PAHO’S RESPONSE TO MAINTAINING AN EFFECTIVE TECHNICAL COOPERATION AGENDA IN VENEZUELA AND NEIGHBORING MEMBER STATES

Background

1. The Bolivarian Republic of Venezuela, a federal state of more than 30 million inhabitants, has been facing a socio-political and economic situation that has negatively impacted social and health indicators.

2. Outbreaks of diphtheria, measles, and malaria have spread rapidly, affecting many states simultaneously. Other areas of public health concern are HIV, tuberculosis, an increase in maternal and infant mortality, and access to medicines and adequate care for people with life-threatening chronic conditions.

3. There have been intensified population movements both within the country and to other countries, particularly Colombia, Brazil, Ecuador, Guyana, Peru, and Trinidad and Tobago. In 2017, over 1.6 million Venezuelans migrated to other countries, raising public health concerns.

4. Venezuela has increased its efforts to improve access to services, particularly at the first level of care. Health system fragmentation, combined with diminished capacity of the system to respond to priority needs, including core functions of epidemiological surveillance and the generation of health information, has impacted the delivery of priority public health services, in particular to prevent and reduce the impact of communicable diseases, and reduce maternal and infant mortality.

5. The health system in Venezuela is currently under stress due to a combination of factors, including health workforce migration and shortages of medicines and health commodities, particularly at the secondary and tertiary levels. This has affected the overall

---

1 As per PAHO Core Health Indicators, 2017 (published) and MPPS Basic Indicators 2017 (unpublished)

2 IOM. Available from: https://www.iom.int/countries/venezuela
operation of the health network and its capacity to rapidly expand its response to emergencies and disease outbreaks. However, the health system still retains capacity, including health infrastructure and the availability of human resources that can be mobilized and supported to implement immediate remedial actions.

6. The purpose of this information document is to provide an update on PAHO’s response to maintain an effective technical cooperation agenda in Venezuela and neighboring member states.

**Situation Analysis**

**Venezuela**

7. Malaria cases in Venezuela increased significantly between 2015 (136,000), 2016 (240,000), and 2017 (406,289). This increase is mostly linked to the migration of persons infected in the mining areas of Bolivar State into other areas of the country with malaria-prone ecosystems, shortages or unaffordability of antimalarial drugs, and weakened vector control programs. Malaria risk from *P. vivax* (75%) and *P. falciparum* (25%) remains high. The export of sporadic cases to countries without malaria poses a challenge for early detection and prevention of complications associated with the disease. Other important risks are: the increase in malaria cases in border areas of neighboring countries, emergence of antimalarial-resistant strains, reintroduction of local transmission in previously malaria-free areas, and continued increase in malaria-related mortality.

8. Measles has spread to 21 of 24 states and the Capital District in Venezuela. Between the first confirmed case of measles in July 2017 (Epidemiological Week 26 [EW 26]) and the end of EW 22 (June 2018), there were 2,285 confirmed cases, 1,558 of them in 2018. Imported measles cases have also been reported in Brazil, Colombia, and Ecuador related to the migration from Venezuela. A number of deaths has been reported in indigenous communities in the state of Delta Amacuro (33 deaths), close to the border with Guyana. The spread of the virus within and outside the country is explained by many factors, including: 1) insufficient vaccine coverage, leaving pockets of susceptible population; 2) inadequate surveillance systems; 3) delayed implementation of control measures; 4) low capacity for isolation and adequate case management; and 5) high population movement across borders during the incubation or communicable period of the virus.

9. In recent years, Venezuela has experienced a major outbreak of diphtheria. The first case was detected in the EW 26 of 2016. Since the beginning of the outbreak until EW 16 of 2018, a total of 1,716 suspected diphtheria cases were reported (324 cases in 2016, 1,040 in 2017, and 352 in 2018), of which 1,086 were confirmed by laboratory (350) or

---

epidemiological-link (736), and 160 died (17 in 2016, 103 in 2017, and 40 in 2018). The cumulative case fatality rate is 14.7%.

10. New HIV infections are estimated to have increased by 24% from 2010 to 2016. The national HIV/AIDS program reports that 69,308 of the 79,467 HIV patients registered for antiretroviral treatment are not receiving it. Fifteen of the 25 antiretroviral drugs (ARVs) procured by the government have been out of stock for over nine months. There is also low availability of drugs to treat opportunistic infections and co-infections.

11. Tuberculosis cases have increased between 2014 (6,063) and 2016 (7,816). Preliminary information for 2017 indicates 10,185 cases, an incidence rate of 32.4 per 100,000 population, half of them in the Capital District and four other states. Prisoners (15.7%) and indigenous people (6.8%) are those most affected. Comorbidities account for almost 10% of the cases (4.8% TB/HIV and 5% TB/diabetes). The recent lack of laboratory supplies has impacted TB diagnosis.

12. A progressive loss of operational capacity in the national health system over the past five years intensified in 2017, affecting the delivery of free health care and free access to medicines. Many hospitals are operating in challenging conditions and the Venezuelan Medical Federation estimates that approximately 22,000 physicians have migrated out of the country. This figure represents approximately 33% of the country’s 66,138 physicians reported in 2014. The migration of physicians has predominately affected certain specialty areas (neonatology, anesthesiology, and intensive and emergency care). Similarly, an estimated 6,000 bioanalysts and laboratory technicians have reportedly left the country, and the National School of Nurses Association estimates between 3,000 and 5,000 nurses have also migrated.

13. Despite these challenges, the Venezuelan health system continues to have significant capacity in place. There is a network of 288 hospitals (levels I-IV), a network of 421 centers of ambulatory specialized care, and the community-based network (Red de Atención Comunal) with 17,986 primary care centers. The initiative “Misión Barrio Adentro”, established in 2003, has significantly expanded primary care services to the population. In 2017, the Government launched the initiative “100% coverage of Barrio Adentro”. This initiative led to important investments in health infrastructure and technology at both hospital and primary care levels and in human resources development (202 projects for rehabilitation, maintenance, and equipment for 80 centers of Barrio Adentro). As part of Barrio Adentro, 23,990 “comprehensive community doctors” (MIC, 6 UNAIDS, 2017 Spectrum estimates.
7 Ministry of People’s Power for Health (MPPS), 2018.
9 Ministry of People’s Power for Health (MPPS), National Tuberculosis Control Program 2018.
10 Ministry of People’s Power for Health (MPPS), unpublished report.
11 MPPS, unpublished presentation, 13 June 2018.
Spanish acronym) have graduated in seven cohorts from 2011 to date. Additionally, 12,269 doctors received credentials in comprehensive general medicine.

14. However, immediate action is required to address short-term priorities, to reduce the impact of health workforce migration, rationalize existing resources while mobilizing additional resources, with the purpose of addressing disease outbreaks and increasing capacity of the system to provide comprehensive care for priority conditions. In the medium-term, opportunities exist to transform the health system to address the fragmentation and segmentation, ensure sustainability and improve health systems resilience.

**Neighboring Countries**

15. During 2017, there were 2,576 malaria cases (35% *P. falciparum*) imported from Venezuela to the state of Roraima, **Brazil**, representing 55% of all imported malaria cases in this country. Between January and April 2018, there were 7,043 malaria cases reported in Roraima, compared to 3,867 for the same period in 2017. There is an ongoing measles outbreak with 995 reported cases (611 in Amazonas state and 384 in Roraima state), 114 of which have been confirmed (30 in Amazonas and 84 in Roraima), including two deaths. In 2017, five cases of diphtheria were confirmed in four states and, of these, one was a fatal case imported from Venezuela. In 2018, Brazil reported 11 suspected cases of diphtheria between EW 1 and EW 20, but no cases have been confirmed. In response to the increased demand for health services in Roraima, the Ministry of Health allocated R$ 10.1 million per year to expand health care in this state. Roraima will receive an additional R$ 9.6 million per year to expand hospital care and a further R$ 500,000 per year for primary care in the municipalities of Pacaraima and Boa Vista. **Migrants in Brazil have unrestricted access to health care and medicines.**

16. In **Colombia**, 26 imported or import-related measles cases were reported up to EW 19 in eight departments and two districts, 23 of them Venezuelan citizens. Colombia has also confirmed five cases of diphtheria, with an age range from 3 to 27 years, three of them Venezuelan citizens. Local health authorities report that, due to the progressive increase in health care provided to the uninsured migrant population, public hospitals have already used up their supplies, leaving them unable to provide some treatments and causing difficulty in accessing services. In the departments of La Guajira and Arauca, local health authorities report that there is an increase in the presence of Venezuelans requesting medical attention (HIV/AIDS, TB, pregnancy). The government of Colombia enacted a resolution to provide emergency care to migrants.

---


17. In **Guyana**, an increase in malaria cases was reported in 2017 in Region #1 (Barima-Waini). Additionally, at the national level, there was a slight increase in 2017 compared to 2016 (11,689 cases, less than 15%). Region #1 was the major contributor.15

18. In **Ecuador**, between 29 March and 12 June 2018, 14 measles cases were confirmed. Of these, 75% are among Venezuelan citizens.16

19. **Trinidad and Tobago** has received an influx of migrants from Venezuela in recent years. There have been no signs of measles and diphtheria; however, the Ministry of Health has reported an increase in imported malaria cases from Venezuela. Between 2006 and 2017, an average of 15 cases were reported each year. For 2018 (as at 20 April 2018), 12 imported malaria cases were confirmed in Trinidad and Tobago: nine cases from Venezuela, two from Guyana, and one from Ghana.

20. The indigenous populations living in border areas of Venezuela are highly vulnerable to epidemic-prone diseases. Of special concern is the Warao people, living in border areas between Venezuela and Guyana, who are now migrating to northern Brazil, the Wayu people living in the border areas between Venezuela and Colombia, and the Yanomami people living in remote locations along the border between Venezuela and Brazil.17,18 One of the highest HIV prevalence rates in indigenous populations in the Region of the Americas is among the Warao in Venezuela, at 9.5%.19 This population also has among the highest levels of TB.

Response of the Pan American Sanitary Bureau (PASB)

21. In response to the evolving situation in Venezuela, PASB has substantially intensified its technical cooperation with the Ministry of Health to enhance health systems management, improve the prevention and control of communicable and noncommunicable diseases, improve emergency management, and purchase medicines, vaccines, laboratory reagents, and other supplies for health programs, through PAHO’s Regional Revolving Fund for Strategic Public Health Supplies (Strategic Fund)20 and Revolving Fund for

15 MoH Guyana, unpublished report.
20 The PAHO Strategic Fund was created in 2000 by the Pan American Health Organization (PAHO) as a mechanism to improve equitable access to safe, efficacious, and quality medicines and supplies in the Americas.
Vaccine Procurement (Revolving Fund).\textsuperscript{21} This response was further strengthened in December 2017 with the activation of an Incident Management System, (at headquarters level and in country offices in Brazil, and Colombia, and Venezuela) and the release of funds from the PAHO Disaster and Emergency Fund and the PAHO Epidemic Emergency Fund, as well as the activation of special internal administrative procedures to facilitate fast and agile technical cooperation to the targeted countries.

22. PASB quickly scaled up its technical cooperation with Venezuela and neighboring countries. Targeting the various public health issues, since November 2016, PASB has deployed multidisciplinary technical field missions, involving the mobilization of over 50 personnel and has established six field offices, five in Colombia and one in Brazil. The expertise represented in the in-country mission teams and in the field offices spans several technical areas: emergency management, entomology and vector control, surveillance, epidemiology, health and laboratory services, health services management, immunization, cold chain, infection prevention and control, antenatal care, clinical management, public health, coordination and logistics, administration, and risk communication. In addition to its established presence on the ground through its country offices, PASB has completed more than 25 technical cooperation missions at national and sub-national levels to Venezuela, Colombia, Brazil, Guyana, the most recent being a technical mission on HIV, TB, and malaria during the current week. During a high-level mission to Venezuela, led by PASB’s Director (12-15 June 2018), the Venezuelan President informed PASB of his authorization to the Ministry of Popular Power for Health (MPPS) to purchase a significant amount of medicines and vaccines through PAHO’s Revolving Fund and Strategic Fund.

23. PASB is supporting the Ministry of Health in the implementation of its National Rapid Response Plan to halt the measles and diphtheria outbreaks. The plan is aimed at interrupting transmission of these diseases and includes universal mass vaccination for children aged 6 months to 14 years, extensive contact tracing, and associated laboratory work, underpinned by the mobilization of national, regional, and municipal rapid response teams. In addition to the rapid response plan, Venezuela is also implementing a national plan to increase vaccination coverage in indigenous communities, municipalities with low coverage, and difficult-to-reach areas. Already, more than 8000 personnel were trained in measles outbreak response in 12 states, including 3500 vaccinators. In collaboration with national and local immunization programs in the country, PASB has been facilitating the purchase of vaccines paid for by Venezuela through its Revolving Fund, with the following supplies and vaccines purchased in 2017: 1.15 million doses of pentavalent vaccine (these are already in the country); eight million doses of dT vaccine for the immunization campaign (four million are already in the country, with another four million to be delivered); 1,000 vials of diphtheria antitoxin; and three million doses of measles, mumps, and rubella (MMR) and MR vaccines. PASB has also helped with the purchase of laboratory supplies for diphtheria and measles diagnosis. Together with WHO and the Measles Rubella Initiative (MRI), PASB has been exploring alternative support

\textsuperscript{21} The PAHO Revolving Fund provides countries and territories with guarantees of quality, safe, and adequate supplies of vaccines and related products, and lower prices.
mechanisms to ensure continued access to the MMR vaccine and to supplies for a nationwide mass campaign to interrupt measles transmission.

24. PASB has been exploring alternative support mechanisms to ensure continuity in access to ARVs and other essential medicines in Venezuela, along with key partners, other United Nations agencies, and specific civil society groups. The country participates in the PAHO Strategic Fund, which it has effectively used to procure HIV/AIDS ARVs, TB medicines and anti-malarials with its own funds. After a reduction in the level of procurement executed on behalf of Venezuela in 2016, in coordination with the MPPS, PASB has expanded its support for the procurement of high-priority medicines such as immunosuppressant drugs, medicines for maternal and child health care, medicines for high-prevalence chronic diseases, and reagents for diagnostics and blood banks. PASB has also provided technical support in the rational selection of medicines to optimize available resources, and in analysis of supply options for key strategic public health supplies.

25. Since April 2017, PASB has scaled up support to the MPPS to strengthen services in up to 21 high-priority hospitals of high complexity in major cities, including Caracas. Activities have included the training of staff on hospital safety and prevention of healthcare-associated infections, implementation of hardware and software for use of the Logistics Support System (LSS) for health supply management, as well as evaluations of essential capabilities within these hospitals. In addition, basic and complementary units of the Interagency Emergency Health Kit, which provides medicines and medical devices for 10,000 people for approximately three months, have already been distributed to 11 of these hospitals. Forty additional interagency emergency health kits are arriving for these 21 prioritized hospitals in the coming weeks.

26. PASB is also working with the MPPS to strengthen the national primary health care network, prioritizing 20 comprehensive community health areas (ASIC, Spanish acronym), 20 comprehensive diagnostic centers (CDI), and 521 community health centers (CPS) where Cuban medical cooperation has been present for many years. With PASB’s support, professionals from many states were trained in essential methodologies to improve obstetric and other medical services, as well as detection and treatment of mental health problems.

27. Recognizing the challenges that malaria presents, the Organization has supported the purchase of malaria medicines and rapid diagnostic tests jointly with the Government, as well as provided training for health care workers and communication material to promote patient adherence to prescribed treatment.

a) In 2017, 130,000 treatments for P. vivax, 800 complete treatments for P. falciparum, 300 treatments for severe malaria cases, and 300,000 rapid diagnostic tests.

b) In 2018, 52 kits to treat severe malaria cases and 25 kits to treat (non-severe) malaria, for nearly 10,000 treatments, plus 20,000 quick diagnostic tests.
c) More than 450 health workers trained in case management in the states of Bolivar, Sucre, Anzoátegui and Aragua.

28. PASB and Venezuela are collaborating on an integrated plan to prevent and control noncommunicable diseases. Action areas include tobacco control, care of people with disabilities, and early diagnosis and screening for cancers. The Organization is also working with the National Nutrition Institute on a project to improve the detection and management of acute malnutrition in children who are receiving care in communities and in centers for nutritional recovery around the country. Other health interventions are being coordinated with the immunization program, such as provision of vitamin A and antiparasitic agents to children under 5.

29. PASB has also scaled up response to neighboring countries (Brazil, Colombia, Ecuador, Guyana, and Trinidad and Tobago) and has established field offices in border areas or deployed additional personnel there. The activities are aimed at strengthening health system response in border areas, vaccination, and epidemiological surveillance at the local and national levels, to detect and respond effectively to the needs of Venezuelan migrants and the host population.

30. In Brazil, PASB is working with the national and local authorities to contain the measles outbreak in affected states. Residents and Venezuelan migrants from 6 months to 49 years old, mainly children under 15 years old, have been vaccinated against measles. PASB has provided technical cooperation to strengthen vaccination activities, including the establishment of a vaccination post in Pacaraima, in the state of Roraima on the border with Venezuela, operating continuously for 10 hours a day, seven days a week. As of 16 June 2018, 45,262 vaccines from the national vaccination program have been administered to 18,439 Venezuelan migrants. Support is also being provided to improve case management and investigation through the implementation of infection prevention and control (IPC) protocols, isolation rooms, hospital screening, contact tracing, training of health professionals, active institutional and community research, and laboratory capacity building, among others. A situation room was also established with the support of PASB to coordinate the response and monitoring of the spread of measles at the state level.

31. In Colombia, PASB is working with health authorities and partners to strengthen capacities at point of entry in Cucuta (North of Santander) for immediate care and immunization, detection and follow-up of measles contacts, active case finding in institutions and in the community, and vaccination of susceptible persons. PASB has also supported national and local authorities in a) the training of health care workers for rapid response to imported measles cases, case management, effective vaccination strategies, b) intensifying epidemiological surveillance; and c) strengthening diagnostic capacity by acquiring reagents for the National Health Institute and providing a virologist for expert support for the screening process for measles. PASB is also providing support for extra-institutional modalities of healthcare delivery (such as mobile health units and the distribution of personal and family protection kits for the reduction of health risks), thus improving the capacity for immediate response and the extension of services through the delivery of supplies and medicines to prioritized public health institutions.
32. **In Ecuador**, PASB has provided ongoing support to the national counterparts to strengthen epidemiological field investigation by conducting a workshop on rapid response to imported measles cases, aimed at activating a rapid response team at different levels of the health system and onsite technical assistance to nine health areas. Additionally, PASB is working closely with the Ecuador Ministry of Health in implementing initiatives to improve epidemiological surveillance, vaccination coverage, water and sanitation, and basic healthcare access for migrant populations, with emphasis on priority care for children under 5 years of age, pregnant women, elderly people, people with disabilities, and indigenous populations in the border area with Colombia.

33. **In Guyana**, the PAHO country office is working closely with the Ministry of Health to monitor the condition of migrants and strengthen epidemiological surveillance, information management, detection, verification, and risk assessments of events related to epidemic-prone diseases. PASB experts are also working with national authorities to assess immunization coverage and laboratory capacities to identify potential health needs in areas with migrants.

34. In compliance with the International Health Regulations, PASB disseminated updated epidemiological reports and alerts to Member States on Diphtheria, Measles, and Malaria. These included notifications of the increased number of cases in Venezuela and recommendations to implement a high-quality surveillance system that is sensitive enough to timely detect any suspected cases and to prevent the introduction and spread of measles and diphtheria through the vaccination of susceptible population.

35. According to criteria included in the regional measles elimination plan, if the transmission persists for 12 months or longer in a given geographic area, endemic transmission is reestablished. Thus, the Region of the Americas would lose its measles elimination status.

**Actions Necessary to Improve the Situation**

36. The following short-term and medium-term interventions are recommended to be implemented by the affected countries:

---


**Venezuela**

a) Urgently develop and implement a plan of action to stop transmission of measles and diphtheria.

b) Reduce morbidity and mortality due to malaria, particularly in populations in conditions of vulnerability.

c) Implement urgent actions to rationalize and mobilize existing resources to ensure the functionality of hospital services on a priority basis and address gaps in primary health care to respond to the immediate challenges. This may require contingency plans, interventions to ensure retention of existing workforce, short-term measures to address human resources gaps, and availability of essential medicines and supplies.

d) Improve essential public health functions, including surveillance and availability of health information within the context of the International Health Regulations.

e) Accelerate efforts to improve integration of health services within the health system, based on the primary health care approach, to address current fragmentation and segmentation. This will be critical to improve efficiencies and build resilience.

**All countries**

f) Invest in and prioritize general vaccination coverage to reach at least 95% in all municipalities and communities and address outbreaks of vaccine-preventable diseases.


h) Continue efforts to address the health needs of migrants in accordance with Resolution CD55.R13 on Health of Migrants.\(^28\)

i) Scale up activities for the elimination of malaria in all affected countries.

**Action by the Executive Committee**

37. The Executive Committee is invited to take note of this report and provide any recommendations it may have.

---

