KEEPING THE REGION OF THE AMERICAS FREE OF POLIO

Background

1. In 1985, the countries of the Region of the Americas committed to achieving polio elimination by unanimously adopting Resolution CD31.R22, Expanded Program on Immunization in the Americas (1). In 1994, the Region was certified as polio-free and, in 1988, the World Health Assembly approved a resolution for the worldwide eradication of polio (2). Since then, the incidence of polio has decreased globally by 99%, wild poliovirus (WPV) type 2 and type 3 have been eradicated, and wild poliovirus type 1 (WPV1) remains endemic in only two countries (Afghanistan and Pakistan), with Malawi and Mozambique reporting recent importation events.

2. As of 20 September 2022, all World Health Organization (WHO) regions, except for the South-East Asia Region and the Western Pacific Region, are experiencing circulating vaccine-derived polioviruses (cVDPV), which are mainly comprised of type 2 poliovirus but also include types 1 and 3 (3). In 2014, on the advice of the Emergency Committee under the International Health Regulations (2005) (IHR) on the international spread of poliovirus, the WHO Director-General declared the international spread of wild poliovirus a public health emergency of international concern (PHEIC) (4). The Committee reassesses the situation every three months. In June 2022, the WHO Director-General accepted the recommendations of the Thirty-second Polio IHR Emergency Committee’s assessment and determined that the situation continues to constitute a PHEIC (5).

3. While the Region of the Americas has maintained its polio-free status for almost 30 years, a polio case was recently confirmed in the United States of America. With low vaccination coverage in the Region and underperforming surveillance in many countries, the Americas is at increasing risk of polio outbreaks.

Situation Analysis

Polio vaccination coverage and surveillance

4. Preliminary data indicate that regional immunization coverage of the third dose of polio vaccine (Pol3) was 79% in 2021, the lowest coverage since 1994. The Region had
started to show a decline in coverage before 2020 and this situation was worsened by the COVID-19 pandemic. In 2021, 29 countries reported Pol3 coverage below the 95% target, and 13 countries reported coverage below 80%, compared to only four countries in 2019 (6).

5. The number of unvaccinated children susceptible to polio in the Region is significant. Type 2 poliovirus is of particular concern, since in many countries there was a late introduction of the second dose of inactivated polio vaccine (IPV, which contains the three poliovirus serotypes) after the switch from the trivalent oral polio vaccine (tOPV) to the bivalent OPV (bOPV, which includes only serotypes 1 and 3) in 2016 (7).

6. For acute flaccid paralysis (AFP), surveillance performance has also declined to below the expected target of at least one case per 100,000 in the over-15 population (8). For the countries and territories in the Region, surveillance is supported by the Regional Polio Laboratory Network, which includes 11 laboratories located in 10 countries, all accredited in accordance with the criteria of the Global Polio Laboratory Network.

**Poliovirus containment**

7. Poliovirus containment is key to eradication. The risk of reintroduction from a facility after poliovirus has been eradicated must be minimized through adequate containment. Countries and territories in the Region have proceeded in accordance with the Regional Action Plan known as Regional-GAPIII, but four countries have not yet been validated by the Regional Commission for the Certification of Polio Eradication in the Region of the Americas (RCC) for completion of the facility survey and the process for final disposal of polioviruses. Three countries have a designated polio-essential facility (dPEF) to store type 2 poliovirus and are advancing in accordance with the WHO Containment Certification Scheme (9).

**Risk assessment for poliovirus transmission**

8. The RCC conducted a risk assessment for polio in July 2022, considering immunization coverage, surveillance, poliovirus containment status, health determinants, and outbreak preparedness to assess the risk of transmission in the event of a poliovirus importation or the emergence of vaccine-derived poliovirus (VDPV). Four countries (Brazil, Dominican Republic, Haiti, and Peru) were classified as very high risk, eight countries (Argentina, Bahamas, Bolivia [Plurinational State of], Ecuador, Guatemala, Panama, Suriname, and Venezuela [Bolivarian Republic of]) as high risk, 18 as medium risk, and 14 as low risk (10).

**Polio situation update**

9. On 21 July 2022, the Pan American Sanitary Bureau (PASB or the Bureau) was informed by the United States Centers for Disease Control and Prevention that a case of VDPV2 had been confirmed in an unvaccinated young adult in Rockland County, New York, with paralysis onset on 20 June 2022. The Global Polio Laboratory Network confirmed that the isolated VDPV2 was genetically linked to Sabin-like type 2 (SL2)
detected in environmental samples collected in Jerusalem, Israel, as well as the VDPV2 isolated from environmental samples in London, United Kingdom, in June 2022 (11).

10. Following confirmation of the case, the United States of America implemented an enhanced national epidemiological surveillance system, strategies to immunize the under-vaccinated population against polio in New York, and environmental surveillance using SARS-CoV-2 sites and specimens. Isolates from wastewater samples collected in August 2022 confirmed both the presence of VDPV2 genetically linked to the case and community circulation of the virus, which was reclassified as circulating VDPV2 (cVDPV2) (12).

11. The decline in surveillance performance, combined with low vaccination coverage in most countries, puts the Region at increasing risk. The current situation would allow the virus to circulate silently until it reaches susceptible pockets and causes paralysis. As stated by the RCC, “the significant decline in both coverage and surveillance in many countries of the Region has increased substantially the risk of polio outbreaks in the event of an importation or VDPV emergence” (10).

Support for Member States

12. The Bureau has provided technical guidance to all Member States, with particular emphasis on very high-risk and high-risk countries. The situation was presented on 14-16 July 2021 and 25 July 2022 to the Technical Advisory Group (TAG) on vaccine-preventable diseases and polio-specific recommendations have been provided to the countries (13). As the RCC Secretariat, PASB has supported the RCC in the provision of periodic general and country-specific recommendations (9, 10, 14). Furthermore, PASB has advised Member States on the need to increase vaccination coverage, improve surveillance performance, and prepare a response for a possible polio event or outbreak (15-19).

13. The Bureau has been in close coordination with the United States of America in the response to the cVDPV2 outbreak in New York. Preparatory actions have been taken by the Organization to ensure the provision of technical support to Member States in their efforts to mitigate risk and respond effectively.

Action needed to improve the situation

14. Member States are urged to develop and implement a prioritized and targeted polio mitigation plan. The TAG and RCC recommendations should be reviewed and implemented to increase vaccination coverage, improve surveillance performance, and ensure adequate preparation for a possible polio event or outbreak.1,2

1 Technical Advisory Group (TAG) on Vaccine-preventable Diseases meeting reports and recommendations are available at: https://www.paho.org/en/technical-advisory-group-vaccine-preventable-diseases.
2 Regional Certification Commission (RCC) for the Polio Endgame in the Region of the Americas meeting reports are available at: https://www.paho.org/en/topics/poliomyelitis.
15. Strengthening of national polio programs should be undertaken in coordination with the programs for all other vaccine-preventable diseases, guided by Resolution CD59.R13, Reinvigorating Immunization as a Public Good for Universal Health, adopted in 2021 (20).

16. Member States should develop and implement a prioritized and targeted polio mitigation plan to protect the population and sustain public health gains. These plans should focus on polio, but all other vaccine-preventable diseases should also be considered as countries prepare to strengthen their immunization programs.

17. The Bureau will continue to provide technical cooperation to Member States in the development, implementation, and monitoring of their risk mitigation and preparedness plans.

Action by the Pan American Sanitary Conference

18. The Conference is invited to take note of this report and provide any comments it deems pertinent, and consider approving the proposed resolution presented in Annex A.

Annexes

References


PROPOSED RESOLUTION

KEEPING THE REGION OF THE AMERICAS FREE OF POLIO

THE 30th PAN AMERICAN SANITARY CONFERENCE,

(OP)1. To urge all Member States, considering their contexts, needs, vulnerabilities, and priorities, to:

a) develop and implement a prioritized and targeted polio mitigation plan based on the recommendations of the Technical Advisory Group on Immunization and the Regional Commission for the Certification of Polio Eradication in the Region of
the Americas, which includes actions to increase vaccination coverage, improve surveillance performance, and ensure adequate preparedness for a possible polio event or outbreak;

b) engage civil society, community leaders, non-governmental organizations, the private sector, academic institutions, and other stakeholders to jointly advance and work in a coordinated manner to keep the Region of the Americas free of polio.

(OP)2. To request the Director to:

a) provide technical cooperation and promote collaboration among Member States in the development, implementation, and monitoring of their polio risk mitigation and preparedness plans;

b) report to the Governing Bodies on the progress made and the challenges faced in the implementation of this resolution as part of the reports on Resolution CD59.R13 (2021).
Report on the Financial and Administrative Implications of the Proposed Resolution for PASB

1. Agenda item: 4.8 - Keeping the Region of the Americas Free of Polio

2. Linkage to Program Budget of the Pan American Health Organization 2022-2023:
   - Outcome 4: Response capacity for communicable diseases
   - Outcome 17: Elimination of communicable diseases
   - Outcome 23: Health emergencies preparedness and risk reduction
   - Outcome 24: Epidemic and pandemic prevention and control

3. Financial implications:
   a) Total estimated cost for implementation over the lifecycle of the resolution (including staff and activities):

<table>
<thead>
<tr>
<th>Area</th>
<th>Estimated Cost (in US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human resources</td>
<td>$1,200,000</td>
</tr>
<tr>
<td>Consultants / service contracts</td>
<td>$1,200,000</td>
</tr>
<tr>
<td>Travel and meetings</td>
<td>$2,300,000</td>
</tr>
<tr>
<td>Training</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>Supplies and other expenses</td>
<td>$2,500,000</td>
</tr>
<tr>
<td>Publications</td>
<td>$300,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$8,500,000.00</strong></td>
</tr>
</tbody>
</table>

   b) Estimated cost for the 2022-2023 and 2024-2025 biennium (including staff and activities):
   The estimated breakdown of the cost per biennium is below. This corresponds to actions that will be undertaken by the Secretariat:
   - US$ 5,000,000 for the biennium 2022-2023.
   - US$ 3,500,000 for the biennium 2024-2025.

   c) Of the estimated cost noted in b), what can be subsumed under existing programmed activities?
   All items can be subsumed under the existing programmed activities. Financial support will be required for 90% of the estimated costs noted in b).
4. Administrative implications:
   a) Indicate the levels of the Organization at which the work will be undertaken:
      Regional, country, and local levels
   b) Additional staffing requirements (indicate additional required staff full-time
      equivalents, noting necessary skills profile):
      There is a need for additional staffing to support implementation of the mitigation plan
      at regional, country, and local levels.
   c) Time frames (indicate broad time frames for the implementation and
      evaluation):
      d) The initial time frame is 15 months (October 2022 to December 2023), followed by
         the 2024–2025 biennium.
## Analytical Form to Link Agenda Item with Organizational Mandates

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. <strong>Agenda item:</strong></td>
<td>4.8 – Keeping the Region of the Americas Free of Polio</td>
</tr>
<tr>
<td>2. <strong>Responsible unit:</strong></td>
<td>Family, Health Promotion and Life Course/Comprehensive Family Immunization Unit (FPL/IM)</td>
</tr>
<tr>
<td>3. <strong>Preparing officer:</strong></td>
<td>Dr. Luis Andres de Francisco, Dr. Daniel Salas, and Gloria Rey-Benito</td>
</tr>
<tr>
<td>4. <strong>Link between Agenda item and the Sustainable Health Agenda for the Americas 2018-2030:</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Goal 5:</strong> Ensure access to essential medicines and vaccines, and to other priority health technologies, according to available scientific evidence and the national context</td>
</tr>
<tr>
<td></td>
<td><strong>Goal 10:</strong> Reduce the burden of communicable diseases and eliminate neglected diseases</td>
</tr>
<tr>
<td>5. <strong>Link between Agenda item and the Strategic Plan of the Pan American Health Organization 2020-2025:</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Outcome 4:</strong> Increased response capacity of integrated health services networks (IHSNs) for prevention, surveillance, early detection and treatment, and care of communicable diseases, including vaccine-preventable diseases</td>
</tr>
<tr>
<td></td>
<td><strong>Outcome 17:</strong> Elimination of communicable diseases. Health systems strengthened to achieve or maintain the elimination of transmission of targeted diseases</td>
</tr>
<tr>
<td></td>
<td><strong>Outcome Indicator 17.g.</strong> Number of countries and territories reporting cases of paralysis due to wild poliovirus or the circulation of vaccine derived poliovirus (cVDPV) in the past year</td>
</tr>
<tr>
<td></td>
<td><strong>Outcome 23:</strong> Health emergencies preparedness and risk reduction. Strengthened country capacity for all-hazards health emergency and disaster risk management for a disaster-resilient health sector</td>
</tr>
<tr>
<td></td>
<td><strong>Outcome 24.</strong> Epidemic and pandemic prevention and control. Countries’ capacities strengthened to prevent and control epidemics and pandemics caused by high-impact and/or high-consequence pathogens</td>
</tr>
<tr>
<td>6. <strong>List of collaborating centers and national institutions linked to this Agenda item:</strong></td>
<td>All collaborating centers and international and national institutions are invited to support the initiative to keep the Region of the Americas free of polio</td>
</tr>
<tr>
<td>7. <strong>Best practices in this area and examples from countries within the Region of the Americas:</strong></td>
<td>The Expanded Program on Immunization in the Americas, established in 1988, has worked in coordination with Member States to achieve the eradication of poliomyelitis and the elimination of measles, rubella, congenital rubella syndrome, and neonatal tetanus, as well as the epidemiological control of other vaccine-preventable diseases.</td>
</tr>
</tbody>
</table>
Aligned with GPW13 Target: *Eradicate poliomyelitis: zero cases of poliomyelitis caused by wild poliovirus and establish a clear timetable for the global withdrawal of oral polio vaccines in order to stop outbreaks caused by vaccine-derived poliovirus.*

The work of the Pan American Sanitary Bureau to build country preparedness relies on interprogrammatic work within the Bureau, involving the areas of universal health, health systems strengthening, antimicrobial resistance, maternal and child health, nutrition, and noncommunicable diseases, as well as disease-specific programs including those dealing with polio and arboviral diseases, among others.