual Health Library (VHL)²⁰⁸ regional portal—for the four CCTs, with the objective of giving visibility and access to reference documents and other information resources on each of the themes.

392. In January 2019, PASB secured funding from a significant new partner, the Robert Wood Johnson Foundation, to support a priority focus on equity in health. The resources targeted knowledge gaps on the scope and effectiveness of national and subnational policies to reduce health inequities; enhancement of knowledge exchange with health equity networks that include civil society, academia, and program implementers; and development of guidance, tools, and training for Member States on health equity policymaking and planning. A study of the integration of equity considerations into the national health policies of several Member States²⁰⁹ revealed that stated commitments to health equity, disaggregation of data, and monitoring of inequalities are common, but that other elements of health equity, such as the identification of persons and groups in situations of vulnerability, receive less attention.

393. The study provided useful insights to inform the Bureau’s technical cooperation for a stronger framework to achieve health equity, and PASB designed a self-learning course Optimizing Health Policy to Achieve Health Equity for the PAHO VCPH, targeting regional policymakers and technical staff in ministries of health.²¹⁰ In July 2019, the Bureau convened an Editorial Board that included external experts to organize a thematic issue of the Pan American Journal of Public Health (PAJPH) on health equity, especially after COVID-19, and the articles were published between late 2020 and mid-2021.²¹¹

394. The Bureau adapted the WHO Innov8 tool, an integrated programmatic tool focused on gender, equity, and human rights, for use in the Americas. The tool, to which PASB added an ethnicity component, provides guidance for national health programs to operationalize the SDGs’ commitment to leave no one behind, through an eight-step analytic process. Its application results in recommendations for concrete actions to address health inequities, support gender and ethnic equality, address the social determinants of health, and realize universal health and the right to health. PASB also intensified efforts to ensure the inclusion of gender and ethnicity perspectives in PAHO Country Cooperation Strategies (CCSs), the instruments that guide the Bureau’s work with and in countries over specified periods of time, to ensure country-focused technical cooperation.

²⁰⁷ Available from: <https://bvshalud.org/vitrinas/en/>.

²⁰⁸ Available from: <https://bvshalud.org/en/about/>.

²⁰⁹ Pan American Health Organization. Equity in health policy assessment: Region of the Americas. Washington, DC: PAHO; 2020 [cited 17 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/52931>.

²¹⁰ To access the course, log in at: Pan American Health Organization. Virtual campus. Washington, DC: PAHO; 2022 [cited 17 August 2022]. Available from: <https://www.campusvirtualsp.org/en/course/optimizing-health-policy-achieve-health-equity-americas-2020>.

²¹¹ Pan American Health Organization. Health equity in the Americas after COVID-19. Pan American Journal of Public Health. October 2020; Special issue. Available from: <https://www.paho.org/journal/en/special-issues/health-equity-americas-after-covid-19>.

Ethnicity and health

395. The 2017 PAHO Policy on Ethnicity and Health (Document CSP29/7, Rev. 1) recognized the need for strengthening intercultural approaches to technical cooperation and identified priority lines as: *a)* the production of evidence; *b)* the promotion of policy action; *c)* social participation and strategic partnerships; *d)* recognition of ancestral knowledge and traditional and complementary medicine; and *e)* capacity development at all levels. The discussions surrounding the policy generated increased attention to ethnic disparities in health and fueled demand for technical cooperation and evidence on this issue.

396. In operationalizing the policy, the Bureau developed the PAHO Strategy and Plan of Action on Ethnicity and Health 2019-2025 (Document CD57/13, Rev. 1) using a process that included extensive national and subnational consultations with indigenous peoples, Afro-descendant people, Roma people, ministries of health, and other relevant entities using a variety of modalities, including face-to-face and virtual meetings. The aim was to ensure that all perspectives were incorporated into this new framework, which included impact indicators for reduction in maternal mortality, infant mortality, and TB among indigenous peoples, Afro-descendant people, and other ethnic groups. It aligned with the OAS Plan of Action for the Americas for Implementation of the International Decade for People of African Descent 2016-2025²¹² and took into consideration the 2018 PAHO Health Plan for Indigenous Youth in Latin America and the Caribbean²¹³ and the 2018 PAHO Health Plan for Afro-descendant Youth in Latin America and the Caribbean.²¹⁴

397. In response to a request from the Government of Costa Rica, PASB collaborated with the Population Division of ECLAC and UNFPA to produce a comprehensive report on the health of Afro-descendant people in Latin America,²¹⁵ which examines the group's social protection status and incorporates social and cultural perspectives that contribute to inequalities in health. The Bureau supported an analysis of HIV, hepatitis, and sexually transmitted infections (STIs) among indigenous and Afro-descendant people,²¹⁶ and developed specific methodologies for addressing the identified issues.

398. The Bureau's technical cooperation to strengthen people-centered models of care through IHSDNs included the promotion of intercultural approaches such as traditional, complementary, and integrative medicine (TCIM), and support for Member States to strengthen their capacity to integrate TCIM into national health systems. The Bureau facilitated the development of an expert

²¹² Organization of American States. Plan of action for the Americas for implementation of the International Decade for People of African Descent 2016-2025. OAS; 2016 [cited 17 August 2022]. Available from: <https://www.oas.org/en/sare/documents/res-2891-16-en.pdf>.

²¹³ Available from: <https://www.paho.org/en/documents/health-plan-indigenous-youth-latin-america-and-caribbean>.

²¹⁴ Available from: <https://www.paho.org/en/documents/health-plan-afro-descendant-youth-latin-america-and-caribbean>.

²¹⁵ Pan American Health Organization. Health of Afro-descendant people in Latin America. Washington, DC: PAHO; 2021 [cited 17 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/55856>.

²¹⁶ Russell NK, Nazar K, del Pino S, et al. HIV, syphilis, and viral hepatitis among Latin American indigenous peoples and Afro-descendants: a systematic review. *Rev Panam Salud Publica*. 2019;43:e17. Available from: <https://doi.org/10.26633/RPSP.2019.17>.

network in this area, and in 2018 the Director of PASB inaugurated the VHL on TCIM, which aims to improve information access and foster research capacity and collaboration in this area, in order to support informed decision-making.

399. In May 2018, PASB hosted a webinar on the contributions of TCIM to PHC that described the Brazilian experience, the perspective of indigenous peoples, and the initiatives of the U.S. National Center for Integrative Primary Healthcare. The Bureau also facilitated the participation of delegates from Brazil, Cuba, and Curaçao in a WHO interregional training workshop on appropriate integration of traditional and complementary medicine in health systems and healthcare services, and the participation of delegates from Chile and Peru in a WHO interregional training workshop on the quality of traditional and complementary medicine services—both events were held in Macao, China.

400. PASB supported other WHO-led initiatives, including an update to the Second WHO Global Survey on National Policies and Regulations on Traditional and Complementary Medicine, to which several PAHO Member States responded, and the participation of regional experts in working meetings for the development of TCIM training and practice benchmarks. The Bureau collaborated with the National Center for Intercultural Health in the Ministry of Health of Peru to promote the inclusion in health registries of self-identification of indigenous, Afro-Peruvian, and other peoples, so as to enable analysis of disaggregated data, identification of inequities, and development of specific actions to address the needs of people in situations of greatest vulnerability and exclusion.

401. In 2019, the Bureau contributed to the establishment of the Indigenous Knowledge and Disaster Risk Reduction Network,²¹⁷ the first network addressing disaster risk reduction and the integration of traditional knowledge. The network was officially launched in Seattle, the United States of America, and it has functioned as an important mechanism for intercultural COVID-19 responses. PASB also collaborated with the U.S. National Council on Urban Indian Health to adapt the WHO Mental Health Gap Action Programme (mhGAP)²¹⁸ for indigenous communities, and to pilot an adapted guide with a group of Native American community health workers.

402. The Bureau's technical cooperation in the response to COVID-19 also took into consideration the needs of indigenous peoples and Afro-descendant people, reflecting their specific situations of vulnerability and the need for intercultural approaches. Important collaboration was undertaken with indigenous and Afro-descendant networks, including Amazonian indigenous organizations such as Coordinator of Indigenous Organizations of the Amazon River Basin, and culturally adapted and accessible communication campaigns were implemented. In coordination with UNFPA, PASB translated infographics on COVID-19 into different languages, including Garifuna and Miskito, and disseminated the materials among those populations in Honduras.

²¹⁷ Available from: <https://indigenoussdr.org/index.php/en/>.

²¹⁸ Available from: <https://www.who.int/teams/mental-health-and-substance-use/treatment-care/mental-health-gap-action-programme>.

403. From September 2020 to November 2020, PASB led the organization of three subregional consultations for indigenous peoples and Afro-descendant people to discuss the pandemic, and convened two regional high-level meetings, one with indigenous peoples and the other with Afro-descendant representatives and leaders. For the first time at the regional level, the meetings brought these representatives and Member State decisionmakers together, with the objective of jointly addressing the main challenges and opportunities within the context of the pandemic. The recommendations from the meetings were subsequently published in two reports: *The Impact of COVID-19 on the Indigenous Peoples of the Region of the Americas: Perspectives and Opportunities. Report on the High-Level Regional Meeting, 30 October 2020*,²¹⁹ and *The Impact of COVID-19 on Afro-descendant Populations in the Region of the Americas: Priorities and Opportunities. Report on the High-Level Regional Meeting, 17 November 2020*.²²⁰ These reports provide frameworks for action at country level, in collaboration with organizations and agencies representing and working with diverse ethnic groups.

404. The Bureau also advanced the knowledge dialogues methodology and built capacity for the use of the methodology in 10 countries—Argentina, Bolivia (Plurinational State of), Costa Rica, Dominican Republic, Ecuador, Guatemala, Honduras, Panama, Paraguay, and Peru. Knowledge dialogues, also called intercultural dialogues, are processes of communication and exchange between people, groups, or communities from different backgrounds or cultures aimed at improving access to health services and building intercultural health, with emphasis on solving previously raised problems and their causes, fostering mutual understanding, and creating solid links.²²¹

Gender and health

405. Gender inequality is well recognized as a significant underlying driver of health inequity among men, women, and those with diverse gender identities. This inequality is mediated through socially and culturally determined male-female differences in exposures, behaviors, and access to health care, and through biases in health service provision and health research, among other factors.

406. A significant proportion of PASB's regional-level interventions to address gender inequalities in health focused upon evidence generation and monitoring, policy recommendations, capacity strengthening, and advocacy, and was partially or fully funded through the Government of Canada's IHSLAC grant.

²¹⁹ Pan American Health Organization. The impact of COVID-19 on the indigenous peoples of the Region of the Americas: perspectives and opportunities. Report on the High-Level Regional Meeting, 30 October 2020. Washington, DC: PAHO; 2021 [cited 17 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/53428>.

²²⁰ Pan American Health Organization. The impact of COVID-19 on Afro-descendant populations in the Region of the Americas: priorities and opportunities. Report on the High-Level Regional Meeting, 17 November 2020. Washington, DC: PAHO; 2021 [cited 17 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/53525>.

²²¹ Pan American Health Organization. The knowledge dialogues methodology. Washington, DC: PAHO; 2022 [cited 17 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/55863/>.

407. The Bureau undertook a study to review regional and country efforts toward gender mainstreaming in health. The study included analysis of gender mainstreaming definitions and institutional requirements in regional policy documents and mandates; systematic review of documented results of gender mainstreaming in national health policies and programs, focusing on gender and health priorities in SDG 3 and SDG 5;²²² review of PAHO documents, scientific publications, and information available on the web; and semi-structured interviews with experts. Case studies in Guatemala, Guyana, and Peru complemented these components, focused on stakeholders' experiences and lessons learned from gender mainstreaming in the respective health sectors.

408. The comprehensive PASB review²²³ noted that despite several initiatives and various promising experiences, more investments in results-based approaches, institutional strengthening, and accountability were needed for measurable improvements in the health conditions and status of women and men in the Region. Recommendations to enhance gender mainstreaming in health included: setting minimum requirements for institutional as well as programmatic interventions; documenting effective and successful strategies and their results; expanding the scope and definitions, with measurable operational plans and a focus on results; and strengthening capacities for gender-based analysis and monitoring and evaluation. The overall recommendations were presented during the Women Deliver 2019 Conference held in Vancouver, Canada, and the national findings and recommendations were presented to each country, with support provided for collaboration among partners in addressing the issues.

409. Other significant PASB gender-related publications included:

- a) A regional interprogrammatic report on gender, masculinities, and health,²²⁴ which was discussed by key subregional stakeholders and formed the basis for the Bureau's technical cooperation in the development of new policy responses to address gaps related to masculinities and men's health. The report presents "a timely appeal for an integrated vision of men as not simply a risk factor but as part of the solution" and notes that "this is a complex issue that deserves attention, participation, and resources from policies and programs aimed at building a new relational gender perspective;"
- b) An updated framework and set of core indicators for monitoring advances on gender equality in health in the Region, within the framework of renewed regional commitments to health equity, gender equality, and the SDGs,²²⁵

²²² SDG 5: Achieve gender equality and empower all women and girls.

²²³ Pan American Health Organization. Gender mainstreaming in health: advances and challenges in the Region of the Americas. Washington, DC: PAHO; 2019 [cited 17 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/51784>.

²²⁴ Pan American Health Organization. Masculinities and health in the Region of the Americas. Washington, DC: PAHO; 2019 [cited 17 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/51804>.

²²⁵ Pan American Health Organization. A framework and indicators for monitoring gender equality and health in the Americas. Washington, DC: PAHO; 2019 [cited 17 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/51786>.

- c) Policy recommendations that promote the incorporation of unpaid work into comprehensive public policies, as well as health-specific policies, from gender and rights perspectives.²²⁶

410. The Bureau facilitated new areas of technical cooperation in the areas of gender, gender identities, and access to health for LGBTQ+ persons with the 2018 Report of the Director on Addressing the Causes of Disparities in Health Services Access and Utilization for Lesbian, Gay, Bisexual, and Trans (LGBT) Persons (Document CD56/INF/11, Corr.). This report, mandated by the 2013 landmark PAHO resolution Addressing the Causes of Disparities in Health Services Access and Utilization for Lesbian, Gay, Bisexual and Trans Persons (Resolution CD52.R6), was developed with input from PASB's LGBT interprogrammatic working group, based on data from Member States and NGOs in the Americas.

411. The findings and recommendations of the Director's report aimed to guide countries' efforts to eliminate barriers that LGBT persons experience in accessing health services, particularly by promoting social and financial protection in a nondiscriminatory manner, and protecting their right to health. Barriers identified included stigma and discrimination; lack of supportive policies, legislation, and comprehensive services; and inadequately trained personnel. Recommendations included enacting LGBT-affirmative legislation and discrediting laws that criminalize LGBT persons; collecting qualitative and quantitative data on sexual orientation and gender identity to monitor obstacles that LGBT persons face when accessing health services; and creating LGBT-sensitive services that are accessible, available, acceptable, and of high quality, and that include mental health services.

412. The Bureau presented the PAHO Gender Equality Policy: Progress Report (Document CD58/INF/14) to the 58th Directing Council in 2020 and developed a brochure²²⁷ with the highlights of the report. Member States improved their data collection, disaggregation, and analysis by sex from 53% to 75%, with the potential to significantly contribute to the visibility and targeting of health inequities. However, despite the progress in disaggregating data, producing gender and health profiles, and incorporating gender indicators into national health programs, the actions had not yet demonstrated the sustainability required in national processes. The report also noted that there was persisting imbalance among the countries with respect to the knowledge and application of gender theories in health, and the Bureau implemented the eight-week virtual course Gender and Health in the Framework of Diversity and Human Rights through the PAHO VCPH, in coordination with the Latin American Faculty of Social Sciences in Argentina, and made available the Spanish version of the updated self-learning virtual course Gender and Health: Awareness, Analysis, and Action.

413. Although more men than women were hospitalized and died from COVID-19-attributable causes and had a greater propensity to fall prey to substance use, indirect and secondary indicators

²²⁶ Pan American Health Organization. Unpaid health care work: a gender equality perspective. Washington, DC: PAHO; 2021 [cited 17 August 2022]. Available from: https://iris.paho.org/bitstream/handle/10665.2/54847/9789275122310_eng.pdf.

²²⁷ Pan American Health Organization. PAHO's progress on gender equality in health 2009-2019. Washington, DC: PAHO; 2020. Updated 15 December 2021 [cited 17 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/55300>.

related to health and other domains of well-being showed that women were disproportionately negatively impacted by the pandemic compared to men.²²⁸ The pandemic and related national responses have increased awareness of the potential for increased domestic violence—of which women bear the brunt—and the particular burden placed on women as caregivers and the majority of healthcare workers.

414. The pandemic affected women in several important ways. They represent 86% of all nurses in the Americas, and with lockdowns in many countries and uncertainties arising from the pandemic, there are fears that women will bear the brunt of frustrations and violence that may erupt from increased unemployment, stressed household finances, and mental health issues. PASB supported the Facebook Live series *Let's Talk about Women and COVID-19*, in collaboration with the Latin American and Caribbean Women's Health Network. The series comprised four sessions: *Gender, Health, and the Pandemic*; *Universal Access to Health during the Pandemic*; *Women's Health in the Context of COVID-19*; and *Preventing and Responding to Violence Against Women in the Context of COVID-19*. The Bureau also moderated a webinar (*COVID-19: Why Can Women's Leadership Make a Difference in the Response? Challenges and Opportunities in the Americas and the Caribbean Beyond the Emergency*) involving women ministers from the Region, organized within the framework of the Inter-American Task Force on Women's Leadership.

415. Gender-based violence typically increases in emergency situations, and in the context of COVID-19, domestic violence increased in the Region.²²⁹ PASB responded by strengthening technical cooperation to improve response services for victims and provide input on relevant policies, protocols, and strategies; train health sector volunteers answering COVID-19 hotlines, raising their awareness and skills in responding to calls for help from domestic violence survivors; and increase access to helplines, including through text messaging, WhatsApp, and similar mobile applications, while maintaining privacy and confidentiality safeguards. The Bureau also hosted a series of webinars with United Nations and other partner organizations to disseminate information and country experiences on responding to victims of violence during COVID-19, and developed and widely disseminated risk communication materials on domestic violence in the context of the pandemic.

416. In efforts to strengthen the capacity of Caribbean health systems to respond to violence against women, PASB worked with the Bahamas, Barbados, Guyana, and Trinidad and Tobago to review their existing guidance, and partnered with IDB and UN Women to carry out national surveys on violence against women in the Bahamas, Barbados, Guyana, Jamaica, Suriname, Trinidad and Tobago, and Turks and Caicos Islands. The Bureau also implemented a training-of-trainers exercise in the Caribbean subregion on evidence-based health system responses to survivors of intimate partner and sexual violence. The aim was to strengthen healthcare providers' capacity to identify, and provide care for, survivors of violence, and to improve the collaboration between government and civil society organizations (CSOs) that provide care to women survivors. The intervention was undertaken in collaboration with PHAC and the Johns Hopkins University

²²⁸ Morgan R, Nacif Pimenta D, Rashid S. Gender equality and COVID-19: act now before it is too late. *Lancet*. 2022;399(10344):2327-2329. Available from: [https://doi.org/10.1016/S0140-6736\(22\)00278-1](https://doi.org/10.1016/S0140-6736(22)00278-1).

²²⁹ United Nations Women. *Measuring the shadow pandemic: violence against women during COVID-19*. New York: UN Women; 2021 [cited 17 August 2022]. Available from: <https://data.unwomen.org/publications/vaw-rga>.

School of Nursing, which is a PAHO Collaborating Centre for HRH. Other partners included the World Bank, CARICOM, UNFPA, UNICEF, and UN Women.

417. With the support of the Government of Canada, the Bureau led the production and publication in 2021 of COVID-19 Health Outcomes by Sex in the Americas, January 2020-January 2021.²³⁰ The publication highlighted significant gender-related distinctions in relation to the impact of the pandemic, and the urgent need to increase the collection, analysis, and utilization of data disaggregated by sex, age, gender, ethnicity, and other demographic variables and equity stratifiers, in order to enable responses that better meet the needs and rights of individuals, groups, and populations being left behind in the COVID-19 response. As an extension of this work—also with the support of the Government of Canada—the Bureau conducted a more extensive, in-depth analysis for the report Gendered Health Analysis: COVID-19 in the Americas,²³¹ which was published in late 2021. The report presents a pioneering look at the intersecting and disproportionate impacts of the pandemic, and offers recommendations for equitable and gender-sensitive national responses.

418. PASB worked closely with agencies in the United Nations system through the United Nations Interagency Gender and COVID-19 Group to develop the virtual course Gender Equality in Humanitarian Action.²³² The course, implemented in March 2021 by UN Women, is framed within the 2017 Inter-Agency Standing Committee’s publication Gender Handbook for Gender Equality in Humanitarian Action.²³³

Human rights and health

419. The realization of human rights is one of the core tenets of the PAHO Strategy on Health-related Law 2015-2023, and the Bureau promoted the right to health through a series of high-level meetings at regional and multicountry levels, in addition to providing technical comments on relevant legislative proposals and policies as requested by Member States, in order to strengthen their legal frameworks for the promotion of the right to health and other human rights.

420. In 2019, PASB’s technical cooperation enabled an exchange of legislative best practices during the IV Congress of the Health Committees of the Parliaments of the Americas. Participants shared their experiences, with the aim of harmonizing national health-related legislation with international human rights instruments and PAHO policies and strategies on universal health. Also in 2019, PASB organized a high-level meeting and a workshop in Paraguay on the role of courts in relation to the right to health, in coordination with the Ministry of Health and the Supreme Court

²³⁰ Pan American Health Organization. COVID-19 health outcomes by sex in the Americas. From January 2020 to January 2021. Washington, DC: PAHO; 2021 [cited 17 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/53372>.

²³¹ Pan American Health Organization. Gendered health analysis: COVID-19 in the Americas. Washington, DC: PAHO; 2021 [cited 17 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/55432>.

²³² Latin American Faculty of Social Sciences. Gender equality in humanitarian action. Buenos Aires: Latin American Faculty of Social Sciences; 2021 [cited 17 August 2022]. Available from: <https://www.flacso.org.ar/formacion-academica/igualdad-de-genero-en-accion-humanitaria/>.

²³³ Inter-Agency Standing Committee. The gender handbook for humanitarian action. IASC; 2017 [cited 17 August 2022]. Available from: <https://reliefweb.int/report/world/iasc-gender-handbook-humanitarian-action-2017-enar>.

of Justice of Paraguay. Participants included members of the Supreme Courts of Chile, Colombia, Paraguay, and Uruguay, as well as parliamentarians from the Plurinational State of Bolivia, Chile, and Paraguay, with an audience of more than 200 judges and ministry of health directors and staff. The Bureau also convened a high-level meeting in Uruguay to promote dialogue between the Ministry of Health and the judiciary in the context of cases that were before the latter body involving the right to health.

421. The high-level meetings provided a unique opportunity to encourage dialogue between the branches of government and learn from experiences in various countries, in order to advance the protection of the right to health and other human rights. The high-level officials participating in these meetings agreed that, while respecting the separation of powers, it was important to strengthen the relationship between the executive and legislative branches of government and the judiciary, and promote an ongoing exchange of views. This model of continuous dialogue seeks to combine the strengths of all branches of government and views the protection of human rights as a joint effort, rather than as a competitive process in which one branch must prevail.

422. In December 2021, the Bureau published a Series on Human Rights and Health²³⁴ comprising eight technical notes summarizing the main international human rights instruments and standards of the United Nations and Inter-American Human Rights systems, and making recommendations for measures to make them effective. The series emphasizes the right to health of persons in situations of vulnerability in the Region, and addresses topics of ethnicity, mental health, environment and climate change, older persons, tobacco, people with disabilities, migration, and healthy food. There have been more than 5,000 downloads of one or more of the technical notes since their publication.

Migration and health

423. PASB undertook advocacy and strategic interventions in the framework provided by the policy elements proposed in the regional policy on Health of Migrants (Document CD55/11, Rev.1), namely: *a*) health services that are inclusive and responsive to the health needs of migrants; *b*) institutional arrangements to provide access to comprehensive, quality, people-centered services; *c*) mechanisms to provide financial protection in health; and *d*) intersectoral action and development of partnerships, networks, and multicountry frameworks.

424. At a side event at the 29th Pan American Sanitary Conference in September 2017, panelists agreed that health should be at the center of any migration policy, and PASB and PAHO Member States jointly advocated for its inclusion in the Global Compact for Safe, Orderly and Regular Migration,²³⁵ which that was formally endorsed by the United Nations General Assembly in December 2018.

²³⁴ Pan American Health Organization. Series on human rights and health. Washington, DC: PAHO; 2021 [cited 17 August 2022]. Available from:

<https://iris.paho.org/browse?value=Human%20Rights%20and%20Health&type=serie>.

²³⁵ Available from: <https://www.iom.int/global-compact-migration>.

425. In December 2019, PASB supported the adoption of reference legislation by the PARLACEN to advocate for improvements in the health and well-being of migrants through legislative mechanisms in Central America. The Bureau also contributed to the integration of health and migration in key national policies and initiatives, and continued its advocacy for the inclusion of the topic in subregional migration-related policies, and in political integration mechanisms and consultative processes.

426. The Bureau strengthened interagency collaboration and engagement with partners such as the World Bank, IOM, United Nations Trust Fund for Human Security, and Johns Hopkins University to develop joint activities and funding proposals on priority areas related to health and migration. In October 2020, the Bureau and IOM developed a memorandum of understanding for collaboration to improve access to health services and ensure continuity of care across all stages of migration, in order to assist Member States in health surveillance and information management; joint monitoring and evaluation of risks, vulnerabilities, and promising practices and initiatives regarding the health needs and conditions of migrants; and enhancing the capacities of health and other professionals. The agreement is particularly applicable in light of the disproportionate impact of COVID-19 on migrant populations.

427. Noting Member State-led actions on international migration, PASB convened a high-level meeting in Washington, D.C., in November 2018,²³⁶ where ministers of health and other representatives from across the Region of the Americas noted the “intensification of two concomitant mass migratory phenomena [that] have recently been observed in the Americas: migration from Mesoamerica towards Mexico, the United States, and Canada, and the migration from Venezuela to South American and Caribbean neighboring countries.” The meeting noted the stress that such migration placed on national systems, especially in the smaller countries of the Caribbean; indicated that migrants often face barriers to health services, including geographical, economic and sociocultural factors that encompass social isolation and fear of discrimination; and identified a series of actions aimed at improving the health response to the mass migration in the Region.

428. Based on the outputs of the high-level meeting, and consultation with Member States, in 2019 PASB published the Guidance Document on Migration and Health,²³⁷ which outlines five strategic lines of action: *a)* strengthen health surveillance, information management, and monitoring; *b)* improve access to health services for the migrant and host population; *c)* improve communication and exchange of information to counter xenophobia, stigma, and discrimination; *d)* strengthen partnerships, networks, and multicountry frameworks to understand the status and promote and protect the health of migrants; and *e)* adapt policies, programs, and legal frameworks to promote and protect the health and well-being of migrants.

²³⁶ Pan American Health Organization. Regional ministerial meeting on mass migration on health, 29 November 2018: Meeting proceedings. Washington, DC: PAHO; 2018 [cited 17 August 2022]. Available from: <https://bit.ly/2OEMm4o>.

²³⁷ Pan American Health Organization. Guidance document on migration and health. Washington, DC: PAHO; 2019 [cited 17 August 2022]. Available from: <https://www.paho.org/en/documents/guidance-document-migration-and-health>.

429. In September 2021, PASB signed a cooperation agreement with the Dalla Lana School of Public Health at the University of Toronto on applied research and knowledge synthesis activities on topics of common interest related to health and migration in the Americas. The Bureau created a Migration and Health in the Americas web page,²³⁸ including an Information Platform²³⁹ that was established in May 2022 to systematize relevant information and facilitate the storage, dissemination, and exchange of knowledge for policies, public health interventions, and other health and migration initiatives in Member States. PASB contributed to the development of the first World Report on the Health of Refugees and Migrants, published in 2022.²⁴⁰

430. The Bureau's technical cooperation with selected countries contributed to:

- a) Chile: Development of the virtual course Intercultural Health for Haitian Migrants in Chile targeting health teams in that country that mainly provide services at the first level of care to the Haitian migrant population, to raise awareness and promote access to care, with a focus on specific challenges and interculturality;
- b) Costa Rica: Execution of an MPTF project between February and December 2021 in four border towns, resulting in strengthened health services, surveillance, health promotion, prevention, and healthy workplaces in those locations. Interventions included capacity-building sessions on health promotion and disease prevention in community and workspace contexts, and specifically addressed mental health issues;
- c) Peru: Piloting of a WHO tool for qualitative situation analyses of demand-side barriers to effective access to health for informal economy workers, focused on the situation of Venezuelan migrants, to inform universal health initiatives in the country.

COVID-19 Spotlight: Equity-based approaches for persons in situations of vulnerability

431. In its responses to COVID-19, PASB highlighted the worsening of health inequities caused by the pandemic and the imperative of maintaining access to essential health services, especially for persons in situations of vulnerability. Many PAHO Member States responded to the health services disruptions caused by the pandemic through the use of telemedicine and other digital solutions, and it remains critical to enhance social service support interventions, and PHC and essential services that especially target those most in need.²⁴¹

432. The Bureau promoted integrated approaches to the CCTs and contributed to interventions to alleviate equity-reducing factors, focusing on persons in situations of vulnerability, including the provision of guidance for the response among such groups. The guidance included, but was

²³⁸ Available from: <https://www.paho.org/en/migration-and-health-americas>.

²³⁹ Available from: <https://www.paho.org/en/migration-and-health-americas/health-and-migration-americas-information-platform>.

²⁴⁰ World Health Organization. World report on the health of refugees and migrants. Geneva: WHO; 2022 [cited 17 August 2022]. Available from: <https://www.who.int/publications/i/item/9789240054462>.

²⁴¹ Hennis AJM, Coates A, del Pino D, et al. COVID-19 and inequities in the Americas: lessons learned and implications for essential health services. *Rev Panam Salud Publica*. 2021;45:e130. Available from: <https://doi.org/10.26633/RPSP.2021.130>.

not limited to: *a)* Guidance Note on Health Disaster Risk Management with Indigenous Peoples;²⁴² *b)* Promoting Health Equity, Gender and Ethnic Equality, and Human Rights in COVID-19 Responses: Key Considerations;²⁴³ *c)* Considerations on Indigenous Peoples, Afro-descendants, and Other Ethnic Groups during the COVID-19 Pandemic;²⁴⁴ *d)* Key Considerations for Integrating Gender Equality into Health Emergency and Disaster Response: COVID-19;²⁴⁵ and *e)* Guidance for Implementing Nonpharmacological Public Health Measures in Populations in Situations of Vulnerability in the Context of COVID-19.²⁴⁶

433. In order to improve the implementation of the last-mentioned guidance, PASB disseminated a regionwide call for proposals from national and local governments, community organizations, CSOs, and academia. A total of 116 proposals were received, addressing communication, capacity-building, and the systematization, evaluation, and adaptation of the guide. Of these, 40 were selected, financed, and successfully implemented in 19 countries²⁴⁷ in the period 2021-2022. The proposals highlighted the key role of NGOs in contributing to the pandemic response, with a focus on persons in situations of vulnerability, such as young persons, indigenous communities, people living with disabilities, and migrants. The projects generated products of great value for the Region, including videos, brochures, short courses, innovative training sessions, rapid assessment tools, and validation guidelines, and contributed to strengthening regional networks and commitments to address postpandemic challenges. On this basis, the Bureau organized a regional meeting in May 2022, which gave rise to a community of practice that brought together various organizations and institutions from all over the Region. This initiative aimed to deepen learning and consideration of the social determinants of health in adapting public health measures to the requirements, resources, and contexts of groups in situations of vulnerability.

434. The Bureau co-organized and participated in public forums with international experts and regional stakeholders to address the relationship between international human rights law and effective public health responses to health emergencies and crises. These forums addressed topics such as the rights of migrant children; the promotion of health equity, ethnic and gender equality, and human rights in response to COVID-19; human rights perspective on the prevention of alcohol

²⁴² Pan American Health Organization. Guidance Note on health disaster risk management with indigenous peoples. Washington, DC: PAHO; 2019 [cited 17 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/51383>.

²⁴³ Pan American Health Organization. Promoting health equity, gender and ethnic equality, and human rights in COVID-19 responses: key considerations. Washington, DC: PAHO; 2020 [cited 17 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/52058>.

²⁴⁴ Pan American Health Organization. Considerations on indigenous peoples, Afro-descendants, and other ethnic groups during the COVID-19 pandemic. Washington, DC: PAHO; 2020 [cited 17 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/52251>.

²⁴⁵ Pan American Health Organization. Key considerations for integrating gender equality into health emergency and disaster response: COVID-19. Washington, DC: PAHO; 2020 [cited 17 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/52247>.

²⁴⁶ Pan American Health Organization. Guidance for implementing nonpharmacological public health measures in populations in situations of vulnerability in the context of COVID-19. Washington, DC: PAHO; 2020 [cited 17 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/53078>.

²⁴⁷ Argentina, Bolivia (Plurinational State of), Brazil, Canada, Chile, Colombia, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Mexico, Nicaragua, Panama, Paraguay, Peru, United States of America, and Venezuela (Bolivarian Republic of).

consumption; legal responses to COVID-19; public health and fundamental rights; and exercise of the right to health during the COVID-19 pandemic. PASB also conducted analyses on how the COVID-19 pandemic has shaped the framework of public health measures and human rights standards, and highlighted the importance of providing special protection for groups at higher risk and those in conditions of particular vulnerability.

435. From August 2020 to February 2021, the Plurinational State of Bolivia and Brazil participated in a WHO global project to support countries in mitigating the effects of the pandemic on essential health services for women, children, adolescents, and older persons. The project, funded by the Bill & Melinda Gates Foundation, included three components: *a)* governance, collaborating with a technical working group from the Ministries of Health to raise the priority assigned to the mitigation of the effects of the pandemic on essential health services, as part of national COVID-19 response committees; *b)* data and information for decision-making, using administrative data to monitor the disruption of health services; and *c)* documentation of the actions to maintain health services, including those taken by government, United Nations agencies, NGOs, academia, and community-based organizations. The project resulted in greater consideration being given to the provision of essential “non-COVID-19” health services, especially at the first level of care.

436. The Bureau actively coordinated at regional, subregional, and country levels to enable the inclusion of populations in situations of vulnerability in interventions aimed at increasing vaccination coverage, and to ensure that such interventions were gender sensitive, culturally appropriate, and equitable. In 2021 the Bureau collaborated with GAC to implement the regional initiative Providing Access to COVID-19 Vaccines for Populations in Situations of Vulnerability in the Americas.²⁴⁸ PASB undertook technical cooperation with the 17 participating countries²⁴⁹ to improve vaccination coverage for the following population groups: indigenous people, Afro-descendant people, migrants, refugees, people deprived of liberty, LGTBQI+ people, people living in poverty, low-income communities, people living in favelas and slum settings, people living in hard-to-reach areas, and health workers.

²⁴⁸ Pan American Health Organization. Canada and PAHO join forces to advance COVID-19 vaccination of people in a situation of vulnerability across the Caribbean and Latin America. Washington, DC: PAHO; 2021 [cited 17 August 2022]. Available from: <https://www.paho.org/en/news/27-5-2021-canada-and-paho-join-forces-advance-covid-19-vaccination-people-situation>.

²⁴⁹ Belize, Bolivia (Plurinational State of), Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, Guyana, Haiti, Honduras, Nicaragua, Panama, Paraguay, Peru, and Saint Vincent and the Grenadines.

5. REDUCING AND ELIMINATING THE BURDEN AND IMPACT OF COMMUNICABLE DISEASES, INCLUDING VACCINE-PREVENTABLE DISEASES, NEGLECTED INFECTIOUS DISEASES, DISEASES COVERED BY THE GLOBAL FUND, AND OTHERS

437. PASB's technical cooperation contributed to Member States' efforts to prevent and control communicable diseases, including those covered by the Global Fund, and to progress toward the elimination of those considered eliminable, despite the setbacks occasioned by COVID-19 and by some regional and national responses. Progress toward strengthening countries' core capacities for the implementation of the IHR assumed even greater significance, and the Bureau's interventions focused on enhancing surveillance, detection, preparedness, capacity, and risk reduction, especially regarding new and emerging diseases, including those with pandemic potential. As the pandemic unfolded, the Bureau worked with Member States to sustain routine disease control and elimination programs, and to better understand and respond to the intersections between COVID-19 and those diseases.

438. The occurrence of some communicable diseases in the Region has been reduced to the point where their elimination is considered to be a realistic target, and PASB developed the PAHO Disease Elimination Initiative: A Policy for an Integrated Sustainable Approach to Communicable Diseases in the Americas (Document CD57/7). The strategic lines of action of the initiative comprise: *a)* strengthening the integration of health systems and service delivery; *b)* strengthening strategic health surveillance and information systems; *c)* addressing the environmental and social determinants of health; and *d)* strengthening governance, stewardship, and finance.

439. The diseases targeted in the initiative include, but are not limited to, malaria; TB; cholera; plague; human rabies; neglected infectious diseases (NIDs) such as Chagas disease, leprosy, trachoma, lymphatic filariasis, and onchocerciasis; VPDs; and elimination of cervical cancer as a public health problem, based on its close links with HPV infection and the availability of cost-effective prevention interventions. The initiative also addresses certain environmental determinants related to communicable diseases, including the elimination of open defecation and of polluting biomass cooking fuels, both of which pose significant public health challenges in certain geographical areas. VPDs are reported on in Chapter 3, Improving health along the life course; cervical cancer in Chapter 6, Reducing the burden and impact of the chronic noncommunicable diseases and their risk factors; and environmental issues in Chapter 8, Addressing the social determinants of health and ensuring healthy and safe environments.

440. PASB and PAHO Member States have embraced the One Health approach, and in 2021 the Bureau developed the policy One Health: A Comprehensive Approach for Addressing Health Threats at the Human-Animal-Environment Interface (Document CD59/9) to foster coordination and collaboration among the different governance frameworks of human, animal, plant, and environmental health programs in order to better prevent and prepare for current and future health challenges at the human-animal-environment interface. The strategic lines of action in the policy address several components of the One Health approach, including, but not limited to: *a)* mapping

of actors and processes; *b*) establishment of multisectoral, multidisciplinary mechanisms for engagement, governance, coordination, planning, and implementation; and *c*) use of digital health solutions and emerging technologies.

Toward disease elimination

Collaboration with the Global Fund

441. The Bureau undertook technical cooperation with all 18 of the Region’s Global Fund-eligible countries²⁵⁰ to support the Fund’s application process, and by mid-2019, all the countries had succeeded in accessing new funding for HIV, TB, and malaria. PASB also supported activities related to sustainability and transition (“transition readiness assessment”) in eight countries graduating out of the Global Fund—Belize, Costa Rica, Cuba, Dominican Republic, El Salvador, Panama, Paraguay, and Suriname—and assisted in identifying and suggesting alternative resources to replace the Global Fund support.

442. With support from the Global Fund, PASB engaged in work in selected countries—in collaboration with UNAIDS, national HIV programs, and CSOs—to strengthen data availability, quality, and use to enhance HIV/STI programs for key populations in situations of vulnerability, including men who have sex with men, sex workers, and transgender women.

443. The Bureau collaborated with the Global Fund in other areas, including development of a joint agreement to strengthen pharmaceutical supply chains and reduce the risk of essential medicine shortages and stockouts in eight countries—Bolivia (Plurinational State of), Cuba, Ecuador, El Salvador, Guatemala, Honduras, Nicaragua, and Paraguay; the Elimination of Malaria in Mesoamerica and the Island of Hispaniola initiative;²⁵¹ and the regional project to strengthen TB laboratory networks in several PAHO Member States.

Human immunodeficiency virus, sexually transmitted infections, and elimination of mother-to-child transmission of selected diseases

444. The Bureau’s technical cooperation in HIV and STI reduction was guided by the regional Plan of Action for the Prevention and Control of HIV and Sexually Transmitted Infections 2016-2021 (Document CD55/14). The strategic lines of action in this plan of action comprised: *a*) strengthened stewardship, governance, strategic planning and information; *b*) strengthened normative framework for health promotion; *c*) expanded and equitable access to comprehensive and quality HIV/STI services; and *d*) increased and improved financing of HIV/STI response with equity and efficient use of resources for sustainability.

445. The Bureau supported interventions to improve HIV/STI services for key populations in situations of vulnerability, including measuring the impact of HIV/STI services and building HIV prevention cascades, which outline the steps needed to achieve HIV prevention in persons at high

²⁵⁰ Belize, Bolivia (Plurinational State of), Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Guyana, Haiti, Honduras, Jamaica, Nicaragua, Panama, Paraguay, Peru, and Suriname.

²⁵¹ Available from:

<https://mesamalaria.org/mesa-track/elimination-malaria-mesoamerica-and-island-hispaniola-emma>.

risk. Several Member States have built their key population cascades, following the guidance established by the Bureau and presented in the PAHO publication *Framework for Monitoring HIV/STI Services for Key Populations in Latin America and the Caribbean*.²⁵²

446. The calculation of the key population prevention cascades allows countries to identify gaps in service provision and develop plans to reduce new HIV infections, and some countries introduced changes to their health management information system to generate HIV key indicators that inform the national strategic plans. Data availability and use are guiding countries to adopt new WHO recommendations for HIV/STI services, including HIV diagnostic algorithms based on rapid tests, preexposure prophylaxis (PrEP), nonoccupational post-exposure prophylaxis, and assisted partner notification.

447. The Bureau assisted countries to enhance their implementation of PrEP, a key intervention to prevent new HIV infections among high-risk groups. The virtual course *Oral PrEP of HIV Infection: eLearning Tool for Clinicians, 2021* was finalized and uploaded to the PAHO VCPH in April 2021. PrEP-related actions in several countries included the application of new PASB tools—the PrEP Needs Estimations tool and the HIV Testing Goals tool—to improve the costing, planning, and management of services, and the development and use of PrEP implementation guidelines.

448. The Bureau supported Member States in the elimination of mother-to-child transmission (EMTCT) of HIV and syphilis, within the framework of the Plan of Action for the Prevention and Control of HIV and STI. In-country technical cooperation was undertaken through joint integrated missions that contributed to the rollout of the 2017 EMTCT Plus initiative,²⁵³ which expanded the EMTCT framework for HIV and syphilis to incorporate Chagas disease and perinatal hepatitis B. The missions also assisted countries in applying to WHO for validation of the achievement of dual elimination targets.

449. In December 2017, Anguilla, Antigua and Barbuda, Bermuda, Cayman Islands, Montserrat, and Saint Kitts and Nevis received WHO certification as having achieved EMTCT of HIV and syphilis; Cuba was recertified for a further two years for having maintained the validation targets achieved in 2015, a unique global accomplishment, to date; Dominica was certified in May 2021; and Guyana has submitted a request for certification. The Bureau is collaborating with WHO on the development of a global methodology for the validation of the EMTCT of hepatitis B, and other partners in the EMTCT validation process include UNAIDS, UNICEF, and CDC. Relevant guidance in the Americas is provided by an expert regional validation committee, with data support from the SIP.

²⁵² Pan American Health Organization. *Framework for monitoring HIV/STI services for key populations in Latin America and the Caribbean*. Washington, DC: PAHO; 2019 [cited 17 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/51682>.

²⁵³ Available from: <https://www.paho.org/en/documents/emtct-plus-framework-elimination-mother-child-transmission-hiv-syphilis-hepatitis-b-and>.

450. The first EMTCT Plus report,²⁵⁴ the result of collaboration between PASB and UNICEF, was published in April 2019, two years after the launch of the EMTCT Plus framework. The report described progress in the Americas toward the EMTCT of HIV and syphilis between 2010 and 2017, and presented the baseline regional situation for congenital Chagas disease and hepatitis B among children. PASB’s technical cooperation contributed to the maintenance of EMTCT of HIV and syphilis, enabled additional countries to reach elimination targets, and sustained the structure of the regional validation committee to facilitate both initial certification and the required two-year renewal of certification of elimination. The Bureau evaluated improvements in congenital syphilis elimination in the Region and published a related paper in the PAJPH in April 2019,²⁵⁵ and on 30 June 2022, the Bureau and Unitaaid launched a five-year, \$2.6 million partnership to scale up regional and national efforts to eliminate mother-to-child transmission of Chagas disease.

451. The Bureau advanced access to effective HIV treatment through technical cooperation to increase uptake of WHO’s recommendations on antiretroviral treatment initiation in people living with HIV, regardless of the CD4 count (the “Treat All” policy), and collaborated with regional partners and WHO reference laboratories to support the expansion of HIV drug resistance surveillance and HIV treatment optimization in response to the emerging threat of resistance to commonly used first-line medicines.

452. A majority of Member States have taken steps to actively offer the new WHO-recommended first-line dolutegravir-based treatment regimen, including procurement of the regimen as a fixed dose combination through the Strategic Fund. Several countries completed nationally representative surveys to estimate the prevalence of pretreatment HIV drug resistance, in compliance with WHO-recommended methodology, to facilitate optimization and updating of national HIV treatment guidelines.

453. Several Member States initiated the development of national policies for HIV self-testing, which, although recommended by WHO since 2015, has been lagging in the Region, amid concerns about the lack of in-person pretest counseling and the potential negative consequences of positive tests performed outside health facilities. However, COVID-19-related service disruptions have made the adoption of HIV self-testing particularly relevant as a possible alternative to facility-based HIV testing services, and the Bureau provided technical guidance to several countries on HIV self-testing and dual HIV-syphilis testing.

454. Global estimates indicate that the prevalence and incidence of four curable STIs—chlamydia, gonorrhea, trichomoniasis, and syphilis—remain high, underscoring their continuing public health importance. PASB prioritized actions to prevent and control infections with syphilis and gonorrhea, and prevent infection with HPV, including rapid diagnostic testing and standardization and simplification of diagnostic algorithms for syphilis among pregnant women and key populations. In the Caribbean subregion, the Bureau partnered with the

²⁵⁴ PAHO. New generations free of HIV, syphilis, hepatitis B, and Chagas disease: EMTCT Plus in the Americas, 2018. Washington, DC: PAHO; 2019 [cited 17 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/50993>.

²⁵⁵ Silveira MF, Gomez Ponce de Leon R, Becerra F, Serruya SJ. Evolution towards the elimination of congenital syphilis in Latin America and the Caribbean: a multicountry analysis. *Rev. Panam Salud Publica.* 2019;43:e31. Available from: <https://doi.org/10.26633/RPSP.2019.31>.

multicountry Global Fund grant for the Organisation of Eastern Caribbean States and CARPHA to address the issues, published an epidemiological alert for the extended-spectrum cephalosporin resistance in *Neisseria gonorrhoeae*, and provided technical cooperation to improve national antimicrobial resistance (AMR) surveillance.

Malaria

455. The Bureau's technical cooperation toward malaria elimination was undertaken in the framework of the regional Plan of Action for Malaria Elimination 2016-2020 (Document CD55/13), which had strategic lines of action as follows: *a*) universal access to good-quality malaria prevention interventions, integrated vector management, and malaria diagnosis and treatment; *b*) reinforced malaria surveillance toward evidence-based decision-making and response; *c*) strengthened health systems, strategic planning, monitoring and evaluation, operational research, and country-level capacity-building; and *d*) strategic advocacy, communications, partnerships, and collaborations.

456. The Bureau supported Argentina and Paraguay in successfully completing their malaria elimination certification processes, and WHO certified the countries as malaria-free in May 2019 and June 2018, respectively. Paraguay became the second country in the Americas to be granted this status, Cuba having been certified in 1973. The Bureau supported other countries that were very close to eliminating malaria, particularly Belize, Costa Rica, El Salvador, and Suriname, and in February 2021, El Salvador became the first Central American country to be certified by WHO as having eliminated malaria, a significant achievement resulting from decades of political commitment and coordination between the Bureau and WHO to provide guidance. As of 31 December 2021, Belize had completed three years without malaria transmission, and in April 2022, officially requested the Bureau to start the process for its malaria-free certification.

457. The Bureau supported all malaria-endemic countries with the adaptation of plans and strategies toward elimination of the disease, and provided technical and financial resources for initiatives in countries with high-burden areas and renewed political interest. PASB promoted actions with greater impact at the local level through the development of a technical framework to address the malaria foci and consolidation of collaborative efforts against the disease in some of the highest-burden municipalities in selected countries.

458. In 2018, in partnership with IDB, PASB assumed the role of lead entity for technical cooperation in the new Regional Malaria Elimination Initiative, which targets Central American countries, Colombia, and the Dominican Republic to leverage new technical approaches, capacity development, mobilization of resources, and a renewal of political interest. In the Amazon, an indigenous intercultural community approach was adopted, focusing on the health services network and the implementation of a malaria management model utilizing community agents.

459. The Bureau's important technical and financial partners in advancing malaria elimination in the Region included the WHO, IDB, COMISCA, Global Fund, USAID, CDC, UN Foundation, Bill & Melinda Gates Foundation, CDC Foundation, and Clinton Health Access Initiative.

Tuberculosis

460. Despite advances in its prevention and control, TB remains a significant public health issue. PASB's technical cooperation with countries in this area was guided by the regional Plan of Action for the Prevention and Control of Tuberculosis (Document CD54/11, Rev. 1), which had strategic lines of action as follows: *a)* integrated TB prevention and care, focused on those persons affected by the disease; *b)* political commitment, social protection, and universal coverage of TB diagnosis and treatment; and *c)* operational research and implementation of innovative initiatives and tools for tuberculosis prevention and control.

461. The Bureau's technical cooperation was also aligned with *a)* the Political Declaration from the first United Nations General Assembly High-Level Meeting on the Fight Against Tuberculosis,²⁵⁶ held in September 2018, which set specific measurable milestones to be achieved by 2022 and called for greater efforts and investments toward ending the TB pandemic by 2030, and *b)* the WHO 2018 End TB Strategy.

462. The Bureau gave priority to countries with high-burden TB, and actions included strengthening prevention, diagnostic, and treatment interventions, as well as managerial capacity, with emphasis on groups in situations of vulnerability, interprogrammatic and intersectoral approaches, and active civil society participation. PASB developed and promoted innovative initiatives, such as Tuberculosis Control in Large Cities, and published information on the situation of TB in the Americas in 2018²⁵⁷ and in 2021.²⁵⁸ With USAID as a key partner, TB control efforts in the Region also included: strengthening capacity for analysis and use of TB information and follow-up; fostering TB research networks; addressing vulnerable populations such as indigenous people, children, and adolescents; and capacity-building for national TB programs and civil society representatives on the ENGAGE-TB²⁵⁹ approach. ENGAGE-TB seeks to shift the perception of TB as a medical illness only to a more comprehensive understanding of the disease as a socioeconomic and community issue, and emphasizes the value of collaboration and partnership between national TB programs and CSOs.

463. Efforts also included advocacy for the implementation of the Multisectoral Accountability Framework for TB,²⁶⁰ development of regional technical guidance on TB in indigenous peoples²⁶¹

²⁵⁶ United Nations. Political declaration of the high-level meeting of the General Assembly on the fight against tuberculosis. UN General Assembly document A/RES/73/3. New York: UH; 2018 [cited 17 August 2022]. Available from: <https://digitallibrary.un.org/record/1649568?ln=en>.

²⁵⁷ Pan American Health Organization. Tuberculosis in the Americas 2018. Washington, DC: PAHO; 2018 [cited 17 August 2022]. Available from: https://iris.paho.org/bitstream/handle/10665.2/49510/PAHOCDE18036_eng.

²⁵⁸ Pan American Health Organization. Tuberculosis in the Americas. Regional report 2020. Washington, DC: PAHO; 2021 [cited 17 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/55194>.

²⁵⁹ Available from: <https://www.who.int/publications/i/item/9789241504508>.

²⁶⁰ Pan American Health Organization. WHO Multisectoral Accountability Framework for TB (MAF-TB). Washington, DC: PAHO; 2021 [cited 17 August 2022]. Available from: <https://www.paho.org/en/documents/who-multisectoral-accountability-framework-tb-maf-tb>.

²⁶¹ Pan American Health Organization. Guidance for tuberculosis prevention and control in indigenous populations in the Region of the Americas. Washington, DC: PAHO; 2021 [cited 17 August 2022]. Available from: https://iris.paho.org/bitstream/handle/10665.2/54973/9789275122778_eng.pdf.

and in prisons, the latter based on WHO guidelines;²⁶² and capacity-building on TB prevention and control through the sponsorship of young professionals in regional virtual courses.

464. The Bureau's work to prevent and control drug-resistant TB (multidrug-resistant and extensively drug-resistant) was undertaken through the Regional Green Light Committee, financed by the Global Fund, through WHO. A three-year Global Fund grant (2017-2019) to strengthen TB national laboratory networks in several Member States was successfully concluded, with the expansion of rapid molecular diagnostics for multidrug-resistant disease in 17 countries.²⁶³ The Bureau prepared a continuation grant proposal to the Global Fund in close partnership with the Andean Health Organization-Hipólito Unanue Agreement (ORAS-CONHU) and SE-COMISCA. The multicountry TB laboratory project was approved, and implementation initiated in January 2021, aiming to strengthen national TB laboratory networks in additional countries over the following three years.

465. The first phase of the Bureau's TB elimination project in Costa Rica, Cuba, and Jamaica continued, with funding from the Russian Federation, in close collaboration with WHO. PASB conducted virtual monitoring visits in Cuba and Jamaica, and epidemiological reviews in all three countries; procured GeneXpert equipment and supplies; and developed preventive materials and reviews of technical guidelines and documents.

466. In collaboration with CARPHA, PASB made GeneXpert TB testing available for the small island countries and territories of the Caribbean, contributing to the implementation of the 2019 Caribbean regional TB strategy that guides the countries of the Organisation of Eastern Caribbean States toward TB elimination. The GeneXpert machines opened new opportunities to improve system efficiencies, improve cost savings, increase patient access to diagnosis, and ultimately improve quality of care in the Caribbean, and, importantly, they were also utilized for COVID-19 testing.

Neglected infectious diseases

467. NIDs, a group of parasitic and bacterial diseases, including Chagas disease, leprosy, trachoma, lymphatic filariasis, and onchocerciasis, are often seen as markers of inequities, given that they are more common among populations living in poor socioeconomic conditions, with low income, limited education, little or no access to basic services such as potable water and adequate sanitation, and barriers to accessing health services.

468. The Bureau's technical cooperation was guided by the regional Plan of Action for the Elimination of Neglected Infectious Diseases and Post-elimination Actions 2016-2022 (Document CD55/15), which has the following strategic lines of action: *a)* strengthen innovative and intensified disease surveillance, diagnosis, and clinical case management of NIDs; *b)* strengthen

²⁶² World Health Organization. Good practices in the prevention and care of tuberculosis and drug-resistant tuberculosis in correctional facilities. Geneva; WHO; 2018 [cited 17 August 2022]. Available from: <https://apps.who.int/iris/handle/10665/342265>.

²⁶³ Argentina, Bolivia (Plurinational State of), Chile, Colombia, Dominican Republic, Ecuador, El Salvador, Guatemala, Guyana, Haiti, Honduras, Mexico, Nicaragua, Paraguay, Peru, Suriname, and Venezuela (Bolivarian Republic of).

preventive chemotherapy and increase access to basic health care for NIDs; *c*) strengthen integrated management of vectors; *d*) strengthen the prevention of select neglected zoonoses through a veterinary public health/One Health approach; *e*) adopt intersectoral approaches to reduce the risk of NID transmission through increased access to safe water, basic sanitation, hygiene, and improved housing conditions; and *f*) incorporate innovative approaches supported by operational research and implementation science to eliminate disease transmission and address NIDs post-elimination actions and new priorities.

469. The Bureau mobilized resources from USAID and the Ending Neglected Diseases (END) Fund to support the lymphatic filariasis elimination program in Guyana. The domestic vector of the parasite that causes Chagas disease was eliminated in Central American subregion, Mexico, and Paraguay as a public health problem, meaning that those countries are now free of the vector responsible for most of the endemicity of Chagas disease. This represents a significant achievement, given the recognized challenges in eliminating vector-borne transmission of Chagas disease. The Sasakawa Peace Foundation partnered with the Bureau in addressing leprosy control in selected countries.

470. The Region is on the verge of eliminating human rabies transmitted by dogs, but there are a few remaining “hotspots” in the Plurinational State of Bolivia, Cuba, and Haiti. These countries implemented prevention programs, and PASB facilitated the donation of human rabies vaccines to Haiti. Canine rabies still occurs in some countries in the Region, and in 2021, the Bureau supported a binational canine rabies vaccination campaign in the border area of the Plurinational State of Bolivia and Brazil, which resulted in the vaccination of more than 35,000 dogs, and implementation of the second phase of the dog rabies vaccination campaign in Haiti, during which more than 630,000 animals were immunized. The Revolving Fund played a role in procuring rabies immunological products (human/animal vaccines and immunoglobulin), as noted in the 2018 third report of the WHO Expert Consultation on Rabies.²⁶⁴ PASB’s technical cooperation contributed to the implementation of PrEP programs for sylvatic rabies in the Amazonian regions of Brazil, Colombia, and Peru, and to herbivore rabies prevention in Guyana, reducing the impact of the disease on indigenous people and other populations in situations of vulnerability.

471. The Bureau conducted an assessment of the epidemiological situation regarding brucellosis, focusing on improving national control programs and collaboration between the animal health and public health sectors. The Bureau also continued its support for the South American Initiative for the Control and Surveillance of Cystic Echinococcosis/Hydatidosis, and provided technical cooperation for the documentation of interruption of transmission of schistosomiasis in Antigua and Barbuda, and Saint Lucia.

472. An estimated 57,500 cases of snakebite envenoming occur each year in the Americas. The number of cases of envenoming from scorpion stings is even higher, as Brazil and Mexico alone report about 120,000 and 300,000 cases each year, respectively. In May 2018, the Seventy-first World Health Assembly adopted Resolution WHA71.5 Addressing the Burden of Snakebite Envenoming, aiming to reduce related deaths, dysfunctions, and suffering. Countries in Latin

²⁶⁴ World Health Organization. WHO Expert Consultation on Rabies, third report. Geneva: WHO; 2018 [cited 17 August 2022]. Available from: <https://apps.who.int/iris/handle/10665/272364>.

America and the Caribbean are particularly affected by incidents involving venomous snakes—mainly in rural areas—and other venomous animals such as scorpions, spiders, caterpillars, and bees. PASB convened the first meeting of official laboratories producing antivenom in Latin America, and initiated coordination of the WHO reference material²⁶⁵ to address the diagnosis and treatment of incidents involving venomous animals in the Region.

Viral hepatitis

473. The Bureau undertook technical cooperation in the framework of the regional Plan of Action for the Prevention and Control of Viral Hepatitis 2016-2019 (Document CD54/13, Rev. 1) and its strategic lines of action: *a)* promoting an integrated comprehensive response; *b)* fostering equitable access to preventive care; *c)* fostering equitable access to clinical care; *d)* strengthening strategic information; and *e)* strengthening laboratory capacity to support diagnosis, surveillance, and a safe blood supply.

474. The Bureau contributed to the scaling up of quality hepatitis B and C testing and treatment in the Region. The Bureau promoted alignment of national hepatitis B testing and treatment guidelines with the 2015 WHO hepatitis B guidelines, and, with the publication of the 2018 WHO hepatitis C care and treatment guidelines,²⁶⁶ supported alignment of national guidance in selected countries in South America, and initiated a Caribbean-wide process for the development of hepatitis C guidelines.

475. In 2018, the Bureau convened the first Caribbean subregional meeting on the prevention and control of hepatitis and the first integrated meeting of heads of hepatitis, HIV, and TB programs in Latin American countries. PASB's contributions to national planning for hepatitis control yielded results in several countries: Belize included interventions on viral hepatitis in its national HIV strategy for the first time; Colombia published the first integrated national strategy for HIV, STIs, TB, and hepatitis in the Region; Ecuador initiated development of its national plan for viral hepatitis; Honduras became the first Central American country to draft a national hepatitis strategy; and Paraguay elaborated clinical guidelines for managing hepatitis B and hepatitis C.

476. The Bureau's efforts to support countries to better understand current and future epidemiological and health system costs associated with hepatitis B and C epidemics included the development of an investment case for hepatitis; implementation of mathematical modeling and a consensus-building process to project disease burden and the economic impact of action; and hepatitis program reviews in selected countries. The Bureau engaged with CSOs at regional and national levels to advance viral hepatitis prevention and control, focusing on awareness and

²⁶⁵ World Health Organization. Snakebite envenoming: a strategy for prevention and control. Geneva: WHO; 2019 [cited 17 August 2022]. Available from: <https://apps.who.int/iris/handle/10665/324838>.

²⁶⁶ World Health Organization. Guidelines for the care and treatment of persons diagnosed with chronic hepatitis C virus infection. Geneva: WHO; 2018 [cited 17 August 2022]. Available from: <https://www.who.int/publications/i/item/9789241550345>.

advocacy for political commitment. In December 2020, a framework for integrated civil society action to contribute to the reduction of HIV, STI, TB, and viral hepatitis was published.²⁶⁷

477. In May 2021, PASB and ORAS-CONHU launched the project Eliminating Hepatitis in the Andean Region: Supporting National Responses. Funded by ENDHEP2030-The Hepatitis Fund,²⁶⁸ areas of work included advocacy and awareness, national policies and planning, and access to testing and treatment, and the project aimed to accelerate and strengthen subregional and national responses to viral hepatitis in Andean countries.²⁶⁹ Also in May 2021, PASB published the Protocol to Estimate Mortality from Cirrhosis and Hepatocellular Carcinoma Attributable to Viral Hepatitis B and C,²⁷⁰ and produced a Spanish translation of WHO's Consolidated Strategic Information Guidelines for Viral Hepatitis.²⁷¹ The Bureau assisted Member States with data collection and reporting to the WHO Global Reporting System for Viral Hepatitis, and organized a virtual workshop to disseminate recommendations on strategic information and identify opportunities for technical cooperation to strengthen national viral hepatitis monitoring systems.

478. In partnership with The Task Force for Global Health, the Bureau supported the elaboration of country profiles on viral hepatitis, focusing on policy uptake and progress toward achievement of WHO elimination targets. The Bureau and representatives from Member States engaged with WHO in the development of the June 2021 publication Interim Guidance for Country Validation of Viral Hepatitis Elimination.²⁷²

Vector- and water-borne diseases, including arboviral diseases

479. The prevention and control of vector-borne diseases such as dengue, chikungunya, and Zika virus, and of waterborne diseases such as cholera, continue to pose challenges for several countries in the Region of the Americas, although major reductions in cholera in the island of Hispaniola signal advances toward elimination.

480. The Bureau continued its implementation of the PAHO Strategy for Arboviral Disease Prevention and Control (Document CD55/16) and its strategic lines of action: *a)* foster an

²⁶⁷ Fundación HCV Sin Fronteras. La sociedad civil y las epidemias de TB, VIH, ITS y hepatitis virales. Buenos Aires: Fundación HCV Sin Fronteras; 2021 [cited 17 August 2022]. Available in Spanish from: <https://hcvsinfronteras.org/la-sociedad-civil-y-las-epidemias-de-tb-vih-its-y-hepatitis-virales/>.

²⁶⁸ Available from: <https://endhep2030.org/>.

²⁶⁹ The Hepatitis Fund. Eliminating hepatitis in the Andean region: supporting national responses. The Hepatitis Fund; 2022 [cited 17 August 2022]. Available from: <https://endhep2030.org/eliminating-hepatitis-in-the-andean-region-supporting-national-responses/>.

²⁷⁰ Pan American Health Organization. Protocol to estimate mortality from cirrhosis and hepatocellular carcinoma attributable to viral hepatitis B and C. Washington, DC: PAHO; 2021 [cited 17 August 2022]. Available from: <https://www.paho.org/en/documents/protocol-estimate-mortality-cirrhosis-and-hepatocellular-carcinoma-attributable-viral>.

²⁷¹ World Health Organization. Consolidated strategic information guidelines for viral hepatitis: planning and tracking progress towards elimination. Geneva: WHO; 2018 [cited 17 August 2022]. Available from: <https://www.who.int/publications/i/item/consolidated-strategic-information-guidelines-for-viral-hepatitis-planning-978-92-4-151519-1>.

²⁷² World Health Organization. Interim guidance for country validation of viral hepatitis elimination. Geneva: WHO; 2021 [cited 17 August 2022]. Available from: <https://www.who.int/publications/i/item/9789240028395>.

integrated approach for arboviral disease prevention and control; *b*) strengthen health services capacity for the differential diagnosis and clinical management of arboviral diseases; *c*) evaluate and strengthen country capacity for surveillance and integrated vector control; and *d*) establish and strengthen the technical capacity of the Arbovirus Diagnostic Laboratory Network of the Americas.

481. In the face of continued high dengue transmission, PASB's technical cooperation focused on clinical training in the management of dengue and identification of early predictors of severity at the first level of care. These efforts led to continued reduction in the dengue case fatality rate, which, as of 29 June 2022, was 0.038%, well below the regional target of 0.050%. Transmission of chikungunya and Zika continued at lower levels throughout the Region.

482. The Bureau participated in the evaluation of *Wolbachia* bacterial strains as a method of biocontrol of the *Aedes aegypti* mosquito in Brazil and Colombia. In selected countries, the Bureau contributed to capacity-building for effective vector control programs through training in mosquito identification, vector surveillance, and insecticide resistance, and assessment of rodent control programs, with recommendations to strengthen the programs as a means of preventing outbreaks of leptospirosis and hantavirus. The Bureau also developed an online self-learning course on the diagnosis and clinical management of dengue, and made the course available in both English and Spanish through the PAHO VCPH. Key partners in arboviral disease control in the Region include WHO, CDC, Florida International University (FIU), and Fiocruz.

Cholera elimination in Haiti

483. There has been no transmission of cholera in Haiti since February 2019, signaling continued control of the outbreak that began in October 2010 and bringing the nation closer to the three-year cholera-free milestone required to obtain validation of disease elimination from WHO. In the second semester of 2022, the WHO Global Task Force on Cholera Control will release revised guidance to define national cholera status. The MSPP, PASB, and counterparts met in February 2022 to review an advanced draft of this guidance and to initiate activities for compliance with the new global standards. PASB and national counterparts are also devising contingency plans, including for the deployment of oral cholera vaccines from the global emergency stockpile.

484. The Bureau contributed to strengthening surveillance and vaccination programs in Haiti, providing supplies, training personnel, and supporting implementation of the LaboMoto project. Although the COVID-19 pandemic and social unrest temporarily impacted cholera surveillance in the country in 2020, PASB's recommendations for actions and personnel enabled the national authorities to fully reinstate surveillance during the first semester of 2021. Between epidemiological weeks 1 and 23 of 2021, of all the cases of acute watery diarrhea detected in Haiti, all cases were sampled and laboratory results were available for 81%—no sample was positive for *Vibrio cholerae*.

485. The LaboMoto network comprises nurses who undertake active surveillance in healthcare institutions and supervise the collection and shipment of samples to laboratories, and the network remained the cornerstone of cholera surveillance in Haiti. Since 2017, PAHO has been supporting the MSPP on cholera surveillance activities through the LaboMoto project, and, more recently, the

network garnered support from the WHO Global Task Force on Cholera Control, United Nations Haiti Cholera Response Multi-Partner Trust Fund, and Bill & Melinda Gates Foundation. In 2021, the nurses collected and transported over 4,100 samples (94% of the total number of samples), taking them from sentinel sites to laboratories at regional and national levels. LaboMoto nurses also trained service providers on sample collection, and this enhanced surveillance of cholera contributed to progress in the country's momentum toward cholera-free status.

486. The maintenance of reliable surveillance, including epidemiology and laboratory components, will be critical to the three-year process to document and verify the interruption of cholera transmission in the island of Hispaniola, and it is imperative that there be accelerated investments in clean water and adequate sanitation in Haiti to ensure long-term cholera elimination.

Antimicrobial resistance

487. AMR is a serious threat to health gains and the achievement of important regional and global public health goals as it puts at risk the effective prevention and treatment of an increasing range of infections caused by bacteria, parasites, viruses, and fungi. PASB implemented the regional Plan of Action on Antimicrobial Resistance 2015-2020 (Document CD54/12, Rev. 1), addressing the following strategic lines of action: *a)* improve awareness and understanding of AMR through effective communication, education, and training; *b)* strengthen knowledge and scientific grounding through surveillance and research; *c)* reduce the incidence of infections through effective sanitation, hygiene, and preventive measures; *d)* optimize the use of antimicrobial drugs in human and animal health; and *e)* prepare economic arguments for sustainable investment that takes into account the needs of all countries, and increase investment in new drugs, diagnostic tools, vaccines, and other actions.

488. With funding from Canada, Germany, and CDC, PASB initiated a special program on AMR in 2018 to enhance Member States' actions, based on their context, needs, and priorities. In November 2019, the Bureau assumed the role of lead implementer of the three-year initiative Working Together to Fight Antimicrobial Resistance 2020-2022²⁷³ funded by the EU. Jointly coordinated with the Food and Agriculture Organization of the United Nations (FAO) and the World Organisation for Animal Health, the overall objectives of this groundbreaking initiative included engaging with major global players and strategic countries to advance the 2015 WHO Global Action Plan on Antimicrobial Resistance by sharing experiences, advocating best practices, and stimulating actions in selected countries. Progress in this area was reflected in the development and implementation of AMR national action plans in seven countries—Argentina, Brazil, Chile, Colombia, Paraguay, Peru, and Uruguay—under the One Health approach, with the Bureau's technical cooperation.

489. Highlights of the initiative in 2020 included the completion of in-depth multisectoral landscape analyses of the status of national action plans on AMR in all seven countries, which informed the development of targeted workplans; One Health surveillance training exercises that

²⁷³ Pan American Health Organization. Working together to fight antimicrobial resistance. Washington, DC: PAHO; 2022 [cited 17 August 2022]. Available from: <https://www.paho.org/en/together-fight-antimicrobial-resistance>.

led to the development of national proposals for multisectoral integrated AMR surveillance; progress with the introduction of new technologies for AMR detection and characterization; advances in the monitoring of antimicrobial use and consumption across sectors; and increases in multisectoral AMR awareness activities. The initiative was extended to 2023 in order to address urgent COVID-19-related AMR.

490. The Bureau prioritized technical cooperation for the response to novel/emerging AMR threats in the context of the COVID-19 pandemic, including fungal pathogens such as *Candida auris* and *Aspergillus fumigatus*, as well as multidrug-resistant pathogens harboring multiple carbapenemase genes. The Latin American and Caribbean Network for Antimicrobial Resistance Surveillance has been instrumental in monitoring the impact of the pandemic on the emergence and spread of AMR.

491. The Bureau assisted countries in implementing multidisciplinary, evidence-based operational interventions for antimicrobial stewardship programs, including a hospital antimicrobial use point prevalence survey; developed a standardized tool in a secure web-based application to capture data for the survey on antibiotic use; published practical guidelines for decisionmakers in support of health workers and for the implementation of cost-effective AMR stewardship interventions, in collaboration with FIU;²⁷⁴ and conducted training in AMR detection, surveillance, and analysis for microbiologists and health information officers from the Caribbean subregion.

492. In October 2019, the first joint meeting of the Latin American and Caribbean AMR surveillance networks was held in Brazil, and countries agreed to implement a new standardized AMR surveillance protocol that combines laboratory and patient data for enhanced isolate-level AMR surveillance of bacterial and/or fungal blood stream infections, especially hospital-acquired fungal infections. This methodology improves AMR data quality, analysis, and reporting, including to the WHO Global Antimicrobial Resistance and Use Surveillance System (GLASS),²⁷⁵ which supports the implementation of the Global Action Plan on Antimicrobial Resistance.

493. The Bureau began piloting the surveillance protocol in 2020, making the Region of the Americas the first WHO region to use the GLASS methodology for estimating mortality attributable to AMR bloodstream infections. This will provide the first such estimates obtained through primary, prospective data collection, and the individual-level data will provide more reliable information on AMR patterns, including the characterization of multidrug resistance, and enable the identification of risk groups for resistant infections. PASB partnered with Canada and CDC to support a meeting of the Regional Network for Antifungal Resistance Surveillance of Invasive Mycotic Diseases, which coordinates regional surveillance and strengthens national capacities in the implementation of the GLASS.

²⁷⁴ Pan American Health Organization, Florida International University. Recommendations for implementing antimicrobial stewardship programs in Latin America and the Caribbean: manual for public health decisionmakers. Washington, DC: PAHO, FIU; 2018 [cited 17 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/49645>.

²⁷⁵ Available from: <https://www.who.int/initiatives/glass>.

494. Through the PAHO Cooperation Among Countries for Health Development (CCHD) initiative,²⁷⁶ the Bureau facilitated another multicountry approach in which Argentina and CARICOM collaborated to strengthen capacities for AMR diagnostics and surveillance under the One Health approach in the 14 independent CARICOM Member States. The initiative, which also supported the countries in achieving compliance with the IHR, aimed to build technical capacity to conduct high-quality testing for the detection of AMR, collate and analyze AMR laboratory data, and use the laboratory results to monitor trends and improve prescribing practices, as well as to foster AMR policies, prevention, and interventions.

495. Through the CCHD project, by 2020 more than 300 nurses, physicians, and laboratory specialists had been trained in specimen collection, 119 participants had successfully completed virtual training in AMR detection and surveillance, and several countries had joined a laboratory external quality assurance program, the first for fungal disease diagnosis in Latin America and the Caribbean, led by the ANLIS Malbrán Institute in Argentina. Several professionals were trained on site at various collaborating Argentinian institutions, and assessment of AMR detection capacity was carried out in eight human health laboratories, one CARPHA laboratory, two food safety laboratories, and three veterinary laboratories in CARICOM Member States.

496. The Bureau participated in the 2019 meeting of the U.S. Presidential Advisory Council Combating Antibiotic-Resistant Bacteria and in several of the council's meetings and discussions regarding surveillance, antimicrobial stewardship, and IPC. PASB played a prominent role in ensuring that AMR was included in the Declaration from the G20 Leaders' Summit held in Argentina in late 2018, and participated in negotiations with the Government of Denmark, the World Bank, and the Consultative Group for International Agricultural Research to reach an agreement for the establishment of the International Centre for Antimicrobial Resistance Solutions in Denmark.²⁷⁷ The center has strengthened the global fight against AMR, serving as an independent global knowledge hub and resource for national and international bodies, and promoting tailored and economically feasible solutions that take into account all aspects of the One Health approach, with particular focus on low- and middle-income countries.

497. The Bureau's collaboration with CDC resulted in the establishment of a multicountry network involving Argentina, Belize, Chile, Costa Rica, Ecuador, and Uruguay for early detection of and response to novel/emerging AMR, innovatively integrating laboratory surveillance and IPC programs with prompt rapid containment actions, thus inhibiting the spread of critical AMR threats. In 2020 and 2021, respectively, the ANLIS Malbrán Institute in Argentina and the Costa Rican Institute of Research and Teaching in Nutrition and Health were officially designated as WHO Collaborating Centres for AMR surveillance.

Zoonoses and food safety

498. PASB's technical cooperation in this area focused on strengthening country programs to prevent and control zoonotic infections circulating in animal populations as the most effective way to prevent related human diseases. However, food safety and food inspection, based on risk

²⁷⁶ Available from: <https://www.paho.org/en/who-we-are/cooperation-among-countries-health-development>.

²⁷⁷ Available from: <https://icars-global.org/>.

analysis, are vital components of a modern food control system to prevent foodborne diseases, and food safety was also a priority, with emphasis on strengthening preventive measures along the food value chain “from farm to fork.”

499. The Bureau worked at the Caribbean subregional level to strengthen regulation by national food safety authorities, developing the Risk-Based Food Inspection Manual for the Caribbean,²⁷⁸ which targeted the national authorities responsible for ensuring food safety in the interests of public health, consumer protection, and international trade. The manual is consistent with Codex Alimentarius guidelines and standards, particularly principles and approaches for national food control systems and food hygiene, as well as the other codes of practice, such as for fish, dairy, meat, and street foods. The manual was validated by senior food inspectors who were trained on risk-based food inspection at a subregional workshop and serves as both a training tool for use by national food safety authorities and a template for the creation of national manuals for Caribbean food inspectorates. A food handlers’ online training course in English and Spanish was developed and implemented through the PAHO VCPH.

500. With PASB’s support, the Inter-American Network of Food Analysis Laboratories strengthened countries’ food analysis laboratories through webinars for technical training of laboratory personnel and coordination of interlaboratory proficiency testing in food microbiology and food chemistry. The network held its first extraordinary assembly in October 2020, and an updated version of its statute was approved. At national level, in selected countries the Bureau’s technical cooperation resulted in assessment of food safety systems and initiation of the implementation of recommendations for their strengthening; training in risk-based food inspection; development of food safety risk communication guidelines; and development of a national food safety policy. PASB worked with selected countries to strengthen their national Codex Committees through FAO/WHO Codex Trust Fund projects and conducted three online risk-based food inspection training courses in February and March 2021.

501. Although COVID-19 is not transmitted by food, the pandemic provided an opportunity to ensure that the food industry was compliant with measures to protect food industry workers from contracting SARS-CoV-2, and to strengthen food hygiene and sanitation practices. PASB increased awareness of food safety along the food value chain through the production and dissemination, including through social media, of multimedia materials promoting the Five Keys to Safer Food and good practices in the food industry and markets. On World Food Safety Day in June 2020, 2021, and 2022, PASB organized online events in keeping with the themes, respectively, of Food Safety, Everyone’s Business, Safe Food Today for a Healthy Tomorrow, and Safer Food, Better Health.

COVID-19 Spotlight: Neglected infectious diseases in Guyana and continuing regional efforts to overcome antimicrobial resistance

502. In February 2021, Guyana began its second mass drug administration campaign using the triple drug combination of ivermectin, diethylcarbamazine, and albendazole to eliminate lymphatic

²⁷⁸ Pan American Health Organization. Risk-based food inspection manual for the Caribbean. Washington, DC: PAHO; 2019 [cited 17 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/51775>.

filariasis. Of the total number of persons eligible, 71.8% received preventive chemotherapy, with 100% geographical coverage, and each of the eight endemic regions achieved the required minimum 65% epidemiological coverage during the campaign. In an ironic twist, the confinement and restrictions on movement resulting from the national response to COVID-19 resulted in a significant increase in household coverage. This second round sets the stage for the implementation of surveys in Guyana to confirm interruption of the transmission of lymphatic filariasis, as recommended by WHO. These efforts were funded with resources from the Ministry of Health, USAID, and the END Fund.

503. In the Region of the Americas, the COVID-19 pandemic resulted in an increase in the use of antibiotics to treat COVID-19 patients, disruptions to IPC practices, and diversion of human and financial resources away from the monitoring of and responding to AMR threats. In response to increases in AMR infections and novel multidrug-resistant pathogens, the Bureau supported countries to reinforce IPC measures and practices, surveillance of healthcare-associated infections, diagnostic capacity—including for emerging threats—and antimicrobial stewardship. The Bureau developed Antimicrobial Resistance, Fueled by the COVID-19 Pandemic. Policy Brief November 2021,²⁷⁹ which provided strategic information for policy and decisionmakers to continue prioritizing the AMR response and implementation of national action plans on AMR, while ensuring that adequate resources are allocated to the latter. It also encouraged countries to measure and monitor the impact of the COVID-19 pandemic on AMR epidemiology in the Region.

²⁷⁹ Pan American Health Organization. Antimicrobial resistance, fueled by the COVID-19 pandemic. Policy brief November 2021. Washington, DC: PAHO; 2022 [cited 17 August 2022]. Available from: <https://www.paho.org/en/documents/antimicrobial-resistance-fueled-covid-19-pandemic-policy-brief-november-2021>.

6. REDUCING THE BURDEN AND IMPACT OF CHRONIC NONCOMMUNICABLE DISEASES AND THEIR RISK FACTORS

504. The global community recognizes the imperative of addressing five main NCDs—CVDs, cancer, diabetes, chronic respiratory diseases, and MNS disorders—and their five major risk factors: tobacco use, unhealthy nutrition, alcohol use, physical inactivity, and air pollution, as outlined in the Political Declaration of the Third United Nations General Assembly High-Level Meeting on the Prevention and Control of Non-communicable Diseases in 2018 (Document A/73/L.2).

505. NCDs are the leading causes of illness, disability, and death in the Americas, accounting for 79% of all deaths in the Region, 35% of which are premature—that is, they occur in persons aged 30 to 69 years. In 2012, the 28th Pan American Sanitary Conference approved the regional Strategy for Noncommunicable Diseases 2012-2025 (Document CSP28/9, Rev. 1), aligned with the WHO Global Strategy for the Prevention and Control of Noncommunicable Diseases. Following the adoption in 2013 of the WHO Global Action Plan for the Prevention and Control of Noncommunicable Diseases 2013-2020,²⁸⁰ PAHO developed its regional Plan of Action for the Prevention and Control of Noncommunicable Diseases 2013-2019 (Document CD52/7, Rev. 1), with strategic lines of action as follows: *a*) multisectoral policies and partnerships for NCD prevention and control; *b*) NCD risk factors and protective factors; *c*) health system response to NCDs and risk factors; and *d*) NCD surveillance and research.

506. Progress toward SDG Target 3.4 (By 2030, reduce by one third premature mortality from NCDs through prevention and treatment and promote mental health and well-being) had slowed even before the COVID-19 pandemic. With firm evidence that persons living with NCDs, including MNS disorders, are at higher risk of severe infection, complications, and death due to SARS-CoV-2, and the pandemic's negative psychosocial and mental impact, the Bureau strengthened its technical cooperation for the prevention and control of NCDs and their risk factors, particularly in the Caribbean, which is the subregion with the highest proportion of premature deaths due to NCDs in Region of the Americas.

507. The pandemic and responses to it resulted in disruptions of essential services and medicines for NCDs, including MNS disorders, and reduced access to care; unhealthy nutrition and decreased physical activity due to curfews, lockdowns, and closures of school and community facilities; and

²⁸⁰ The WHO Global Action Plan has been extended to 2030, as stated in: World Health Organization. Follow-up to the political declaration of the third high-level meeting of the General Assembly on the prevention and control of non-communicable diseases. Document WHA72(11), 28 May 2019. Geneva: WHO; 2019 [cited 17 August 2022]. Available from: <https://apps.who.int/iris/handle/10665/328411>.

increases in substance use.^{281,282} PASB enhanced its advocacy and technical cooperation with countries to increase awareness of the need to take effective action against NCDs, not only as a critical component of the COVID-19 response, but also to increase resilience and mitigate the potential impacts of future emergencies and disasters.

508. The Bureau played an important role in preparing CARICOM Member States to participate in the Third United Nations General Assembly High-Level Meeting on the Prevention and Control of Non-communicable Diseases in 2018, providing technical materials and undertaking advocacy for countries to be represented at the highest political levels. PASB representatives participated in the Joint High-Level Session of the OAS Permanent Council and the Inter-American Council for Integral Development that took place in March 2018, and the Bureau was also represented at the Healthy Caribbean Coalition (HCC)²⁸³ Caribbean NCD Forum held in Jamaica in April 2018. The Bureau's contribution to the preparation of the Caribbean subregion for the high-level meeting was recognized in the Communiqué from the 39th Regular Meeting of the Conference of Heads of Government of CARICOM, held in July 2018.

Determinants of health and the economics of noncommunicable diseases

509. Across the Region, PASB fostered a better understanding of the imperative of multisectoral (whole-of-government), multi-stakeholder (whole-of-society) actions in addressing the issues, given the significant influence of the social, ecological, commercial, political, and other determinants of health on NCDs and their risk factors, and the importance of adopting equity- and rights-based approaches. The importance of these approaches became even clearer with the onset of the COVID-19 pandemic, which has resulted in more severe illness and increased mortality among persons living with NCDs, and in September 2020, the members of the PASB-led Inter-American Task Force on NCDs produced a joint statement on NCDs and COVID-19,²⁸⁴ calling for multisectoral actions and the implementation of regulatory policies to protect the health of the public and reduce risk factors.

510. PASB improved appreciation of the economics of NCDs with two main goals: *a)* to help health authorities advocate with heads of state and ministries of finance on the urgency of financing NCD prevention and control programs; and *b)* to demonstrate how economic policies that are outside the health sector can help to curb the NCD epidemic and have a positive economic impact. The Bureau advocated for health and trade policy coherence, and highlighted the need to pursue the benefits of trade and investment agreements and economic integration, simultaneously taking

²⁸¹ Pan American Health Organization. Rapid assessment of service delivery for NCDs during the COVID-19 pandemic in the Americas, 4 June 2020 (updated 16 June 2020). Washington, DC: PAHO; 2020. Available from: <https://iris.paho.org/handle/10665.2/52250>.

²⁸² Pan American Health Organization. The impact of COVID-19 on mental, neurological and substance use services in the Americas: results of a rapid assessment, June 2021 (updated 2 September 2021). Washington, DC: PAHO; 2021. Available from: <https://iris.paho.org/handle/10665.2/54784>.

²⁸³ The Healthy Caribbean Coalition is an umbrella nongovernmental organization for civil society organizations working in NCD prevention and control in the Caribbean. It is in official relations with PAHO.

²⁸⁴ Inter-American Task Force on NCDs. Joint statement on noncommunicable diseases and COVID-19. Inter-American Task Force on NCDs; 2020 [cited 17 August 2022]. Available from: <https://www.paho.org/en/documents/joint-statement-noncommunicable-diseases-and-covid-19>.

action to prevent the negative impact on health and well-being of increased accessibility and affordability of unhealthy commodities such as tobacco, alcohol, and energy-dense, nutrient-poor, ultra-processed food.

511. In 2019, the first-ever country-level investment case for mental health in the Region was completed in Jamaica,²⁸⁵ and demonstrated that for every 1.00 Jamaican dollar (JMD) devoted to scaling up treatment for depression, anxiety, and psychosis, the expected return on investment (ROI) is JMD 4.20. In June 2021, in collaboration with the ministry of health of Peru, UNDP, United Nations Inter-Agency Task Force on the Prevention and Control of Non-communicable Diseases, and RTI International, and with partial funding from CDC, PASB published the report *Prevention and Control of NCDs and Mental Health Conditions in Peru: The Case for Investment*.²⁸⁶ Results demonstrated that for every 1.00 Peruvian Sol devoted to scaling up treatment for depression, anxiety and psychosis, the expected ROI is 5.15 soles. PASB initiated arrangements for a similar NCD and MNS investment case in Suriname, and an NCD investment case in Guyana, with financial support from the European Commission’s grant for Health Systems Strengthening for Universal Health Coverage Partnership, a WHO-EU initiative. Preliminary results from Suriname demonstrate that for every 1.00 Surinamese dollar (SRD) devoted to scaling up treatment for alcohol dependence, depression, and psychosis, the expected ROI is SRD 2.54. Based on calculations of the current health and economic burdens due to NCDs and MNS conditions in all three cases, and estimates of the expected ROI over the next 15 years from implementing WHO NCD Best Buys and mhGAP interventions, the reports showed that associated health and economic burdens could be significantly reduced, with the generation of benefits that substantially outweigh the implementation costs of the interventions.

512. The Bureau promoted health and fiscal policy coherence, especially to mainstream taxation as a public health measure. The Bureau conducted interventions to sensitize and build capacity among policymakers and other key stakeholders on the effectiveness of health taxes, and produced technical resources and materials to inform and guide national action.²⁸⁷ In the context of the COVID-19 pandemic, the Bureau focused on supporting Member States in the use of health taxes as a “win-win-win” policy to: *a)* improve health outcomes by reducing the consumption of health-harming products; *b)* improve the financial status of health systems by reducing associated healthcare costs; and *c)* raise much-needed tax revenues in the wake of the enormous public sector spending caused by the COVID-19 pandemic.

513. Examples of the Bureau’s health tax-related sensitization and capacity-building interventions include:

²⁸⁵ Pan American Health Organization. Care for mental health conditions in Jamaica: the case for investment. Evaluating the return on investment of scaling up treatment for depression, anxiety, and psychosis. Washington, DC: UNIATF, UNDP, PAHO; 2019 [cited 17 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/51834>.

²⁸⁶ Pan American Health Organization. Prevention and control of NCDs and mental health conditions in Peru: the case for investment. Washington, DC: UNIATF, UNDP, PAHO; 2019 [cited 17 August 2022]. Available in Spanish from: <https://iris.paho.org/handle/10665.2/54306>.

²⁸⁷ Pan American Health Organization. Health taxes. Washington, DC: PAHO; 2022 [cited 17 August 2022]. Available from: <https://www.paho.org/en/topics/health-taxes>.

- a) In July 2020, PASB and the National Institute of Public Health of Mexico (INSP) co-hosted the webinar Excise Taxes on Tobacco, Alcohol, SSBs and Non-basic Food with High Caloric Density to Prevent NCDs and as a Source of Additional Revenue in the Context of the COVID-19 Pandemic: The Case of Mexico, which discussed the use of excise taxes on unhealthy products in the context of the COVID-19 pandemic.
- b) In October 2020, PASB and ECLAC co-hosted the webinar The Role of Health Taxes in Health Systems During and Post-COVID-19 in the Caribbean, which promoted increases in excise taxes on unhealthy products as an additional means of preventing NCDs and collecting tax revenues; discussed the use of excise taxes on unhealthy products within the context of the COVID-19 pandemic; and presented the role of such taxes in reducing fiscal deficits and creating fiscal space for health, while strengthening health systems.
- c) In May 2022, the Bureau again collaborated with the INSP to host the webinar Health Taxes Policies in Latin America and the Caribbean: Are We Making Progress?²⁸⁸

Risk factor reduction

514. The Bureau significantly strengthened its technical cooperation to reduce NCD risk factors, aligned with the regional frameworks mentioned above, and others such as the Plan of Action for the Prevention of Obesity in Children and Adolescents 2014-2019 (Document CD53/9, Rev. 2), which had the following strategic lines of action: *a)* PHC and promotion of breastfeeding and healthy eating; *b)* improvement of school nutrition and physical activity environments; *c)* fiscal policies and regulation of food marketing and labeling; *d)* other multisectoral actions; and *e)* surveillance, research, and evaluation, and the WHO Best Buys and Other Recommended Interventions for the Prevention and Control of NCDs,²⁸⁹ cost-effective policy options addressing both risk factor reduction and management of NCDs.

515. In collaboration with the University of South Florida and with funding from the American Heart Association and the WHO Universal Health Coverage Partnership, in July 2020 PASB developed and unveiled a virtual social marketing program on public health, addressing NCD behavioral risk factors. This program, offered in both English and Spanish as a self-learning course or in tutorial format, consists of five courses in which participants learn how to conduct formative research, formulate communication objectives, and design, implement, monitor, and evaluate social marketing campaigns.

Tobacco control

516. The Bureau developed the regional Strategy and Plan of Action to Strengthen Tobacco Control in the Region of the Americas 2018-2022 (Document CSP29/11), with the objective of accelerating implementation of the WHO Framework Convention on Tobacco Control (FCTC)

²⁸⁸ Pan American Health Organization. Health taxes policies in Latin America and the Caribbean: are we making progress? Washington, DC: PAHO; 2022 [cited 17 August 2022]. Available from: https://www.paho.org/sites/default/files/sandoval-roche-presentation-health-taxes-webinar_0.pdf.

²⁸⁹ World Health Organization. Tackling NCDs: 'best buys' and other recommended interventions for the prevention and control of noncommunicable diseases. Geneva: WHO; 2017 [cited 18 August 2022]. Available from: <https://apps.who.int/iris/handle/10665/259232>.

and progressing to SDG Target 3.a. (Strengthen the implementation of the FCTC in all countries, as appropriate). The strategic lines of action of the strategy and plan of action are: *a)* implementation of measures for the creation of completely smoke-free environments and the adoption of effective measures on the packaging and labeling of tobacco products as a priority for the Region; *b)* implementation of a ban on the advertising, promotion, and sponsorship of tobacco products and the adoption of measures to reduce their affordability; *c)* ratification of the FCTC and the Protocol to Eliminate Illicit Trade in Tobacco Products by Member States that have not yet done so; and *d)* strengthening of Member States' capacity in terms of public health policies to counter attempts at interference by the tobacco industry and those who work to further its interests.

517. The Region of the Americas was on track to reach the 2025 target of a 30% reduction in the age-standardized prevalence of tobacco smoking among both males and females 15 years and older. According to the WHO global report on trends in prevalence of tobacco smoking 2000-2025,²⁹⁰ the regional target for this indicator for 2025 is 14.2%; however, the projected prevalence for the Region for 2025 is lower, at 13%.

518. There was limited progress in implementation of the FCTC measures during the peak of the COVID-19 pandemic, despite the observation that measures aimed at increasing taxation to reduce tobacco consumption would also result in immediate increases in additional revenue for pandemic recovery plans. The tobacco industry used the pandemic as an opportunity to position itself as a partner in the response,²⁹¹ while attempting to weaken effective regulatory frameworks to address the tobacco epidemic.²⁹² Moreover, the most recent WHO report on the global tobacco epidemic²⁹³ noted that the COVID-19 pandemic had significantly affected the monitoring of tobacco use, as data collection efforts for 2020 and the release of the results of surveys completed during 2018 and 2019 had been hindered in most countries.

519. The Bureau's technical cooperation for tobacco control across countries focused on comprehensive tobacco control legislation and regulations, with several countries adopting legislation and/or reviewing their tobacco legislation for better alignment with FCTC measures, including smoke-free environments; health warnings; plain packaging; bans on tobacco advertising, promotion, and sponsorship; imposition of taxes on tobacco products; and antitobacco communication campaigns on traditional and social media. As examples:

²⁹⁰ World Health Organization. WHO global report on trends in prevalence of tobacco smoking 2000-2025, second edition. Geneva: WHO; 2018 [cited 18 August 2022]. Available from: <https://bit.ly/2ThRdhj>.

²⁹¹ Barquero, K. Philip Morris donó 40 mil mascarillas para funcionarios de Salud. La Republica.net. 16 April 2020. Available from: <https://www.larepublica.net/noticia/philip-morris-dono-40-mil-mascarillas-para-funcionarios-de-salud> (Costa Rica), and Jamaica Observer. Carreras donates \$9.5M to COVID-19 relief programme. Jamaica Observer. 18 May 2020. Available from: <https://www.jamaicaobserver.com/latest-news/carreras-donates-9-5m-to-covid-19-relief-programme/>.

²⁹² The Tobacco Atlas. Philip Morris makes profit on cigarettes smuggled to Ecuador and seeks government compensation for these same cigarettes. 9 June 2020 [cited 18 August 2022]. Available from: <https://tobaccoatlas.org/philip-morris-makes-profit-on-cigarettes-smuggled-to-ecuador-and-now-seeks-government-compensation-for-these-same-cigarettes/>.

²⁹³ World Health Organization. WHO report on the global tobacco epidemic 2021: addressing new and emerging products. Geneva: WHO; 2021 [cited 18 August 2022]. Available from: <https://www.who.int/publications/i/item/9789240032095>.

- a) The Plurinational State of Bolivia passed a comprehensive tobacco control law that included the adoption of “100% smoke-free environments” in indoor public places and workplaces, becoming the 21st country in the Americas to do so, and mandated larger graphic health warnings on tobacco packages.
- b) Mexico increased taxes on cigarettes and banned the importation of electronic nicotine delivery systems and heated tobacco products, aimed at preventing vaping by young persons. In December 2021, the country approved a key amendment to the 2008 General Law on Tobacco Control, establishing 100% smoke- and emission-free environments in all enclosed public places and workplaces, as well as a total ban on the advertising, promotion, and sponsorship of tobacco products.
- c) Paraguay decreed a ban on smoking of lit or electronic tobacco products in public spaces.
- d) Saint Lucia amended its Public Health Act to include smoke-free environments.
- e) Trinidad and Tobago increased taxes on cigarettes, smoking tobacco, and water pipe tobacco.
- f) The Bolivarian Republic of Venezuela approved a ministerial resolution establishing a total ban on advertising, promotion, and sponsorship of tobacco, becoming the eighth country in the Americas to implement this FCTC requirement.

520. Brazil achieved the highest level of implementation of the WHO MPOWER²⁹⁴ policy package for tobacco control, having implemented the six measures at the best practice level. MPOWER is intended to assist country-level implementation of effective FCTC interventions to reduce the demand for tobacco, and Brazil is the second country in the world (after Türkiye) to achieve this landmark level. In June 2021, with support from the INSP and financial support from the Bloomberg Initiative to Reduce Tobacco Use, through WHO, PASB implemented a course to strengthen the implementation of MPOWER during COVID-19.²⁹⁵ The Bureau also collaborated with the HCC to assess the possibility of having the multisectoral, multi-stakeholder national NCD commissions (or their equivalents) established in several Caribbean countries—in keeping with the 2007 CARICOM Heads of Government Declaration of Port of Spain—to perform the functions of national coordinating mechanisms for tobacco control.

521. In August 2018, PASB hosted a regional conference in Washington, D.C., in preparation for two events to be held in October 2018: the Eighth Conference of the Parties to the FCTC and the First Meeting of the Parties to the Protocol to Eliminate Illicit Trade in Tobacco Products. The August regional conference allowed the exchange of experiences among FCTC Parties from the Americas and provided an opportunity to develop a more cohesive regional platform in preparation for the Eighth Conference of the Parties and the First Meeting of the Parties. Subsequently, PASB facilitated coordination between the Parties to both treaties.

²⁹⁴ Available from: <https://www.who.int/initiatives/mpower>.

²⁹⁵ Pan American Health Organization. Virtual technical training on tobacco control: accelerating the MPOWER package implementation during COVID-19 in the Americas. Washington, DC: PAHO; 2021 [cited 18 August 2022]. Available from: <https://www.paho.org/en/virtual-technical-training-tobacco-control-accelerating-mpower-package-implementation-during-covid>.

522. The Bureau collaborated with the ministries of health, UNDP, United Nations Inter-Agency Task Force on the Prevention and Control of Non-communicable Diseases, FCTC Secretariat, RTI International, and other stakeholders in the respective countries to prepare investment cases for tobacco control in Colombia, El Salvador, and Suriname²⁹⁶ and also in Jamaica, as part of a wider NCD investment case.²⁹⁷ The development of investment cases has proved to be a powerful tool to support the design of tax policy on tobacco and to engage sectors beyond health in the implementation of the FCTC.²⁹⁸

523. The Bureau's collaborators and partners in its work in tobacco control, in addition to those mentioned above, include the International Union Against Tuberculosis and Lung Diseases, Johns Hopkins University, the University of Illinois at Chicago, the Campaign for Tobacco-Free Kids, the Framework Convention Alliance, the InterAmerican Heart Foundation, the American Cancer Society, and Vital Strategies.

Healthy nutrition

524. An unhealthy diet featuring foods and nonalcoholic beverages high in fats, sugar, or salt—based on criteria such as those in the 2016 PAHO Nutrient Profile Model²⁹⁹—contribute significantly to overweight, obesity, diabetes, hypertension, and heart disease. The regional consumption of salt is 10 grams per person per day, twice the level recommended by WHO, and increases in obesity and overweight in the Region are evident, particularly in childhood. Seven percent of children aged less than 5 years old are overweight, a proportion that exceeds the global average of 6%, and in the Caribbean, one in three children is overweight or obese. These patterns are a cause for concern, as they herald increases in the already crippling burden of NCDs in the Region.

525. The Bureau intensified its technical cooperation in healthy nutrition, contributing to the development, implementation, updating, and/or assessment of national frameworks—including legislation, policies, plans, and guidelines—for the reduction of NCD risk factors and prevention and control of obesity and overweight, and its collaboration with partners increased significantly. PASB advocated strongly for, and supported countries to develop and implement, national policies to reduce sugar consumption, including the imposition of taxes on sugar-sweetened beverages (SSBs); enable front-of-package warning labeling (FoPWL); promote healthy infant and young child feeding practices, including exclusive breastfeeding; eliminate trans-fatty acids from the food

²⁹⁶ WHO Framework Convention on Tobacco Control. Investment cases. Geneva: WHO; 2022 [cited 18 August 2022]. Available from: <https://fctc.who.int/who-fctc/development-assistance/investment-cases>.

²⁹⁷ Pan American Health Organization. The case for investment in prevention and control of noncommunicable diseases in Jamaica: evaluating the return on investment of selected tobacco, alcohol, diabetes, and cardiovascular disease interventions. Washington, DC: UNIAFT, UNDP, and PAHO; 2018 [cited 18 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/49693>.

²⁹⁸ RTI International. Studying investment in tobacco control in low- and middle-income countries: investment cases for the FCTC. RTI International; 2022 [cited 18 August 2022]. Available from: <https://www.rti.org/impact/studying-investment-tobacco-control-lmics>.

²⁹⁹ Available from: <https://www.paho.org/en/nutrient-profile-model#:~:text=>

supply; reduce salt/sodium intake; and improve school-based nutrition and physical activity, among other measures to reduce the growing burden of childhood obesity in particular.

SSB taxation

526. The Bureau collaborated with the World Bank, Global Health Advocacy Incubator, Institute of Nutrition of Central America and Panama (INCAP), and other partners to provide evidence for the taxation of SSBs as an effective strategy for combating NCDs. Studies demonstrated that in all countries, an increase in the real price of SSBs can significantly reduce the consumption of such beverages, and one study reported that SSB purchases supersede purchases in essential goods and services such as education and health care, implying that reductions in the amount spent on SSBs may have important immediate and longer-term consequences for the welfare of households. PASB provided situation analyses and guidance in response to increasing requests from Member States to strengthen their technical resources regarding SSB taxation^{300,301} and supported comparisons of taxes as a percentage of SSB prices in Latin America and the Caribbean.³⁰²

Front-of-package warning labeling

527. The Bureau promoted and contributed to FoPWL aimed at reducing the consumption of unhealthy foods, including support for countries and two integration mechanisms—CARICOM and SICA—in the design, formulation, revision, implementation, and/or monitoring and evaluation of front-of-package nutritional warnings to alert consumers to contents high in sugars, fats, and/or sodium. Such initiatives are key for addressing NCDs and protecting the right to health of all populations, but especially those in vulnerable situations, such as children and populations with low literacy.

528. The Bureau continued its support for the CCHD initiative Advancing Public Health Policies to Address Overweight and Obesity in Chile and the Caribbean Community between the Government of Chile and CARICOM, which was launched in 2017 and which aligned well with the July 2018 endorsement of FoPWL as a priority by CARICOM Heads of State and Government. In 2019, in collaboration with the Global Health Advocacy Incubator, PASB supported a study in Suriname to demonstrate the efficacy of nutrition warning labels, the first such study done in a Caribbean country. The findings of the Suriname study corroborated international results and assisted in countering industry arguments that the positive effect of warning labels, although proven internationally, had not been validated in the Caribbean.

³⁰⁰ Pan American Health Organization. Sugar-sweetened beverage taxation in the Region of the Americas. Washington, DC: PAHO; 2020 [cited 18 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/53252>.

³⁰¹ Pan American Health Organization. Calculating standardized tax share and other price and tax policy indicators for sugar-sweetened beverages in Latin America and the Caribbean: methodological note. Washington, DC: PAHO; 2021 [cited 18 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/54917>.

³⁰² Roche M, Alvarado M, Sandoval RC, et al. Comparing taxes as a percentage of sugar-sweetened beverage prices in Latin America and the Caribbean. *Lancet Regional Health – Americas*. 2022;11;100257. Available from: <https://doi.org/10.1016/j.lana.2022.100257>.

529. A similar study was completed in Jamaica in 2021 to add to evidence for the adoption of the octagonal “high in” FoPWL³⁰³ warning labels that have proved effective in other parts of the Region, and the Bureau produced regional guidance on the issue.³⁰⁴ The three-year subregional process led by the CARICOM Regional Organisation for Standards and Quality to revise the CARICOM regional standard for specification for labeling of prepackaged food, CRS 5:2010—which would have enabled acceptance of the PASB-recommended FoPWL system—did not receive the endorsement of the required 75% of CARICOM Member States in 2022. However, the process itself provided many lessons, including the need to protect the policy development space from vested interests and engage the public.

530. The Caribbean process triggered industry and private sector interests, which continue to propose voluntary approaches and alternative FoPWL systems that are known to be less effective in achieving the intended public health objectives. The process also stirred public debate on consumers’ right to know the nutritional content of food products, with civil society, including the HCC, leading advocacy and public education campaigns. In support of the initiative, PASB sensitized and engaged with legal officers from ministries of health, representatives of ministries of legal affairs, relevant CARICOM bodies and institutions, civil society, and academia. The Bureau’s actions included capacity-building, collaboration with the Caribbean Court of Justice Academy for Law, and establishment of the Caribbean Public Health Law Forum,³⁰⁵ which addresses the use of law to advance public health goals, with FoPWL as a priority area. The issue became even more relevant during the COVID-19 pandemic, which put a spotlight on food and nutrition security in the Caribbean.

531. The Bureau also contributed to strengthening the capacity of the MERCOSUR Parliament to address legislative measures aimed at reducing obesity and promoting healthy eating through front-of-package labeling.

532. Achievements in selected countries include:

- a) Argentina: Approval of a healthy eating law, incorporating the highest recommended standards for FoPWL, food marketing, and regulations to promote healthy school food environments;
- b) Mexico: Approval of a law that provides for the adoption of an effective FoPWL system and an amendment to the Official Mexican Standard NOM-051-SCFI/SSA1-2010 (NOM-051), on the general labeling specifications for prepackaged food and nonalcoholic beverages. This modification requires FoPWL indicating whether the product has excessive amounts of sugar, sodium, saturated fat and/or trans fat, to provide clear and

³⁰³ Pan American Health Organization. Superior efficacy of front-of-package warning labels in Jamaica. Fact sheet, March 2021. Washington, DC: PAHO; 2021 [cited 18 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/53328>.

³⁰⁴ Pan American Health Organization. Front-of-package labeling as a policy tool for the prevention of noncommunicable diseases in the Americas. Washington, DC: PAHO; 2020 [cited 18 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/52740>.

³⁰⁵ Pan American Health Organization. Launch of the Caribbean Public Health Law Forum. Washington, DC: PAHO; 2021 [cited 18 August 2022]. Available from: <https://www.paho.org/en/events/launch-caribbean-public-health-law-forum>.

- simple information on content that may compromise nutrition and health. With the enactment of this modification of NOM-051, Mexico became the fourth country in the Region to enact FoPWL, with the most advanced standard regionally and worldwide. The labeling includes information on the presence of nonsugar sweeteners; uses the PAHO Nutrient Profile Model; restricts the use of persuasive and promotive elements on the package; and requires quantitative declaration of trans fat and added sugars in the “nutrition facts” table;
- c) Peru: Entry into force of warnings based on the octagonal “high in” FoPWL model, in the framework of the law on the promotion of healthy nutrition for boys, girls, and adolescents;
 - d) Suriname: Development of the Standard of Labeling for prepackaged foods, including FoPWL;
 - e) Uruguay: Implementation of FoPWL regulations, becoming the fifth country in the Region to do so.

Breastfeeding promotion

533. The COVID-19 pandemic crystallized the need for strong advocacy to promote breastfeeding as a public health intervention that saves lives and prevents infections and illnesses. PASB continued to promote the International Code of Marketing of Breast-milk Substitutes (the Code) and hosted virtual meetings for Latin American and Caribbean countries in November 2020 to emphasize the need for domestic legislation that enables countries to fulfill their obligations in implementing the Code.

534. In 2021, the Bureau supported a survey in Suriname, using the toolkit from the Network for Global Monitoring and Support for Implementation of the International Code of Marketing of Breast-milk Substitutes and Subsequent Relevant World Health Assembly Resolutions (NetCode), to provide baseline data on the country’s compliance with the Code and facilitate the development and implementation of relevant legislation. The Bureau also coordinated with INCAP to implement NetCode in the Central American subregion.

535. In February 2022, PASB participated in the launch of the WHO report *How the Marketing of Formula Milk Influences Our Decisions on Infant Feeding*,³⁰⁶ which exposes the aggressive marketing practices used by the formula milk industry, highlights the impact on women and families, and outlines opportunities for action. The launch was preceded by the first-ever joint meeting of PASB and UNICEF regional and country advisors working in nutrition, early childhood development, and child health. During the virtual meeting, the discussion focused on collaboration to anticipate and respond to industry reactions to the report.

536. The Bureau continued its support for countries in their implementation of the Baby-Friendly Hospital Initiative, which promotes breastfeeding, and four additional hospitals in Jamaica were certified as baby-friendly. Baby-friendly hospital assessor training was conducted

³⁰⁶ World Health Organization, United Nations Children’s Fund. *How the marketing of formula milk influences our decisions on infant feeding*. Geneva: WHO, UNICEF; 2022. [cited 18 August 2022]. Available from: <https://www.who.int/publications/i/item/9789240044609>.

in Grenada, Guyana, and Trinidad and Tobago, and the Bureau kept countries updated on breastfeeding and COVID-19 through various information products.³⁰⁷ During the annual World Breastfeeding Week in August 2020, the Bureau co-hosted a Caribbean subregional webinar with Trinidad and Tobago, and held a subregional webinar for Latin American countries, both on the theme Support Breastfeeding for a Healthier Planet! Similarly, the Bureau provided support to Member States in their observance of World Breastfeeding Week in 2021 and 2022 (Figure 4).

Figure 4. Logo blocks for World Breastfeeding Week



Trans-fatty acid elimination

537. The Bureau developed the regional Plan of Action for the Elimination of Industrially Produced Trans-Fatty Acids (IP-TFA) 2020-2025 (Document CD57/8), with strategic lines of action to: *a)* enact regulatory policies to eliminate partially hydrogenated oils from the food supply and/or to limit IP-TFA content to no more than 2% of total fat in all food products; *b)* implement IP-TFA elimination policies by means of clearly defined regulatory enforcement systems; *c)* assess progress of IP-TFA elimination policies and their impact on the food supply and on human consumption; and *d)* create awareness, through outreach and educational campaigns, of the negative health impacts of TFA and the health benefits to be gained from the elimination of IP-TFA, among policymakers, producers, suppliers, and the public.

538. In support of the WHO technical package REPLACE,³⁰⁸ the plan of action guides the enactment, implementation, and enforcement of regulatory policies to eliminate IP-TFA from the food supply in the countries of the Americas, and the Bureau convened technical meetings to support related interventions by Member States. In December 2019, the Brazilian Health Regulatory Agency enacted Resolution RDC 332/2019 on the use of IP-TFA in that country, which combines the restriction of trans fats to no more than 2% of total fat in foods with the complete ban of partially hydrogenated oils and fats, and which constitutes a best practice regulation on the use of IP-TFA in the food chain. With this regulation, Brazil joined Canada, Chile, Peru, and the

³⁰⁷ Pan American Health Organization. Breastfeeding and COVID-19. Washington, DC: PAHO; 2020 [cited 18 August 2022]. Available from: <https://www.paho.org/en/documents/breastfeeding-and-covid-19>.

³⁰⁸ Available from: <https://www.who.int/teams/nutrition-and-food-safety/replace-trans-fat>.

United States of America as the only countries in the Region implementing best practices in the use of trans fats policies.

539. The Bureau supported the engagement of health authorities throughout the Region in the work of Codex Alimentarius to protect public health, given the recent inclusion on the Codex agenda of discussions related to FoPWL, nutrient profile models, and breast-milk substitutes. PASB contributed to an approximately 40% increase in the participation of representatives from ministries of health in the Region in Codex Committees.

Salt/sodium reduction

540. With financial support from Resolve to Save Lives,³⁰⁹ an initiative of the global public health organization Vital Strategies aimed at preventing deaths from heart disease, the Bureau undertook technical cooperation with countries to promote policies to reduce salt/sodium intake. Efforts included situational analyses in selected countries regarding sodium reduction policies in 2020, in order to contribute to the NCD Global Monitoring Framework target of a 30% relative reduction in mean population salt intake by 2025. The resulting report concluded that although the countries had differing views on their levels of implementation, they held similar views on industry opposition, conflicts of interest, the need for capacity-building on reformulation, and the need to increase the participation of different stakeholders in Codex Alimentarius discussions. The report also identified opportunities for policy promotion and for multi-stakeholder, multisectoral collaboration within the countries. The Bureau contributed to the definition of road maps for actions tailored to specific country contexts to achieve reduction in salt intake at the population level.

541. The Bureau updated the PAHO regional sodium reduction targets 2021-2025,^{310,311} with support from the University of Toronto and the PAHO Technical Advisory Group on CVD Prevention through Population-Wide Dietary Salt Control Policies and Interventions, developed an advocacy plan, and officially revealed the targets in October 2021. The Bureau also promoted the implementation of national legislation and regulations to accelerate progress toward reduction of the mean population intake of sodium as recommended in the WHO Best Buys for NCD prevention and control, and in the WHO SHAKE³¹² technical package for salt reduction. In March 2021, for World Salt Awareness Week, PASB launched an initiative to map salt/sodium reduction policies in the Americas and an interactive online tool to monitor progress in the implementation of those policies—the results of the mapping were published in October 2021.³¹³ In Central

³⁰⁹ Available from: <https://resolvetosavelives.org/>.

³¹⁰ Pan American Health Organization. Updated PAHO regional sodium reduction targets. Washington, DC: PAHO; 2021 [cited 18 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/54658>.

³¹¹ Pan American Health Organization. Updated PAHO regional sodium reduction targets: a tool to tackle the burden of diet-related noncommunicable diseases. Washington, DC: PAHO; 2021 [cited 18 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/55001>.

³¹² Available from: <https://apps.who.int/iris/handle/10665/250135>.

³¹³ Pan American Health Organization. Mapping dietary salt/sodium reduction policies and initiatives in the Region of the America. Washington, DC: PAHO; 2021 [cited 18 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/55056>.

America and the Dominican Republic, the Bureau collaborated with INCAP and COMISCA to develop a Central American subregional strategy for the reduction of salt consumption.

Other actions for healthy nutrition

542. As one of the activities of the Inter-American Task Force on NCDs, the Bureau and OAS collaborated to introduce school-based activities centered on NCD prevention and aligned with the workplan of the OAS Inter-American Committee on Education 2019-2022 and the PAHO Plan of Action for the Prevention of Obesity in Children and Adolescents. In November 2020, a joint seminar was held on the promotion of healthy school settings, with the participation of delegates from ministries of health and education. A second joint webinar was convened in June 2021, addressing the promotion of healthy life skills through physical and nutrition education in schools.

543. In the context of increasing malnutrition due to the COVID-19 pandemic, in the second semester of 2020, PASB, in collaboration with other United Nations agencies, participated in the preparation of a road map for the implementation in Haiti of the Global Action Plan on Child Wasting.³¹⁴ In Guatemala, the Bureau continued its participation in the development and implementation of an EU-supported project to address stunting, and supported the nutrition response to the volcano emergency in Saint Vincent and the Grenadines with technical guidance on nutrition support for people in shelters and infant-feeding in emergencies. PASB coordinated with United Nations agencies through the United Nations regional nutrition group, and, in June 2021, co-organized subregional meetings on nutrition in emergencies in preparation for the hurricane season with UNICEF and the United Nations World Food Programme.

544. In March 2021, the Bureau strengthened its own interprogrammatic mechanisms for technical cooperation in healthy nutrition, convening a technical meeting with relevant entities at regional, subregional, and country levels. The meeting aimed to analyze and discuss the current context and nutrition problems of the Region; develop a strategic response through a food and nutrition systems approach; and identify priorities for technical cooperation to address all forms of malnutrition. As an outcome of the meeting, the Bureau established an interdepartmental working group to prepare a road map for a comprehensive interprogrammatic response, in coordination with other United Nations agencies.

Alcohol use reduction

545. The Bureau prepared and published a regional report³¹⁵ on the level of implementation of policies for the reduction of the harmful use of alcohol in Member States, measuring their progress in executing the 2010 WHO Global Strategy to Reduce the Harmful Use of Alcohol. The 2018 regional report suggested that there was significant room for PAHO Member States to develop

³¹⁴ World Health Organization. Global action plan on child wasting: a framework for action to accelerate progress in preventing and managing child wasting and the achievement of the Sustainable Development Goals. Geneva: WHO; 2020 [cited 18 August 2022]. Available from: <https://www.who.int/publications/m/item/global-action-plan-on-child-wasting-a-framework-for-action>.

³¹⁵ Pan American Health Organization. Alcohol policy scoring: assessing the level of implementation of the WHO global strategy to reduce the harmful use of alcohol in the Region of the Americas. Washington, DC: PAHO; 2018 [cited 18 August 2022]. Available from: <https://bit.ly/31atfnT>.

more comprehensive and stringent alcohol policies, and the Bureau urged countries to use the report and its scoring scheme to monitor and compare their progress in this area of work.

546. In September 2019, PASB convened a regional consultation on the WHO Global Strategy to Reduce the Harmful Use of Alcohol with ministry of health focal points from across the Americas. The consultation resulted in recommendations on the way forward and informed a global report that was presented at the 146th Session of the WHO Executive Board in February 2020, where a request was made for the development of an action plan 2022-2030 for effective implementation of the global strategy, to be considered by the Seventy-fifth World Health Assembly in 2022. In 2020, PASB published the Regional Status Report on Alcohol and Health in the Americas 2020,³¹⁶ updating the situation regarding alcohol consumption, harms, and policies in all Member States, and organized three webinars to disseminate the results.

547. In March 2021, the Bureau convened another regional consultation to discuss the draft WHO Global Alcohol Action Plan 2022-2030 and technical inputs from countries in the Region were incorporated into the document. The Draft Action Plan (2022-2030) to Effectively Implement the Global Strategy to Reduce the Harmful Use of Alcohol as a Public Health Priority (Document EB150/7 Add.1) is being discussed at global level.

548. The Bureau continued to support countries in the implementation of the WHO SAFER³¹⁷ initiative to reduce alcohol harm. Brazil was the first country in the Region to launch the initiative, and PASB undertook technical cooperation with that country on the calculation of national alcohol consumption per capita. In 2020 the Bureau organized global and regional webinars related to SAFER, and, at the Seventy-fourth World Health Assembly in May 2021, co-organized a side event with international partners (Ministries of Health of Kenya and Sri Lanka, OECD, WHO Regional Office for Europe, NCD Alliance, and Movendi International) on the impact of the COVID-19 pandemic on alcohol consumption and policies.

549. The Bureau's technical cooperation to reduce alcohol consumption in selected countries contributed to the development of national alcohol strategies and plans of action; trained healthcare providers in the assessment and diagnosis of fetal alcohol spectrum disorders, which led to the creation of the first diagnostic center for such disorders in the Dominican Republic in early 2019; developed and implemented a self-learning virtual course on alcohol and pregnancy in English, Portuguese, and Spanish; used WHO methodology to identify, document, and reduce gaps in national policies to decrease alcohol consumption; and coordinated a regional study on alcohol, drugs, and road injuries in emergency rooms, with piloting of effective interventions for reduction of alcohol use. Mexico passed legislation for a national alcohol awareness day—15 November 2019—which was celebrated with various activities throughout the country, including a national seminar on alcohol use as a public health issue.

550. In the Central American subregion, the Bureau used an interprogrammatic approach to work with the PARLACEN and SE-COMISCA to develop and obtain approval for a resolution on

³¹⁶ Pan American Health Organization. Regional status report on alcohol and health 2020. Washington, DC: PAHO; 2020 [cited 18 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/52705>.

³¹⁷ Available from: <https://www.who.int/publications/i/item/9789241516419>.

strengthening and harmonizing comprehensive alcohol legislation in Central America and the Dominican Republic, in line with WHO's SAFER technical package for alcohol reduction. The PARLACEN resolution declared that harmful use of alcohol is a serious public health problem, recognized that there is no safe level of alcohol consumption, and called on all members of the SICA to update and strengthen legislation aimed at limiting the availability of alcohol; preventing drink-driving; banning alcohol marketing, promotion, and sponsorship; reducing alcohol demand through price control policies and taxation; preventing influence by the alcohol industry on public health policies; and guaranteeing access to trustworthy information about the use of alcohol. The PARLACEN plenary formally ratified the resolution in April 2019, obligating SE-COMISCA to compile and report detailed information on the countries' fulfillment of the resolution.

551. In the Caribbean subregion, the Bureau continued its collaboration with the HCC in observing the annual Caribbean Alcohol Reduction Day (CARD), which was inaugurated in 2016. The theme for CARD 2021³¹⁸ was Live Better, Drink Less: Alcohol Gets in the Way.

Physical activity

552. The Bureau's technical cooperation addressed physical activity as an important component of overweight and obesity prevention, and part of integrated NCD risk factor reduction efforts at national and subregional levels. In selected countries: agreements were reached between the mayors' association and the ministry of health for the promotion of wellness parks in all districts of the country; physical activity was included as a component of a national intersectoral converging agenda for action involving government, academia, civil society, and United Nations agencies; and a project funded by the Korea International Cooperation Agency (KOICA) created inter- and multi-sectoral networks, including academia and civil society, to strengthen primary care and health literacy, and promote healthy nutrition and physical activity in schools.

553. Since the launch of Jamaica Moves by the Ministry of Health in that country in 2017, aiming to increase physical activity among the population in community and school settings, the initiative has expanded to the Caribbean subregional level. CARICOM Heads of State and Government endorsed the Caribbean Moves initiative in September 2018, and its development is currently being spearheaded by CARPHA, with financing from CDB. Supported by PASB, the initiative has been adopted by other countries in the subregion, such as Barbados, Saint Kitts and Nevis, and Trinidad and Tobago.

554. The Bureau collaborated with the United States of America to complete research on the country's existing bicycle-sharing systems, the results of which were used to analyze links between better health outcomes and the use of those systems.³¹⁹ The WHO Health Economic Assessment Tool³²⁰ for walking and cycling, which helps users to conduct an economic assessment of health

³¹⁸ Available from: <https://www.healthycaribbean.org/6th-caribbean-alcohol-reduction-day-card-2021/>.

³¹⁹ Pan American Health Organization. Bicycle-sharing systems across the United States of America. Washington, DC: PAHO; 2020 [cited 18 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/52076>.

³²⁰ Available from: [https://www.who.int/publications/i/item/health-economic-assessment-tool-\(heat\)-for-walking-and-for-cycling](https://www.who.int/publications/i/item/health-economic-assessment-tool-(heat)-for-walking-and-for-cycling).

benefits by estimating the value of reduced mortality that results from specified amounts of walking or cycling, was adapted for the United States of America and the tool algorithm finalized. These two achievements laid the groundwork to build a strong case for physical activity in the United States of America and the rest of the Region.

Reducing air pollution

555. The Bureau's technical cooperation to improve ambient air quality and reduce household air pollution is summarized in Chapter 8, Addressing the social determinants of health and ensuring healthy and safe environments.

Reducing and managing the major noncommunicable diseases

Cardiovascular diseases

556. The Bureau supported the promotion, adaptation, and implementation of the Global HEARTS initiative in the countries of the Americas as a comprehensive package of best practices for the prevention and management of CVDs. HEARTS in the Americas,³²¹ led by ministries of health with the participation of local stakeholders and PASB's technical cooperation, aims to improve high blood pressure control and promote secondary prevention of CVDs, with emphasis on the PHC approach. Implemented in collaboration with partners, including World Hypertension League, Latin American Society of Hypertension, InterAmerican Heart Foundation, and Inter-American Society of Cardiology, and CDC, the initiative addresses healthy lifestyles, evidence-based protocols, access to essential medicines and technologies, risk-based management, team-based care and task-sharing, and monitoring systems. Its four core components comprise a simplified, evidence-based hypertension treatment algorithm; the availability and affordability of a core set of high-quality antihypertensive medications; a registry of hypertensive patients for monitoring and performance evaluation; and task-sharing in a team-based approach at the first level of care.

557. HEARTS is being implemented and expanded in 23 countries and territories³²² of the Region to include 1,380 health centers covering about 14 million adults in the aggregate catchment area. It is anticipated that, by 2025, HEARTS will be the model for CVD risk management, including hypertension, diabetes, and dyslipidemia, as a component of PHC in the Americas. PASB's technical cooperation for HEARTS implementation was provided through webinars, virtual courses on the PAHO VCPH—which have had over 182,000 users—and dissemination of tools such as the HEARTS technical modules,³²³ which were updated with a HEARTS-D module for the diagnosis and management of type 2 diabetes; an implementation guide; the Monitoring and Evaluation Framework for Hypertension Control Programs developed by PASB and the World Hypertension League; and PASB's CVD risk calculator. The risk calculator transforms the

³²¹ Available from: <https://www.paho.org/en/hearts-americas>.

³²² Argentina, Bahamas, Barbados, Bolivia (Plurinational State of), Brazil, British Virgin Islands, Chile, Colombia, Costa Rica, Cuba, Dominica, Dominican Republic, Ecuador, El Salvador, Guatemala, Guyana, Mexico, Panama, Peru, Saint Lucia, Saint Vincent and the Grenadines, Suriname, and Trinidad and Tobago.

³²³ Available from: <https://www.paho.org/en/hearts-americas/hearts-americas-technical-package>.

previous WHO color-coded risk charts into an online electronic calculator to estimate the 10-year risk of myocardial infarction, stroke, or cardiovascular death, and includes information on the standardized CVD treatment protocols.

558. The Bureau, through the Strategic Fund, improved the availability and affordability of high-quality CVD medications and technology by seeking to consolidate the demand for antihypertensive drugs for selected countries; mapping suppliers and reference prices of the new antihypertensive drugs included in the Strategic Fund list; developing international tenders and technical evaluation of antihypertensive drugs offered to the Strategic Fund; and establishing long-term agreements with manufacturers for the antihypertensive medicines that meet technical specifications, eligibility criteria, and established quality standards.

559. Despite the difficulties faced during the COVID-19 pandemic, primary care health centers in several countries continued to report basic indicator data on hypertension coverage and control rates. Although many such services for NCDs were disrupted as a result of the pandemic, including hypertension and CVD management, Mexico was able to position the HEARTS initiative at the forefront of its national COVID-19 response.

560. A threat to the sustainability of the HEARTS initiative is the high turnover of health workers. To address this issue, PASB initiated the establishment of a network of individuals trained in HEARTS implementation at all levels of the ministries of health, through training-of-trainers programs. The implementation of the HEARTS technical package has resulted in measurable improvements in the detection and treatment of persons with hypertension, and hypertension control among those treated. Data from a community health center in the city of Matanzas, Cuba, published in 2020, show that coverage increased from 52.9% to 88.2% and the proportion of those treated who were controlled increased from 59.3% to 68.5%.³²⁴ In recognition of the impact of the initiative, PAHO received the 2019 World Hypertension League Excellence Award for Hypertension Prevention and Control, and the Cuba HEARTS program received this award in 2020.

Cancer

561. The Bureau's technical cooperation for cancer prevention and control supported, in various Member States: conduct of a needs assessment of the cancer control program, updating of the cancer control plan and development of an operational plan for its implementation; strengthening of colposcopy services, including provision of equipment and supplies, and retraining of colposcopists; and collaboration with the International Agency for Research on Cancer (IARC) to generate information for the planning and monitoring of cancer programs in Latin America, and to assess, build capacity for, and improve screening programs for breast, cervical, and colorectal cancers. The efforts to improve cancer screening, including identification of barriers to availability, access, and effectiveness of screening services, with formulation of evidence-based interventions,

³²⁴ Valdés Y, Campbell N, Pons E, Calderón M, Pérez A, Morales J, et al. Implementation of a community-based hypertension control program in Matanzas, Cuba. *Journal of Clinical Hypertension*. 2020;22(2):142–9. Available from: <https://doi.org/10.1111/jch.13814>.

were part of the IARC Cancer Screening in Five Continents project.³²⁵ In the South American subregion, a population-based cancer registry was established as part of a horizontal cooperation initiative involving the Union of South American Nations Network of National Cancer Institutes and Institutions and IARC.

Cervical cancer

562. Following the WHO Director-General's global call for cervical cancer elimination in May 2018, and building on PASB's previous substantial work in this area, the Bureau developed the regional Plan of Action for Cervical Cancer Prevention and Control 2018-2030 (Document CD56/9). The strategic lines of action in the plan of action comprise: *a)* improve cervical cancer program organization and governance, information systems, and cancer registries; *b)* strengthen primary prevention through information, education, and HPV vaccination; *c)* improve cervical cancer screening and precancer treatment through innovative strategies; and *d)* improve access to services for cancer diagnosis, treatment, rehabilitation, and palliative care.

563. These lines of action are aimed at putting the Region of the Americas on the pathway to elimination of cervical cancer as a public health problem, aligned with the November 2020 WHO Global Strategy to Accelerate the Elimination of Cervical Cancer as a Public Health Problem 2020-2030³²⁶ and its 90-70-90 targets: 90% coverage of girls by HPV vaccination (by age 15); 70% coverage of screening (70% of women are screened with high-performance tests by the ages of 35 and 45 years); and 90% treatment of precancerous lesions and management of 90% of invasive cancer cases.

564. The Bureau's technical cooperation promoted HPV testing for cervical cancer screening and the diagnosis and treatment of precancerous lesions in primary care, including disseminating new evidence and PAHO guidelines on the effectiveness of HPV testing throughout the Region; updated national cervical cancer guidelines; trained primary care providers and conducted refresher training to improve the competencies and skills of gynecologists in colposcopy, biopsy, and treatment of precancerous lesions; equipped clinics with new colposcopy units; and conducted a cervical cancer program needs assessment in the Plurinational State of Bolivia, in collaboration with the United Nations Joint Global Programme on Cervical Cancer Prevention and Control. PASB also implemented web-based training courses on comprehensive cervical cancer control and palliative care through the PAHO VCPH.

565. Partners in these activities included IARC and CDC, and financial support was received from the Government of Canada, CDC, and the Organization of the Petroleum Exporting Countries Fund for International Development (OFID). The Revolving Fund was instrumental in supplying HPV vaccine to countries, and although many are currently offering HPV vaccination as part of their immunization programs, reaching the estimated 37 million girls in the targeted age group of

³²⁵ International Agency for Research on Cancer. CanScreen5. Lyon: IARC; 2021 [cited 18 August 2022]. Available from: <https://canscreen5.iarc.fr/>.

³²⁶ World Health Organization. Global strategy to accelerate the elimination of cervical cancer as a public health problem. Geneva: WHO; 2020 [cited 18 August 2022]. Available from: <https://www.who.int/publications/i/item/9789240014107>.

9-14 years remains a challenge, as coverage in most of the countries is less than the recommended 80% of this population.

566. In 2019, the Bureau introduced a web-based PASB communication campaign It's Time to End Cervical Cancer, using multiple methods and platforms, including social media, to mobilize health providers and encourage women and girls to seek preventive care. Several countries have initiated a path toward elimination of cervical cancer as a result of PASB-led discussions with representatives from both national immunization and cervical cancer programs, which included innovative approaches to overcome challenges related to HPV testing and vaccination.

567. In 2018 Trinidad and Tobago was the only country in the Region to participate in the WHO cervical cancer costing study using the WHO Cervical Cancer Prevention and Control Costing³²⁷ tool to provide the Ministry of Health with cost-of-care information and enable costing of the national cervical cancer program. In 2019, an education and outreach campaign was implemented in a remote, isolated community in Suriname, and 10 health providers were retrained in screening and precancer treatment methods. About 100 indigenous women in the community were screened for cervical cancer for the first time.

568. The Bureau undertook technical cooperation with several Latin American countries to develop national cervical cancer elimination plans, and established a monthly virtual telementoring program on cervical cancer elimination with countries in Latin America in collaboration with the University of Texas MD Anderson Cancer Center and the U.S. National Cancer Institute—project ECHO ELA.³²⁸ The program identified evidence-based interventions for cervical cancer elimination, built capacity for their implementation, and created a community of practice to share experiences on cervical cancer prevention, improving the technical skills and knowledge of health professionals and civil society representatives to reach their vaccination, screening, and treatment targets.

Childhood cancer

569. A regional initiative to address inequities in outcomes for children with cancer was implemented to strengthen early detection and treatment services, aligned with the WHO Global Initiative for Childhood Cancer,³²⁹ CureAll. PASB, St. Jude Children's Research Hospital, and leading pediatric oncologists in the Region collaborated with countries in Latin America and the Caribbean that are participating in CureAll Americas (Figure 5), the regional implementation of the global initiative. Several countries developed national childhood cancer prevention and control plans and defined priorities to strengthen health services and quality of care for children with cancer.

³²⁷ Available from: [https://www.who.int/tools/who-cervical-cancer-prevention-and-control-costing-\(c4p\)-tool](https://www.who.int/tools/who-cervical-cancer-prevention-and-control-costing-(c4p)-tool).

³²⁸ Lopez Varon M, Pontremoli Salcedo M, Schmeler K, et al. ECHO elimination of cervical cancer in Latin America (ECHO ELA): lessons learned from promoting WHO's cervical cancer elimination goals '90-70-90'. JCO Global Oncology 2022, 10th Annual Symposium on Global Cancer Research: Meeting Abstracts Vol. 8, Issue Supplement 1. Available from: <https://ascopubs.org/doi/abs/10.1200/GO.22.12000?af=R>.

³²⁹ Available from: <https://www.who.int/publications/m/item/global-initiative-for-childhood-cancer>.

Figure 5. Logo block for CureAll Americas

Source: Pan American Health Organization. National childhood cancer plans. Washington, DC: PAHO; 2022 [cited 2 September 2022]. Available from: <https://www.paho.org/en/topics/childhood-cancer/national-childhood-cancer-plans>.

570. In Central America, PASB convened national health authorities, childhood cancer foundations, pediatric oncologists, and, in collaboration with COMISCA, conducted a rapid situation assessment in July 2019 in selected countries. The assessment results revealed, among other findings, that children were being diagnosed late, and that the referral systems and pathology services were weak. The findings were used to create national childhood cancer plans and develop standardized treatment guidelines for the main cancer types.

571. PASB convened the policy dialogue Health Systems Strengthening for Childhood Cancer in the Caribbean in Trinidad and Tobago in February 2020,³³⁰ in collaboration with SickKids and St. Jude Children’s Research Hospital, and commitments were made to cooperate on treatment protocols, train more medical specialists, and improve referral pathways, blood banks, and pathology services. In October 2021, the collaborating partners convened a virtual meeting to follow up on the previous meeting and to establish Caribbean subregional and national priorities and joint activities for the 2022-2023 biennium.³³¹

572. The Central American and Caribbean subregional findings reflected those of a situational assessment of childhood cancer in Peru in June 2019, which also recommended increasing access to essential medicines through the Strategic Fund, and designing data systems to record and monitor patient outcomes. A major achievement in Peru was the enactment of the childhood cancer law in September 2020, which assured universal coverage for childhood cancer care and provided social support to parents of children with cancer. In October 2021, the Ministry of Health of Peru reported a reduction in the rate of treatment abandonment for childhood cancer from 18% to 8.5%, a major achievement in the framework of CureAll. In March 2022, Brazil approved a national policy for childhood cancer, including activities for early detection and mortality reduction.

³³⁰ Pan American Health Organization. Health system strengthening for childhood cancer in the Caribbean. Washington, DC: PAHO; 2020 [cited 18 August 2022]. Available from: <https://www.paho.org/en/topics/cancer/health-system-strengthening-childhood-cancer-caribbean>.

³³¹ Pan American Health Organization. Caribbean sub-regional meeting of childhood cancer: CureAll Americas. Washington, DC: PAHO; 2021 [cited 18 August 2022]. Available from: <https://www.paho.org/en/topics/childhood-and-adolescence-cancer/caribbean-sub-regional-meeting-childhood-cancer-cureall-0>.

573. A new virtual course on early detection of childhood cancer, aimed at primary care providers, was implemented in September 2021.

Diabetes

574. Persons living with diabetes and other NCDs benefit from the Bureau's overall technical cooperation to combat NCD risk factors and obesity, strengthen implementation of the PHC strategy and IHSDNs, and improve NCD self-management.

575. In selected countries in the Region: a national diabetes institute was provided with equipment and supplies, and technicians trained, to improve capacity for the accurate and timely diagnosis of diabetes, supported by a grant from OFID; comprehensive care in the network of health services was strengthened for persons living with NCDs, following implementation of a demonstration model for the management and comprehensive care of chronic diseases at the first level of care and at subnational levels, with an emphasis on diabetes; and a self-management manual and related educational tools for diabetes and hypertension were updated, with relevant training for NCD lay educators. These interventions aimed to empower community members and persons living with NCDs to better manage their chronic conditions and their overall health.

Chronic respiratory disease

576. The Bureau's technical cooperation in tobacco control and cessation, promotion of the WHO Best Buys and Other Recommended Interventions, occupational safety and health and the prevention of pneumoconioses, addresses this priority NCD.

Mental, neurological, and substance use disorders

Mental health services and mental health and psychosocial support

577. The Bureau's technical cooperation in MNS disorders was guided by the regional Strategy and Plan of Action on Mental Health 2010-2019 (Document CD49/11), which identified strategic lines of action as follows: *a)* development and implementation of national mental health policies, plans, and laws; *b)* promotion of mental health and prevention of psychological disorders, emphasizing the psychosocial development of children; *c)* PHC-centered mental health services delivery, determination of priority conditions, and implementation of interventions; *d)* human resources development; and *e)* strengthened capacity to produce, assess, and use information on mental health.

578. The integration of mental health services into the first level of care has proved essential for the development of equitable service provision, working to bridge the mental health treatment gap and advance universal health. The Bureau's technical cooperation in MNS disorders continued within the framework of the WHO mhGAP, which aims to scale up MNS services in countries, providing tools for use in nonspecialized health settings, including the mhGAP Operations Manual (updated in 2018), the mhGAP Intervention Guide, and mhGAP training manuals.

579. In coordination with ministries of health, local universities, and PAHO/WHO Collaborating Centres, the Bureau supported in-country training, regional training of trainers, and virtual training for PHC providers in resource-constrained settings through the PAHO VCPH. The mhGAP Virtual Classroom, an initiative that aimed to further strengthen mhGAP training in the Region, was launched in October 2019. This virtual space provided support, monitoring, and supervision of key technical issues to nonspecialist health professionals trained in mhGAP, and through the Virtual Classroom, general practitioners and primary care nurses trained in mhGAP received guidance and advice from experienced mental health specialists on problems or key questions related to the application of the program.

580. As a response to inadequate services and interventions to promote mental health, and to identify and treat mental health disorders in children and adolescents, the Bureau's technical cooperation focused on providing guidance for the revision of national mental health policies and strategies; determination of strategies to address mental health in children and adolescents; and consideration of the types of services needed. The final version of this guidance document is currently under internal review.

581. Cognizant of the psychosocial impact of disasters and humanitarian emergencies on the general population, responders, and healthcare workers, PASB's technical cooperation also focused on improving MHPSS for disaster-affected populations. Two online courses were implemented in Spanish on PAHO's VCPH: *a*) Preventing Self-harm/Suicide: Empowering Primary Health Care Providers, a self-learning course based on the self-harm suicide module of the mhGAP Intervention Guide,³³² in July 2019, aiming to enhance the capacity of nonspecialized health workers to identify, assess, manage, and provide follow-up to people with suicidal behaviors, and *b*) a self-learning course on Psychological First Aid (PFA) in the Management of Emergencies, in April 2020.

582. The mhGAP Intervention Guide and PFA are key tools for managing mental health conditions and providing support to people in distress during emergencies, respectively, and have become highly relevant during the COVID-19 pandemic. During the peak of the pandemic, the Bureau's immediate focus was on enhancing MHPSS, especially in light of the pandemic-associated disruptions in MNS services in Member States. In its technical cooperation in MHPSS, PASB focused on strengthening coordination; improving and scaling up service provision; capacity-building and training; and the development and dissemination of communications materials for the general population, as well as for specific at-risk groups. The Bureau's efforts aimed to promote and support sustainable MHPSS responses, reforming and strengthening mental health systems and services for the postpandemic period and beyond.

583. In contributing to enhancement of Member States' coordination mechanisms for MHPSS, PASB supported the establishment of intersectoral technical working groups and developed virtual courses on MHPSS intersectoral coordination in English and Spanish, which were implemented through the PAHO VCPH. The Bureau implemented numerous webinars targeting first-responders, parents, teachers, journalists, adolescents, and indigenous populations, as well as

³³² Available from: <https://www.who.int/publications/i/item/9789241549790>.

micro, small, and medium-sized enterprises, with training conducted in English, Dutch, and Spanish.

584. In September 2020, PASB implemented the second edition of the self-learning virtual course Psychological First Aid in Disaster Management in the Caribbean, which included special considerations on the utilization of PFA skills during disease outbreaks. The Bureau's virtual training included media professionals in the Caribbean working in print, broadcast, and online media, as well as communicators working in ministries of health, government information services, and CSOs. The sessions focused on epidemiological aspects and MHPSS considerations related to the COVID-19 pandemic, stigma and discrimination, and self-care. After the training series ended, participants were invited to compete for the PAHO/CDB/CBU awards celebrating responsible coverage of MHPSS during COVID-19, giving them the opportunity to use evidence-based information to reflect topics and key recommendations raised during the training. A journalist based in Cayman Islands was announced as the winner in March 2021.³³³

585. The use of telehealth for MHPSS interventions—distance-based, digital, or online—proved to be an effective alternative to in-person mental health services during the pandemic. PASB not only assisted countries and territories to provide remote MHPSS interventions, but also contributed to the development and implementation of a community of practice on remote MHPSS care. The Bureau developed and adapted many communication materials, including technical documents, videos, and social media cards, targeting the general population and populations in vulnerable situations, including health and other front-line workers. The Bureau developed an MHPSS in Emergencies website,³³⁴ which collates relevant resources formulated in the Region.

586. The Bureau spearheaded special projects for MHPSS, including:

- a) The two-year, CDB-funded project Mental Health and Psychosocial Support in Disaster Management in the British Virgin Islands, which supported local communities to develop action plans for emergency preparedness and response and built local capacity through the training of community members in PFA, stress management, community resilience, and the mhGAP Humanitarian Intervention Guide.³³⁵ While initially developed to support the British Virgin Islands in building psychological resilience in the face of commonly occurring natural disasters such as hurricanes, the project was adapted to address MHPSS during the pandemic, and one of the project outputs, the British Virgin Islands MHPSS Webinar Series, garnered thousands of views on YouTube.
- b) In April 2020, PASB received funding from the PHAC International Health Grants Program to implement the project Responding to Mental Health and Psychosocial Support Needs during COVID-19 in Indigenous and Afro-descendant Communities in the Americas. The project helped the Plurinational State of Bolivia, Guatemala, Haiti,

³³³ Pan American Health Organization. Winner announced in PAHO/CDB/CBU awards for responsible reporting during COVID-19. Washington, DC: PAHO; 2021 [cited 18 August 2022]. Available from: <https://www.paho.org/en/news/23-3-2021-winner-announced-pahocdbcbu-awards-responsible-reporting-during-covid-19>.

³³⁴ Available from: <https://www.paho.org/en/topics/mental-health-and-psychosocial-support-emergencies-mhps>.

³³⁵ Available from: <https://www.who.int/publications/i/item/9789241548922>.

- Honduras, Saint Lucia, and Saint Vincent and the Grenadines to strengthen national policies, health systems, and community capacities to provide MHPSS services to indigenous and Afro-descendant populations, which are at risk of suffering even poorer mental health outcomes during the pandemic, as a result of their marginalized status.
- c) In November 2020, a five-part training program on remote assistance in mental health was conducted in Paraguay as part of the WHO Special Initiative on Mental Health,³³⁶ which seeks to ensure UAH and UHC, and enable 100 million more people in participating countries to obtain mental health care; advance policies, advocacy, and human rights; and scale up quality interventions and services for people with MNS disorders. The program in Paraguay built the capacity of mental health professionals to provide remote assistance to people presenting with acute and/or emergency mental health conditions, as well as to persons with chronic mental health conditions that require monitoring.

587. The effects of the COVID-19 pandemic include lasting adverse effects on people's mental health and well-being, placing strain on already-stretched mental health services in the Region. Notwithstanding its focus on MHPSS, PASB assisted selected countries to develop and systematize mental health national plans and reforms, including implementation plans for mhGAP. The Governments of Argentina and Chile announced substantial increases in their mental health budgets and the launch of new mental health programs as components of their COVID-19 responses, and teams from selected countries and territories were trained for the implementation of an evidence-based mental health literacy model intervention in schools. In 2020, the Stronger Together³³⁷ campaign in the Caribbean, jointly supported by PASB and CDB, raised awareness of the importance of mental health and provided tools and information to promote psychosocial support.

588. Suicide claims the lives of nearly 100,000 people per year in the Americas, corresponding to an age-standardized suicide rate of 9.25 per 100,000 in 2016, the third highest of all WHO regions. In 2021, PASB published *Suicide Mortality in the Americas. Regional Report 2015-2019*,³³⁸ and supported suicide prevention interventions in Argentina, Costa Rica, Guyana, Suriname, and Trinidad and Tobago, including situation assessment, plan development, and enhancement of surveillance mechanisms.

589. The Bureau expanded its partnerships for mental health in the Caribbean, collaborating with the Caribbean Alliance of National Psychological Associations to address mental health in emergencies, and the inaugural partnership event, a webinar series dealing with MHPSS, took place in July 2020. PASB adapted the WHO mental health management guide *Doing What Matters*

³³⁶ World Health Organization. The WHO special initiative for mental health (2019-2023): universal health coverage for mental health. Geneva: WHO; 2019 [cited 18 August 2022]. Available from: [https://www.who.int/publications/i/item/special-initiative-for-mental-health-\(2019-2023\)](https://www.who.int/publications/i/item/special-initiative-for-mental-health-(2019-2023)).

³³⁷ Available from: <https://www.paho.org/en/stronger-together-2020>.

³³⁸ Pan American Health Organization. *Suicide mortality in the Americas – regional report 2015-2019*. Washington, DC: PAHO; 2021 [cited 18 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/55297>.

in Times of Stress: An Illustrated Guide³³⁹ for the Caribbean to answer the call for mental health service provision to be prioritized as a key component of the region's COVID-19 response, and to help people of all ages cope with adversity and better manage stress. The adapted guide was published in 2021, in collaboration with CDB.³⁴⁰

590. In order to highlight the impact of the COVID-19 pandemic on the mental health of populations in the Americas, PASB conducted and published a review of the regional literature and recommendations for strengthening mental health in the Region during and after the pandemic. The recommendations addressed actions to improve the inadequate financial and human resource investments in mental health services, the limited implementation of the decentralized community-based care approach, and the insufficient policies to address the mental health gap that existed prior to the pandemic, as well as efforts to scale up MHPSS services for all, and reach marginalized and at-risk populations.³⁴¹

591. The Bureau established the PAHO High-Level Commission on Mental Health and COVID-19 in May 2022³⁴² to provide guidance in advancing mental health in the Region during the pandemic and in the postpandemic period. The commission includes mental health experts and leaders from across the Region in government, policy, health, academia, and civil society, and its work will focus on recovering from the pandemic and promoting mental health as a priority; the mental health needs of vulnerable populations; integrating mental health into UHC; financing; and promoting the prevention of mental health conditions.

592. In June 2022, the 170th Session of the PAHO Executive Committee reviewed the Bureau's proposed Policy for Improving Mental Health (Document CE170/15), which aims to intensify the Bureau's work in mental health, building on lessons learned during the pandemic, and as a priority for advancing health, social, and economic development in the Region.

Neurological disorders

593. In technical cooperation to prevent, control, and alleviate neurological disorders, the Bureau focused on dementia, using an interprogrammatic approach in the framework of the regional Strategy and Plan of Action on Dementias in Older Persons 2015-2019 (Document CD54/8, Rev. 1), the goal of which was to promote universal health with quality interventions for people with, or at risk of, dementia. The strategic lines of action of the strategy and plan of action addressed, among other issues, frameworks that promote and respect human rights; provision of

³³⁹ World Health Organization. Doing what matters in times of stress: an illustrated guide. Geneva: WHO; 2020 [cited 18 August 2022]. Available from: <https://www.who.int/publications/i/item/9789240003927>.

³⁴⁰ Pan American Health Organization. Doing what matters in times of stress: an illustrated guide. Adapted Version for the Caribbean. Washington, DC: PAHO; 2021 [cited 18 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/54659>.

³⁴¹ Tausch A, Oliveira e Souza R, Martinez Viciana C, et al. Strengthening mental health responses to COVID-19 in the Americas: a health policy analysis and recommendations. Lancet Regional Health – Americas. 2021;5:100118. Available from: <https://doi.org/10.1016/j.lana.2021.100118>.

³⁴² Pan American Health Organization. PAHO establishes high-level commission on mental health and COVID-19. Washington, DC: PAHO; 2022 [cited 18 August 2022]. Available from: <https://www.paho.org/en/news/6-5-2022-paho-establishes-high-level-commission-mental-health-and-covid-19>.

quality care for persons with or at risk of dementias and their caregivers; human resources training; and research and surveillance.

594. In partnership with Alzheimer’s Disease International, PASB launched an Americas-wide dementia awareness and antistigma campaign on 1 September 2019, in honor of World Alzheimer’s Month. The campaign Let’s Talk About Dementia used social media platforms and reached almost 800,000 people in the Region. PASB also facilitated countries in the Region to join the WHO Global Dementia Observatory, a data and knowledge exchange platform that offers easy access to key data on dementia from Member States across policies, service provision, information, and research domains, and contributed to the finalization of a national dementia plan in the Dominican Republic.

Substance use disorders

595. Substance use has been increasing in the Region, and the COVID-19 pandemic has negatively impacted substance use morbidity, mortality, and access to treatment. PASB strengthened intersectoral cooperation at the regional and country levels in order to improve access to and quality of treatment for substance use disorders. Although the focus of national substance use prevention policies is shifting from a punitive perspective to a more comprehensive approach that includes a public health component, strategies and resources remain skewed toward repressive and judicial interventions.

596. The Bureau collaborated with strategic partners, including WHO, CARICOM, UNODC, Inter-American Drug Abuse Control Commission of the OAS (CICAD OAS), and national drug reduction authorities to strengthen country capacities for the formulation of drug reduction policies with a public health orientation, emphasizing the COVID-19 response and the achievement of SDG Target 3.5 (Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol) through the improvement of accessibility to treatment services.

597. The Bureau participated in the validation of the International Standards for the Treatment of Drug Use Disorders prepared by WHO and UNODC, as well as the standard criteria for accreditation of drug demand reduction programs prepared by the Cooperation Programme between Latin America, Caribbean and the European Union on Drugs Policies. As a result, the Bureau was particularly well positioned to support countries in implementing these standards and to be seen as a key actor in the reorientation of current drug policies toward a more comprehensive, balanced, and integrated approach.

598. The Bureau renewed its memorandum of understanding with CICAD OAS, establishing specific projects that benefited ministries of health, national drug control commissions, and CSOs in several Member States, aiming to improve access to, and the quality of, treatment for substance use disorders in drug treatment facilities operated by both public sector agencies and NGOs. In collaboration with the Cooperation Programme between Latin America, Caribbean and the European Union on Drugs Policies, PASB coordinated the regional field test—carried out in Brazil, Chile, and Mexico—to inform the March 2020 revision of the International Standards for the Treatment of Drug Use Disorders. The Bureau assisted countries, including the Plurinational

State of Bolivia, Dominican Republic, and Panama, to validate quality standards for treatment programs and develop a road map for the establishment of program accreditation systems. The Bureau also collaborated with civil society networks in the Americas—the Ibero-American Network of NGOs Working in the Fields of Drugs and Other Addictions, and the Latin American Federation of Therapeutic Communities—to promote good practices, human rights protection, and related approaches based on the social determinants of health.

599. With the support of the Bureau of International Narcotics and Law Enforcement Affairs at the U.S. State Department, a joint PASB-CICAD OAS program to promote universal health for substance use disorders is being implemented in eight countries—Colombia, Costa Rica, Dominican Republic, Ecuador, Guyana, Jamaica, Panama, and Paraguay (through Paraguay’s participation in the WHO Special Initiative for Mental Health)—in partnership with the CICAD OAS Expert Group on Drug Demand Reduction. CICAD OAS, PASB, and the Ajuntament de València (Spain) organized a series of webinars on topics related to substance use disorders and COVID-19, which took place in June, November, and December 2020, and in April and June 2021.

600. The Bureau provided support to Aruba, Curaçao, and Sint Maarten, through a WHO-Netherlands grant, addressing the reorganization of mental health and substance use treatment services, treatment quality assurance, screening, and brief interventions for medium- to high-risk populations. The development of a training program aimed to enhance country capacity to provide effective responses to substance use-related problems was initiated in Costa Rica, in collaboration with the Ministry of Health, Institute on Alcoholism and Drug Dependence, and Costa Rican Social Security Fund.

Other areas of noncommunicable diseases

Chronic kidney disease of nontraditional causes

601. The Bureau continued its interprogrammatic work on chronic kidney disease of nontraditional causes in Central America,³⁴³ and a progress report examining how Member States are advancing in addressing this priority health issue was presented at the 57th Directing Council in 2019 (Document CD57/INF/10). Affected countries developed integrated responses to increase the capacity of their health services for diagnosis and appropriate care and management of the disorder, and increased their surveillance capacity by integrating epidemiological, environmental, and occupational surveillance strategies.

Surveillance of noncommunicable diseases

602. The Bureau strengthened NCD surveillance systems across several Member States, with interventions that included implementation of the Global School-Based Student Health Survey, which generates key information on risk behaviors of adolescents aged 13-17 years; progress in implementing the Pan American STEPS survey on NCDs and their risk factors; and completion of

³⁴³ Pan American Health Organization. Epidemic of chronic kidney disease in agricultural communities in Central America: case definitions, methodological basis, and approaches for public health surveillance. Washington, DC: PAHO; 2017 [cited 18 August 2022]. Available from: <http://iris.paho.org/xmlui/handle/123456789/34132>.

the NCD Country Capacity Survey, the results of which were incorporated into the WHO NCD country profiles. The profiles include data on NCD mortality, risk factor prevalence, capacity of national systems to prevent and control NCDs, and progress toward national targets related to the WHO NCD Global Monitoring Framework, based on the nine global targets to be achieved by 2025. These and related data were reflected in the WHO NCD Progress Monitor, from which, for 2022, the Bureau extracted data to produce a Scorecard for the Americas.³⁴⁴ The results allowed NCD country program managers to compare their national NCD status with that of other countries in the Region and identify priority areas for action.

603. ENLACE,³⁴⁵ the PAHO data portal on NCDs, mental health, injuries, and risk factors, was unveiled in January 2022. The portal provides data on a comprehensive set of indicators by age, sex, country, and year, across topics on the disease burden from NCDs, MNS disorders, and violence and injuries; common risk factors for NCDs; and malnutrition in all its forms. The portal also features topics and tools related to monitoring the implementation of NCD policies, strategies, and action plans.

Road safety

604. In support of the WHO Global Road Safety Report 2018,³⁴⁶ the Bureau undertook data collection and analysis on the key legislative and public health interventions in the Americas, and their impact, and published the fourth regional report on road safety in 2019.³⁴⁷ The most vulnerable road users—pedestrians, motorcyclists, and cyclists—had the highest rates of road traffic deaths and injuries, and deaths of motorcycle users in particular increased over the previous three years. Overall, road traffic deaths remained the second-leading cause of death for young adults aged 15-29 years old in the Region of the Americas, highlighting the need to prioritize road safety on the adolescent health agenda. The regional report showed that some aspects of road safety management, legislation, and postcrash care had improved in several countries, and it provided an important tool to monitor progress and stimulate Member States to improve road safety, through the identification of key gaps and opportunities. The Bureau also published other guidance and information documents related to road safety.³⁴⁸

605. The Latin American Road Safety Parliamentary Network was launched in Paraguay in September 2019, with the participation of parliamentarians from the Central American and Andean Parliaments. The aim of this network, which has PASB as its technical secretariat, was to promote road safety and reduce injuries and deaths due to traffic collisions through exchange of information

³⁴⁴ Pan American Health Organization. Noncommunicable diseases progress monitor 2022: scorecard for the Americas. Washington, DC: PAHO; 2022 [cited 18 August 2022]. Available from: <https://www.paho.org/en/documents/noncommunicable-diseases-progress-monitor-2022-scorecard-americas>.

³⁴⁵ Available from: <https://www.paho.org/en/enlace>.

³⁴⁶ World Health Organization. Global status report on road safety 2018. Geneva: WHO; 2018 [cited 18 August 2022]. Available from: https://www.who.int/violence_injury_prevention/road_safety_status/2018/en/.

³⁴⁷ Pan American Health Organization. Status of road safety in the Americas. Washington, DC: PAHO; 2019 [cited 18 August 2022]. Available from: <https://www.paho.org/en/documents/status-road-safety-region-americas>.

³⁴⁸ Pan American Health Organization. Good road safety practices in the Americas: action-oriented data and stories. Washington, DC: PAHO; 2019 [cited 18 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/51353>.

and best practices among the participating parliaments; harmonization of legislation and public policies; and implementation of intersectoral measures.

606. In September 2020, the United Nations proclaimed 2021-2030 a new Decade of Action for Road Safety,³⁴⁹ and WHO, in collaboration with the United Nations Regional Commissions, the United Nations Road Safety Collaboration, and other partners, released the Global Plan for the Decade of Action for Road Safety 2021-2030 in October 2021.³⁵⁰ The global plan aims to reduce traffic deaths and injuries by 50% over the stated period using a Safe System approach, and the Bureau promoted a high-level policy dialogue among key ministries involved in safe mobility interventions, parliamentarians, and CSO representatives at the local and regional levels to implement the plan. As a result, various countries, including Argentina, Brazil, Colombia, Dominican Republic, and Jamaica, have launched national strategies to adopt the global plan, and Colombia and Mexico improved their road safety legislation.

Disabilities and rehabilitation

607. The Bureau's technical cooperation in the area of disabilities and rehabilitation addressed health equity for persons with disabilities, especially given the health inequalities they faced during the COVID-19 pandemic and their being disproportionately impacted by the crisis. There were higher death rates in this group than among persons without disabilities, as many people living in congregate settings, such as older persons' homes or psychiatric facilities, are persons with disabilities. Despite increased attention to disability inclusion during the pandemic, this population group has been left behind in terms of public health programming, and more needs to be done to ensure that all health services are inclusive for persons with disabilities, who comprise about 12%-15% of the population of the Americas.

608. Engaging with persons with disabilities themselves is a crucial strategy to build more disability-inclusive health programming. At the regional level, PASB established a regular meeting forum for the community of persons with disabilities to interact with the Bureau's technical advisors, facilitate dialogue, identify the community's high-priority issues, and develop solutions, particularly related to the pandemic. This innovative approach evolved into a more permanent community of practice on disabilities, which seeks meaningful engagement and partnerships with persons with disabilities to address emergency preparedness, their rights, and the establishment of equitable, accessible, and inclusive health systems, developing guidance and providing training to health planners and providers.

609. In addressing this often-neglected area, several countries in the Region took action to improve rehabilitation services. The Plurinational State of Bolivia, Costa Rica, and Dominican Republic initiated redevelopment of their disability certification processes; the Plurinational State of Bolivia and El Salvador initiated assessment of their national rehabilitation system; Chile and

³⁴⁹ Available from: <https://www.who.int/teams/social-determinants-of-health/safety-and-mobility/decade-of-action-for-road-safety-2021-2030>.

³⁵⁰ World Health Organization. Global Plan for the Decade of Action for Road Safety 2021-2030. Geneva: WHO; 2021 [cited 18 August 2022]. Available from: <https://www.who.int/publications/m/item/global-plan-for-the-decade-of-action-for-road-safety-2021-2030>.

Guyana initiated updating of their national rehabilitation plans based on national assessments; Antigua and Barbuda and Grenada completed needs assessment for persons with disabilities; and Uruguay improved accessibility and quality of health care for persons with disabilities as part of a multi-United Nations agency project.

610. In January 2020, PASB was selected to lead a major multi-stakeholder disability initiative in Trinidad and Tobago, aimed at strengthening collaboration among United Nations agencies, organizations of persons with disabilities, and government ministries in order to advance efforts toward disability-inclusive societies. This project added to ongoing projects focused on disability data and sexual and reproductive health in the Plurinational State of Bolivia, and independent living and wheelchair training in Dominican Republic. The Bureau also initiated partnerships with other United Nations agencies in Argentina and Panama to undertake a detailed national situational analysis of disability across all sectors, including health.

611. Rehabilitation services were one of the most heavily disrupted health services as a result of the pandemic, with resulting gaps in these important services to support people in their post-COVID-19 recovery. In response, PASB developed a number of webinars and materials to provide rehabilitation professionals with up-to-date information on post-COVID-19 management and recovery. Aruba, the Plurinational State of Bolivia, and El Salvador undertook national rehabilitation assessments using a new rehabilitation need estimator tool³⁵¹ developed by WHO and the Institute for Health Metrics and Evaluation (IHME), with PASB input, to approximate the potential need for rehabilitation within a population. The evaluations also incorporated a review of potential post-COVID-19-condition rehabilitation needs.

612. Assistive technology services provide vital products such as wheelchairs, hearing aids, eyeglasses, and communication devices. The Plurinational State of Bolivia and Dominican Republic conducted the first two national assessments of assistive technology services in the Region, the results of which provided a platform to better identify and address bottlenecks, quality issues, system gaps, and population needs, in order to ensure that people who need assistive products have access to them.

613. The Bureau improved its own approaches toward accessibility in order to make information and services more available and appropriate for persons with disabilities, including using sign interpreters and closed captioning in a number of regional webinars and PASB videos; developing braille, audio, and easy-read materials; and ensuring that the PAHO website meets accessibility standards. PASB launched its web page on disability³⁵² on the International Day of Persons with Disabilities in December 2020, and the Bureau facilitated an internal online training series for its personnel to improve organizational knowledge and competency related to disability and inclusion.

³⁵¹ Institute for Health Metrics and Evaluation. WHO rehabilitation need estimator. Seattle: University of Washington; 2022 [cited 18 August 2022]. Available from: <https://vizhub.healthdata.org/rehabilitation>.

³⁵² Available from: <https://www.paho.org/en/topics/disability>.

COVID-19 Spotlight: Protecting persons living with noncommunicable diseases

614. As evidence emerged that persons living with NCDs were at increased risk of severe disease, complications, and death due to COVID-19, the Bureau produced and disseminated a series of questions and answers for persons living with NCDs, and fact sheets for health workers on caring for persons living with NCDs during COVID-19. The materials were disseminated to Member States, on social media, and through PAHO's NCDs and COVID-19 web page.

615. In collaboration with the Yale Institute for Global Health and the Eastern Caribbean Health Outcomes Research Network, PASB assessed and piloted the WHO NCDs kit (NCDK),³⁵³ in the Caribbean. The NCDK supports treatment for persons living with NCDs in emergency settings and provides essential NCD medicines and diagnostic supplies. The pilot aimed to understand the challenges of managing persons living with NCDs after natural events and emergencies that disrupt their care; examine current approaches to addressing their needs in the setting of a disaster; and determine the feasibility and acceptability of using NCDKs to address those challenges. The Caribbean pilot identified five important themes: *a)* access to professional advice and medication; *b)* addressing the mental health needs of survivors; *c)* integration of NCD management and disaster preparedness and response; *d)* identification of unique opportunities to integrate NCD care into the COVID-19 response; and *e)* acceptability of the NCDKs, with due consideration of logistics for their storage, distribution, and use.

616. In July 2020, WHO inaugurated Florence, the first digital health worker to support tobacco cessation,³⁵⁴ an artificial intelligence tool that provides interactive support for those who want to quit smoking, given the increased relevance of smoking cessation during the COVID-19 pandemic. In November 2021, PASB revealed Pahola, the first digital health worker to specialize in alcohol and health,³⁵⁵ also reliant on artificial intelligence, to provide information on the risks of alcohol consumption, identify treatment resources, and suggest courses of action for “risky drinkers.”

617. The Bureau worked with partners to identify, prevent, mitigate, and manage conflict of interest issues, especially in the small societies of the Caribbean, in collaboration with the HCC. Some unhealthy commodity industries used the pandemic as an opportunity to present themselves as socially responsible by donating protective and medical equipment, along with their unhealthy products. The Bureau supported Member States to improve nutrition standards for foods provided during emergency situations; provided guidance for reduced consumption of ultra-processed food products; and advocated for increased availability of minimally processed foods. The Bureau developed communication messages aimed at health professionals and the general public on

³⁵³ World Health Organization. Non communicable diseases kit (NCDK) 2016. Geneva: WHO; 2016 [cited 18 August 2022]. Available from: <https://www.who.int/emergencies/emergency-health-kits/non-communicable-diseases-kit-2016>.

³⁵⁴ World Health Organization. Meet Florence, she will help you quit tobacco and inform you about COVID-19 vaccines. Geneva: WHO; 2022 [cited 18 August 2022]. Available from: <https://www.who.int/campaigns/Florence#>.

³⁵⁵ Pan American Health Organization. Launch – meet Pahola: PAHO's first digital health specialist on alcohol use. Washington, DC: PAHO; 2021 [cited 18 August 2022]. Available from: <https://www.paho.org/en/events/launch-meet-pahola-pahos-first-digital-health-specialist-alcohol-use>.

emerging evidence on intersections between COVID-19 and tobacco use, diet, breastfeeding, and obesity.

618. With regard to MHPSS, one of the Bureau's videos, titled 6 Recommendations for Dealing with Stress during the COVID-19 Pandemic,³⁵⁶ was well-received, and amassed millions of views.

³⁵⁶ Pan American Health Organization. 6 recommendations for dealing with stress during the COVID-19 pandemic. Washington, DC: PAHO; 2020 [cited 18 August 2022]. Available from: <https://www.youtube.com/watch?v=h4tsN7InkPM>.

7. UTILIZING EVIDENCE AND INTELLIGENCE FOR ACTION IN HEALTH

619. Timely collection, analysis, disaggregation, management, and reporting of quality health and health-related data are essential for the development, monitoring, and evaluation of evidence-based policies and programs that address health and its social, economic, commercial, political, and other determinants. Quality information on health is also critical to ensure accountability of governments and other key stakeholders in advancing equity, the realization of human rights, and sustainable national development that leaves no one behind. Strengthening mechanisms to measure and track inequities and progress toward the SDGs and their targets is a priority for the Bureau.

620. In March 2019, PASB convened the regional meeting *The Sustainable Development Goals in Health in the Americas: Challenges for the Monitoring of Equity and Proposals for Progress* to contribute to the establishment of an Organization-wide, equity-focused framework for tracking regional and country-level progress toward the SHAA2030 and SDG 3 Targets. Potential methodologies for measuring inequalities related to the 27 SDG 3 Indicators were examined, and the meeting produced a map linking each indicator with routine data collection mechanisms to determine baseline and target data. Participants in the meeting included personnel from across PASB's technical departments and several PAHO/WHO country offices, as well as experts from WHO Headquarters, the WHO Regional Office for Europe, the Federal University of Pelotas in Brazil, IHME, and the Johns Hopkins University Bloomberg School of Public Health.

621. During the COVID-19 pandemic, existing and newly developed digital solutions have emerged as cornerstones of UAH, UHC, and continuity of care, particularly through the implementation of telemedicine solutions, and enhanced the learning environment for digital transformation. Digital transformation encompasses more than automating processes or procuring software and hardware. It entails the positioning of public health in the digital era, aims to support the convergence of public health interventions and digital systems toward a more interconnected and digitally interdependent society, and has the potential to contribute to greater efficiencies, the provision of quality and timely health data, information, and knowledge for health action, and reductions in health inequalities. PASB has played a very important role in providing timely evidence on COVID-19 to bridge gaps among science, policy, practice, and politics in the response.

622. The disaggregation of data by age, sex, ethnicity, gender, geographical location, migration status, and other stratifiers allows the identification of inequities and the development of interventions to reduce them. Surveillance systems that operate at subnational and national levels are essential to detect emerging and reemerging diseases with epidemic potential. The reporting of up-to-date health information and its dissemination in appropriate format, using appropriate communication channels to reach a wide range of stakeholders—including policymakers, the public, and development partners—are critical to inform advocacy, planning, programming, and adjustments in interventions to achieve priority health objectives. Technical cooperation to strengthen Information Systems for Health (IS4H), information and knowledge management,

communication for health, and research remained among the Bureau's top technical cooperation priorities, even more so during the pandemic.

Strengthening information systems and digital transformation for health

623. The Bureau strengthened and enhanced the innovative framework for IS4H, which PASB, in conjunction with WHO, had developed and launched in 2016. Using a strategic approach based on universal health, the framework aimed to enable data collection from both national and subnational levels, improve countries' decision- and policy-making mechanisms, take advantage of the most cost-effective information and communication tools, and provide a comprehensive road map to adopt and implement standards for interoperable and interconnected systems. The framework also aimed to enable information and communication technology solutions and the identification of best practices in vital and health statistics, and in data and information management.

624. The Latin American and Caribbean Network for Strengthening Health Information Systems leveraged its alliances and partners throughout the Americas to ensure that IS4H-related technical information and webinars were disseminated free of charge to network members and other audiences. This action provided Member States with a medium for sharing successful practices and receiving information on PASB-recommended methodologies, tools, policies, and strategies related to IS4H. The Bureau also collaborated with the CARICOM-supported IS4H Technical Working Group to produce a road map for improving the Caribbean subregion's health information systems, as foreseen in the 2016 CARICOM-PAHO high-level meeting on IS4H.³⁵⁷

625. The Bureau created an IS4H portal³⁵⁸ and disseminated a call for the submission of IS4H proposals to PAHO Member States. The call closed in November 2018, attracted 172 proposals, and resulted in the award of grants to 37 entities from 27 countries and territories³⁵⁹ to implement projects in 2019. The projects, aimed at making information systems more interoperable and interconnected, addressed issues ranging from cancer registration, improvements in vector control, and the digitization of health records to the establishment of a telemedicine community of practice, development of a solar-powered, web-based patient information management system, and creation of a mobile application to improve communicable disease surveillance. As of January 2022, all projects had been implemented with a high degree of performance and achievements, laying solid foundations in information systems and digital health to face the pandemic.³⁶⁰

³⁵⁷ Pan American Health Organization. High-level meeting on information systems for health: advancing public health in the Caribbean region, 7-8 November 2016, Kingston, Jamaica. Meeting report. Washington, DC: PAHO; 2017 [cited 18 August 2022]. Available from: <https://bit.ly/2YIY8HZ>.

³⁵⁸ Available from: <https://www3.paho.org/ish/index.php/en/>.

³⁵⁹ Argentina, Antigua and Barbuda, Bermuda, Bolivia (Plurinational State of), Brazil, British Virgin Islands, Chile, Colombia, Costa Rica, Cuba, Curaçao, Dominican Republic, Ecuador, Guatemala, Guyana, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Suriname, Saint Vincent and Grenadines, Trinidad and Tobago, Uruguay, and Venezuela (Bolivarian Republic of).

³⁶⁰ Pan American Health Organization. IS4H stories. Washington, DC: PAHO; 2022 [cited 18 August 2022]. Available from: <https://www3.paho.org/ish/index.php/en/all-stories/>.

626. The Caribbean subregional high-level meeting on IS4H was replicated in the Central American and South American subregions, and, informed by all the discussions, PASB developed the regional Plan of Action for Strengthening Information Systems for Health 2019-2023 (Document CD57/9, Rev. 1). The plan of action provides an improved framework for further interventions in this critical public health area, recognizing the need to encompass advances and innovations in digital health. The strategic lines of action of the plan of action comprise: *a)* information system management and governance; *b)* data management and IT; *c)* information and knowledge management; and *d)* innovation, integration, and convergence.

627. The Bureau enhanced its deployment of a tool that the Bureau developed in 2017 to establish the maturity level (on a scale of from 1 to 5, where 1 is low and 5 is high) of health information systems in PAHO Member States, based on defined strategic areas. The Bureau worked with countries and territories in its application and the formulation of recommendations for the development of national road maps to improve their IS4H. Results of the IS4H maturity assessment obtained in 2020 showed that 32³⁶¹ (65%) of the 49 assessed countries and territories were progressing to levels 3 to 5 within the four strategic areas of: *a)* data management and IT, *b)* management and governance, *c)* knowledge management and sharing, and *d)* innovation.

628. The Bureau collaborated with IDB to use the IS4H maturity assessment tool to direct investments for information systems and digital health, and that partnership contributed to loans for eight Member States—Bahamas, Belize, Ecuador, Guyana, Honduras, Jamaica, Paraguay, and Suriname—to invest in IS4H or to conduct IS4H assessments as preconditions for further investments.

629. In 2021, PASB published the results of a review of the IS4H initiative in the Caribbean, including an IS4H maturity assessment of CARICOM Member Countries, identifying lessons learned and areas for enhanced action,³⁶² and in February 2021 the Bureau convened a virtual regional conference to reflect on the achievements and lessons learned from the IS4H initiative,³⁶³ especially in the context of the COVID-19 pandemic. The approximately 150 participants in the conference, which was supported by AECID and USAID, recognized the importance of working together with a common goal. They endorsed the eight guiding principles presented by the Bureau for the digital transformation of the health sector,³⁶⁴ which are aligned with the United Nations digital transformation principles: *a)* universal connectivity; *b)* digital public health goods;

³⁶¹ Argentina, Bahamas, Barbados, Belize, Bermuda, Bolivia (Plurinational State of), Brazil, British Virgin Islands, Canada, Chile, Colombia, Costa Rica, Cuba, Curaçao, Dominican Republic, Ecuador, El Salvador, French Guiana, Guatemala, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, Saint Lucia, Trinidad and Tobago, United States of America, Uruguay, and Venezuela (Bolivarian Republic of).

³⁶² Pan American Health Organization. Information systems for health: lessons learned and after-action review of the implementation process in the Caribbean, 2016-2019. Washington, DC: PAHO; 2021 [cited 18 August 2022]. Available from: https://iris.paho.org/bitstream/handle/10665.2/54033/9789275123607_eng.pdf.

³⁶³ Pan American Health Organization. From the evolution of information systems for health to the digital transformation of the health sector. IS4H conference report. Washington, DC: PAHO; 2021 [cited 18 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/53364>.

³⁶⁴ Pan American Health Organization. Eight guiding principles of digital transformation of the health sector. A call to Pan American action. Washington, DC: PAHO; 2021. Available from: <https://iris.paho.org/handle/10665.2/54256>.

c) inclusive digital health; *d)* interoperability; *e)* human rights; *f)* artificial intelligence; *g)* information security; and *h)* public health architecture, and related actions. The conference also saw the launch of a call to action to position the health sector in the vanguard of digital transformation in public health in the Region.

630. In 2021, in actions that transformed the Americas into the first WHO region to accelerate innovative processes for the digital transformation of the health sector, the 59th PAHO Directing Council approved the regional Roadmap for the Digital Transformation of the Health Sector in the Region of the Americas (Document CD59/6), and the Policy on the Application of Data Science in Public Health Using Artificial Intelligence and Other Emerging Technologies (Document CD59/7).

631. The road map proposed actions to guide countries in the following: *a)* alignment with United Nations digital transformation; *b)* promotion of policy action; *c)* strategic partnerships and knowledge-sharing; and *d)* capacity development at all levels. The policy identified complementary areas for action, comprising: *a)* priority actions—regulatory frameworks, data governance, data disaggregation, ethical use of data, ethical use of artificial intelligence and other emerging technologies, emerging technologies, big data analytics, and renewed health analysis; *b)* promotion of policy action and stewardship; *c)* strategic partnerships for open and secure data-sharing and artificial intelligence adoption; and *d)* capacity development at all levels.

632. The Bureau developed a comprehensive digital transformation toolkit that is being applied in 19 countries³⁶⁵ as part of its technical cooperation in this area, and PASB's efforts contributed to the development of the political declaration on digital transformation of the Summit of the Americas and the G20 discussions on digital health, both in 2022.

633. Vital registration data comprise important components of IS4H, but they are often inaccurate and incomplete. In continued implementation of the PAHO Plan of Action for the Strengthening of Vital Statistics 2017-2022 (Document CSP29/9), the Bureau's technical cooperation addressed its four strategic lines of action: *a)* strengthening vital statistics systems; *b)* modernizing vital statistics processes with the support of information and communications technologies; *c)* strengthening the capacity for management and analysis of vital statistics data; and *d)* strengthening and sharing best practices related to vital statistics.

634. The Bureau organized regional training and virtual courses for coders working in vital registration in Latin American countries, including for the conduct of intentional searches for maternal deaths among all sources of death registration within countries—that is, an audit of death certificates. Aiming to identify maternal deaths that had not been originally included in the total count, the training used the methodology for the Deliberate Search and Reclassification of Maternal Deaths developed by the Mexican Center for the Classification of Diseases, which is a WHO Collaborating Centre for the Family of International Classifications. Regional training was conducted for professionals from ministries of health and national statistics offices in a methodology used by the United Nations Maternal Mortality Estimation Inter-agency Group to

³⁶⁵ Argentina, Bahamas, Belize, Bolivia (Plurinational State of), Brazil, Chile, Cuba, Dominica, Ecuador, El Salvador, Haiti, Honduras, Jamaica, Mexico, Paraguay, Peru, Suriname, Trinidad and Tobago, and Uruguay.

estimate maternal mortality and by the United Nations Inter-agency Group for Child Mortality Estimates to measure stillbirths and child mortality. Following the training, PASB engaged national teams from selected countries to identify strategies for strengthening the quality and coverage of data to better inform government interventions and United Nations estimates.

635. The Bureau, in collaboration with UNICEF, Argentina’s Ministry of Health, Mexican Center for the Classification of Diseases, United Nations Maternal Mortality Estimation Inter-agency Group, and USAID, coordinated a series of virtual and in-person sessions to build health professionals’ capacity to analyze vital statistics data and address data quality challenges, with a special emphasis on mortality-related SDG indicators; worked with selected countries to enhance health professionals’ knowledge of the methodology for estimating and analyzing infant, neonatal, and maternal mortality at national and subnational levels; and trained professionals from ministries of health and national statistics offices in several Member States to establish targets and analyze subnational data to determine social inequities related to SHAA2030 and SDG indicators.

636. With the impending adoption of the 11th Revision of the International Classification of Diseases (ICD-11) in 2022, PASB contributed to establishing preparatory mechanisms in 12 Member States³⁶⁶ through ICD-11 pilot testing and road map development.

Monitoring for health equity

637. While the collection, analysis, and reporting of data are crucial, it is also critical to assess their impact on public health interventions and progress to UAH and UHC. In May 2021 the Bureau published the PAHO Monitoring Framework for Universal Health in the Americas,³⁶⁷ with the aim of supporting analysis of progress and performance of public policies, generation of evidence and decision-making to transform or strengthen health systems, and levels of integration of these interventions into national processes of planning, monitoring, evaluation, and accountability. The global health data assessment SCORE (Survey, Count, Optimize, Review, Enable) was completed for all PAHO Member States, and the results assisted countries to identify gaps in tracking progress toward the health and health-related SDGs, universal health, the objectives of the PAHO Plan of Action for the Strengthening of Vital Statistics 2017-2022, and goals related to health emergencies and other national and subnational priorities.

638. The Bureau monitored progress toward objectives and indicators from the PAHO Strategic Plan 2020-2025, SHAA2030, WHO Thirteenth General Programme of Work, and SDG 3, in collaboration with Member States and WHO, incorporating quantitative and qualitative methodologies that allow tracking of regional advances not only toward those objectives but also toward reducing inequalities within the Region.

639. The Bureau, in collaboration with USAID, developed and implemented methods for monitoring SDG 3 indicators and targets at regional, subregional, and national levels, with strong

³⁶⁶ Argentina, Bahamas, Belize, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, Jamaica, Mexico, Panama, and Trinidad and Tobago.

³⁶⁷ Pan American Health Organization. Monitoring framework for universal health in the Americas. Washington, DC: PAHO; 2021 [cited 19 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/53918>.

emphasis on monitoring the social inequalities in the SDG 3 indicators, through the project Monitoring SDG 3 Indicators and Addressing their Inequalities. The Bureau established an SDG 3 portal³⁶⁸ that provides information on monitoring and analysis of the indicators, evidence for action, access to data, and resources and news. PASB also partnered with the Robert Wood Johnson Foundation to define pro-equity drivers and identify corresponding data and information within the Region. This initiative aims to contribute to the reduction of health inequities by systematizing regional health inequality drivers, standardizing health and “nonhealth” indicators that have an impact on health inequities, and increasing visibility, knowledge, and competency around health equity metrics.

640. The Bureau continued its coordination of the Metrics and Monitoring Working Group of EWEC-LAC. This working group is dedicated to ensuring that the measurement and monitoring of social inequalities in health are included in countries’ systematic health analyses, and it facilitates the use of disaggregated data at subnational levels to identify the most vulnerable social groups. The working group has catalyzed regional and country efforts that have led to the establishment of country teams responsible for health inequality measurement and monitoring; development of a toolkit to measure and respond to health inequities; and creation of guides and action items for reducing inequality and improving health.

641. The Bureau also continued its engagement with the Social Innovation in Health Initiative,³⁶⁹ which demonstrated that in those places where local innovations were supported, scaled up, and researched, the innovations became integral to the pandemic response and enhanced local health systems. These social and technological innovations, coupled with research, brought impactful solutions that included buy-in from local communities.

Promoting research for health equity

642. The COVID-19 pandemic sparked renewed awareness of the importance of research and comprehensive reports on access and coverage, demonstrated by an increase in research studies and in national and regional analyses and reports on health conditions and health determinants, including the exploration of barriers to access and their causes.

643. The Bureau strengthened institutional capacity for research at the national level through the Improving Program Implementation through Embedded Research initiative. The initiative aimed to document systemic issues that contribute to suboptimal implementation of health interventions and failures in health systems arrangements and performance. It provided evidence for corrective strategies through innovative methods of developing science and engaging decisionmakers in research, and emphasized the benefits of embedded implementation research to support health policy, programs, and systems.

644. Key results of the initiative in several countries, to date, include the establishment of national research priorities; creation of mechanisms for evidence-informed, rapid-response

³⁶⁸ Available from: <https://www3.paho.org/ods3/en/home/>.

³⁶⁹ Special Programme for Research and Training in Tropical Diseases. Social Innovation in Health Initiative. TDR; 2022 [cited 19 August 2022]. Available from: <https://socialinnovationinhealth.org/>.

decision-making; and strengthening of evidence-for-policy mechanisms³⁷⁰ to support decision-making. In 2021, a special issue of the PAJPH was published on embedded implementation research for the SDGs,³⁷¹ focusing on the institutional-level changes required to improve health, programs, policies, and systems in order to contribute to achievement of the SDGs. Partners in this work included INSP, Alliance for Health Policy and Systems Research, and Special Program for Research and Training in Tropical Diseases (TDR).

645. The Bureau monitored and assessed national policies and agendas on research for health, and partnered with TDR to strengthen countries' capacity to conduct implementation research, in the framework of the TDR/PAHO Small Grants Program. Five implementation research projects were approved and funded for TB, malaria, and leishmaniasis, and the Bureau implemented the TDR Structured Operational Research and Training Initiative,³⁷² which aims to improve the capacity of national public health professionals in protocol design and writing, data analysis, scientific writing, and results dissemination.

646. The Bureau partnered with IHME to develop analytic perspectives on key public health issues such as NCDs and AMR, incorporating participants from government and civil society, and initiated the development of methodologies and standardized protocols to address policy questions and guide Member States in their implementation, analysis, and interpretation of findings. PASB and IHME are working with SIDS in the Caribbean to build national capacity to track progress in reducing NCDs through evaluation, production of evidence, and forecasting of progress over time. For AMR, the objectives are to develop tools for modeling AMR-attributable mortality and assess the impact of vaccines on AMR using regional data from the IHME Global Burden of Disease study and well-established AMR surveillance networks.

647. The Bureau advanced the integration of ethics in health, and research ethics systems were strengthened through the development of a new version of ProEthos—a software to improve ethics review of research in human subjects. The software facilitates ethics review committee processes and the development of normative frameworks that align with international ethical guidelines. Ethics review for PAHO-supported research was institutionalized, and proposals submitted to the PAHO Ethics Review Committee increased significantly, with ethics guidance developed in response to various emergencies due to disease outbreaks. The WHO report Making Fair Choices on the Path to Universal Health Coverage,³⁷³ which provides guidance on ethical prioritization in advancing to universal health, also contributed to strengthening of the integration of ethics into public health. The COVID-19 pandemic revealed new ways of advancing coordination between

³⁷⁰ Pan American Health Organization. EVIPnet: evidence-informed policy network. Washington, DC: PAHO; 2013 [cited 19 August 2022]. Available from: <https://www.paho.org/hq/dmdocuments/2013/Evipnet-brochure-English-2013.pdf>.

³⁷¹ Pan American Health Organization. Embedded implementation research for the Sustainable Development Goals. Pan American Journal of Public Health. December 2020;Special issue. Available from: <https://www3.paho.org/journal/en/special-issues/embedded-implementation-research-sustainable-development-goals>.

³⁷² Available from: <https://tdr.who.int/activities/sort-it-operational-research-and-training>.

³⁷³ World Health Organization. Making fair choices on the path to universal health coverage. Final report of the WHO Consultative Group on Equity and Universal Health Coverage. Geneva: WHO; 2014 [cited 19 August 2022]. Available from: http://apps.who.int/iris/bitstream/handle/10665/112671/9789241507158_eng.pdf.

research ethics committees, researchers, and health authorities, and paved the way for systematic exploration of strategies to further improve the ethical governance of research.

Improving dissemination of evidence and knowledge in health

648. PAHO's information products continued to serve as trusted sources of authoritative, scientific, technical information on public health in the Americas, and PASB's technical cooperation enabled evidence-based policy development, decision-making, and planning. The dissemination of evidence-based, accurate information assumed even greater importance in light of the infodemic of misinformation and disinformation that accompanied the COVID-19 pandemic.

649. The use of IT proved essential to promote access to and use of up-to-date evidence to support better decisions, and to manage the global infodemic. The Bureau reinforced its institutional capacity to process, index, and monitor COVID-19-related documents and guidance, and was able to promptly respond to WHO's request to develop a search web interface for the dissemination of global literature on COVID-19—the WHO COVID-19 database was made available 10 days after receipt of the request. After one year of operation and daily updates, the WHO COVID-19 database had over 573,000 documents, with more than 2.9 million visits and more than 6.5 million page views from 237 countries and territories.

650. The Bureau promoted access to the PAHO VHL and assisted countries in the institutionalization of mechanisms to synthesize evidence and develop evidence-informed guidelines and policies; kept the PASB database updated with COVID-19 guidance and the latest research in the Americas; and developed EVID@Easy,³⁷⁴ a guided evidence search tool in the VHL. Available since March 2021, the EVID@Easy tool innovates the information retrieval process in the VHL by using search criteria related to contexts and health issues, according to the user's needs, in a simple and intuitive way. EVID@Easy uses the intelligence behind numerous predefined search strategies in VHL information sources, and currently includes 130 health topics that can be retrieved based on the main types of studies and research methodologies.

651. The Bureau collaborated with VHL networks to strengthen local capacities to access and use health information in efforts to reduce the gap between scientific knowledge and health practice, and to inform decision-making. Interventions included training for information professionals and creation of a network of professionals specialized in bibliographic search to develop knowledge translation services and products such as windows of knowledge, quick answers, and systematic search for evidence. The Bureau organized on-site training exercises on information access and scientific communication in partnership with ministries of health, and disseminated methodologies and tools to support countries' implementation of policies and programs on knowledge management. PASB also launched a self-learning course Scholarly Communication in Health Sciences in November 2019, hosted by the PAHO VCPH, aiming to promote the publication of research results in countries in Latin America and the Caribbean. Of

³⁷⁴ Pan American Health Organization. What is EVID@Easy? Washington, DC: PAHO; 2022 [cited 19 August 2022]. Available from: <https://bvsalud.org/evideasy/en/>.

the professionals who took the course, nurses ranked first in number, followed by general practitioners and specialist physicians.

652. In early 2021 the Bureau created the VHL maturity instrument, based on its IS4H maturity assessment tool, to enable countries' self-assessment of the maturity level of their VHL. PASB developed the Action Plan for the Strengthening of the VHL Network 2021³⁷⁵ and worked with countries to implement activities, based on the maturity level of each VHL, for each of four pillars: governance, contents, communication and services, and systems.

653. The international database of GRADE³⁷⁶ guidelines (BIGG),³⁷⁷ a database of new evidence, was established in 2018. BIGG gathers public health and practice evidence-informed guidelines produced by WHO, PAHO, government institutions, and national and international scientific associations in several countries that meet PAHO/WHO-recommended standards. BIGG was integrated into the PAHO VHL, with indexed guidelines and links to the full text, offering high-quality, evidence-informed recommendations for public health and its practice. Also in 2018, a new interoperability framework was developed that facilitates the continuous updating of the Global Index Medicus with technical and scientific literature from across WHO regions.

654. In addition to keeping BIGG updated in order to facilitate adaptation of guidelines by ministries of health and other partners, the Bureau maintained the database of evidence-informed policies³⁷⁸ that have been developed in the Region. PASB organized several virtual training sessions on the generation and use of scientific evidence in partnership with ministries of health, and disseminated methodologies and tools to support countries' implementation of policies and programs on knowledge translation and evidence. A virtual training course on evidence and guideline development was made available in English and Spanish to all Member States through the PAHO VCPH.

655. Capacity-building, best practices, and innovation are centerpieces of the knowledge-sharing process, and the Bureau's technical cooperation in these areas took place with the contribution of the PAHO/WHO Collaborating Centres in the Americas, including sharing of information, evidence, and knowledge related to the COVID-19 pandemic and responses to it. In the period 2020-2021, 29 new PAHO/WHO Collaborating Centres were designated in the Americas, bringing the number of active centers in the Region to 180, as of 27 June 2022.³⁷⁹ These Collaborating Centers continued to make important contributions to PASB's technical cooperation by generating knowledge and evidence related to the Organization's programmatic areas and Member States' health priorities. In April 2021, the Bureau organized a regional webinar

³⁷⁵ Pan American Health Organization. Action Plan for the Strengthening of the VHL Network 2021. Washington, DC: PAHO; 2021 [cited 19 August 2022]. Available in Spanish from: <http://red.bvsalud.org/modelo-bvs/es/fortalecimiento-de-la-red-bvs-alc-plan-accion-2021/>.

³⁷⁶ GRADE = Grading of Recommendations Assessment, Development and Evaluation.

³⁷⁷ Pan American Health Organization. International database of GRADE guidelines. Washington, DC: PAHO; 2022 [cited 19 August 2022]. Available from: <https://sites.bvsalud.org/bigge/en/biblio/>.

³⁷⁸ Pan American Health Organization. Evidence-informed policies. Washington, DC: PAHO; 2022 [cited 19 August 2022]. Available from: <https://sites.bvsalud.org/pie/en/biblio>.

³⁷⁹ Pan American Health Organization. PAHO/WHO Collaborating Centres. Washington, DC: PAHO; 2022 [cited 19 August 2022]. Available from: <https://www.paho.org/en/pahowho-collaborating-centres>.

for the Collaborating Centres, gathering their representatives for a two-day meeting with PASB personnel to share presentations and round tables aimed at reengaging and strengthening collaboration. More than 400 participants shared regional and global priorities and mandates; discussed the current scenario in public health, especially in light of the COVID-19 pandemic; and showcased the contribution of PASB-Collaborating Centre joint work to achievement of the SDGs. The meeting generated over 185 recommendations to inform future interactive events, develop synergies in technical areas, and share innovative practices.

656. The Bureau took advantage of advances in information and communication technology to provide health information, publish scientific manuscripts, and improve health literacy, including through the PAJPH. The PAJPH coordinated special issues and supplements on HRH, SDG 3, and equity in health, many with external partners, to signal the approach of its centenary of uninterrupted publication of peer-reviewed scientific information, and gave priority to articles from PAHO Key Countries. Topics, including AMR, TB, equity, and nutrition and information, were jointly coordinated with strategic partners including FAO, FIU, and the Health Equity Network of the Americas.

657. In its dissemination of information on progress to SDG 3 Targets, PASB established a web page with scientific and technical materials,³⁸⁰ and the special PAJPH supplement on SDG 3³⁸¹ presented regional, national, and subnational experiences and proposals for monitoring the framework of SDG 3 indicators with an equity focus. The articles were published as a series from August 2020, and enabled policy development and decision-making on SDG-related health issues based on identification of good practices; dissemination of successful experiences; and provision of evidence to inform equity-based decisions and strengthen accountability for leaving no one behind in improving the health of the population. The PAJPH instituted a fast-track editorial process to meet the uptick in submitted COVID-19-related manuscripts, many with original research from the Americas—11 of the 50 papers published in the Journal in the first six months of 2020 were related to COVID-19. The impact score of the PAJPH, a measure of the yearly average number of citations to recent articles published in the Journal, rose from 0.70 in 2019 to 1.46 in 2020—more than doubling the score—and was 2.84 in 2021,³⁸² underscoring the Journal's increasing value in knowledge-sharing.

658. The Bureau enhanced maintenance of the Institutional Repository for Information Sharing (IRIS), PASB's online institutional memory library, and reinforced its institutional capacity to process, index, and monitor COVID-19-related documents and guidance. In the past five years, IRIS has received over 52 million interactions. The Bureau also reviewed and expanded the Health

³⁸⁰ Pan American Health Organization. Sustainable Development Goals (SDG) – PAHO/WHO Scientific and Technical Material. Washington, DC: PAHO; 2022 [cited 19 August 2022]. Available from: <https://www.paho.org/en/topics/environmental-determinants-health/sustainable-development-goals-sdg-pahowho-scientific-and>.

³⁸¹ Pan American Health Organization. Evidence and intelligence for action on SDG-3 targets. Pan American Journal of Public Health. August 2020;Special issue. Available from: <https://www3.paho.org/journal/en/special-issues/evidence-and-intelligence-action-sdg-3-targets>.

³⁸² Pan American Health Organization. The Journal doubles its impact factor for the second consecutive year. Washington, DC: PAHO; [date unknown] [cited 19 August 2022]. Available from: <https://www.paho.org/journal/en/courses/pan-american-journal-public-health-doubles-its-impact-factor>.

Sciences Descriptors/Medical Subject Headings (DeCS/MeSH) vocabulary for the Organization's CCTs of equity, ethnicity, gender, and human rights, resulting in the addition of more than 100 new terms to promote better organization, retrieval, and use of information and scientific evidence on these priorities in Latin America and the Caribbean. PASB indexed new documents into DeCS and updated terms in English, French, Portuguese, and Spanish, giving greater visibility and access to new scientific and technical information. The content related to health systems and services research and experiences at the national, state, and municipal levels, and to topics such as assessment of health technologies, nursing, integrative health, psychology, health legislation, and, more recently, COVID-19.

659. The Bureau launched a new DeCS/MeSH website³⁸³ in September 2020, with a modern layout in accordance with W3C Web Accessibility Initiative standards,³⁸⁴ and a user-friendly interface, where users can access the same content in the four official PAHO languages. PASB published the DeCS/MeSH 2021 edition in June 2021 with several concepts related to COVID-19 and SARS-CoV-2, and also provided an innovative service for researchers, editors, and librarians in health sciences, the DeCS/MeSH Finder.³⁸⁵ Available since February 2021, this online service locates any descriptor, synonym, or qualifier of the DeCS/MeSH-controlled vocabulary of a given text in seconds. Since its launch, thousands of users from countries all around the world have used the service.

660. The Bureau kept LILACS updated and, in observance of its 35th anniversary, in October 2020 PASB established an Internet portal³⁸⁶ that remained active and updated until October 2021. LILACS served as a cornerstone for two new VHLs:

- a) The Virtual Health Library on Traditional, Complementary, and Integrative Medicine (VHL-TCIM)³⁸⁷ was established in 2018 in recognition of the importance of traditional medicine to inclusive intercultural approaches. The VHL-TCIM promotes the visibility, access, use, and development of scientific information and educational materials on intercultural and inclusive health system models. This was exemplified by PASB's interprogrammatic development of an initiative to integrate indigenous traditional knowledge into disaster risk reduction, along with a corresponding regional network that includes indigenous peoples.
- b) The CARPHA EvIDeNCe Portal³⁸⁸ was established to serve as a live repository for research, syntheses, and policy-relevant documents and health information to support evidence-informed decision-making in the Caribbean. The Bureau presented the portal at

³⁸³ Pan American Health Organization. DeCS/MeSH health sciences descriptors. Washington, DC: PAHO; 2022 [cited 19 August 2022]. Available from: <https://decs.bvsalud.org/en/>.

³⁸⁴ W3C Web Accessibility Initiative. W3C Accessibility Standards Overview. W3C; 2022 [cited 19 August 2022]. Available from: <https://www.w3.org/WAI/standards-guidelines/>.

³⁸⁵ Pan American Health Organization. DeCS/MeSH health sciences descriptors: finder. Washington, DC: PAHO; 2022 [cited 19 August 2022]. Available from: <https://decsfinder.bvsalud.org/dmfs>.

³⁸⁶ Pan American Health Organization. LILACS: 35 years sharing information and experiences from LAC countries. Washington, DC: PAHO; 2021 [cited 19 August 2022]. Available from: <https://lilacs.bvsalud.org/35anos/en/>.

³⁸⁷ Available from: <https://mtci.bvsalud.org/en/the-vhl-on-traditional-complementary-and-integrative-medicine-a-collective-achievement/>.

³⁸⁸ Available from: <http://carphaevidenceportal.bvsalud.org/>.

the 49th Conference of the Association of Caribbean University, Research and Institutional Libraries in June 2019.

661. The Bureau maintained and populated the Health Information Platform for the Americas (PLISA), the Organization's repository for data collected on 170 core health indicators (365 when disaggregated); mortality data shared by Member States; and health issues ranging from AMR to immunizations. The platform has undergone improvements that allow countries to exchange epidemiological data, leverage their analysis capabilities, and follow up on key indicators. Ongoing efforts are focused on expanding the platform's capacity to include epidemiological information on various communicable diseases, including some NIDs and vector-borne diseases.

662. The repository of legislation on risk factors in NCDs was established in August 2018 and allows access to the legal frameworks that countries have developed to combat chronic diseases. It provides a model for collating health legislation, aims to strengthen stewardship and governance in advancing to universal health, and has demonstrated benefits in systematizing the organization and monitoring of and access to NCD-related legislation in Member States.

663. The Bureau inaugurated the e-BlueInfo application³⁸⁹ for mobile devices in 2018 as an information platform for health practice to decrease inequities in health professionals' access to and use of scientific information and evidence oriented to healthcare services. The application has the greatest impact when used by people located in cities far from large urban centers, and El Salvador adopted the application in May 2020 with a collection of documents dedicated only to COVID-19. The use of the application has become an important component of that country's national response.

664. The Bureau launched version 2.0 of the e-BlueInfo application for healthcare professionals in April 2021, expanding accessibility to information on various health topics, including COVID-19. The updated application includes new collections of documents; greater visibility of sources from ministries of health; new graphics and data; information for health professionals from countries that are not yet part of the e-BlueInfo network; collections of guidelines published by PASB and WHO; access to scientific evidence available in the VHL using the codes of the ICD; related scientific and technical information available in the VHL; and new types of content, such as multimedia and health legislation. Version 2.0 of the application offers the option of storing the user's favorite and visited documents, through authentication.

665. The evidence maps methodology is an emerging method of knowledge translation that seeks to synthesize, identify, describe, and characterize the scientific evidence that exists for a health topic or condition, and to identify knowledge gaps, gained traction. The methodology was applied to produce 10 evidence maps on the clinical applicability of integrative and complementary health practices (PICS) to support Brazil's National PICS Policy, as well as to suggest topics for further research. An evidence map constructed by the TCIM Americas Network systematized available evidence on the application of some integrative practices to the clinical management of COVID-19 symptoms in selected countries. The evidence map aimed to improve immunity and mental health in persons in conditions of social isolation and trauma, and was the basis of

³⁸⁹ Available from: <https://e-blueinfo.bvsalud.org/en/>.

recommendations from the Brazil National Health Council to other national and local authorities in the country regarding the use of PICS during the COVID-19 pandemic.

666. In 2020, PASB collaborated with the University of Illinois in the United States of America to leverage “big data” and artificial intelligence for improving public health in the Region. The Bureau also worked closely with IHME to track the spread of diseases and assess the global burden of disease in the Americas, and this collaboration yielded projections for the spread of COVID-19 in the Americas. PASB collaborated with Member States to promote open government initiatives that would put timely and quality health data into the hands of researchers, civil society, and the wider public, and catalyze the transition toward digital transformation in health in the Region of the Americas.

667. The Bureau established three critical corporate platforms: Health in the Americas,³⁹⁰ including all the material dating back to the first edition in 1954 to the latest analysis on potentially avoidable premature mortality; Core Indicators Database,³⁹¹ with more than 200 updated indicators and time series covering data since 1995; and the SDG3 Monitoring Portal,³⁹² which includes a regional dashboard, country profiles, up-to-date evidence on policies and guidelines, and specific methodological tools to track progress on the SDG 3 Indicators and their inequalities at the regional, national, and subnational levels.

COVID-19 Spotlight: Tools and guidelines

668. In its technical cooperation for COVID-19 responses, PASB developed population modeling tools for the Region of the Americas to aid Member States in their efforts to create projections on how the COVID-19 pandemic might affect their countries. The Bureau partnered with the UWI, London School of Hygiene and Tropical Medicine, and the Johns Hopkins Bloomberg School of Public Health to create models specifically tailored to the Latin American and Caribbean context. These models informed Member States’ decisions on actions to mitigate the impact of COVID-19 and implement short-, medium-, and long-term responses to the pandemic, and facilitated the allocation and mobilization of resources.

669. The Bureau reinforced the development of networks of health professionals and health facilities to support the characterization, diagnosis, and management of acute COVID-19 and the post-COVID-19 conditions, and supported the implementation of the WHO Clinical Management of COVID-19 platform³⁹³ in countries of the Region. Of the more than 500,000 COVID-19 cases on the platform, 85,000 are from 10 countries of the Region: Argentina, Brazil, Chile, Colombia, Dominican Republic, Ecuador, Mexico, Panama, Peru, and United States of America.

³⁹⁰ Available from: <https://iris.paho.org/handle/10665.2/28369>.

³⁹¹ Available from: <https://www.paho.org/en/evidence-and-intelligence-action-health/core-indicators-database>.

³⁹² Available from: <https://www3.paho.org/ods3/en/home/>.

³⁹³ Available from: <https://www.who.int/teams/health-care-readiness/covid-19>.

8. ADDRESSING THE SOCIAL DETERMINANTS OF HEALTH AND ENSURING HEALTHY AND SAFE ENVIRONMENTS

670. The social determinants of health, defined as the nonmedical factors that influence health outcomes, the conditions in which people are born, grow, work, live, and age, and the wider set of forces and systems shaping the conditions of daily life, include economic policies and systems, development agendas, social norms, social policies, and political systems.³⁹⁴ Determinants of health may also be defined as the range of factors—including social, ecological, political, commercial, and cultural factors—that combine to influence the health of individuals and communities,^{395,396} a definition that allows more nuanced assessment of the impact of these factors on equity, human rights, and health.

671. Consideration of these factors emphasizes the critical importance of identifying persons and groups in situations of vulnerability, and of information systems for health that, through the provision of data disaggregated by key stratifiers such as age, sex, gender, ethnicity, geographical location, and migrant status, provide evidence of the situation and needs of such persons and groups, and enable interventions to address them, reducing inequities and protecting human rights.

Addressing the social determinants of health—promoting health and enabling health in all policies

672. The Bureau's work in health promotion addresses the social determinants of health and is a critical component of technical cooperation with Member States. Through an extensive consultative process, the Bureau developed the PAHO Strategy and Plan of Action on Health Promotion within the Context of the Sustainable Development Goals 2019-2030 (Document CD57/10), which has four strategic lines of action: *a*) strengthen key healthy settings; *b*) enable community participation and empowerment and civil society engagement; *c*) enhance governance and intersectoral work to improve health and well-being and address the social determinants of health; and *d*) strengthen health systems and services by incorporating a health promotion approach, all aligned with universal health and PHC concepts.

673. The degree to which health promotion is used as a crosscutting approach varies among countries. PASB continued its advocacy and support for Member States to include health promotion in their national health policies and plans as an approach that includes not only health education activities but also multisectoral, multi-stakeholder work, community participation, and other aspects of the PHC strategy. Supported by Brazil, Canada, Ecuador, Mexico, and Peru, PASB played an important role in galvanizing support for Resolution WHA74.16 on the social

³⁹⁴ World Health Organization. Social determinants of health. Geneva: WHO; 2022 [cited 19 August 2022]. Available from: https://www.who.int/health-topics/social-determinants-of-health#tab=tab_1.

³⁹⁵ World Health Organization. Determinants of health. Geneva: WHO; 2017 [cited 19 August 2022]. Available from: <https://www.who.int/news-room/questions-and-answers/item/determinants-of-health>.

³⁹⁶ Public Health Association of Australia. What are the determinants of health? Canberra: Public Health Association of Australia; 2018 [cited 19 August 2022]. Available from: <https://www.phaa.net.au/documents/item/2756>.

determinants of health, which was adopted by the Seventy-fourth World Health Assembly in May 2021. The resolution calls on WHO Member States to consider social, economic, and environmental determinants of health in their recovery from the pandemic and in boosting resilience to both the current pandemic and future public health emergencies.

674. The Bureau initiated a project on the social determinants of health, funded by a global grant from SDC, in the framework of the WHO Multi-Country Special Initiative for Action on the Social Determinants of Health for Advancing Health Equity.³⁹⁷ The goal of the special initiative is to improve the social determinants of health for at least 20 million disadvantaged people in at least 12 countries by 2028. In the Region of the Americas, the project aims to spotlight structural social determinants such as the labor market, employment, immigration status, and housing, and a workshop was held for teams from ministries of health in the five participating countries—Chile, Colombia, Costa Rica, El Salvador, and Peru—where academic institutions and other organizations associated with the initiative shared progress and reflections on interventions for health equity.³⁹⁸ In addition, six videos were launched highlighting stories of migrants, informal economy workers, indigenous peoples, people living with disabilities, and the LGBTQ+ community. In 2021, PASB conducted an assessment among health and social science faculties at universities and teaching centers in Latin America regarding the inclusion of social determinants and health equity content in their curricula, and inaugurated the Window of Knowledge on the Commercial Dimensions of the Social Determinants of Health.³⁹⁹

675. The Bureau initiated the production of a document on the history of community participation in the Region over the last 20 years, commissioned 10 case studies on historical and current advances in community participation in Latin America, and developed a concept note to define frameworks for social participation in health, globally and regionally. Within the frame of this work, PASB convened expert regional meetings on social participation in September and December 2021. The Bureau also conducted a mapping exercise among 404 CSOs in Latin America and the Caribbean to identify, and gain a better understanding of, their role and main actions in the COVID-19 response. Given the rich experience on community participation in Latin America, the Bureau participated in a plenary on this topic at the WHO 10th Global Conference on Health Promotion: Health Promotion for Well-being, Equity and Sustainable Development in 2022.⁴⁰⁰

³⁹⁷ World Health Organization. Special Initiative for Action on the Social Determinants of Health for Advancing Health Equity. Geneva: WHO; 2022 [cited 19 August 2022]. Available from: <https://www.who.int/initiatives/action-on-the-social-determinants-of-health-for-advancing-equity>.

³⁹⁸ World Health Organization. AMRO/PAHO (Chile, Colombia, Costa Rica, El Salvador, Peru). Geneva: WHO; 2022 [cited 19 August 2022]. Available from: <https://www.who.int/initiatives/action-on-the-social-determinants-of-health-for-advancing-equity/about/work-in-who-regions/amro-paho>.

³⁹⁹ Pan American Health Organization. Commercial Dimensions of the Social Determinants of Health. Washington, DC: PAHO; 2022 [cited 19 August 2022]. Available in Portuguese from: https://bvsalud.org/vitrinas/post_vitrines/5061/.

⁴⁰⁰ EuroHealthNet. 10th Global Conference on Health Promotion for Well-being, Equity, and Sustainable Development. EuroHealthNet: 2021 [cited 19 August 2022]. Available from: <https://eurohealthnet.eu/publication/10th-global-conference-on-health-promotion-for-well-being-equity-and-sustainable-development/>.

676. The Bureau serves as the regional focal point for the implementation of the Global Action Plan for Healthy Lives and Well-being for All,⁴⁰¹ which brings together multilateral health, development, and humanitarian agencies to better support countries in making progress toward the health-related SDGs. The Bureau conducted regionwide mapping of progress, identifying experiences in Member States, in the context of the PAHO Strategy and Plan of Action on Health Promotion within the Context of the Sustainable Development Goals 2019-2030. The mapping identified niches, needs, and opportunities for advancement in this area, and led to the development of a road map for the accelerated implementation of interventions in the framework of the strategy and plan of action.

677. Policy coherence across sectors is critical in addressing the social and other determinants of health, and in achieving desired health outcomes and impact, as outlined in the PAHO Plan of Action on Health in All Policies 2014-2019. The final report on the Plan of Action on Health in All Policies (Document CD58/INF/3) noted that the most important achievements included: significant progress in building awareness of the need to apply a HiAP framework to allow people to reach their maximum health potential; direct and indirect motivation of governments, universities, and civil society groups to strengthen their efforts to address the social determinants of health; and ongoing generation of evidence. The final report also stated that many countries of the Region had established intersectoral mechanisms at national, subnational, and local levels using various entry points, ranging from health priorities such as HIV/AIDS, malnutrition, and NCDs to broader issues such as reduction of the burden of disease and health inequity.

678. In highlighting the importance of health promotion, PAHO has celebrated Wellness Week in the Americas annually in September since 2011, modeled after the annual Caribbean Wellness Day established by CARICOM Heads of State and Government through their seminal 2007 Port of Spain Declaration on NCD prevention and control. The Wellness Week initiative seeks to mobilize a range of actors with the potential to positively impact their communities, including health promoters, staff from ministries of health, mayors, community leaders, and civil society in general.

679. In June 2022, the 170th Session of the PAHO Executive Committee considered a proposed Policy for Recovering Progress toward the Sustainable Development Goals with Equity through Action on the Social Determinants of Health and Intersectoral Work (Document CE170/14). The policy aims to strengthen effective integration of actions to promote equity and undertake a course of action to recover lost progress and accelerate SDG achievement with an equity approach, by addressing the social determinants of health.

⁴⁰¹ World Health Organization. Stronger collaboration, better health: Global Action Plan for Healthy Lives and Well-being for All. Geneva: WHO; 2022 [cited 19 August 2022]. Available from: <https://www.who.int/initiatives/sdg3-global-action-plan>.

Environment, climate change, and health

680. The Bureau's technical cooperation contributed to the reduction or mitigation of insults and threats to the health of the environment, including the climate crisis, and the establishment and maintenance of healthy and safe environments.

Environmental threats and water, sanitation, and hygiene

681. In collaboration with ministries of health, environment, and energy, the Bureau conducted a situational assessment of national readiness to reduce the residential use of solid fuels and kerosene using the Household Energy Assessment Rapid Tool.⁴⁰² The tool provides a method to stimulate collaboration between sectors following HiAP guidelines, and its use allowed PASB to engage national health sectors in relevant discussions and produce a report for each country that provided a diagnosis of the situation and a road map to improve access to clean energy for all.

682. As part of the global BreatheLife campaign—a joint initiative of WHO, United Nations Environment Programme (UNEP), and the Climate and Clean Air Coalition—PASB helped to build capacities to address ambient air pollution in several Member States, including support for the training of environmental health officers and other stakeholders in monitoring indoor air quality, and mobilized regional leadership in air quality and health through country engagement in the BreatheLife campaign. The Region has the largest number of participants in this global campaign, which has raised awareness and built technical capacities among health actors to address air pollution and mitigate climate change through a series of webinars and one-on-one e-meetings with national and subnational authorities.

683. The road map on air quality and health that the Bureau developed in 2018⁴⁰³ was embraced by Member States. Mexico and Panama updated air quality regulations; Argentina, Colombia, and Trinidad and Tobago integrated public policies that tackle air quality and climate change, involving multiple sectors and stakeholders; Honduras, Panama, Peru, and Paraguay assessed the risks and supported the prioritization of country-tailored policies toward the elimination of the use of solid fuels and kerosene for cooking; and Honduras and Panama launched the report of the assessment and officially committed to the elimination initiative during World Health Day 2022.

684. In the Central American subregion, PASB proposed and negotiated an initiative on air quality and health with the PARLACEN, which endorsed it by resolution in May 2019. The resolution recognized poor air quality as a public health issue and as a significant environmental risk factor for NCDs that should be prioritized and adequately addressed. It urged the establishment or strengthening of technical norms for air quality to protect people's health; review of countries' relevant legal frameworks; and the creation, with PASB technical cooperation, of an observatory on air quality in the Central American subregion. The Bureau

⁴⁰² Available from: <https://www.who.int/tools/household-energy-assessment-rapid-tool-templates>.

⁴⁰³ Pan American Health Organization. PAHO's road map on air quality: a strategic agenda to mainstream health in air quality management. Washington, DC: PAHO; 2018 [cited 19 August 2022]. Available from: <https://www.paho.org/en/documents/pahos-road-map-air-quality-strategic-agenda-mainstream-health-air-quality-management-0>.

proposed a model law for use in creating or strengthening legislation related to air quality, which was also approved by the PARLACEN.

685. Household air pollution is a significant and avoidable public health risk in the Region, amenable to elimination or substantial reduction, in line with SDG Indicator 7.1.2 (proportion of population with primary reliance on clean fuels and technology) and SDG Indicator 3.9.1 (mortality rate attributed to household and ambient air pollution). A special initiative to accelerate the transition to clean energy and technologies was implemented in countries where solid fuels and kerosene are still in regular use for cooking, with a focus on urban settings. This represents a stepwise approach to clean energy for all by 2030 and presents an opportunity for numerous health-environment co-benefits, including climate change mitigation.

686. With funding from UNEP and the Global Environment Facility, the Bureau undertook technical cooperation on the elimination of lead in paint, organizing the first regional workshop on the subject in June 2019. PASB also began work on other projects of the Global Environment Facility for the implementation of the Minamata Convention on Mercury in Argentina (thermometer replacement), the Caribbean (skin-lightening products), and Uruguay (dental amalgam phasedown).

687. The Bureau applied the WASH protocol for healthcare facilities to conduct evaluations in selected countries on measures related to WASH, drainage, healthcare waste, and vector control. This information formed the basis for the integration of WASH into national health policies and plans, and was the core source of regional data for the WHO-UNICEF Joint Monitoring Programme's WASH in Health Care Facilities: Global Baseline Report 2019.⁴⁰⁴ Partners in this work included the Government of Peru, WHO, UNICEF, and the IHSLAC project.

688. The Bureau also highlighted progress toward the provision of safe WASH services in healthcare facilities during a virtual call to action to improve WASH in those settings and reduce the risk of infection in patients, caregivers, health workers, and communities, as a critical need during the COVID-19 pandemic. The Bureau enhanced country capacity in the area of on-site wastewater management, and specific country guidelines were developed and adopted.

689. The Bureau coordinated and implemented TrackFin,⁴⁰⁵ a methodology for tracking financing for WASH, at the subnational level in Brazil, and applied the Global Analysis and Assessment of Sanitation and Drinking Water methodology in several Member States. Both instruments revealed substantial gaps in countries' understanding and tracking of financing to the WASH sector, making evidence-based planning and budgeting decisions difficult. PASB promoted the TrackFin methodology and supported a regional study on the affordability of WASH services within a human rights framework. Partners and supporters in this work included

⁴⁰⁴ World Health Organization, United Nations Children's Fund. WASH in health care facilities: global baseline report 2019. Geneva: WHO and UNICEF; 2019. Available from: <https://www.who.int/publications/i/item/9789241515504>.

⁴⁰⁵ World Health Organization. UN-Water GLAAS TrackFin Initiative: tracking financing to sanitation, hygiene and drinking-water at the national level. Geneva: WHO; 2017. Available from: <https://www.who.int/publications/i/item/9789241513562>.

the Government of Peru, WHO, AECID, Association of Regulators of Water and Sanitation of the Americas, and Fiocruz.

Climate crisis and health

690. The Region advanced in strengthening health and climate change governance and partnerships, which has allowed for integrated planning, enhancing capacities, and attracting investments. PASB promoted and supported adaptation to mitigate the effects of climate change on human health, which include increased heat-related mortality and morbidity, greater frequency of infectious disease epidemics, increased risk and severity of disasters due to natural hazards, population displacement from sea level rise and increased storm activity, and threats to food and nutrition security.

691. The Bureau highlighted the need for a robust health sector response and for identifying health co-benefits in climate change mitigation measures implemented by other sectors. PASB contributed to the development of the Caribbean Action Plan on Health and Climate Change,⁴⁰⁶ the Andean Health and Climate Change Plan 2020-2025,⁴⁰⁷ and the November 2018 Declaration of Ministers of Health of MERCOSUR and Associate States on Climate Change and Health,⁴⁰⁸ which are examples of concerted intersectoral actions. As a broader initiative to mainstream climate change into national health policies and strategies, the Bureau built the capacity of health representatives in the Caribbean, Central America, and South America to develop health national adaptation plans (H-NAPs). The efforts were cofunded by the respective subregional integration mechanisms and subregional institutions, including the CARICOM Secretariat, CARPHA, Caribbean Community Climate Change Centre, Amazon Cooperation Treaty Organization, and ORAS.

692. SIDS are among the countries and territories most vulnerable to climate change and its health impacts. PASB, in collaboration with CARICOM Member States and as part of the WHO Special Initiative on Climate Change and Health in Small Island Developing States, developed an action plan for Caribbean countries and territories that aims to protect their populations from the adverse health effects of climate variability and change. The action plan includes linkages to environmental determinants of health and addresses the development of climate-resilient health systems, increased awareness, mainstreaming of funding opportunities to support countries, and promotion of intersectoral mitigation actions in the health sector. Its strategic lines of action, aligned with the four key areas of the WHO special initiative, are: *a*) empowerment (supporting health leadership in the Caribbean to engage nationally and internationally); *b*) evidence (understanding the impacts on health, preparing health systems and building the health argument for investments); *c*) implementation (preparedness for climate risks, building climate-resilient

⁴⁰⁶ Pan American Health Organization. Caribbean Action Plan on Health and Climate Change. Washington, DC: PAHO; 2019 [cited 19 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/38566>.

⁴⁰⁷ Andean Health Organization-Hipólito Unanue Agreement, Pan American Health Organization. Andean Health and Climate Change Plan 2020-2025. Washington, DC: ORAS/CONHU and PAHO; 2020 [cited 19 August 2022]. Available in Spanish from: <https://iris.paho.org/handle/10665.2/53077>.

⁴⁰⁸ Pan American Health Organization. As talks get underway at COP24, MERCOSUR ministers of health commit to prioritize health in climate change adaptation plans. Washington, DC: 2018 [cited 19 August 2022]. Available from: <https://bit.ly/2L81k3d>.

health systems and health-promoting mitigation policies); and *d*) resources (facilitating access to climate and health finance).

693. The Caribbean action plan is being implemented primarily through the five-year collaborative project Climate Resilient Health Systems in the Caribbean 2020-25, which involves members of the Caribbean Forum of the African, Caribbean and Pacific Group of States, funded through an EU grant to the Bureau in 2019.⁴⁰⁹ Complemented by funding from the Climate and Clean Air Coalition, the project's implementation also relies on the participation of various partners, including FAO, UNEP, UNICEF, CARICOM, CARPHA, Caribbean Community Climate Change Centre, Caribbean Institute of Meteorology and Hydrology, Saint George's University in Grenada, and UWI at St. Augustine and Cave Hill, situated in Trinidad and Tobago, and Barbados, respectively.

694. The project uses a One Health approach within the Caribbean Cooperation in Health Phase IV framework—the CARICOM health agenda—and contributes to reduction of mortality and morbidity from the expected health consequences of climate change in Caribbean countries. It also contributes to the provision of infrastructure and services in healthcare facilities to increase the climate resilience of the health sector and reduce its carbon footprint. Actions to address COVID-19 were integrated into the project's activities, which support national-level efforts to: *a*) adapt systems in order to better address future climatic threats and strengthen public health interventions; *b*) strengthen national health early warning surveillance systems and training; *c*) enhance training and assessment of the environmental health workforce to respond to COVID-19; *d*) pilot food safety and inspection programs that consider the impacts of both climate change and COVID-19; *e*) train multisectoral and interdisciplinary groups from health, environment, climate, agriculture, and other sectors in COVID-19 prevention and control; *f*) promote youth engagement in COVID-19 prevention activities; and *g*) develop health communication strategies that enable the Caribbean public to better understand and prevent COVID-19.

695. Project results to date include: *a*) the preparation of health and climate change profiles of the participating countries; *b*) establishment of a cohort of young persons and a multisector leaders' fellowship program to participate in extensive climate and health training experiences; *c*) development of comprehensive H-NAPs; *d*) administration of a survey on climate change and health public perceptions survey in selected Caribbean countries; and *e*) development of a series of tools, including guidelines for climate-resilient and environmentally sustainable healthcare facilities, a pocketbook on climate change for health professionals, and guidance for the development of early warning systems for heat. The development of the tools was partially financed by the Norwegian Agency for Development Cooperation. A majority of Member States now recognize health as a priority topic in their nationally determined contributions

⁴⁰⁹ Caribbean Community Climate Change Centre. CRIS number: FED/2019/41949, financed under the European Development Fund. Belmopan: 5Cs: 2022 [cited 19 August 2022]. Available from: <https://www.caribbeanclimate.bz/blog/2021/02/18/2020-2025-strengthening-climate-resilient-health-systems-in-the-caribbean/>.

—national commitments with the United Nations Framework Convention on Climate Change— and several have completed, or are in the process of completing, their H-NAPs.

696. The Bureau advocated for health at a meeting of Caribbean SIDS in August 2018 in San Pedro, Belize, to prepare for the September 2019 High-Level Mid-term Review of the SAMOA (SIDS Accelerated Modalities of Action) Pathway, which resulted in the San Pedro Declaration. The declaration identifies the need to enhance citizen and private sector engagement at the national level and to effectively mainstream the pathway, which covers the period 2015-2025, into national development plans. The Caribbean countries reaffirmed that climate change was one of the greatest challenges they faced, and acknowledged that its impacts continued to pose a significant threat to Caribbean SIDS and their efforts to implement the pathway. The Bureau's advocacy contributed to the participation of representatives from Caribbean SIDS in the Inter-Regional Preparatory Meeting for the Mid-term Review held in Apia, Samoa, in late 2018, which led to the Apia Outcome. The Apia Outcome reaffirms the pathway as an overarching framework for guiding SIDS in their global, regional, and national development efforts, and as an integral part of the 2030 Agenda for Sustainable Development.

697. The Bureau supported a review of the Caribbean Regional Curriculum for Environmental Health Officers, from the perspectives of climate change adaptation and the introduction of online courses, as well as the completion of final recommendations and an action plan, with the participation of representatives from Caribbean educational institutions, including the UWI, and environmental health departments.

Healthy and safe environments

Urban health

698. The Bureau made progress in its technical cooperation to improve urban health, demonstrated by the growing number of its partnerships in this sphere, including with the Urban Health in Latin America (SALURBAL) project. SALURBAL includes a consortium of leading universities from the Region that provides evidence-based policy recommendations on improving urban health to local leaders. Other partnerships, such as with UN-Habitat, Vital Strategies, and the Ibero-American Center for Strategic Urban Development, were strengthened to create a strong urban health movement in the Region.

699. The Bureau collaborated with the International Society for Urban Health and SALURBAL to organize the 17th International Conference on Urban Health that was held in July 2021 with the theme Transforming Our Collective Urban Future: Learning from COVID-19. Supported by a global grant from SDC, PASB also collaborated in the implementation of a project on urban governance for health and well-being in Mexico City, Mexico, and Bogotá, Colombia, which seeks to improve intersectoral action and community participation, prioritizing marginalized populations in urban slums and informal settlements, and promoting inclusive governance at the city level.

700. As part of work with cities, the Bureau partnered with UNOSSC and the United Nations Office for Disaster Risk Reduction to develop a global training course on resilient cities, in the context of the pandemic. In collaboration with WHO, PASB initiated a mapping exercise of the

role of civil society and community-based organizations in the response to COVID-19, in order to inform preparation of a guide for resilient cities. PASB's partnership with the Latin American Federation of Cities, Municipalities, and Local Government Associations resulted in the implementation of a series of capacity-building and experience-sharing events in the first half of 2020 to strengthen the local response to COVID-19.

Workers' health

701. The health and well-being of workers is an important aspect of PASB's technical cooperation. At its 2019 meeting, the network of PAHO/WHO Collaborating Centres in Occupational Health renewed its commitment to contribute to the implementation of the regional Plan of Action on Workers' Health 2015-2025 (Document CD54/10, Rev. 1) including the protection of workers in the informal economy. The strategic lines of action in the plan of action are: *a)* develop and update legislation and technical regulations on workers' health; *b)* identify, evaluate, prevent, and control hazardous conditions and exposures in the workplace; *c)* increase access to and coverage of health services for workers; *d)* promote health, well-being, and healthy work in the workplace; and *e)* strengthen diagnostic capacity, information systems, epidemiological surveillance, and research in the field of occupational diseases, injuries, and deaths.

702. The Bureau, in collaboration with WHO and the network of PAHO/WHO Collaborating Centres in Occupational Health, built capacities in occupational health and safety for health institutions, including implementation of the International Labour Organization/WHO HealthWISE tool,⁴¹⁰ which addresses working and employment conditions for health workers. The tool was translated into Spanish and a pilot was implemented in the United States of America. Two pilots planned for Colombia and Grenada were halted due to the COVID-19 pandemic and will be rescheduled.

703. The Bureau contributed to the global initiative to develop national action plans on workers' health for the health sector, advancing the planning and implementation processes to improve the health of healthcare workers in selected countries in the Region. The pandemic provided an opportunity for the Bureau to widen and strengthen partnerships in this area, within and beyond the United Nations and the Inter-American systems, including with entities such as the International Labour Organization, OAS, United Nations Office for Project Services, Ibero-American Social Security Organization, Latin American Association of Occupational Health, and Workplace Health Without Borders, among other networks of Collaborating Centres. The collaboration resulted in the development of guides to prevent COVID-19 in construction and agricultural workers—the latter in collaboration with La Isla Network—and on indoor ventilation for health institutions in the Region.

⁴¹⁰ Available from: https://www.ilo.org/sector/Resources/training-materials/WCMS_250540/lang--en/index.htm.

704. PASB also addressed workers' health through technical cooperation for the construction and update of CARcinogen EXposure⁴¹¹ matrices in several countries to help prevent occupational cancer; design of a program for occupational surveillance of agricultural workers in Mesoamerica, as part of efforts to prevent chronic kidney disease of nontraditional origin; and enhanced occupational surveillance aimed at preventing pneumoconioses in the Region, particularly asbestosis and silicosis.

Health in schools

705. The Bureau underscored the importance of health in the school setting by celebrating Wellness Week in September 2019 under the theme Building Healthy Schools. The campaign included dialogue with children, adolescents, and school communities across the Region, and highlighted the experiences of some health-promoting schools in the Americas during the launch event. PASB completed a regional school health assessment comprising country-based assessments, and desk and scoping reviews, to provide a baseline for implementation of the 2021 WHO Global Standards for Health-Promoting Schools.⁴¹² Based on the lessons learned from the regional assessment and the global standards, the Bureau initiated the development of a field guide to support the implementation of the global standards at the school level and, in collaboration with UNESCO, supported Paraguay as an early adopter of the standards, fostering collaboration between the Ministries of Health and Education for their achievement.

COVID-19 Spotlight: Boosting safety in the environment and in settings

706. The Bureau developed a program to strengthen technical capacity in the Region for the response to the environmental public health aspects of the COVID-19 pandemic. Partners included UNEP, UNESCO, UNICEF, and regional technical entities within the WASH group for Latin America and the Caribbean led by UNICEF and PASB as part of the humanitarian response network.

707. The program reached over 2,000 people through regional and subregional webinars, country-specific conference calls, and the use of the PAHO VCPH. Topics addressed included WASH services, management of municipal and medical solid wastes, ventilation, and cleaning and disinfection in different settings, such as healthcare facilities, schools, and housing. The program also focused on integrating environmental surveillance as part of routine health surveillance systems in the context of the COVID-19 pandemic. Moreover, in collaboration with a network of technical and academic institutions, a technical guidance document was prepared for the surveillance of SARS-CoV-2 in wastewater,⁴¹³ as a supporting tool for the epidemiological

⁴¹¹ CARcinogen EXposure (CAREX) is an international information system on occupational exposure to known and suspected carcinogens. The CAREX database provides selected exposure data and documented estimates of the number of exposed workers by country, carcinogen, and industry.

⁴¹² World Health Organization, United Nations Educational, Scientific and Cultural Organization. Making every school a health-promoting school: global standards and indicators. Geneva: WHO and UNESCO; 2021 [cited 19 August 2022]. Available from: <https://www.who.int/publications/i/item/9789240025059>.

⁴¹³ World Health Organization. Environmental surveillance for SARS-CoV-2 to complement public health surveillance: interim guidance. Geneva: WHO; 2022 [cited 19 August 2022]. Available from: <https://apps.who.int/iris/handle/10665/353158>.

surveillance systems already in place. The Bureau also developed guides to promote and enable attention to community settings during the pandemic, including Recommendations to Prevent COVID-19 Transmission at Food Fairs and Markets.⁴¹⁴

708. The Bureau enhanced its collaboration with ministries of education in the Region to address public health and social measures to prevent COVID-19, and to present emerging evidence on the role of children and schools in the transmission of SARS-CoV-2. The Bureau published Considerations for School-related Public Health Measures for Populations in Vulnerable Conditions in the Context of COVID-19,⁴¹⁵ which discussed the health, social, and economic consequences of the measures taken to control the pandemic-related to the closure of schools, as well as the elements that should be taken into account when reopening and closing schools, with a focus on children and adolescents in vulnerable situations.

⁴¹⁴ Pan American Health Organization. Recommendations to prevent COVID-19 transmission at food fairs and markets. Washington, DC: 2021 [cited 19 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/55632>.

⁴¹⁵ Pan American Health Organization. Considerations for school-related public health measures for populations in vulnerable conditions in the context of COVID-19. Washington, DC: 2021 [cited 19 August 2022]. Available from: <https://iris.paho.org/handle/10665.2/53317>.

9. ADVANCING PASB'S INSTITUTIONAL DEVELOPMENT AND CAPACITY

709. In 2020, in response to the twin challenges of the COVID-19 pandemic and the Organization's dire financial situation—due to the nonpayment of \$164.6 million in assessed contributions owed by several PAHO Member States as of 30 April 2020—the Bureau instituted significant cost containment and cost-saving measures in order to ensure that no reductions in the workforce complement would become necessary, while simultaneously deferring some technical cooperation deliverables. PAHO proved to be a resilient organization and now, more than ever before, the Organization is at the forefront of public health in the Region. The response to COVID-19, other emergencies, and commitments in the PAHO Strategic Plan 2020-2025 cemented PAHO's role as a catalyst, honest broker, and convener to improve the health and well-being of the peoples of the Americas, working with national counterparts and partners at all levels.

Governance, leadership, and management

710. The extraordinary circumstances of the pandemic necessitated innovation to enable PAHO Member States to continuously discharge their responsibilities for governance of the Organization. Although the meeting of the Subcommittee on Program Budget and Administration planned for March 2020 had to be canceled, thereafter the Bureau sought alternative methods for conducting PAHO's Governing Bodies, by maximizing the use of videoconferencing platforms to convene virtual meetings, including a Special Session of the Executive Committee in May 2020 and a Special Session of the Directing Council in December 2020.

711. The May 2020 meeting⁴¹⁶ discussed the Organization's dire financial situation at the time and the possibility of increasing the Strategic Fund's capitalization to facilitate procurement of emergency medical supplies for Member States as part of the COVID-19 response. The meeting resulted in Resolutions CESS1.R1 and CESS1.R2, respectively on an emergency loan from the Revolving Fund to the Strategic Fund, and adjustments to PAHO's strategic priorities. The December 2020 meeting⁴¹⁷ updated Member States on the status of the pandemic in the Region of the Americas and sought their guidance on the Bureau's work to secure access to COVID-19 vaccines for the countries and territories in the Region, which resulted in the approval of Resolution CDSS1.R1 regarding negotiations and possible amendments to the Revolving Fund's terms and conditions.

712. The Bureau identified 20 organizational development initiatives (ODIs) to strengthen its institutional development and capacities, informed by: *a)* the outputs of the Member State Working Group that was established by Resolution CESS1.R2 of the May 2020 Special Session of the PAHO Executive Committee; *b)* recommendations from a Strategic Function Review conducted

⁴¹⁶ The final report of this Special Session is Document CESS1/FR. Available from: https://www3.paho.org/hq/index.php?option=com_docman&view=download&alias=52087-cess-fr-e-final-report&category_slug=ce166-en&Itemid=270&lang=en.

⁴¹⁷ The final report of this Special Session is Document CDSS1/FR. Available from: <https://www.paho.org/en/documents/cdss1fr-final-report>.

by an Internal Steering Committee that the Director established in June 2020 to identify possible adjustments in response to the difficult financial situation discussed at the Special Session; and c) input from PASB staff.

713. In September 2020, the Director of PASB launched the ODIs, 12 of which target strategic functional optimization, including streamlining, consolidation, and reorganization for greater effectiveness in achieving the objectives of the PAHO Strategic Plan 2020-2025, and eight of which aim to ensure that PASB is on a sustainable financial footing for 2022-2023 and beyond. As of June 2022, 17 ODI workplans had been approved and, of those, 12 ODIs had had their final report issued, most of which are available on the PASB intranet.

714. In 2019 the Bureau prepared its second report on the implementation of resolutions and documents approved by the Governing Bodies of PAHO, which was presented to the 57th Directing Council. The document, Monitoring of the Resolutions and Mandates of the Pan American Health Organization (Document CD57/INF/3), reviewed the status of resolutions that were active or “conditional active” during the period 1999-2015 and those adopted by the Governing Bodies between 2016 and 2018. Of the 163 resolutions examined, 92 (56%) were deemed “active,” 13 (8%) were recommended for designation as “conditional active,” and 58 (36%) were recommended for designation as “sunset,” because their mandates had been fulfilled or they had been superseded by new resolutions. The third report was prepared in May 2022 and discussed at the 170th Session of the Executive Committee in June 2022 (Document CE170/INF/5). Of 143 resolutions examined, the Bureau proposes to classify 74 (52%) as “active,” 17 (12%) as “conditional active,” and 52 (36%) as “sunset.”

715. The Bureau ensured compliance with the Framework of Engagement with Non-State Actors (Document CD55/8, Rev. 1), conducting due diligence and risk assessment exercises on proposed engagements with non-State actors. The Bureau actively coordinated with the WHO Secretariat for consistent implementation of the Framework of Engagement with Non-State Actors (FENSA) and adapted processes and procedures as needed to take into account PAHO’s unique legal status. The Bureau also strengthened its enterprise risk management system as one of the critical pillars of effective, results-based management. At strategic level, risks and related mitigation actions were included in the framework of the PAHO Strategic Plan 2020-2025 and associated two-year program budgets, and PASB incorporated risk management into projects funded by voluntary contributions, completed risk assurance maps for all administrative entities, and created corporate risk fraud profiles.

716. The Bureau issued a new, comprehensive policy on preventing, detecting, and responding to fraud and corruption, making clear its intention to take decisive action against those and other dishonest practices that could damage PAHO’s reputation and credibility. The Bureau also updated the PAHO Asset Accountability Policy, which holds staff accountable when PASB assets are lost or stolen due to negligence. The policy was revised to reduce the financial liability of staff in order to reflect the increasing use of PASB-owned assets outside the workplace in the performance of official tasks, and the resulting higher risk of theft or loss.

717. The Bureau enhanced its efforts to ensure ethical conduct in its operations and activities, within the framework of the PAHO Integrity and Conflict Management System.⁴¹⁸ The Investigations Office was established and began operations in January 2018, separating its functions from those of the Ethics Office, where they had previously been housed. The Investigations Office reports to the PAHO Executive Committee, collaborates with other PASB administrative units to ensure consistency, coordination, and optimization of resources, and has conducted several investigations into allegations of wrongdoing, reporting its findings as a basis for corrective measures.

718. PASB personnel at Headquarters and in country offices participated in face-to-face training on ethical behavior, conflicts of interest, fraud prevention and detection, use of social media, personal and sexual harassment, and whistleblower protection. The Bureau promoted a “speak up” culture where people could freely raise concerns without fear of reprisal, and a revised protection against retaliation policy was issued in September 2021 in order to strengthen the protections accorded to personnel. The updated policy makes it easier to submit a retaliation complaint, expands the scope of protection, provides a right of recourse for personnel who wish to challenge a decision regarding the merit of their complaint, and outlines the key role of the Ethics Office in protecting personnel from retaliation.

719. The Bureau participated in the WHO dedicated Sexual Exploitation and Abuse and Sexual Harassment Prevention and Response Task Team, and the Bureau developed the Policy on Preventing Sexual Exploitation and Abuse pertaining to the prevention of sexual exploitation and abuse of beneficiary populations, especially those in situations of vulnerability. The policy prohibits PASB personnel from engaging in any type of sexual conduct with people who depend on the services or assistance rendered by the Bureau. The PAHO policy on harassment and sexual harassment was updated, and a new code of ethics and an investigations protocol are being finalized.

720. The Bureau made available, through the PAHO iLearn platform, an online training curriculum on the prevention of sexual harassment and abuse of authority in the workplace. This training is mandatory for all PASB personnel, regardless of position or type of contract. The Bureau also implemented the “Clear Check” reference database used by the United Nations to identify individuals who have been involved in sexual harassment, sexual exploitation, and sexual abuse. The use of Clear Check enhances the selection process in response to recommendations from internal and external auditors, and is consistent with the Prevention of Sexual Exploitation and Abuse Initiative launched by WHO.

721. In the context of heightened civil society activism in PASB’s host city, Washington, D.C., and in other PAHO Member States, new guidance was issued for the participation of the Bureau’s personnel in peaceful demonstrations and rallies, and their use of social media. The guidance included restrictions aimed at upholding their status and obligations as international civil servants.

⁴¹⁸ Members of the PAHO Integrity and Conflict Management System include the Ethics Office, Office of the Ombudsman, Office of the Legal Counsel, Human Resources Management, Information Security Officer, Internal Oversight and Evaluation Services, Investigations Office, Board of Appeal, and PAHO/WHO Staff Association.

722. The Bureau undertook internal audits at country offices and Headquarters, and related to specific projects, the latter including the now-concluded *Mais Médicos* project and Smart Hospitals project. The results showed improvement in internal controls, attributable to the PASB Management Information System (PMIS) and increased awareness of their importance among PASB management and personnel. Furthermore, the PAHO Audit Committee provided advisory services, including guidance on the development of PASB policies for fraud prevention and evaluation assignments, and advice on matters ranging from IT security to enterprise risk management and the operations of the Investigations Office.

723. A new Ombudsman came on board in January 2020 and, as of 30 June 2022, had handled 14 cases concerning issues of fairness in organizational processes. In March 2020, the evaluation function previously assigned to the Office of Internal Evaluation and Oversight (IES) was transferred to the Department of Planning, Budget and Evaluation—formerly the Department of Planning and Budget—to facilitate closer links to the Organization’s planning cycle. The Office of Internal Evaluation and Oversight continues to provide oversight through internal audits and monitoring of internal controls.

Strategic planning and evaluation, country focus, and resource mobilization and coordination

Strategic planning and evaluation

724. In its strategic planning process, the Bureau continued its successful application of the PAHO-adapted Hanlon method,⁴¹⁹ which incorporates enhancements that prevent priority-setting from becoming a purely mechanical process, thereby increasing its practical value in a real-world setting, and ensured the participation of, and input from, Member States through the Strategic Plan Advisory Group. For the development of the PAHO Strategic Plan 2020-2025, the Strategic Plan Advisory Group comprised 21 countries representing the four PAHO subregions.⁴²⁰

725. In September 2019 the 57th Directing Council approved the PAHO Strategic Plan 2020-2025, the PAHO Budget Policy (Document CD57/5), which responded to Member States’ concerns and the recommendations of the 2018 external evaluation of the previous PAHO Budget Policy, and the PAHO Program Budget 2020-2021 (*Official Document 358*). The new Budget Policy provides a transparent, evidence-based, empirical foundation for assigning budget ceilings across PAHO Member States, while allowing sufficient flexibility to ensure that the Bureau remains responsive and proactive in allocating resources to address evolving political, health, and technical challenges. An innovation in the Program Budget 2020-2021 was the inclusion of “Country Pages,” one-page analyses of the health situation, priorities, and key technical

⁴¹⁹ Pan American Health Organization. Methodology for the programmatic priorities stratification framework of the PAHO Strategic Plan. Washington, DC: PAHO; 2016 [cited 19 August 2022] (Document CD55/7). Available from: <https://www.paho.org/hq/dmdocuments/2016/CD55-7-e.pdf>

⁴²⁰ Caribbean: Antigua and Barbuda, Bahamas, Dominica, Guyana, Saint Lucia, Trinidad and Tobago; Central America: Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Panama; North America: Canada, Mexico, United States of America; South America: Argentina, Bolivia (Plurinational State of), Brazil, Ecuador, Paraguay, and Venezuela (Bolivarian Republic of).

cooperation interventions for each Member State. The Bureau implemented \$673 million of the Program Budget 2020-2021, \$127 million (23.2%) more than in 2018-2019.

726. The 59th Directing Council in September 2021 approved the PAHO Program Budget 2022-2023 (*Official Document 363*), which was shaped by the consequences of, and lessons learned from, the ongoing pandemic, and focuses on three strategic approaches: protect, recover, and build stronger. The Program Budget 2022-2023 was prepared through a “bottom-up” and “top-down” planning process, and features a 5.8% increase in overall budget and a 3.2% increase for base programs from the 2020-2021 budget. The priorities were subjected to a strategic review by PASB and Member States in light of the new challenges and health context of the Region due to the pandemic, and appropriate adjustments made. PASB also applied lessons learned during the implementation of the Program Budget 2020-2021, with special attention to actions related to emergency and disaster preparedness, prevention, control, and response.

727. The Bureau improved the efficiency of its response to the COVID-19 pandemic through budget support for, and collaboration with, the IMSTs, channeling resources, where possible, to finance PAHO’s base programs. Actions included a strategic review of biennial workplans to ensure that the challenges of the COVID-19 pandemic and the Bureau’s financial situation did not compromise the provision of key technical cooperation interventions and deliverables, and creation of a standard structure for the implementation of COVID-19 funding to facilitate an effective response. While the overall level of outstanding assessed contributions from Member States has tapered since the 2019 year-end high, the 31 March 2022 outstanding balance of \$129.5 million is still much higher than the 2015-2018 average of \$43 million, negatively impacting cash available for flexible funded operations and biennial budget implementation.

728. In the area of evaluation, PASB launched a new platform in the second quarter of 2019 that assembles evaluation reports from different parts of the Organization and makes them available to all PASB personnel. The platform allows greater information-sharing and facilitates more systematic follow-up of findings, recommendations, and lessons learned, thus providing an important feedback loop for planning and designing new PASB initiatives. The PAHO Evaluation Policy was revised, updated, and approved in March 2021, with complementary products including the 2021-2022 PAHO Evaluation Work Plan, which was launched in March 2021; capacity development of the PAHO Evaluation Network; the PAHO Evaluation Intranet; and the PAHO Evaluation Handbook. These will be critical in the implementation of the PAHO evaluation action areas: an enabling evaluation environment and governance; capacity development and networking; evaluation implementation; and evaluation usage. In addition, the PASB Director significantly strengthened the Bureau’s evaluation function by approving two professional evaluation positions, including a Senior Evaluation Adviser, who came on board in mid-March 2022.

729. PAHO initiated the end-of-biennium assessment for 2020-2021 in December 2021. The end-of-biennium assessment is the principal instrument of programmatic accountability and transparency for the Organization, and, given the unprecedented toll of the COVID-19 pandemic and the evolving socioeconomic and political context in the Region of the Americas, this assessment offers a critical opportunity to collectively take stock of the Region’s health gains and remaining gaps, as well as of the challenges, lessons learned, and opportunities moving forward. The Preliminary Report of the End-of-Biennium Assessment of the PAHO Program Budget

2020-2021/First Interim Report on the Implementation of the PAHO Strategic Plan 2020-2025 (Document CE170/13) was presented to the 170th Session of the Executive Committee in June 2022, along with the Program Budget of the Pan American Health Organization 2022-2023: Proposed Amendments (Document CE170/12).

730. The Bureau accelerated efforts to monitor the inclusion of the PAHO CCTs across all levels, with the implementation of the gender, equity, and rights scorecard as part of PASB's wider reporting to WHO, and development and use of innovative monitoring tools for a more detailed analysis. PASB reviewed reports on the mandatory CCT-related products and services component that was introduced for the 2020-2021 biennial workplan, which included two surveys on the integration of related perspectives and approaches in both technical and enabling work in annual reporting at outcome level at the end of 2020, in order to identify advances and gaps in the Organization's crosscutting work.

Country focus

731. The results of PAHO's technical cooperation are manifest in its Member States, and PASB continued to tailor its country-level interventions according to national priorities and needs. The Bureau developed a CCS for each country, including interventions to maintain essential health services throughout the pandemic. Each CCS is fully aligned with SHAA2030, the PAHO Strategic Plan 2020-2025, SDG 3, and other health-related SDGs, as appropriate to the national context.

732. In alignment with ODI 3 Review Experiences with Country Cooperation Strategies and Develop New Guidelines, the Bureau adapted the global approach to CCS development to the regional context. This action followed a consultative and systematic documentation and review of CCS experiences and resulted in concrete recommendations to strengthen country focus and improve CCS processes, outcomes, and use. Although no new CCS has been developed since 2020 due to constraints and the changed political context imposed by the COVID-19 pandemic, PASB has ensured effective bridging across the different levels of the Organization—the regional office, 27 country offices, and three subregional programs—in order to strengthen country focus, enhance collaboration with subregional integration entities, and optimize the Bureau's technical cooperation.

733. Additionally, the Bureau restructured its subregional programs so as to further engage with subregional integration mechanisms at the highest levels and promote a more coordinated approach to address common health challenges. In June 2022, the Bureau signed a Subsidiary Agreement to Improve Regional⁴²¹ Public Health with CARPHA, committing \$750,000 to support CARPHA programs over the next 18 months. The funding will benefit interventions to improve access to safe and affordable medicines, implement policies for healthy food environments, and enhance country capacity for the surveillance of communicable and noncommunicable diseases, among other regional health security issues.

⁴²¹ Here, "regional" refers to the Caribbean region, which is the terminology used by Caribbean stakeholders.

734. The Bureau advanced implementation of the PAHO Key Country Strategy, with close monitoring and adjustment of technical cooperation with these countries, including a formal review of the technical cooperation with Haiti, which maximized PASB's added value and impact. The Bureau dedicated special attention to countries in particularly difficult situations, such as Haiti and the Bolivarian Republic of Venezuela, through weekly meetings of dedicated task forces, allowing for close monitoring of the countries' situations, and timely decision-making and technical cooperation.

735. The Bureau enhanced its strategic tailoring of technical cooperation to individual country needs through strengthened partnerships with WHO, ECLAC, other United Nations agencies, and subregional integration mechanisms; engagement with ministers of health and CARICOM and COMISCA Heads of State and Government through face-to-face and virtual meetings; and participation in United Nations high-level meetings and the United Nations General Assembly Special Session on COVID-19. The Bureau's coordinated approach with United Nations Resident Coordinators in countries and the United Nations Regional Coordination Mechanism for Latin America and the Caribbean has reinforced PAHO's leadership at country level, extending beyond the health sector to enable a common approach with all development partners and at the highest levels of government.

736. The Bureau has a long history of championing and contributing to the promotion of South-South and triangular cooperation, initially through its initiative on technical cooperation among countries, and now through the successor CCHD program. CCHD not only leverages expertise within the Organization, but also—as importantly—identifies and mobilizes know-how from within countries themselves to develop tailored solutions to national health issues. The Bureau contributed to strengthening the offices of international relations of the ministries of health, and in November 2018 launched a community of practice for representatives of those offices, aimed at facilitating improvements in national governance for global health and international cooperation for health, and promoting health diplomacy and cooperation among countries.

737. In 2018, PASB collaborated with the Ibero-American General Secretariat to produce a report on South-South cooperation in the Region,⁴²² and the Bureau contributed to the development of the United Nations System-wide Strategy on South-South and Triangular Cooperation for Sustainable Development, in collaboration with UNOSSC. In March 2022, as part of the Global South-South Development Expo prelaunch activities, UNOSSC, in partnership with PAHO, UNICEF, and UNFPA, launched the publication *Good Practices in South-South and Triangular Cooperation: Delivering on the Sustainable Development Goal on Good Health and Well-Being*.⁴²³ This partnership also convened virtual sessions with countries to exchange best practices

⁴²² Pan American Health Organization. *South-South and triangular cooperation in health in Ibero-America 2018*. Washington, DC: PAHO, SEGIB; 2018 [cited 19 August 2022]. Available in Spanish from: <http://iris.paho.org/xmlui/handle/123456789/50514>.

⁴²³ United Nations Office for South-South Cooperation / United Nations Development Programme, United Nations Children's Fund, United Nations Population Fund, Pan American Health Organization. *Good practices in South-South and triangular cooperation: delivering on the Sustainable Development Goal on good health and well-being*. Washington, DC: UNOSSC/UNDP, UNICEF, UNFPA, and PAHO; 2022 [cited 19 August 2022]. Available from:

and lessons learned in maintaining essential health services during the COVID-19 pandemic and looking to the postpandemic period.

738. The Bureau increased the visibility of its country-level work by contributing stories to the 2021 WHO Country Presence Report.⁴²⁴ These country stories showcased salient aspects of the COVID-19 response, work on WHO's Triple Billion targets, and issues related to SIDS, among other topics. COVID-19 country stories were produced by Argentina, Barbados, Colombia, Costa Rica, Dominican Republic, Guatemala, Panama, and Trinidad and Tobago, along with country profiles from the Dominican Republic and Paraguay for the WHO Country Presence portal.

739. The Bureau enabled continued leadership and strategic, technical, and managerial operations at country and subregional levels through the development of adapted guidelines for country office transfers on appointment of new PAHO/WHO Representatives, and leveraging all available resources to conduct successful transfers of PAHO/WHO Representatives in nine countries from 30 June 2021 to 30 June 2022—Argentina, Ecuador, Guatemala, Jamaica, Mexico, Panama, Paraguay, Uruguay, and the Bolivarian Republic of Venezuela—and of Subregional Program Directors in Central and South America. PASB convened numerous dialogues and strategic briefings between the PASB Director and PAHO/WHO Representatives, as well as capacity-building activities for the latter, in order to enhance coordination and communication at all levels of the Organization.

Resource mobilization and coordination

740. The Bureau completed implementation of its Resource Mobilization Strategy 2016-2019, which was designed to ensure the availability of financial resources for effective technical cooperation with Member States. Actions taken included the relaunching of the Resource Mobilization Network to build capacity, strengthen planning, and generate more effective resource mobilization across the Organization.

741. The Bureau conducted a survey of technical departments and country offices to capture and compile information on the work being done with CSOs, including the type of engagement that the Bureau has with them, enablers for closer collaboration with these organizations, and the optimal forums for successful engagement. The survey found that most (54%) of the contacts were informal and that consultative processes constituted the largest proportion (46%) of that civil society engagement.

742. The Bureau strengthened and expanded its relations with existing partners—at regional, subregional, national, and subnational levels—while seeking to forge new partnerships. Between mid-2018 and mid-2019, the Bureau mobilized almost \$60 million in contributions (including national voluntary contributions and emergency funds) from existing partners and 10 new partners, the latter comprising the United Arab Emirates, Government of the British Virgin Islands, SDC,

<https://www.unsouthsouth.org/2022/03/23/good-practices-in-south-south-and-triangular-cooperation-delivering-on-the-sustainable-development-goal-on-good-health-and-well-being-2022/>.

⁴²⁴ World Health Organization. WHO presence in countries, territories and areas: 2021 report. Geneva: WHO; 2021 [cited 19 August 2022]. Available from: <https://apps.who.int/iris/handle/10665/341308>.

UWI, Argentina's Secretariat for Comprehensive Drug Policies, two secretariats of health in Brazil END Fund, Bernard van Leer Foundation, and Robert Wood Johnson Foundation.

743. In 2020, the Bureau enhanced its performance in mobilizing voluntary contributions, broadening and diversifying its financial partner base, and improving its visibility and overall positioning in the international health and development community. From July 2019 to June 2020, PASB mobilized a total of \$205 million in voluntary contributions—over \$47.2 million was mobilized through agreements with the EU alone, reaffirming this body as one of PAHO's most significant partners—and was able to attract 24 new financial partners. The EU adopted its new Multiannual Financial Framework (the EU budget 2021-2027) in December 2020, and PASB, in collaboration with WHO, offered training in March 2021 to strengthen the capacities of key staff to effectively engage with the European Commission and EU delegations. The Bureau provided ongoing capacity development opportunities, including through an exchange of knowledge and experience around resource mobilization efforts across all PASB levels.

744. In the period July 2020-June 2021, PASB mobilized a total of \$270.3 million, signing agreements with 25 new funding partners that represented a diverse group of foundations, public charities, academia, and development agencies, and reinforcing PAHO's position as the partner of choice in public health for the Americas. From 1 July 2021 to 30 June 2022, the Bureau mobilized a total of \$309.2 million in PAHO voluntary contributions—including nonemergency, emergency, and national voluntary contributions—and signed agreements with 16 new financial partners, representing a diverse group of government entities, foundations, public charities, and development agencies. The partners comprise: Government of Belize; Government of Turks and Caicos Islands; Ministry of Health of Spain; U.S. Department of State; Ministry of International Relations and La Francophonie of the Government of Quebec; Health Department of Amazonas (Brazil); Health Department of the Federal District (Brazil); Health Department of Mato Grosso do Sul (Brazil); Health Department of Rio de Janeiro (Brazil); Health Department of Santa Catarina (Brazil); Unitaaid; MiracleFeet; Resolve to Save Lives; Fred Hollows Foundation; Ford Foundation; and Foundation MAPFRE.

745. For the COVID-19 response, PASB partnered with the World Bank, IDB, Central American Bank for Economic Integration, and the CAF development bank of Latin America to fast-track loans, grants, and technical cooperation projects for Member States, with most of the funds being allocated directly to countries. The Bureau also signed memoranda of understanding with the United Nations Multi-Partner Trust Fund Office to become a Participating United Nations Organization in the United Nations COVID-19 Response and Recovery Fund, and in the operational aspects of the Spotlight Initiative⁴²⁵ Fund in the Caribbean. As of 30 June 2022, over \$2.9 million had been mobilized for PASB's COVID-19 response through these funds.

746. Given the urgency of the COVID-19 response, the Bureau developed new simplified and expedited processes for reviewing proposed engagements with non-State actors, aligned with FENSA. This ensured rapid—in most cases, within 48 hours—but still thorough, due diligence reviews and risk assessments of proposed engagements to preserve the Organization's integrity, independence, and reputation. A new partnerships portal was created on the PAHO website to

⁴²⁵ Available from: <https://www.spotlightinitiative.org/>.

enhance the visibility of the Bureau's work with partners and provide key information for existing and potential new partners.

747. In December 2020, PASB formulated its new Resource Mobilization Strategy 2020-2025, which has an action plan to guide its implementation and measurable indicators aligned with the principles of results-based management. The Bureau also developed a road map for the period 2021-2023 for working with the private sector—the first of its kind—which aligns with FENSA, and boosted its capacity for resource mobilization, partnerships, and project management through webinars targeting PASB personnel. In the first semester of 2021, the webinar series Activate Resource Mobilization explored the importance of partnerships; concept notes as valuable resource mobilization tools; initial approaches to partners; core principles of effective negotiation; and characteristics of a quality proposal.

748. The Bureau supported country-level resource mobilization through the development of country-driven projects, including for national COVID-19 responses. The India-UN Development Partnership Fund supported technical cooperation and the response to COVID-19 in Belize (\$1 million), Grenada (\$100,000), Guyana (\$968,000), and Trinidad and Tobago (\$1 million). The Bureau also organized resource mobilization webinars to identify opportunities that allow for initiatives under the modality of cooperation among countries by partners such as the India, Brazil, and South Africa Facility for Poverty and Hunger Alleviation; German Agency for International Cooperation Regional Fund for Triangular Cooperation in Latin America and the Caribbean; and various United Nations multipartner trust funds.

Financial operations

749. In 2018, real-time financial reporting for managers was significantly enhanced through the deployment of dashboards for monitoring both the Program Budget and procurement on behalf of Member States. The United Kingdom National Audit Office (NAO), which was appointed as PAHO's external auditor in 2017, delivered an unmodified audit opinion for 2018, reflecting the Bureau's compliance with the International Public Sector Accounting Standards. The audit found no weaknesses or errors considered material to the accuracy, completeness, or validity of PAHO's financial statements. However, the NAO provided broad recommendations regarding the management of the Working Capital Fund and other cash resources in support of the Program Budget, the PAHO Resource Mobilization Strategy, budgetary monitoring and oversight, and the assurance provided by compliance, risk management, and accountability activities.

750. At the peak of the pandemic, PASB cooperated with and assisted the NAO to implement a remote external audit, which again resulted in an unqualified audit opinion. In addition to the standard audit of accounting and other internal controls, in 2020 the NAO focused on the Bureau's programs for procurement on behalf of Member States, and on human resources management and important aspects of the response to COVID-19.

751. In response to the Organization's financial crisis, PASB established a new interest-bearing demand deposit account for Headquarters and a quarterly and monthly cost center financial compliance process, and decentralized some procedures to cost centers. These measures resulted in additional interest revenue and improved liquidity, more efficient financial closure, and timely

implementation of small financial commitments. In another innovation, The Bureau created a new category of focal point in cost centers to facilitate the establishment and timely monitoring of letters of agreement for technical cooperation, and provided relevant training. PASB also developed several new tools and automated reports to monitor execution of funds received, expedite financial reporting to donors, and enable more specific and efficient analysis of the Organization's spending trends.

752. In addition to the pandemic, recent armed conflicts have impacted global financial markets, resulting in decreased returns and challenging the Organization's capacity to achieve the budgeted investment income. PASB's financial managers engaged in continuous assessment and analysis of the Bureau's financial condition, including monthly monitoring and calculation of internal borrowing and, together with budget managers, the preparation and update of financial projections. Options for responding to the precarious financial situation were presented to the Steering Committee on Emergency Financial Measures, and several efficiency improvements were made, including the reorganization of services and responsibilities to increase efficiency, resulting in a reduction of a further 15% in positions in the Financial Resources Management Department in the period July 2018 to June 2019, freeing additional resources for technical cooperation. The Bureau also developed a new Perpetual Budget Structure for Procurement Funds, which optimizes resources, reduces workload, and provides for uninterrupted operation. This perpetual structure was adopted by PASB's Terminal and Statutory Entitlements Funds, and others, to take advantage of the efficiencies.

753. In 2021, the Bureau ensured efficient support for the exponentially increased volume of voluntary contributions for emergency response and procurement of pandemic-related supplies on behalf of Member States, and recruited temporary assistance to address the increase in transactions. PASB developed a policy and job aid to assist with appropriate and transparent reporting, monitoring, and management of inventories, in light of the Bureau's need to temporarily hold stocks of essential materials and supplies for the COVID-19 response in order to facilitate their timely distribution to Member States.

754. The Bureau competitively selected third-party administrator services to support the processing of staff health insurance (SHI) medical and pharmacy claims for PAHO and WHO staff members and retirees residing in the United States of America, and their eligible dependents, finalizing the respective contracts with Cigna International and Navitus Health Solutions. The two agreements are expected to save about \$3.2 million per year in costs to the SHI plan and participants. The transition to the vendors was completed on 1 January 2021, and the Bureau implemented a communication campaign to inform SHI members of the procedures and tools available with the new administrators. In another cost-saving measure, PASB instituted a new rule in the SHI program that requires all eligible retirees who are residents of the United States of America to enroll in Medicare (Parts A and B), a strategy that is expected to significantly reduce costs for this group of former staff.

Human resources management

755. The Bureau continued to implement its People Strategy to strengthen organizational alignment and agility, foster talent at every level, and provide inspiring leadership for change. In 2020, the Bureau developed the People Strategy 2.0 to incorporate high-priority activities from the 2015-2019 People Strategy and the human resources-related ODI. The People Strategy 2.0 comprises three pillars designed to support the PAHO Strategic Plan 2020-2025: functional optimization, innovation, and agility. The Bureau has defined key performance indicators for each pillar to enable monitoring of the Bureau's achievements and timeliness based on an implementation plan. PASB has also taken steps to streamline staff selection, improve human resources planning, increase work efficiencies, and enhance corporate learning.

756. In 2019, the Bureau established the Advisory Committee on the Implementation of the People Strategy, which recommended that priority be given to keeping key positions filled, including by onboarding replacement staff prior to the separation of retiring staff. The committee also called for the development of specialized rosters to enable the recruitment of top talent; making the search for talent an ongoing responsibility of managers; and engaging in regular and sustained exchange of staff with key partners such as the U.S. National Institutes of Health and CDC, as well as with in-country public health entities and universities. PASB conducted an internal survey on staff engagement, which was completed by 74% of personnel, the highest response rate on record for such surveys. The results revealed that personnel felt strongly connected to the Organization's mission, but also suggested room for improvement in the organizational climate, particularly through enhanced internal communication and management practices.

757. The Bureau developed and adopted new guidelines for reprofiling PASB positions to meet evolving programmatic needs and ensure that the Organization is fit for purpose, entailing reviews of workforce composition to determine the most efficient distribution of positions and skills. PASB implemented iLearn, the WHO global learning management system, making it available to both employees and contingent workers, signed a multiyear agreement with the United Nations System Staff College, and established a new management and leadership training initiative for senior and mid-level managers. The Bureau mounted a special training initiative for internal staff interested in becoming PAHO/WHO Representatives, in order to improve their chances of successfully competing in WHO's Global Assessment Process for Heads of Country Offices.

758. In December 2020, PASB created a special program for succession planning related to PAHO/WHO Representatives, and, in February 2021, established a mentoring program to maintain achievements in gender parity and offer the same development opportunities to female and male internal candidates seeking positions as PAHO/WHO Representatives. The program is available to all PASB staff members whose names are already on the global roster for heads of country offices, and those whose inclusion in the roster is pending the completion of additional developmental activities based on their assessment results.

759. Workforce statistics reflected progress toward gender parity in the Bureau, particularly at the P-4 and higher post levels. With respect to staff in the international professional and national

professional officer categories, PASB maintained a distribution of 51% female and 49% male. The Bureau's most current data indicate that the percentage of women as heads of country offices increased 9% between 2017 and 2021.

760. The Bureau implemented the PMIS Recruiting Module, which permits a consistent approach to consultant recruiting and maintains all actions in a single system, increasing the pool of applicants through the establishment of open advertisement of vacancies. PASB also developed a new disclosure form specifically for consultants, enhancing its efforts to mitigate conflicts of interest. Prior to being contracted, consultants must now disclose their activities and associations in order to allow the Bureau to determine whether a disclosed activity or association might give rise to a conflict of interest. In addition, the Bureau automated the annual declaration of interest questionnaire for senior staff and staff in selected employment categories, integrated it within the PMIS, and implemented a new candidate disclosure form that requires prospective personnel to disclose their outside interests and activities prior to joining the Organization. This enables identification of potential conflicts of interest and corrective action before any appointment takes place.

761. The Bureau renewed its orientation program for new hires and personnel rotating across duty stations, as well as its language learning program. By adopting virtual instructor-led training, PASB was able to offer group classes in all four official languages: English, French, Portuguese, and Spanish. However, PASB's financial difficulties during the second half of 2019 prompted a hiring freeze under which only critical positions were filled. A critical review of staffing and contractual modalities highlighted the Bureau's reliance on temporary workers—as of December 2019, more than half of the PASB workforce were contingent personnel secured through agencies, secondments from host countries, and consultancy contracts. The Bureau's financial uncertainty, together with the onset of the COVID-19 pandemic, increased anxiety levels among some PASB personnel, and PASB hired a temporary in-house counselor to work with employees and build their coping skills. The Bureau provided information through webinars, virtual town hall interventions, and intranet postings on topics such as effective teleworking, minimizing exposure to COVID-19, and addressing feelings of fear and anxiety.

762. The telework program that PASB implemented in 2017 proved to be prescient, as, in response to the COVID-19 pandemic, most PASB personnel were required to telework to safeguard their health and well-being. The Bureau regularly updated its SOPs to guide managers and staff on the emergency telework modality, and the telework agreement form was modified in the PMIS to allow for the new ways of working. The Bureau issued a revised telework policy in April 2021 that was informed by a survey of PASB personnel, and the policy and updated SOPs will govern all staff members upon their return to premises.

763. The Bureau enhanced its support for the physical and mental well-being of its personnel during the COVID-19 pandemic, providing information on testing services; developing a protocol for the voluntary confidential reporting of COVID-19 cases to allow individualized follow-up of reported, confirmed, and probable cases of COVID-19, and contact-tracing; tracking the number of COVID-19 cases among personnel; developing new SOPs on medical evacuation of personnel; and encouraging and facilitating uptake of the COVID-19 vaccine. In April 2021, PASB extended the external Employee Assistance Program available to personnel based in Washington, D.C.,

which complements the support provided by a counselor psychologist, to cover all country offices and centers.

764. In May 2020, the Bureau developed and disseminated guidance to all duty stations on managing the occupancy of premises safely and defining the conditions for a phased return. A check-in survey was developed in the PMIS to ascertain an individual's eligibility and availability to manage a return within the maximum occupancy allowed.

Strategic communication

765. The Bureau adopted the Communications Strategic Plan 2018-2022 to guide strategic and effective health communication, and for making communication for health an area of PASB technical cooperation. Communication for health refers to health communication that seeks to influence behaviors and attitudes, and generate positive public health outcomes. Drawing on the growing body of evidence on the types of communication that are most effective, the approach emphasizes evidence-based, emotive, and exceptional content and storytelling that engage audiences, successfully communicate important health information, amplify "front-line voices," and engage new and younger audiences through targeted content on social media and other new platforms. In early 2019, the Bureau completed a "brand evolution" exercise that refreshed PAHO's visual identity and resulted in new guidelines for communication products and channels, to strengthen both institutional and health communications.

766. The COVID-19 pandemic presented major communication opportunities and challenges for the Bureau. PASB became the "go to" technical and scientific institution for media inquiries on various public health issues relevant to the Region, and, given PAHO's status as one of the most trusted regional sources of health information, the Bureau's communications sought to contribute to improvements in individual health and health systems, while countering misinformation and disinformation. PASB's communication officers at country level developed a series of feature stories depicting human perspectives of COVID-19 and other health conditions, which were instrumental in promoting public health messages for broader audiences.

767. From January to June 2020, the PAHO website⁴²⁶ received more than 42 million page views, a more than threefold increase over the same period in 2019. Website traffic peaked at 350,000 visitors per day in late March 2020, soon after WHO declared COVID-19 a pandemic, then tapered off to 150,000-200,000 per day through the end of June 2020. Overall, PAHO's web users increased by 367% compared with the same period a year earlier. In 2020, PASB adopted Drupal as the new content management system for the PAHO website, enabling the Bureau to tell success stories more compellingly and disseminate time-sensitive content throughout the COVID-19 pandemic. PAHO web traffic from 1 July 2021 to 30 June 2022 totaled 71,521,204 views (67% of users viewed the page in Spanish, 15% in Portuguese, 13% in English, and 5% in French).

768. News media interest in PAHO's information and analysis also increased substantially. From January through June 2020, PAHO's weekly press briefings and daily spokesperson

⁴²⁶ Available from: <https://www.paho.org/>.

interviews generated nearly 1,000 original news stories published or broadcast in more than 40 countries and territories. These included articles and citations by major media outlets including Agencia EFE, Agence France-Presse, Associated Press, British Broadcasting Corporation, Cable News Network, Telemundo, The Economist, The New York Times, The Washington Post, TV Globo, and Univision. The Bureau convened several journalist training sessions to improve quality and factual media coverage of the COVID-19 pandemic, with a focus on tackling vaccine misinformation.

769. The Organization also made full use of its social media platforms to disseminate COVID-19 messages and prevention and risk-reduction advice intended for both health professionals and the general public. Between January and June 2020, this stepped-up social media activity attracted more than 550,000 new followers to PAHO’s Facebook page, nearly 230,000 new followers to PAHO’s Spanish-language Twitter account, and nearly 130,000 new followers to PAHO’s Instagram account. In addition, an estimated 1.25 million people joined Facebook Live streams of PAHO’s weekly virtual press briefings on COVID-19.

770. In the period from July 2020 to June 2022, the Bureau produced more than 1,050 videos on the PAHO YouTube channel—PAHO TV⁴²⁷— which garnered over 13 million views in 2021 and over 3 million more in 2022. PAHO’s social media presence experienced a rapid increase in engagement and reach: 27 PASB Facebook sites attracted over one million new followers, 27 Twitter accounts received over 500,000 more followers, the Instagram account gained 400,000 new followers, and the LinkedIn account 50,000 new followers. Facebook-Instagram and Twitter provided access to resources to help the Bureau maximize its presence on their platforms, support for the preparation of content, donation of advertisement credits to boost posts, and training opportunities related to COVID-19.

771. Innovative corporate communications approaches expanded PASB’s traditional audiences, and the Bureau collaborated with several celebrities and media organizations on communication initiatives for the COVID-19 response and other health issues. These included Mario “Don Francisco” Kreutzberger (#SafeHands Challenge); Diego Torres (Color Esperanza 2020); Sesame Street/Sésamo (#ManosSeguras); and the World Economic Forum and Univision (#JuntosEnCasa). A new partnership with Pinkfong resulted in the co-branded hand-washing messages delivered by Baby Shark, and work with Global Citizen led to the donation of proceeds from the song “Color Esperanza” recorded by Camilo, Kany García, Leslie Grace, Lali, Reik, Carlos Rivera, Prince Royce, Thalía, Diego Torres, and Carlos Vives, and sponsored by Sony Music Latin.

772. In December 2021, PAHO began a year-long celebration of its 120th anniversary with a focus on the historic health gains made by Member States, catalyzed through PASB’s work. As of 30 June 2022, PASB showcased this milestone anniversary by launching a dedicated website⁴²⁸ that includes news stories, a timeline of public health achievements, and a calendar of events. The Bureau pursued wide outreach at all levels with the development of strategic communication pieces, engagement with national authorities, and insertion of 120th anniversary key messages in

⁴²⁷ Available from: https://www.youtube.com/channel/UCpNnv_kL4Jk8YG_VflnZpmg.

⁴²⁸ Available from: <https://www.paho.org/en/120>.

high-level meetings and events. The Bureau created the Heritage Repository, an indexed library that safeguards the institutional memory of these events and hosts information on the planning and execution of special events for future reference.

773. During the first semester of 2020, special initiatives included a commemorative event hosted by the Embassy of Spain in Washington, D.C., to highlight the Bureau's longstanding cooperation with that country in pursuit of universal health in the Americas; a virtual dialogue on expanding regional manufacturing capacity through public and private approaches; and a webinar on resilient health systems and services in the context of emergencies and disasters. At country level, events included the planting of 120 fruit trees in Nicaragua, a founding PAHO Member State, which was attended by high-level government officials, other dignitaries, ambassadors, United Nations agency representatives, and PASB personnel.

774. In 2018, PASB created a new Office of Knowledge Management, Publications, and Translations, merging three formerly separate programs. The entity was charged with positioning PAHO as the authoritative source of multilingual scientific and technical health information and publications for the Americas, and providing technical cooperation to build capacity in knowledge management, publishing, and multilingualism in Member States. In 2019, PASB officially launched the Spanish version of ICD-11, developed in cooperation with other institutions, mainly PAHO/WHO Collaborating Centres, and has continued to provide all technical and governance documents in PAHO's four official languages and to translate key WHO publications into French, Portuguese, and Spanish.

775. The pandemic highlighted the importance of providing multilingual guidance to Member States in order to increase equitable access to health information and facilitate more timely technical cooperation. PASB joined other WHO offices in implementing eLUNa, a new system developed by the United Nations to streamline editing and translation processes by leveraging past translations and neural machine translation technologies. The Bureau benefited from combining computer-assisted translation and terminology tools with professional translators, and, in conjunction with internally developed systems and databases, improved productivity and consistency in translation processes. The Bureau's publication of the Spanish version of the Control of Communicable Diseases Manual provided a key tool for epidemiologists and experts in Spanish-speaking countries.

776. The Bureau designed and implemented a new publishing tracking system, PubTrack, to increase efficiency in its publishing processes. This tool covers all stages of publishing, from planning to content development, production, and final publication, and has been linked to other PASB systems to streamline workflows. PubTrack was implemented at the end of 2019 for all departments in PASB Headquarters, but, due to the COVID-19 emergency, its rollout in country offices was postponed until March 2022. Currently, all the Bureau's entities are using PubTrack to register their publications, request relevant approvals, and complete all publishing processes, as required by the PAHO Publications Policy, in order to ensure quality, consistency, and timelines.

777. In order to lower publishing costs, PASB signed a single-supplier agreement for electronic and print distribution based on a print-on-demand model, and, as part of ongoing efforts to make its publications easily accessible and more widely known, the Bureau implemented an open access

policy under a Creative Commons license that allows noncommercial reuse of all PAHO information products. By categorizing content, using predefined templates, and implementing industry best practices, PASB was able to move to a system of producing publications at lower cost, with estimated savings calculated at \$1.5 million per 200 publications. The Bureau also began disseminating a monthly publications newsletter and implemented a social media strategy that increased outreach to, and engagement with, users.

778. In its critical role as an authoritative source of scientific and technical information, PASB maintained the PAJPH and IRIS, enhancing the IRIS IT infrastructure through an investment from the Master Capital Investment Fund. IRIS now makes available about 60,000 full-text documents to thousands of daily visitors within and outside the Americas. The Bureau undertook technical cooperation with ministries of health and public institutes in several countries in the Region to build their own repositories, contributing to the preservation and sharing of institutional memory on public health in the Americas. PASB's information products were disseminated at several key international events, including the World Health Assembly; the American Public Health Association Conference; the Canadian Public Health Association Conference, and the Canadian Conference on Global Health; and the Guadalajara International Book Fair.

779. As part of the pandemic response, the Bureau created a specific workflow to review and assign dates and version numbers to COVID-19-related documents, so that users of the PAHO website and institutional repository could readily find the latest updates. PASB also focused on marketing and dissemination, creating a network of over 2,000 institutional partners in the Region and beyond, including public health schools, medical schools, universities, public health associations, and Collaborating Centres, and built partnerships with them for the promotion and dissemination of PAHO publications through their networks. The Bureau continued the assignment of digital object identifiers to PAHO International Standard Book Number publications, a process initiated at the beginning of 2020. This procedure ensures that these publications are more discoverable on the web, and that a permanent Uniform Resource Locator link for each is registered in Crossref, an official digital object identifier Registration Agency of the International DOI Foundation.

Information technology

780. The Bureau's IT strategy focused on improving the reliability, security, quality, and agility of IT services to support its technical cooperation and enabling programs, and to enhance collaboration and communication among its teams and between its teams and partners within secure, managed, and cost-effective environments. The Bureau added secure and cost-effective cloud-based services to improve mobility and sustainability, and to enable direct staff access to services, tools, and repositories at any time, from any location, and on any device. Following the "cloud first" principle, PASB migrated the Bureau's intranet and 70% of on-premises sites to cloud services, and achieved three significant milestones:

- a) In 2020, consolidation of virtual workplace, meeting, and collaboration platforms, leveraging the Microsoft Office 365 Cloud Platform and using Microsoft Teams as well as Zoom for virtual videoconferencing with simultaneous interpretation;

- b) In May 2021, migration of the PAHO intranet from on-premises infrastructure to Pantheon, a web-hosting service provider that leverages the Google Cloud Platform;
- c) Implementation of external teams and collaboration sites by leveraging Microsoft Office 365 technologies to support remote relations with Member States and partners. The use of Skype for Business enhanced responsiveness and agility by providing flexible and mobile virtual meetings, messaging, and file-sharing.

781. The Bureau introduced new cybersecurity controls aligned with industry best practices, particularly since the risk of a cyberattack was identified as one of the major risks facing the Bureau's IT systems. The Bureau implemented a mandatory information security awareness program, ensuring that all employees are able to assist in identifying and reporting potential cyberattacks, conducted regular simulated phishing attacks to further sensitize users about the dangers of clicking on malicious links, and undertook continuous information security risk assessments of new software applications. PASB also established a new Security Operations Center to improve cybersecurity incident monitoring and response, with tools based on machine-learning and artificial intelligence to enable the early detection of incidents, leveraging Microsoft's Sentinel technology.

782. Although remote working introduced new cybersecurity challenges, PASB was able to extend the same level of security that existed on premises to all remote devices, no matter where employees were located, through the deployment of new software distribution tools, leveraging Microsoft's Intune technology. The Bureau joined other United Nations agencies in the Common Secure initiative, a collective approach to counter the increase in cybersecurity incidents globally. The United Nations Digital Transformation Network, United Nations Information Security Special Interest Group, and United Nations International Computing Centre are collaborators in the initiative. As a result of the Bureau's cybersecurity program, external firms consistently rated PAHO at the top of United Nations agencies in terms of countering cybersecurity risk exposure.

783. The Bureau's digital transformation was well under way prior to the onset of the COVID-19 pandemic, but the process took on new urgency during the pandemic, particularly with the Bureau's shift to nearly universal staff teleworking and the impediments to international travel. PASB personnel adapted to the new remote environment by increasing their use of tools such as softphones, virtual meeting platforms, collaboration sites, and electronic signature, among others, and the expanded availability and use of these tools enhanced collaboration between PASB and its stakeholders, and facilitated continued, effective technical cooperation.

784. Many corporate innovations were introduced to streamline administrative business processes in the PMIS, including enhancement and optimization of the Bureau's SharePoint and Workday Cloud platforms. These actions included the development of new dashboards and reports to support informed decision-making; implementation of a new framework to support and monitor technical cooperation activities; and improvement of procurement processes through a new electronic signature, a new web portal that allows interaction with suppliers, and a new electronic contract review committee within the PMIS. Significant improvements also related to simplifying travel and financial processes, installing a user-friendly, web-based meeting reservation tool at the Bureau's Headquarters, and deploying a corporate correspondence management system, along

with other PMIS enhancements to provide live data-sharing in a secure environment and electronic delivery of statements of account, invoices, and development partner reports to Member States.

785. The Bureau created a new mobile application to better support Governing Bodies' meetings, with more user-friendly processes for registration and collaboration among participants, and deployed PASB's first two "digital workers"—Florence and Pahola—through artificial intelligence. PASB streamlined the processes of the Revolving and Strategic Funds through the implementation of new technologies and digital solutions, and deployment of the COVAX Tracker in March 2021 provided a valuable tool to monitor the processing and delivery of COVID-19 vaccines to Member States. Additionally, the deployment of the COVID-19 Vaccine Demand Planning tool in June 2021 allowed both the Bureau and Member States to document countries' demands, as well as COVAX and bilateral agreements, through a centralized platform.

786. The Bureau focused attention on analyses using health data that required technical solutions and strategic projects. PASB's use of Microsoft's Power BI software to create innovative graphs and the ability to electronically warehouse data facilitated access to information and provided tools for analyses to enhance data-driven decision-making across PASB's programs and entities. The Bureau submitted a proposal to develop a data-management road map for all corporate health-related projects through engagement with Gartner Consulting. This proposal focused on the development of a design for data management and the corresponding infrastructure and technologies. The engagement also included a review of key initiatives under way to identify those that could provide "quick wins" as part of an overall data-management implementation strategy.

Procurement

787. Between July 2018 and June 2019, the Revolving Fund procured vaccines and related supplies worth \$814.2 million for countries and territories in the Region, and the Strategic Fund supported the acquisition of medicines and strategic supplies worth \$69.5 million. Improvements to the procurement process resulted in, among other things, a reduction in the lead time for acquisition of the commodities. The renewal of PASB's partnership with the Global Fund in 2018 provided countries participating in the Strategic Fund with access to antiretrovirals at more competitive prices and with improved supply, and the arrangement enhanced PAHO's position as a strategic player among United Nations agencies and other international organizations.

788. During the COVID-19 pandemic, PASB implemented innovations in its procurement operations to help Member States access health supplies in the face of severe disruptions in global supply chains, and joined forces with WHO, UNICEF, and other partners through the United Nations COVID-19 Supply Chain System and the Access to COVID-19 Tools Accelerator. These collaborations helped ensure cost-effective procurement and fair allocation of scarce supplies for PAHO Member States.

789. The Bureau's capacity to respond to the significant leap in volume was aided by technological advancements in procurement processes, such as the implementation of the Collaboration Portal for Shipping Documents. Using SharePoint, PASB established a conduit with suppliers and national authorities for immediate access to shipping documents, and enabled all suppliers to upload information directly to the collaborative platform. This allowed Member States

to directly access data from the PMIS related to shipments of vaccines ordered through the Revolving Fund.

790. Another technological advancement was the addition of robotic process automation, which facilitated faster and more efficient review and uploading of supplier shipping documentation. PASB used robotic process automation to create two bots—software programs that perform automated, repetitive, predefined tasks—MIA, which creates draft purchase orders from a requisition, and MAX, which creates advanced shipping notices and fills out shipping information. Both bots have introduced efficiencies into the procurement process as MIA reduces order processing time, and MAX facilitates access to documents by national authorities.

791. Between July 2019 and June 2021, the Bureau’s procurement activity surpassed the \$1 billion mark in annual procurement, making PAHO one of the top 10 United Nations agencies carrying out procurement activities to support Member States in achieving their national and regional health goals. In 2020, through the Revolving Fund, PASB co-led—with UNICEF—the procurement mechanisms of the COVAX Facility, and jointly issued a request for proposals to secure at least 2 billion doses of COVID-19 vaccines of assured quality. The Bureau coordinated the supply chain for three different providers (AstraZeneca, Pfizer, and Serum) for a total of 22.5 million doses of vaccines to countries and territories in the Region.

792. The Bureau’s procurement function strengthened its market intelligence and logistics management in order to better anticipate market challenges and opportunities, and to establish the best and most cost-effective approaches to deliver health supplies within a context of unstable global logistics over coming years.

Legal services

793. The Bureau enhanced its legal interventions to facilitate and enable both the Bureau’s internal procedures and its technical cooperation, especially in the challenging and evolving situation presented by the COVID-19 pandemic. The Bureau ensured legal counsel and support for technical cooperation activities by drafting, negotiating, and reviewing agreements and other legally binding documents for projects and activities, and reviewing documents as requested by Member States. These activities encompassed interventions related to both PASB’s and Member States’ responses to COVID-19. From July 2021 to June 2022, the Bureau supported the review, negotiation, and signature of over 350 agreements and many more extensions and amendments to existing agreements—of these, in 2021, about one-third were specifically related to COVID-19.

794. In January 2021, PASB’s legal apparatus launched the cloud-based version of the PAHO E-Manual, which is the official repository for the Organization’s policies and procedures. Improvements in the system include enhanced search capabilities and a more user-friendly experience for PASB personnel and for policy drafters and approvers. The Bureau’s recruitment of legal experts in the relevant areas was critical to the successful negotiation of the contracts to obtain third-party services for medical and pharmacy claims and improve the efficiency of the SHI program.

795. The Bureau's legal support for the procurement of vaccines and essential medicines and supplies, including through the COVAX Facility included: *a)* developing country prepayment obligations to COVAX/Gavi through the Bureau to enable country participation in COVAX; *b)* providing assistance and advice on a joint request for proposal—with UNICEF—for COVID-19 vaccines that was issued in November 2020; *c)* reviewing manufacturers' bid responses; *d)* providing assistance and advice, including negotiating agreements, regarding the Bureau's procurement and shipping of essential medicines and supplies to Member States to aid their response to COVID-19; *e)* participating in COVID-19 vaccine negotiations for supply agreements with manufacturers; and *f)* negotiating supply agreements to maintain previously agreed or improved prices for routine immunization programs at least through 2021, given the severe economic impact of the pandemic, including for the more expensive vaccines such as HPV, pneumococcal conjugate, and rotavirus.

796. The Bureau's legal apparatus supported resource mobilization and partnerships through: *a)* creation of a model template to expedite and facilitate the receipt of contributions from non-State actors to support PAHO's response to the COVID-19 pandemic; *b)* identification of the need for, and development of, a flexible process for proposed engagement with non-State actors to address COVID-19 emergency activities; *c)* capacity-building in FENSA for selected Bureau staff; and *d)* contribution to, and provision of guidance on, PAHO's new internal road map for working with the private sector in the period 2021-2023.

797. The Bureau worked closely with the Organization's outside counsel to defend PAHO's privileges and immunities in the United States of America. The *Mais Médicos* litigation case centered on whether the Bureau's technical cooperation for Brazil's *Mais Médicos* program between 2012 and 2018 constituted a commercial activity, such that PAHO cannot claim immunity from suit under United States law—specifically, under the International Organizations Immunities Act (IOIA). The loss of the Organization's privileges and immunities under this act in this case would have significant negative repercussions for the Organization and for other international organizations, and immunity under WHO's Constitution is also at issue in this litigation. In March 2022 the United States Court of Appeals for the District of Columbia Circuit denied the Bureau's motion to dismiss the case,⁴²⁹ and PASB will continue to vigorously defend PAHO's position in this matter.

General services

798. In 2018, a modern video and audio recording studio was completed at the Bureau's Headquarters for the production of professional-quality content in support of PAHO's Communications Strategy.

799. In 2019, a new centralized vehicle replacement plan was implemented under the Master Capital Investment Fund, and more than 60 obsolete vehicles were replaced across PAHO/WHO country offices and centers to ensure reliable support for technical cooperation activities. A new

⁴²⁹ *Ramona Matos Rodriguez v. Pan American Health Organization*, No. 20-7114 (D. Columbia Mar. 29, 2022) [cited 20 August 2022]. Available from: <https://www.courthousenews.com/wp-content/uploads/2022/03/cuban-doctors-ruling.pdf>.

travel agency was selected for Headquarters and for six country offices that use the agency's services—Bahamas, Barbados, Belize, Haiti, Jamaica, and Trinidad and Tobago—resulting in a reduction in service fees.

800. The Bureau invested in improved security and infrastructure at PAHO Headquarters, where a new security company was contracted, and a first phase of lobby security improvements was implemented. Security and infrastructure were also enhanced in country offices, including those in Argentina, Barbados, Brazil, Costa Rica, Dominican Republic, El Salvador, Guatemala, Guyana, Honduras, Jamaica, Peru, Trinidad and Tobago, Uruguay, and the Bolivarian Republic of Venezuela. Consequent on the COVID-19 pandemic, PASB Headquarters and other duty stations operated at reduced levels of attendance and operating costs, with strict control of occupancy.

801. The Bureau implemented digitization projects in two headquarters entities and in Guatemala, and conducted appraisals of PAHO properties—land and buildings—at Headquarters and in Argentina, Barbados, Brazil, Guatemala, Guyana, Haiti, Jamaica, Paraguay, Peru, and the Bolivarian Republic of Venezuela. The Bureau furnished, or replaced furniture in, various locations, including in a total of almost 190 new workspaces.

802. In 2021, the contract for the PASB warehouse in Virginia, the United States of America, was not renewed when the contract ended, and the firm Iron Mountain was hired to provide archive management services to the Bureau.

10. MAIN CHALLENGES

803. The Bureau took note of and analyzed the main challenges faced during the five-year period under review, with the intention of distilling lessons learned, identifying and implementing strategies and solutions to overcome them, and adapting and innovating to strengthen its trajectory as a learning organization that remains fit for purpose, in the service of the Member States of the Region of the Americas.

804. The COVID-19 pandemic and the Organization's financial crisis constitute the two major challenges that the Bureau faced over the past five years as described throughout this report—the former with its severe negative health, social, and economic impact, the latter with its significant obstacles to PAHO's technical, administrative, and managerial functions. Despite the differences in the nature of these challenges, both developed into emergency situations, putting at risk PASB's technical cooperation in priority health issues in the Region and necessitating substantial adjustments to the Bureau's operations in order to efficiently and effectively serve Member States.

805. The pandemic-associated infodemic has been, and continues to be, a major obstacle to health. The flood of information associated with the pandemic—the infodemic—resulted in misinformation and disinformation, and contributed to the spread of myths, a degree of distrust in international organizations, and vaccine hesitancy across the Region. As the pandemic continued into its second year, both the public and the news media showed increasing fatigue to COVID-19-related news, particularly to the plethora of emerging scientific studies—some with results contradicting others. This presented a risk of inadequate attention being paid to evidence-based guidance, especially for nonpharmaceutical public health measures. PASB also faced the dual challenge of improving its communications in this new era of hybrid communication and capitalizing on gains made in media coverage to call attention to priority topics beyond health emergencies, as the pandemic wanes.

806. Misunderstanding of the intergovernmental nature of PAHO and WHO was an overall challenge spotlighted by the COVID-19, as part of the myths, misinformation, and disinformation associated with the pandemic. Many persons seemed to see the secretariats of both PAHO and WHO as being equivalent to the Organizations themselves, expressing the view that not only could the secretariats compel Member States to take certain actions in the face of the pandemic, but also that they were failing to do so. This led to erroneous perceptions and opinions of, and the dissemination of false information about, the leadership of WHO and PAHO, especially on social media. The persistence of this aspect of the infodemic has the potential to undermine the credibility, reputation, and work of both organizations.

807. Changes in the political, social, and economic landscapes in the Region proved, in several cases, to constrain or limit the Bureau's work. New administrations in some Member States adopted a range of philosophical positions, some of which had the potential to negatively impact equitable progress to health. New governments advanced different perspectives, priorities, and policies, and changes in national counterparts required sensitization of new personnel at political and technical levels about established consensus on evidence-based priorities, as well as ongoing programs and interventions. In addition, as new governments took actions to clearly distinguish

themselves from previous administrations, there had to be frequent “re-booting” of previously agreed policies and strategies. These circumstances tend to limit tangible advancements within a five-year mandate, as a much longer time frame is usually required to achieve progress in areas such as the social determinants of health. There have been complex sociopolitical conditions, conflicts, and other crises in the Region, including significant flows of migrant populations, with concurrent strain on health systems, worsening of existing inequities, and creation of new inequalities. Although the economic situation of some of the larger countries in the Region has improved and several countries are showing signs of economic recovery from the pandemic, other countries continue to face significant challenges, and concerns remain regarding the equitable distribution of benefits, including access to health.

808. Inadequate attention to, and resources for, strengthening advances to UAH, UHC, and PHC have resulted in health systems that are still fragmented, segmented, and overly focused on secondary and tertiary levels of care. There is need for more efficient and effective governance and stewardship, greater attention to health promotion and disease prevention, and to IHSDNs, HRH that are fit for purpose, including at the first level of care, adequate health financing, access to essential medicines and technologies, disaggregated information on health that allows identification of persons and groups in situations of vulnerability, and the effective performance of the EPHFs, including monitoring, evaluation, and accountability.

809. Weak mechanisms for promoting effective multisectoral, multi-stakeholder, HiAP approaches to address the social, economic, environmental, commercial, and other determinants of health are hampering progress to realization of the right to health and health equity. Many sectors other than health—and even some stakeholders in the health sector—are unaware or unconvinced of the significant role they can play in improving the health of the public, the need for policy coherence across sectors to achieve health goals, and the importance of CCTs such as equity, ethnicity, gender, and human rights. There is much scope for greater inclusion and engagement of civil society and people who are affected by specific health policies, and for adequate protection of the policy space from industry interference and conflicts of interest.

810. Inadequate preparedness for and response to emergencies and disasters, especially large and/or multihazard events such as the COVID-19 pandemic, and to the climate crisis, together with insufficient appreciation of the importance of the IHR for health security, continued to impede the achievement of desired health outcomes. The Region’s dependence on external sources and importation of essential medicines, vaccines, equipment, and supplies led to unavailability or insufficiency of adequate quantities of these commodities. This situation severely challenged and hampered effective COVID-19 responses on the part of many countries of the Americas, with life-threatening consequences in some instances. Disasters and emergencies often result in the suspension or reduction of priority health programs for varying periods, and these disruptions may involve critical services for persons with chronic conditions such as NCDs, including MNS disorders, and other persons in situations of vulnerability. In addition, although the projected negative impact of climate change on the environment, health, and other critical developmental issues has been recognized, there are delays in the development and implementation of national climate change mitigation and adaptation plans, including for the health sector.

811. Constraints in resource mobilization constitute an important challenge, in light of competing priorities and a scarcity of flexible, unearmarked voluntary contributions, despite the significant resources mobilized to address the COVID-19 pandemic. Official development assistance to the Region of the Americas has continued to decline in a highly competitive environment and an international context with unforeseen political challenges, and financing is still inadequate for priorities such as NCDs, HRH, and the social and other determinants of health. PASB must also exercise care and due diligence in its resource mobilization efforts, partnerships, and alliances in order to avoid or appropriately manage potential conflicts of interest with private partners that may affect the Organization's image and reputation.

812. Uneven progress in the digital transformation of the health sector and the availability of information and communication technology is evident. Despite the rapid application of IT advances as part of the pandemic response, there remain countries, and areas and people within countries, that are at a disadvantage due to inadequate resources, limited capacity, and geographical barriers, among other factors. Telehealth, artificial intelligence, social media, and other digital platforms have tremendous potential to advance UAH and UHC, but they also have the potential to aggravate inequities in access where not adequately managed and resourced.

813. The need for continued institutional strengthening of the Bureau in an environment of restricted flexible resources is an ongoing challenge, as PASB responds to changing needs of Member States, the threats of future pandemics, and its continuing responsibilities to promote and contribute to the fulfillment of established mandates, as well as the COVID-19 pandemic response. This became evident in the changing environment, especially regarding: greater personnel awareness of policies governing ethical behavior, including zero tolerance of sexual exploitation and abuse; recruitment of additional human resources to address areas such as the increased demand for multilingual content, procurement, IT, human resources management, and legal services; creative strategies to address delays in receipt of assessed contributions from Member States and associated financial uncertainties; strengthening of the evaluation culture; improved managerial and staff compliance with, and accountability for, organizational policies and procedures; and consideration of strategies to encourage the Government of the United States of America to strengthen PAHO's and WHO's immunities and privileges as international, intergovernmental agencies.

11. CONCLUSIONS AND LOOKING FORWARD TO 2030

814. The last two-and-a-half years of the five-year period under review have been dominated by the COVID-19 pandemic and efforts by Member States, the Bureau, and partners to respond to it. Amid all the pandemic's well-documented ill effects on the health, societies, and economies of countries and territories in the Region of the Americas, COVID-19 has also provided opportunities for creativity, innovation, and adaptation in strengthening health systems for equity- and rights-based approaches that put people at the center, engage them, and address the social, economic, environmental, commercial, and other determinants of health. PASB will continue to work with Member States and partners to reduce inequities in the Region in the quest to build back better and fairer from COVID-19.

815. The Bureau has taken careful note of several lessons learned over the period, prominent among them the imperative of placing equity at the heart of health in order to leave no one behind. There must be meaningful actions to address the social, economic, political, environmental, commercial, and other determinants of health that strongly influence UAH, UHC, and health outcomes. In tandem with these efforts, strong social protection systems, including health insurance programs and financial safety nets, are essential, so that the plight of those in situations of vulnerability is not aggravated by situations over which they have little or no control.

816. Long-term investments in public health, in terms of financial, human, technical, infrastructural, and other resources, and—as importantly—multisectoral, multi-stakeholder involvement, are critical to prepare for, and mount a robust response to, external shocks and unexpected events such as the COVID-19 pandemic. The Region's leaders must commit to increased and strategic investments in health, as continued underinvestment, including in the first level of care and in specific threats to health such as NCDs, hampers the implementation of more agile, consolidated, and efficient responses. Strengthened and reoriented health systems based on the PHC approach must be established and maintained to achieve the promise of universal health.

817. Regional solidarity, exemplified by the Revolving Fund, an integral pillar of the Bureau's technical cooperation with countries, is essential. This pooled procurement platform has provided all Member States with access to quality and safe vaccines, at a single price for any product, regardless of countries' economic status. Another regional public good that must be pursued is regional self-sufficiency in access to essential medicines, vaccines, and health technologies. The severe disruption in supply chains due to the pandemic put the health of the peoples of the Americas at serious risk, and sustainable, collaborative—rather than competitive—pathways to building manufacturing capacity for these essential products and reducing dependence on their importation must be a priority for regional health.

818. Other lessons learned include the critical importance of strong disease surveillance systems; efficient laboratory diagnostic and clinical management capacities; well-trained and equitably distributed HRH, with persons at the cutting edge of information and innovation; and strategic communication that targets key stakeholders, including the public, to counter and manage misinformation and disinformation. Investments in public health must therefore include resources

to improve health literacy and develop and implement communication plans that address issues such as vaccine hesitancy and denial.

819. Looking forward to 2030, guided by the SDGs, SHAA2030, the PAHO Strategic Plan 2020-2025, the PAHO policies, strategies and plans of action approved by the Governing Bodies, and other international, subregional, and national frameworks for health, the Bureau foresees accelerated action in the following areas, in close collaboration with strategic partners, emphasizing results at the national level, adequate resource allocation and mobilization, and strengthened integration of the CCTs:

- a) COVID-19 containment, treatment, and rehabilitation measures, including vaccination, and documentation and analysis of the pandemic's impact on health and equity, with recommendations and guidance for strategies to negate or minimize its effect;
- b) Advancing UAH, UHC, PHC, and performance of the EPHFs, with focus on increasing the resilience of health systems and strengthening IHSDNs, innovative health financing, social protection, efficient IS4H, and adequately trained, distributed, and remunerated HRH;
- c) Promoting, advocating for, and supporting regional self-sufficiency in the provision of essential medicines, vaccines, and health technologies, including engagement with Member States, partners, academia, and the private sector to reduce the Region's extreme dependence on extra-regional imports and increase its self-sufficiency. Key strategies include building and strengthening manufacturing capacity, and promoting the use of the Revolving and Strategic Funds, as appropriate, to enable equitable access to these lifesaving products;
- d) Emergency and disaster preparedness and response, including for pandemics, strengthening IHR core capacities and including persons in situations of vulnerability in the planning processes, establishment of mechanisms for their continued care through maintenance of essential health services, and interventions for MHPSS;
- e) Establishment of effective multisectoral, multi-stakeholder mechanisms and actions for addressing the social and other determinants of health, advancing the realization of the right to health and other human rights, and furthering the reduction of inequities. The Bureau will collaborate with other regional organizations, subregional integration entities, United Nations agencies, and diverse partners, including young persons, indigenous people, Afro-descendant people, and other persons in situations of vulnerability or their legitimate representatives, in the planning, implementation, monitoring, and evaluation of relevant interventions. PASB will also promote the development of policies and mechanisms to identify, prevent, mitigate, and manage conflicts of interest and industry interference;
- f) Health promotion and disease prevention through a life course approach, focusing on populations at higher risk, including women, neonates, children, adolescents, older persons, LGBTQ+ persons, and migrants;
- g) Prevention, effective management, and, where possible, elimination of communicable diseases, including neglected infectious diseases and VPDs, with promotion and strengthening of the Revolving Fund;

- h) Prevention and control of NCDs, including MNS disorders, focusing on risk factor reduction and management of NCDs, aligned with the WHO Best Buys and other evidence-based interventions, as applicable and adapted to the national situation;
- i) Digital transformation of the health sector, with equitable access to information and communication technology and communication products tailored to various audiences, and the establishment of efficient IS4H that provide and disseminate updated, disaggregated information to facilitate decision-making, effective action, and accountability;
- j) Strengthening all the Bureau's enabling functions through continued implementation of the ODIs. The Bureau will focus on strategic communications for health, correcting misinformation about PAHO, and using traditional and new media, as well as creative storytelling, to promote health and improve health literacy. PASB will also work to navigate changing workplace and employment trends that have resulted from the COVID-19 pandemic, in order to retain existing staff and attract new staff;
- k) Enhancing country focus and the CCHD program to take advantage of, and document, national experiences and lessons learned, in collaboration with the major subregional integration entities and their organs, which are critical partners in improving health and facilitating collective action and cross-fertilization, as well as with other entities such as UNOSSC, and aligned with FENSA.

820. The Bureau is keenly aware of, and contributed to, discussions and agreements reached at the Seventy-fifth World Health Assembly in May 2022, which addressed priority issues for the Region, including, but not limited to, a draft implementation road map for NCD prevention and control 2023-2030; diabetes; obesity; people living with NCDs in humanitarian emergencies; and intersectoral action epilepsy and other neurological disorders in support of UHC. Guided by the PAHO Governing Bodies, PASB will take action to align its technical cooperation with global frameworks, while adapting its work and tailoring interventions to the national, subregional, and regional situations in the Americas.

821. The Bureau must continue to function as a politically neutral technical agency and honest broker for the health of the peoples of the Americas, contributing to the realization of the right to health and other human rights, and the reduction of inequities, working with like-minded partners, and leveraging regional and subregional networks of key stakeholders, in achieving the goals of the 2030 Agenda for Sustainable Development and SHAA2030.

Abbreviations and acronyms

AECID	Spanish Agency for International Development Cooperation
AEFI	adverse events following immunization
Ag-RDT	antigen rapid diagnostic test
AMR	antimicrobial resistance
BIGG	international database of GRADE guidelines
BRISA	Regional Database of Health Technology Assessment Reports of the Americas
CARD	Caribbean Alcohol Reduction Day
CARICOM	Caribbean Community
CARPHA	Caribbean Public Health Agency
CBU	Caribbean Broadcasting Union
CCHD	Cooperation Among Countries for Health Development
CCS	Country Cooperation Strategy
CCT	crosscutting theme
CDB	Caribbean Development Bank
CDC	Centers for Disease Control and Prevention (United States of America)
CERF	Central Emergency Response Fund (United Nations)
CFE	Contingency Fund for Emergencies (World Health Organization)
CICAD	Inter-American Drug Abuse Control Commission
Code	International Code of Marketing of Breast-milk Substitutes
COMISCA	Council of Ministers of Health of Central America and the Dominican Republic
COVAX	COVID-19 Vaccines Global Access
COVID-19	coronavirus disease of 2019
COVIGEN	COVID-19 Genomic Surveillance Regional Network
CRS	Caribbean Regulatory System
CSO	civil society organization
CVD	cardiovascular disease
DeCS/MeSH	Health Sciences Descriptors/Medical Subject Headings
DFID	United Kingdom Department for International Development
DHHS	Department of Health and Human Services (United States of America)
ECHO	European Civil Protection and Humanitarian Aid Operations (European Union)
ECLAC	Economic Commission for Latin America and the Caribbean
EMT	emergency medical team
EMTCT	elimination of mother-to-child transmission
END	Ending Neglected Diseases (Fund)
EOC	Emergency Operations Center
EPHF	essential public health function
ESAVI	events supposedly attributable to vaccination or immunization
EU	European Union
EUL	Emergency Use Listing
EWEC-LAC	Every Woman Every Child Latin America and the Caribbean

FAO	Food and Agriculture Organization of the United Nations
FCTC	Framework Convention on Tobacco Control
FENSA	Framework of Engagement with Non-State Actors
Fiocruz	Oswaldo Cruz Foundation (Brazil)
FIU	Florida International University
FoPWL	front-of-package warning labeling
GAC	Global Affairs Canada
Gavi	Gavi, the Vaccine Alliance
GBT	Global Benchmarking Tool
GDP	gross domestic product
GIS	geographical information system
GLASS	Global Antimicrobial Resistance and Use Surveillance System
Global Fund	Global Fund to Fight AIDS, Tuberculosis and Malaria
HCC	Healthy Caribbean Coalition
HiAP	health in all policies
HIV/AIDS	human immunodeficiency virus/acquired immunodeficiency syndrome
H-NAP	health national adaptation plan
HPV	human papillomavirus
HRH	human resources for health
HTA	health technology assessment
IAEA	International Atomic Energy Agency
IARC	International Agency for Research on Cancer
ICD	International Classification of Diseases
ICD-11	11th Revision of the International Classification of Diseases
IDB	Inter-American Development Bank
IHME	Institute for Health Metrics and Evaluation
IHR	International Health Regulations
IHSDN	integrated health service delivery network
IHSLAC	Integrated Health Systems in Latin America and the Caribbean
IMST	Incident Management Support Team
IPC	infection prevention and control
INCAP	Institute of Nutrition of Central America and Panama
INSP	National Institute for Public Health (Mexico)
IOM	International Organization for Migration
IRIS	Institutional Repository for Information Sharing
IP-TFA	industrially produced trans-fatty acids
IS4H	Information Systems for Health
IT	information technology
IVD	in vitro diagnostics
LGBTQ+	lesbian, gay, bisexual, transgender, queer, and other persons of nonheterosexual orientation
LILACS	Latin American and Caribbean Health Sciences Literature
MERCOSUR	Southern Common Market
mhGAP	Mental Health Gap Action Programme

MHPSS	mental health and psychosocial support
MIS	multisystem inflammatory syndrome
MIS-C	MIS in children and adolescents
MNS	mental health, neurological, and substance use
MPTF	Multi-Partner Trust Fund (United Nations)
mRNA	messenger RNA
MSPP	Ministry of Public Health and Population (Haiti)
NAO	National Audit Office (United Kingdom)
NCD	noncommunicable disease
NCDK	noncommunicable diseases kit
NIC	national influenza center
NID	neglected infectious disease
NGO	nongovernmental organization
NHI	national health insurance
NID	neglected infectious disease
NRA	national regulatory authority
OAS	Organization of American States
ODI	organizational development initiative
OECD	Organisation for Economic Co-operation and Development
OFDA	Office of United States Foreign Disaster Assistance
OFID	Organization of Petroleum-Exporting Countries Fund for International Development
OOP	out-of-pocket
ORAS/CONHU	Andean Health Organization-Hipólito Unanue Agreement
PAHO	Pan American Health Organization
Revolving Fund	PAHO Revolving Fund for Access to Vaccines
Strategic Fund	PAHO Revolving Fund for Strategic Public Health Supplies
PAJPH	Pan American Journal of Public Health
PARLACEN	Central American Parliament
PASB	Pan American Sanitary Bureau
PCR	polymerase chain reaction
PFA	psychological first aid
PHAC	Public Health Agency of Canada
PHC	primary health care
PICS	integrative and complementary health practices
PMIS	PASB Management Information System
PPE	personal protective equipment
PrEP	preexposure prophylaxis
RedETSA	Regional Network of Health Technology Assessments for the Americas
ROI	return on investment
Rt	effective reproductive number
SALURBAL	Urban Health in Latin America
SARI	severe acute respiratory infection
SARInet	Severe Acute Respiratory Infections network

SDC	Swiss Agency for Development and Cooperation
SE-COMISCA	Executive Secretary of the Council of Ministers of Health of Central America and the Dominican Republic
SHAA2030	Sustainable Health Agenda for the Americas 2018–2030
SHI	staff health insurance
SICA	Central American Integration System
SIDS	small island developing States
SIP	Perinatal Information System
SOP	standard operating procedure
SSB	sugar-sweetened beverage
STI	sexually transmitted infection
SUMA/LSS	humanitarian supply management system/logistics support system
TAG	technical advisory group
TB	tuberculosis
TCIM	traditional, complementary, and integrative medicine
TDR	Special Programme for Research and Training in Tropical Diseases
UAH	universal access to health
UHC	universal health coverage
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific, and Cultural Organization
UNFPA	United Nations Population Fund
UNICEF	United Nations Children’s Fund
UNODC	United Nations Office on Drugs and Crime
UNOSSC	United Nations Office for South-South Cooperation
U.S.	United States
USAID	United States Agency for International Development
UWI	University of the West Indies
VCPH	Virtual Campus for Public Health
VHL	virtual health library
VOC	variant of concern
VPD	vaccine-preventable disease
VWA	Vaccination Week in the Americas
WASH	water, sanitation, and hygiene
WHO	World Health Organization

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United Nations Population Fund
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