12th Meeting of the Regional Certification Commission for the Polio Endgame in the Region of the Americas Report

In memoriam



Dr. Juan Santoni Mendoza 1935-2020

The RCC expresses its sincere condolences for the loss of Dr. Juan Santoni Mendoza who dedicated his life to the polio program in Dominican Republic and served during his last years as the National Polio Containment Coordinator (NPCC).

Introduction

The 12th Meeting of the Regional Certification Commission (RCC) for the Polio Endgame in the Region of the Americas was conducted virtually due to the pandemic of COVID-19. The meeting was composed of 5 steps:

Step 1: An introductory meeting between RCC members and Secretariat

Step 2: Assessment of the annual and containment reports by the reviewers

Step 3: Observations and recommendations review

Step 4: A meeting between RCC Chair and the Secretariat to review the draft report and general recommendations of the meeting

Step 5: RCC meeting to review and approve the recommendations to each country and the final report and recommendations of the meeting

Meeting objectives

The primary objectives of the meeting were for the members of the RCC to review, discuss, and validate the country annual reports on polio eradication status and updated polio containment reports.

Methodology

Given the current pandemic situation, the 12th Meeting of the RCC had to be virtual. All the meetings were conducted through the Teams and Zoom platforms and simultaneous translation was available when needed.

Step 1: The RCC members and Secretariat met on October 9, 2020 for an introductory meeting. During this meeting, the review process was explained, and the annual reports and containment reports were sent to the reviewers accordingly.

Step 2: Between October 26 and 30, the two reviewers for each country and the Secretariat met to discuss the reports. For the review, the Secretariat presented a summary of the annual and containment reports followed by discussion by the reviewers and their final decision on their assessments of each of the seven questions posed in the annual report:

- 1. Polio immunization coverage: Is the polio immunization coverage high enough to prevent the circulation of wild poliovirus (WPV) or of a circulating vaccine-derived poliovirus (cVDPV) emergence?
- 2. Epidemiologic surveillance: Is polio surveillance sensitive enough to detect an imported WPV or VDVP in a timely manner?
- 3. Containment: Has the country minimized the risk of a facility-associated reintroduction of poliovirus from facilities collecting, handling, or storing infectious materials (IM) or potentially infectious materials (PIM)?
- 4. Risk assessment: Has the country conducted a risk assessment at the sub-national level?
- 5. Risk mitigation: Has the country developed a risk mitigation plan?
- 6. Preparation of a response plan for an event or outbreak: Does the country has an adequate and updated response plan for an event or outbreak of polio?
- 7. Validation: The members of the National Certification Committee (NCC)/RCC are firmly convinced that the country was polio-free during the report period.

35 countries and 9 territories were required to submit an annual report; given that the Caribbean Sub-Region submits one report, the RCC received 23 reports.

For containment, only the countries whose reports had not been validated by the RCC were required to submit a report. Only 6 countries: Brazil, Canada, Ecuador, El Salvador, Mexico, and the United States of America were

required to submit a report. The RCC discussed the containment reports for these countries. The validation of the report is done in two parts: the completion of the survey process and the validation by type of material.

To approve the completion of the survey process: the RCC examines the NCC endorsement letter as well as the documents supporting the endorsement: source of list of laboratories, selection of facilities to participate, analysis of non-responding laboratories, data analysis of responding laboratories and clear consolidation of information.

To approve the validation by type of material: the RCC then validates inventory (identification or absence of PV materials) and proof of attestation of the final disposal (destroy, transfer, store) for Infectious Material (IM) and Potentially Infectious Material (PIM). Untyped poliovirus materials should be considered as high risk and handled as type2 material.

Following the discussion, a summary of the RCC's observations and recommendations was drafted by the Secretariat and submitted for the reviewers' approval.

Step 4: On November 17 and 18, the RCC Chair met with the Secretariat to review and finalize the meeting report and the observations and recommendations per country. Country letters were drafted and reviewed.

Step 5: On November 23, all the RCC members met with the Secretariat and the results of the validation process were presented. The RCC approved the meeting report and the content of the letters that are to be sent to the countries with specific observations and recommendations. These letters provide the NCC and the National Poliovirus Containment Coordinator (NPCC) with general feedback and country-specific recommendations.

The RCC will then provide a summary of the decisions to the Global Certification Commission (GCC) that is used as part of the global certification process.

General summary

Global update

Polio type 3 was declared eradicated in October 2019; and the Africa Region was declared polio-free in August 2020. With only WPV type 1 remaining in Afghanistan and Pakistan, the world is getting closer to polio eradication. However, 2020 has posed unprecedented difficulties for all countries.

As of November 10, 2020, there have been 133 polio cases compared to 102 in 2019 for the same period; and a total of 655 cases of cVDPV cases have been detected in 2020 in comparison to 151 in 2019.

The global polio program was already facing significant challenges with declining immunization coverage, strained surveillance systems, and resource constraints. Since the beginning of the COVID-19 pandemic, the program has faced even more challenges and we cannot yet fully appreciate its impact on polio-free status in the Americas.

Regional update

The Region of the Americas has been polio-free since 1994. Maintaining high and homogenous immunization coverage and sensitive surveillance systems is a challenge for all countries. Polio3 immunization coverage for the Americas was 87% and only 4 countries had an adequate performance for all 3 surveillance indicators (AFP rate, percentage of cases that are investigated within 48 hours, and percentage of cases with adequate specimen) in 2019. Despite the current challenges, the Region of the Americas has been successful in rapidly identifying iVDPV cases, with last ones detected in Argentina and Colombia in 2018. Furthermore, Haiti and Guatemala conduct environmental surveillance and in 2019, 3 genetically unrelated VDPVs (2 VDPV1 and 1 VDPV3) were isolated in Guatemala and immediate actions taken to prevent poliovirus circulation. Until polio is eradicated, there's a risk of importation; but more importantly, low immunization coverage and inadequate surveillance systems in the region represent a high risk for cVDPV emergence, circulation, and risk of undetected circulation.

COVID-19 impact and implications

After the declaration of the COVID-19 pandemic in March 2020, both the World Health Organization (WHO) and the Pan American Health Organization (PAHO) recommended that immunization should be maintained as an essential health service. PAHO collected data through a survey to monitor the functioning of immunization services from 38 countries and territories in the Region of the Americas. As of July 2020, immunization services were open in all countries and territories; but the demand for services had decreased because of people's concerns about the risk of exposure to COVID-19 if they seek immunization services as well as a redirection of immunization program and surveillance health workers to COVID activities. When comparing the number of doses of DPT1 and DPT3 that have been administered to children during the first trimester in 2019 and 2020, there's a 14.33% reduction for DPT1 and a 12.26% reduction for DPT3 (Figure 1 and 2).

Epidemiological surveillance has also been affected by the pandemic. In the Region, 17 countries out of 38 reported being affected, primarily due to changes in priorities to focus on the surveillance of SARS-CoV-2 cases. Likewise, in 12 countries laboratory services and activities were affected. The AFP report status for the Region is shown in Figure 3.

As country policies evolve; and lockdown measures are relaxed, one would expect an improvement in immunization services and in demand for those services. Nonetheless, countries need to implement innovative measures and strategies to ensure that all children are immunized.

With respect to polio eradication, most countries stated in their annual and containment reports that activities were affected by the pandemic.





FIGURE 2. COMPARISON OF POLIO3 DOSES ADMINISTERED IN 2019 AND 2020

Overall decrease in AFP case reporting Change in AFP case reporting, 2019 vs 2020 up to EW 45



FIGURE 3: AFP REPORTING STATUS BY COUNTRY

Results of the review of the 2019 Annual Reports

From the 23 expected reports, 22 (21 countries + one Subregion) representing a total of 43 countries and territories (34 countries and 9 territories) were submitted for RCC review previous validation by the country's NCC. One country (Brazil) submitted a report, but the report was not validated by the NCC given that the Committee has been dissolved and its re-instatement is pending. The RCC commends the countries for submitting their reports and continuing their work despite the current pandemic situation.

The RCC recognizes the countries for the following achievements:

- 5 countries submitted exceptionally comprehensive annual reports on the state of polio eradication: Argentina, Costa Rica, Colombia, Paraguay, and the United States of America.
- 13 countries immunization coverage improved in 2019 compared to 2018: Antigua and Barbados, Belize, Bermuda, Chile, Colombia, Dominica, Dominican Republic, Guyana, Haiti, Montserrat, Peru, Uruguay, and Venezuela.¹
- 16 countries conducted immunization campaigns or implemented other activities to assure vaccination: Bolivia, Brazil, Canada, Colombia, Cuba, Dominican Republic, Ecuador, Guatemala, Haiti, Honduras, Mexico, Nicaragua, Panama, Paraguay, United States of America, and Venezuela.
- 4 countries that had not achieved an AFP rate >1/100,000 children <15 years in 2018, achieved this rate in 2019: Nicaragua, Peru, Venezuela, and Uruguay.²
- 3 countries and the Caribbean sub-region implemented improvements in their surveillance systems. In comparison with 2018; in 2019, the Caribbean sub-region, Chile, Ecuador, Guatemala, and Paraguay

¹ Information based on the country reports through the JRF

² Information based on country reports through ISIS

reported that 80% of the cases were investigated within 48 hours, had an adequate stool specimen, and a final classification in less than 90 days. ²

- 3 countries made significant efforts to advance containment: Canada, Mexico, and the United States of America.
- 2 countries continued working on containment activities, assessing laboratories, and updating their inventories: Bolivia and Costa Rica
- Brazil conveyed its decision to not have a designated poliovirus essential facility (dPEF); however, the official communication is pending.
- Risk mitigation activities were implemented in all countries.
- 3 countries updated their outbreak response plan: Guatemala, Honduras, and Paraguay.
- 4 countries conducted a polio outbreak simulation exercise (POSE): Brazil, Costa Rica, Paraguay, and Venezuela.

Upon completion of the review of the 22 annual reports, the members of the RCC concluded that:

- Only 6 reports received validation of the country or sub-region's immunization coverage being high enough to prevent the circulation of WPV or of a cVDPV (Figure 4).
- Only 8 reports received validation of the country or sub-region's surveillance being sensitive enough to detect an imported WPV or VDPV in a timely manner (Figure 5).
- 19 reports were validated for countries and territories that have minimized the risk of a facility-associated reintroduction of poliovirus from facilities collecting, handling, or storing IM or PIM (Figure 6).
- 21 reports included a risk assessment at the sub-national level (Figure 7).
- 18 reports included a risk mitigation plan (Figure 8).
- 17 reports included an adequate and updated response plan for an event or polio outbreak (Figure 9).
- Based on the evidence provided, all countries and territories in the Region of the Americas remain poliovirus-free (Figure 10).

However, the RCC expressed concern over the sustainability of the polio-free status in Bolivia, Brazil, Ecuador, Guatemala, Haiti, Paraguay, and Venezuela. Representing 32.63% of the population of the Americas under 1 year of age in the Americas,³ these countries have sustained, low immunization coverage and weak surveillance systems, posing a threat of cVDPV emergence or polio importation and subsequent circulation.



FIGURE 4: RCC VALIDATION ON IMMUNIZATION COVERAGE STATUS MAP. 2019

³ Information based on the country reports through the JRF



Is polio surveillance sensitive enough to detect an imported WPV or VDPV in a timely manner?

FIGURE 5: RCC VALIDATION ON SURVEILLANCE STATUS MAP. 2019



FIGURE 6: RCC VALIDATION ON CONTAINMENT STATUS MAP. 2019



FIGURE 7: RCC VALIDATION ON RISK ASSESSMENT STATUS MAP. 2019



FIGURE 8: RCC VALIDATION ON DEVELOPMENT OF A RISK MITIGATION PLAN STATUS MAP. 2019



FIGURE 9: RCC VALIDATION ON ADEQUATE AND UPDATED RESPONSE PLAN FOR AN EVENT OR OUTBREAK OF POLIO. 2019

Table 1 shows the RCC validation by country and component.

Country / Sub-Region Report	Polio immunization coverage	Epidemiologic surveillance	Poliovirus containment	Risk assessment	Risk mitigation	Event and outbreak preparedness	Polio-free status assessment
Argentina	No	No	Yes	Yes	Yes	Yes	Yes
Bolivia	No	No	Yes	Yes	Yes	Yes	Yes
Brazil	No	No	No	No	No	Yes	Yes
Canada	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Caribbean Sub-Region	No	No	Yes	Yes	Yes	No	Yes
Chile	Yes	No	Yes	Yes	No	No	Yes
Colombia	No	Yes	Yes	Yes	Yes	Yes	Yes
Costa Rica	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cuba	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Dominican Republic	No	No	Yes	Yes	Yes	Yes	Yes
Ecuador	No	No	No	Yes	No	No	Yes
El Salvador	No	No	No	Yes	Yes	Yes	Yes
Guatemala	No	No	Yes	Yes	Yes	Yes	Yes
Haiti	No	No	Yes	Yes	Yes	No	Yes
Honduras	No	No	Yes	Yes	Yes	Yes	Yes
Mexico	No	Yes	No	Yes	Yes	Yes	Yes
Nicaragua	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Panama	No	No	Yes	Yes	Yes	Yes	Yes
Paraguay	No	Yes	Yes	Yes	Yes	Yes	Yes
Peru	No	No	Yes	Yes	No	No	Yes
United States	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Uruguay	No	No	Yes	No	No	No	Yes
Venezuela	No	No	Yes	Yes	Yes	Yes	Yes

TABLE 1: RCC VALIDATION BY COUNTRY AND COMPONENT

Risk assessment

A risk analysis was conducted for the Region of the Americas considering immunization coverage, surveillance, health determinants, containment status, and outbreak response preparedness variables. Figure 10 shows the countries overall classification.



FIGURE 10: REGIONAL RISK ASSESSMENT MAP

Results of the review of the 2019 Containment Reports

6 countries were required to submit a Containment Report: Brazil, Canada, Ecuador, El Salvador, Mexico, and the United States of America. The RCC received an updated report from Brazil, Canada, Mexico, and the United States of America. El Salvador submitted a report, but it had not been updated since 2018, therefore the previous RCC containment recommendations are still pertinent and should be addressed. Ecuador included a description of the activities that were conducted in the annual report, but the containment report submission is still pending.

The RCC commends Mexico and the United States of America for providing a detailed response to all previous RCC recommendations.

The survey process was approved for 30 countries and 9 territories in 2018. In 2019, no further countries received the RCC approval for the survey process. However, the RCC recognizes that Canada has almost completed the process.

The RCC validation by type of material remains the same as in 2018:

Poliovirus type 2:

- WPV2/VDPV2 IM: 18 reports
- WPV2/VDPV2 PIM: 18 reports
- OPV2/Sabin 2 IM: 18 reports
- OPV2/Sabin 2 PIM: 17 reports

Poliovirus type 3:

- WPV3/VDPV3 IM: 17 reports
- WPV3/VDPV3 PIM: 18 reports

Poliovirus type 1:

- WPV1/VDPV1 IM: 17 reports
- WPV1/VDPV1 PIM: 18 reports

In 2018, Brazil, Canada, Cuba, and the United States of America stated the intention of having a dPEF. In 2019, Brazil has stated its intention of not having one; but official documentation on this matter is still pending. In Cuba, Canada, and the United States of America a total of 14 facilities plan on becoming dPEF and all have submitted the necessary documentation to the NAC to request the Certificate of Participation (CP) in the Containment Certification Scheme. GCC has endorsed the CP submitted by the NACs.

The RCC congratulates the countries and territories for advancing in the destruction of unnecessary material and for implementing PIM guidances.

Conclusions and recommendations

The RCC recognizes the advances of the countries in the Region of the Americas in the implementation of the Polio Endgame Strategic Plan, particularly in the context of COVID-19. The RCC wishes to thank the national authorities for their effort and work in planning, executing, and documenting the activities as well as the countless health workers who work every day to maintain the polio-free status of the Region. Additionally, the RCC would like to thank the polio partners that contribute to the sustainability of the polio elimination in the Americas. The support of the NCCs and NPCCs in the review and validation of the information is key to the Global Certification process and the RCC extends its gratitude to all its members who volunteer their time to the Global Eradication of Polio. The RCC also wishes to thank its Secretariat, composed of members of PAHO's Immunization Unit, for their unwavering support.

The general recommendations by risk component are listed below. The RCC developed country-specific recommendations to strengthen the polio programs and to advance containment. The recommendations will be shared with the countries through the PAHO country offices and with the NCCs through a letter from the RCC Chair.

The RCC expressed ongoing concern about the continued decline in immunization coverage and unmet surveillance indicators in 2019. Large population immunity gaps and weak surveillance systems represent a threat to Regional polio-free status, and this year, the COVID-19 pandemic has imposed additional, significant strains on all health services, including the immunization programs. The RCC is extremely concerned about the impact of the COVID-19 pandemic on the polio program. Extraordinary efforts need to be made by countries to immunize all children, to continue with polio surveillance and the implementation of the Polio Endgame Strategic Plan. Countries should ensure the sustainability of the polio eradication program, including the availability of specific financial resources to conduct immunization, surveillance, and other activities related to the program.

Recognizing that the current pandemic was declared early in 2020; and that most countries were not able to implement previous RCC recommendations; the RCC re-states previous recommendations.

General recommendations for the annual report by component

Coverage:

- Countries should identify districts with coverage <80% and develop local strategies that are pertinent to the specific situation to improve coverage.
- Countries that have not implemented the second IPV dose must strive to introduce it.
- Countries should try to monitor zero dose and late immunization on a monthly basis.

- Countries should define the proportion of children with missed immunizations due to COVID-19 and advance innovative strategies to catch up all unimmunized or partially immunized children.

Surveillance:

- Countries should continue strengthening surveillance in high-risk areas.
- Countries should consider the implementation of active hospital-based case-finding in areas where AFP rate is below target.
- Countries performing environmental surveillance should continue with this effort. Other high-risk countries should evaluate the possibility of introducing environmental surveillance in specific areas.

Risk assessment and mitigation:

- Identify the risk of importation (patterns of population movements), particularly along land borders, but also via air and sea, and clearly address these risks in the mitigation plans.
- In 2020, countries should include a risk analysis that considers the impact of COVID-19 in the polio eradication activities, including immunization coverage and surveillance performance.
- Countries should implement activities to mitigate COVID-19 repercussions for the polio program and include them in the 2020 report.

Preparedness and response:

- All countries should update their Event and Outbreak Response Plan following the Global Polio Eradication Initiative (GPEI) SOP that was published in March 2020.
- Countries should conduct the POSE when possible, considering the current circumstances.
- Countries should build upon what the country has learned from the COVID-19 response and apply this to the polio outbreak preparedness response plan. Country strengths and weaknesses should be used to better understand the country's capacity to respond.

General recommendations for containment

For countries pending RCC validation for phase I:

- Finalize the GAPIII surveys and evaluate and assess the non-responders' facilities, and advance with the destruction of all unneeded material.

For countries that have received the RCC validation for the completion of phase I:

- Countries should maintain an updated electronic database of the survey and an inventory of the facilities retaining poliovirus material. This information should be included in the containment section included in the annual report.

For all countries:

- Countries should continue with the implementation of PIM guidance when appropriate (for countries with PIM Sabin2) and implement the risk mitigation strategies in accordance with the risk-classification of the material retained by facility.
- The RCC recommends that the relevant national authorities follow-up on the laboratories that decided to store PIM Sabin2 and verify the implementation of all risk mitigation strategies in accordance with the risk classification of the material retained. Any change in the PIM inventory or procedures performed (new or modified techniques) in the laboratory should be officially reported to the competent national authority.
- Encourage facilities that retain higher risk materials (i.e. type 2 and untyped poliovirus/unknown materials) to destroy unneeded material or transfer the materials to a dPEF.

General recommendations for PAHO

- PAHO should continue to support high and medium-risk countries in improving their performance with respect to immunization coverage and surveillance.
- Establish a PAHO polio rapid response team that includes experts from diverse expertise areas and representation from different countries.
- Haiti presents an ongoing risk to the polio-free status of the Region given its current polio program and recent but ongoing security challenges. This risk is confirmed by the comparison of polio program performance with that of other countries in other WHO Regions where cVDPVs have emerged. Consideration should be given to long term planning and interventions to mitigate the risks to both the country and Region. The RCC would appreciate being involved in discussions and/or apprised of the approach PAHO will take to mitigate the potential risks of the emergence and transmission of cVDPVs in Haiti.

General recommendations for the GPEI

- Until polio is eradicated, every child is at risk of polio, including the children of the Americas. In this respect, the GPEI should continue to support the Region of the Americas.

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