

## **Regional Polio Meeting Next Steps in Certification and Containment**



### **Final Report**

**30 November - 1 December 2015  
Brasília, Brazil**

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## Acronyms

<b>AFP</b>	Acute flaccid paralysis
<b>bOPV</b>	Bivalent oral polio vaccine, containing serotypes 1 and 3
<b>CDC</b>	Centers for Disease Control and Prevention
<b>cVDPV</b>	Circulating vaccine-derived poliovirus
<b>GCC</b>	Global Certification Commission
<b>IPV</b>	Inactivated polio vaccine
<b>mOPV</b>	Monovalent oral polio vaccine
<b>NAC</b>	National authority for containment
<b>NCC</b>	National Certification Committee
<b>NPCC</b>	National Poliovirus Containment Coordinator
<b>OPV</b>	Oral polio vaccine
<b>PAHO</b>	Pan American Health Organization
<b>PEESP</b>	Polio Eradication and Endgame Strategic Plan 2013-2018
<b>RCC</b>	Regional Certification Commission for the Polio Eradication Endgame in the Region of the Americas
<b>SAGE</b>	Strategic Advisory Group of Experts on Immunization of the World Health Organization
<b>TAG</b>	Technical Advisory Group on Vaccine-preventable Diseases of the Pan American Health Organization
<b>tOPV</b>	Trivalent oral polio vaccine
<b>VAPP</b>	Vaccine-associated paralytic poliomyelitis
<b>WHO</b>	World Health Organization
<b>WPV</b>	Wild poliovirus
<b>WPV2</b>	Wild poliovirus type 2

## **Introduction**

The *Regional Polio Meeting: Next Steps in Certification and Containment* was held on 30 November and 1 December 2015 in Brasilia, Brazil.

Dr. Joaquim Molina, Representative the Pan American Health Organization (PAHO) Brazil office, gave the welcoming words. Dr. Arlene King, chair of the Regional Certification Commission and Dr. Cristina Pedreira, Regional Advisor from the PAHO Immunization Unit, outlined the objectives and expectations of the meeting, and Dr. José Agenor Alvares da Silva, Vice Minister of Health, representing the Ministry of Health of Brazil, officially opened the event.

Objectives of the meeting:

1. To update national certification committees (NCCs) on their roles and responsibilities in the final phase of polio eradication.
2. To update national polio containment coordinators (NPCCs) on their roles and responsibilities in the Regional Poliovirus Containment Plan, and to present a report template for the first containment phase.

This meeting was attended by 18 NCC presidents or representatives, one representative from the Caribbean Subregional Committee, and 23 NPCCs or their representatives, representing a total of 24 countries. It was also attended by four members of the Regional Certification Commission (RCC) for the Polio Eradication Endgame in the Region of the Americas, professionals from the Ministry of Health and the Oswaldo Cruz Foundation in Brazil, as well as representatives from the Centers for Disease Control and Prevention (CDC), the World Health Organization (WHO), and Pan American Health Organization (PAHO) advisors.

This report provides a summary of each topic discussed, the agreements reached, and the final recommendations.

## **Update on Global Polio Eradication**

Remarkable progress has been made toward achieving the global goal of eradication. Eighty percent of the world's population now lives in four WHO regions certified as polio-free: the Americas in 1994, the Western Pacific Region in 2000, the European Region in 2002, and the South East Asia Region, which includes India, in 2014. No new case of the wild poliovirus has been identified in the African Region in the last 15 months, and on 25 September, Nigeria was removed from the WHO list of endemic countries. There are currently only two endemic countries in the world: Pakistan and Afghanistan. In 2015, as of 19 November, these two countries reported a total of 57 cases, all caused by wild poliovirus type 1, 72% of which were in Pakistan.

On 20 September 2015, the Global Certification Commission (GCC) officially declared the worldwide eradication of the wild poliovirus type 2, while wild poliovirus type 3 has not been detected since 10 November 2012.

Outbreaks caused by the circulating vaccine-derived poliovirus (cVDPV) in three WHO regions reflect major gaps in vaccination coverage in affected countries: Guinea, Laos, Madagascar, and Ukraine. The outbreak in Guinea was caused by cVDPV type 2, and by type 1 in the other countries. Also, three cases of cVDPV type 2 have been detected in 2015: one environmental sample taken in Nigeria, and two AFP cases in Pakistan.

In light of the current situation, the priorities of the global eradication program are:

- to interrupt wild poliovirus circulation in Afghanistan and Pakistan,
- to maintain achievements in Africa and the Middle East,
- to improve surveillance and immunity in high-risk areas,
- to interrupt cVDPV type 2 circulation,
- to prepare for the switch, and
- to ensure adequate outbreak detection and response capacities.

## **Regional Update on the implementation of the PEESP**

The four main objectives of the Polio Eradication and Endgame Strategic Plan (PEESP) are to:

- detect and interrupt all poliovirus transmission
- strengthen immunization programs and withdraw OPV vaccines to eradicate all poliovirus
- contain all types of poliovirus and certify this
- complete legacy work.

Acute flaccid paralysis (AFP) surveillance will remain as the primary mechanism for poliovirus detection. The following must be investigated:

- any AFP case detected in children under 15 years of age for any reason other than severe trauma,

- any AFP case detected in any person of **any age** with suspected poliomyelitis, and
- any AFP outbreak of unknown cause to rule out a polio diagnosis.

The importance of the polio detection and response capacity is heightened following the withdrawal of the type 2 component due to the risk of cVDPV emergence, containment failures, and the prolonged excretion of vaccine-derived polio virus in the immunocompromised population.

The PAHO Weekly Polio Bulletin is a simple tool used to monitor the quality of AFP surveillance. In the Bulletin number 42/2015, the majority of countries are not meeting the targets for the AFP surveillance indicators. The AFP reporting rate varies from 2.31 in Honduras to 0.26 in Guatemala. The percentage of AFP cases with adequate sampling ranges from 100% in Costa Rica to 38% in the English-speaking Caribbean subregion, and the percentage of AFP cases investigated within 48 hours of being reported varies from 100% in Uruguay and Cuba to 23% in Honduras, with no available data from Guatemala and the Dominican Republic.

Environmental surveillance will complement AFP surveillance in certain selected areas, depending on the risk criteria.

Regional polio vaccination coverage, which reached 94% in 2011, has declined over the past three years, falling to 90% in 2014. There are also differences in coverage both between and within the countries. In 2014, polio vaccination coverage in most countries did not reach 95%. Thus, a total of 6.0 million children under 1 year were living in the 60% of municipalities in Latin America and the Caribbean with OPV3 coverage under 95% in 2014. Most countries have a high percentage of municipalities with coverage less than 80%.

The withdrawal of OPV is a key step in the Polio Eradication and Endgame Strategic Plan as the ultimate aim is to eliminate all cases of vaccine-associated paralytic poliomyelitis (VAPP) and all cases of cVDPV. OPV withdrawal will be sequential, starting with the type 2 virus, with a worldwide synchronized switch from the trivalent oral vaccine (tOPV) to the bivalent oral vaccine (bOPV) containing types 1 and 3. To reduce the risks associated with the withdrawal of the type 2 component, all countries of the Region will introduce at least one IPV dose into their routine vaccination programs. This will be carried out sequentially, starting with one IPV dose followed by 3-4 OPV doses until there are sufficient supply for two IPV doses followed by 2-3 OPV doses.

Up to the time of this meeting, of the 51 countries and territories of the Region, 33 have already added IPV to their vaccination schedules, and of the remaining 18, the majority plan to do so by the end of December, and five in January 2016.

The WHO Strategic Advisory Group of Experts on Immunization (SAGE) has confirmed 17 April to 1 May 2016 as the window for the switch from tOPV to bOPV. The 36 countries in the Region of the Americas currently using OPV must participate in this switch and must, therefore, finalize and send their switch plan to PAHO, indicating the date they have assigned for the switch within the timeline established by SAGE. So far, we have been informed of the following dates for the switch: of the 18 countries in the Caribbean subregion, 16 will make the switch on 26 April, Belize and Curaçao will do so on 25 April, El Salvador on 29 April, Haiti on 18 April, and Nicaragua on 25 April.

PAHO has already received switch plans from 22 countries, and is awaiting plans from Argentina, Belize, Bolivia, Brazil, Chile, Cuba, Curaçao, Dominica, Ecuador, Guatemala, Mexico, Paraguay, Peru, and Venezuela.

The global containment strategy has been adapted to the Region. This will commence with the destruction or containment of all wild poliovirus (type 1, 2, and 3) up to the end of December, and continuing with the Sabin type 2 poliovirus up to the end of July 2016. All countries have officially appointed their NPCCs. The only containment coordinator yet to be appointed at the date of the meeting was for Curaçao.

The Region of the Americas has formed the RCC to certify the final phase of polio eradication, and two meetings have been held since June 2015. To date, 21 of the 23 expected national committees have been formed; committees from the United States and Canada have yet to be formed.

### **Recommendations:**

<b>1</b>	Strengthening AFP surveillance is crucial in preparation for the switch, due to the risk of emergence of cVDPV type 2 during the post-switch period, as well as the risk of failures in containment efforts.
<b>2</b>	Countries not reaching an AFP reporting rate of one case of per 100,000 children under 15 in the past 52 weeks must conduct active searches.
<b>3</b>	Countries should analyze vaccination coverage and intensify vaccination activities in areas with low tOPV coverage in preparation for the switch.
<b>4</b>	Countries that have not yet introduced IPV into their vaccination programs should do so before the end of January 2016.
<b>5</b>	Countries should be prepared to follow TAG recommendations on the introduction of the second IPV dose, when there are sufficient supplies.
<b>6</b>	All countries should send PAHO their switch plans by 15 December 2015, at the latest.
<b>7</b>	Countries should intensify their efforts in preparation for the switch from the tOPV to bOPV to ensure the safety of the switch and compliance with the established timelines.

### **Role of the Regional Certification Commission and National Certification Committees**

To fulfill the recommendations outlined in the Polio Eradication and Endgame Strategic Plan (the Endgame) 2013–2018, PAHO has formed a Regional Certification Commission for the Polio Endgame in the Region of the Americas (RCC). The role of the RCC is to assess the achievement of the four main objectives of the Endgame in the Americas..

The RCC will be supported by the national certification committees (NCCs) responsible for certifying the final phase of polio eradication. The NCCs will evaluate, verify, and submit national documentation, as required by the GCC, to the RCC. The NCCs should be composed of independent experts in different areas of public health, acting in a personal capacity, without direct responsibility for polio eradication in their country

NCCs are responsible for verifying:

- the country's capacity to detect and interrupt all poliovirus transmission, by evaluating the quality of AFP surveillance systems;
- the updating of national polio outbreak reporting and response plans;
- that all municipalities or districts in the country reach at least 95% polio vaccination coverage;
- that containment guidelines to reduce the risk of wild poliovirus, VDPV, or Sabin reintroduction or emergence are followed;
- that the country has finalized its switch plan and that this includes all key components.

Furthermore, NCCs are responsible for

- validating the wild poliovirus containment report;
- validating the tOPV withdrawal and destruction report;
- validating the Sabin type 2 poliovirus containment report;
- conducting field visits, as necessary, to confirm if endgame eradication objectives are being met;
- meeting requirements set by the RCC and GCC.

The final reports on each stage of the final eradication phase should be sent by the NCC to the respective Ministry of Health, which in turn should send it to the PAHO country office. For additional data or information, the NCC can contact the technical secretariat: (Ministry of Health and PAHO).

### Next Steps

<b>1</b>	<b>Monthly, until April 2016:</b> RCC and NCC will review progress in each country regarding the switch and endgame targets through the regional dashboards.
<b>2</b>	<b>January 2016:</b> NCCs will submit the revision and validation of the wild poliovirus containment report (prepared by the containment coordinator) to the Ministry of Health, which should immediately send it to the PAHO country representative.
<b>3</b>	<b>February 2016:</b> The RCC will review the WPV containment reports and will submit the regional report to PAHO/WHO.
<b>4</b>	<b>May 2016:</b> NCCs will deliver the switch validation reports to the Ministry of Health, and the Ministry of Health will forward them to the PAHO country representative.
<b>5</b>	<b>June 2016:</b> RCC will review NCC reports on tOPV withdrawal and destruction and will send a regional report to PAHO/WHO.
<b>6</b>	<b>August 2016:</b> NCCs will deliver the revision and validation of the Sabin 2 poliovirus containment report to the Ministry of Health (report prepared by the containment coordinator), which should immediately send it to the PAHO representative office.
<b>7</b>	<b>September 2016:</b> RCC will review the Sabin type 2 poliovirus containment reports and deliver a regional report to PAHO/WHO.



## **Switch and independent monitoring guidelines**

Cessation of OPV use is a key step in the polio eradication endgame strategy to eliminate all vaccine-associated paralytic poliomyelitis (VAPP) cases and those caused by the circulating vaccine-derived virus (cVDPV).

OPV withdrawal will be sequential starting with type 2 poliovirus, with the switch from tOPV to bOPV. SAGE recommended starting with the tOPV withdrawal because this contains the type 2 virus, and wild poliovirus type 2 has not been detected since 1999. However, around 90% of polio cases caused by cVDPV since 2000 are type 2, and 40% of all VAPP cases reported worldwide are caused by the type 2 vaccine poliovirus. Therefore, in this final phase of polio eradication, the continued use of tOPV presents greater risk than benefit, and threatens the global polio eradication efforts.

For a successful switch, the following are necessary:

- a carefully elaborated and detailed plan
- well-trained health professionals
- the effective monitoring of health care facilities that store or administer vaccines after the switch to ensure that tOPV is no longer available for administration in the country
- the effective containment of all type 2 polioviruses.

It must be stressed that each country is responsible for ensuring that tOPV is not administered after the switch, and that no tOPV stocks remain in the cold chain.

The switch implementation guidelines describe four phases: planning, preparation, implementation, and validation. This and other technical support documents on the final eradication phase can be found at the following web site: [www.paho.org/polio](http://www.paho.org/polio)

The switch plan, including an estimated budget for switch activities, should be finalized by the end of September. The preparation period for the switch extends through March next year, and should include key activities such as: a precise estimation of tOPV needs to ensure sufficient vaccine supplies prior to the switch and to minimize tOPV wastage thereafter; identifying sources for the financial resources needed; drawing up plans for training, monitoring, supervision, bOPV distribution and tOPV withdrawal; determining tOPV destruction sites; and deciding the national switch date.

For the validation of the switch, it will be essential to prepare a plan for independent monitoring. The primary aim of the independent plan for monitoring the switch is to verify tOPV withdrawal. The secondary aims are to evaluate the success of the bOPV introduction and the distribution of the IPV. Countries should finalize the independent monitoring, consolidate the data, and submit the final report to the NCC for validation within a maximum period of two weeks after the switch.

This process should not be carried out by persons directly involved in the switch activities in the area to be inspected. Monitors themselves may come from the health sector, be government employees, or from non-government organizations or local universities.

The method used to monitor the switch involves a number of stages: conduct site visits to all cold chain stores at all levels, where the largest quantities of tOPV will generally be stored at time of switch, as well as 10% of selected health facilities, selected on a risk basis, to verify the removal of tOPV; take corrective action to remove tOPV from the cold chain and if found mark for disposal; and assess the status of bOPV and IPV distribution at the selected establishments.

Following the monitoring of a sample of services, the results cannot be generalized to all health services in the country. Countries should ensure tOPV withdrawal from all service points through supportive supervision during the 2-3 months that follow the completion of independent monitoring.

The final report on independent monitoring in each country is based on six indicators selected for their ability to identify whether the switch has been conducted safely and successfully. A copy of the form to submit with the final report to the NCC is shown in Annex 1 to this report. The technical secretariat (Ministry of Health and PAHO) are responsible for drawing up the final report from the independent monitoring results.

Once the NCC has revised the report and concluded that the country can no longer administer tOPV, nor has any stocks in the cold chain, the report should be sent to the **national government**, together with its final verdict.

The **national government**, in turn, will send the NCC report to the **PAHO Representative Office** in the country, which will forward it to the **WHO Regional Office**.

**Recommendations:**

<b>1</b>	Argentina, Belize, Bolivia, Brazil, Chile, Cuba, Curaçao, the Dominican Republic Ecuador, Guatemala, Mexico, Paraguay, Peru, and Venezuela should finalize their switch plans and forward them to PAHO by 15 December 2015 at the latest.
<b>2</b>	Countries should continue with the preparation activities as described in their national switch plan, and emphasize adequate training for all health workers as a high priority.
<b>3</b>	The National Plan for the switch must be supplemented by specific plans for: training, independent monitoring and supervision, bOPV distribution and removal and destruction of tOPV.
<b>4</b>	All countries should update the dashboard on a monthly basis with data on the implementation of switch activities, and immediately report any problem or factor that could threaten the process.
<b>5</b>	All components of the switch plan should be covered with sufficient financial resources to ensure implementation.
<b>6</b>	Countries should review national regulations on vaccine disposal so as to define protocols for tOPV disposal.
<b>7</b>	Countries should prepare stickers to clearly distinguish between tOPV and bOPV, showing dates when tOPV use must cease and bOPV use must commence.
<b>8</b>	The Switch Validation Report should be shared with PAHO within 15 days of the national switch date.

## Updating the Regional Poliovirus Containment Plan

A key step in global polio eradication is the destruction of all polioviruses, or their containment at essential facilities. In December 2014, WHO published the third Global Action Plan (GAPIII) for poliovirus containment aimed at minimizing the risks associated with the likelihood of accidental or deliberate poliovirus release from facilities after the eradication of wild polioviruses and the sequential cessation of routine OPV use.

Aligned with GAPIII, the Regional Plan consists of three phases relating to international polio eradication milestones: phase I, containment preparation; phase II, poliovirus type 2 containment period; and phase III, final poliovirus containment.

The Regional GAPIII survey was sent out in August 2015. Some countries have already adapted this format and are collecting the information electronically or by post. The survey is currently underway in other countries.

Essential activities that countries of the Region should carry out in phase I:

- appoint a national poliovirus containment coordinator
- draw up a list of laboratories and facilities
- conduct a survey of laboratories and facilities
- draw up an inventory of laboratories and facilities that stock infectious and/or potentially infectious material
- destroy or transfer infectious and potentially infectious poliovirus material
- prepare final containment report on all wild poliovirus in January 2016, and on Sabin type 2 poliovirus in August 2016.

Countries must inform PAHO about their decision to have a designated essential poliovirus facility, which in turn must inform WHO, so that WHO can initiate the containment certification process.

PAHO will send countries a template for the phase I final containment report by 18 December.

### Recommendations:

<b>1</b>	PAHO/WHO will support the work of the national authorities for containment (NACs) concerning the certification of essential facilities.
<b>2</b>	All countries must draw up an inventory of laboratories/facilities storing infectious or potentially infectious WPV, VDPV, and Sabin material.
<b>3</b>	All countries must destroy, transfer, or contain infectious or potentially infectious WPV and VDPV material before 31 December 2015.
<b>4</b>	All countries must urge laboratories to eliminate infectious or potentially infectious WPV material before 31 December 2015.
<b>5</b>	All countries must keep records of the the destruction or transfer of infectious or potentially infectious WPV, VDPV, and Sabin material, signed by the person responsible for the laboratory and an external observer.

<b>6</b>	All countries must submit a report on the inventory of facilities, and WPV and VDPV containment to PAHO in January 2016.
<b>7</b>	All countries must destroy, transfer, or contain infectious or potentially infectious Sabin 2 poliovirus material before 31 July 2016.
<b>8</b>	All countries must submit a report on the inventory of facilities, and Sabin 2 poliovirus containment to PAHO in August 2016.
<b>9</b>	Countries should report on the need to designate an essential poliovirus facility before the end of December 2015.
<b>10</b>	Countries that decide to maintain infectious or potentially infectious samples must appoint a NAC which will be responsible for certifying the essential poliovirus facility.

### **GAPIII laboratory survey application**

To support countries in the data collection for the Regional GAPIII survey, PAHO has developed an online tool that is currently being validated, and which is available in English and Spanish. This is a simple and reliable tool which facilitates the gathering of individual information from each laboratory or facility, as well as the consolidation of the information at the national level. Each country will appoint an administrator who will email the survey to the selected laboratories or facilities.

The application will contain the five modules as defined in the Regional GAPIII survey. The questions will have predetermined response options, making it easier to complete the survey, saving time and expedited the submission of the data. There will also be a validation process to help augment the reliability of the information submitted.

PAHO will inform countries of the availability of the tool and provide training via video conference.

### **Dashboards for the Polio Endgame and the Switch**

To support countries have an overall picture of the situation across the Region, PAHO has developed two dashboards to monitor the various indicators relating to surveillance, vaccination coverage, and implementation of key activities to ensure a safe switch. The two dashboards are explained in detail below.

#### *1. Switch dashboard*

The switch dashboard contains 41 selected activities that will help the country guarantee a safe switch and these activities are listed according to the optimal time-period for their implementation.

The dashboard serves as a checklist of actions to be carried out in the countries, and allows for a quick identification of activities that are falling behind schedule or require greater attention. Of the 41 activities, 18 are marked as “milestones”. Failure to meet the milestone activities will compromise the safety of the switch in the country and, consequently, in the Region.

This tool will be useful for RCC and NCC members, immunization program managers and personnel, and PAHO immunization advisors.

In September 2015, the dashboard was made available to all 36 countries that will be involved in the switch. At the time of this meeting, PAHO had received updated data from 29 of them and was awaiting updates from Antigua and Barbuda, Bolivia, Chile, Guatemala, Haiti, Mexico, and Venezuela.

By keeping the dashboard updated, progress and preparedness for the switch can be verified. Failure to do this means that delays in the preparation for the switch will not be easily identified and, as a result, timely solutions cannot be sought. National committees have an important role to play to ensure that countries keep information up-to-date with monthly submissions.

The dashboard for the monitoring of the switch is available at:  
<https://app.box.com/s/l6ovokw6i8i81sf7atb0pd66ck4xf4y7>.

## 2. Final polio eradication dashboard

The dashboard for the final phase of polio eradication includes indicators for epidemiological surveillance, data related to polio 3 coverage, and key activities for containment and the switch. The objective of the final eradication phase dashboard is to provide a summary on surveillance quality, polio 3 vaccination coverage, and advances made with containment and preparation for the switch.

This tool helps to readily identify areas in which countries have performed well, and where they need to increase efforts towards meeting global polio eradication targets.

The final polio eradication dashboard is available at:  
<https://app.box.com/s/et8f2afaiq2mwe1eswcb121nkj1r6mfp>

## Recommendations

<b>1</b>	The country's Ministry of Health must keep the dashboard up-to-date and send it to PAHO before the 10th of every month.
<b>2</b>	National committees should review the dashboards at least monthly and provide the Ministry of Health with recommendations, depending on the situations identified.

## Protocol for notification, risk assessment, and response to type 2 poliovirus detection

After the withdrawal of the type 2 OPV, there will be a relatively high, but short-term, risk of cVDPV2 emergence, and a lower but more prolonged risk of reintroduction of the type 2 poliovirus from vaccine manufacturing sites or laboratories. Therefore, all countries should maintain strict surveillance systems to rapidly detect, notify, and interrupt any circulation of type 2 poliovirus.

Detection of any type 2 poliovirus in a sample from any source will be considered a global public health emergency warranting a rapid and high-quality response.

The type and magnitude of the response will depend on the

- time since the OPV2 withdrawal and the type 2 poliovirus detection
- history of WPV or cVDPV transmission in the affected region or area
- characteristics of the population affected, such as their immunity level.

The potential magnitude of a type 2 poliovirus outbreak will increase the longer the time since the switch, with the loss of intestinal mucosal immunity after OPV2 cessation. The real magnitude of a post-switch outbreak will depend very much on the humoral immunity, in other words, on the vaccination coverage reached with the IPV vaccine.

WHO will maintain a global reserve of mOPV type 2 and IPV vaccines to deal with any type 2 poliovirus outbreak after the switch. To obtain these vaccines in the event of an outbreak, countries must send a complete risk assessment report to WHO, through the PAHO regional and country offices. The assessment should start within 72 hours and be completed within seven days.

To offer support to countries, the Global Polio Eradication Initiative has drawn up a protocol for type 2 poliovirus detection, reporting, research, risk assessment, response, and complementary measures. It is available at: [www.paho.org/immunization/polio](http://www.paho.org/immunization/polio).

### **Recommendations:**

<b>1</b>	Countries should update their outbreak detection and response protocols for the final phase of polio eradication.
<b>2</b>	AFP surveillance continues to be the best strategy for poliovirus detection, so countries should strengthen this and comply with quality indicators.
<b>3</b>	If type 2 poliovirus is detected during the post-switch period, countries must rapidly report and investigate this, and conduct a risk assessment including the time, place, and population characteristics to determine the type and magnitude of the response.

### **Resources available at the PAHO polio website**

The PAHO immunization website, <http://www.paho.org>, contains many resources such as the [polio weekly bulletin](#), the [polio field guide](#), technical guidelines, training documents, and communication guidance for the [IPV introduction](#) and the [switch](#).

The IPV introduction documents were designed to help immunization program managers to develop and implement their IPV introduction plan; provide health workers with a broad training on all aspects relating to the IPV introduction, including multiple injections; and help communication experts define key messages for the media and prepare themselves for unexpected situations.

The documents on the switch were designed to support countries with preparing their national switch plans, including independent monitoring and supervision plans, and the protocol for notification, risk assessment, and response to type 2 poliovirus detection after the switch. The documents may also be used to support countries as they train health workers at all levels on

the necessary steps to ensure a safe and successful switch. Additionally, a Switch Communication Planning Guide and an Issues Management Guide have been prepared to help countries prepare appropriate communications plans and to respond to unforeseen situations that could have a public impact.

Note: Given the technical nature of the switch, which does not impact parents or caregivers (since, in practice, it is simply a switch from one vaccine to another), it is not recommended to inform communities or families about the switch. However, for crisis response activities, a communication plan should be a ready for this audience.

ANNEX 1

**Switch Validation Report**

**1. Percentage of vaccines warehouses visited in each level of the chain FR I or, considering all the sectors involved (eg, Ministry of Health, Social Security, Armed Forces and others)**

Cold Chain level	Number of existing warehouses	Number of warehouses visited	% Of warehouses visited
National			
Regional			
Departmental			
Municipal			
Total			

Note: If vaccine warehouses at other levels, add additional lines and information as necessary

**2. tOPV found in warehouses**

<b>Number</b> of warehouses with tOPV found <b>within</b> the cold chain.	
<b>%</b> Of warehouses visited with tOPV found <b>within</b> the cold chain.	
Total number of tOPV doses found	
<b>Number</b> of warehouses with tOPV found <b>outside</b> the cold chain.	
<b>%</b> Of warehouses with tOPV found <b>outside</b> the cold chain.	
Total <b>number</b> of tOPV doses found	
Total <b>number</b> of warehouses that had tOPV outside the cold chain that was not properly labeled (ex: label saying “Do not use”)	

For each warehouse where tOPV found in the cold chain, specify:

- Level of the cold chain (national, regional, provincial or district)
- Municipality where the warehouse is located:
- Actions implemented against this finding:



3. **Number of vaccination service points**

<b>Total number</b> of vaccination service points in the country	
<b>Number</b> of vaccination service points <b>visited</b>	
<b>% Of</b> vaccination service points <b>visited</b>	

4. **tOPV found at vaccination service points**

<b>Number</b> of vaccination service points with tOPV found <b>within</b> the cold chain.	
<b>% Of</b> vaccination service points with tOPV found <b>within</b> the cold chain.	
<b>Number</b> of vaccination service points with tOPV found <b>outside</b> the cold chain.	
<b>%</b> vaccination service points with tOPV found <b>outside</b> the cold chain.	
Total <b>number</b> of tOPV doses found at vaccination service points	
Total <b>number</b> of vaccination service points that had tOPV outside the cold chain that was not properly labeled (ex: label saying “Do not use”)	

For each vaccination service point where tOPV was found in the cold chain, specify:

- Municipality where is located the service:
- Service Point Name:
- Actions implemented against this finding:

If it was necessary to expand the number of immunization services to visited because of the amount of tOPV that was found in the initial search, specify the municipality and number of additional service points visited (add lines as necessary):

Municipality name:	
Number of additional services visited:	

5. **bOPV** availability at vaccination service points

<b>Number</b> of vaccination service points where bOPV was not available	
<b>% Of</b> immunization services visited where bOPV was not available	

For each service where bOPV was not available, specify:

- Municipality where is located the vaccination service:
- Service Name:
- Actions implemented:

6. **IPV** availability at vaccination service points

<b>Number</b> of vaccination service points where IPV was not available	
<b>%</b> of vaccination service points where IPV was not available	

For each vaccination service point where IPV was not available, specify:

- Municipality of vaccination service point:
- Vaccination service point Name:
- Actions implemented:

7. tOPV destruction

- How many doses of tOPV needed to be destroyed?
- What was the period of tOPV destruction?
- How many centers were involved in the destruction process?
- Of the total number of doses of vaccines destroyed, specify:

<b>Number of doses destroyed</b>	<b>Method</b>	<b>Level</b>

ANNEX 2

**National Report Phase I - GAP III: WPV/VDPV Containment  
Preparation for Poliovirus containment**

**1. INTRODUCTION** (Brief description)

National status of polio eradication, risk of reintroduction of poliovirus since facilities and purpose of poliovirus containment.

**2. NATIONAL BACKGROUND**

Last polio confirmed case by WPV	
Last polio confirmed case by VDPV	
Use of polio vaccines in the national immunization program	OPV since ___ until ___ IPV since ___
Polio vaccine manufacturers and type of polio vaccine	Producer ___ Type vaccine ___
Summary of results of Phase I of containment GAP- II <ul style="list-style-type: none"> <li>• Laboratories with infectious WPV materials</li> <li>• Laboratories with potentially infectious WPV materials</li> </ul>	_____ _____

**3. LEGAL BASIS AND POLITICAL**

- Political and legislation support for the implementation of the plan
- Multi-Sector participation

**4. NATIONAL CONTAINMENT PLAN** (Brief description)

- Organization, assignment of responsibilities (NCC , NPCC , NAC)
- Human and financial resources allocated
- Activity schedule
- Source (s) of the list of laboratories; and, completeness and reliability of the survey information
- Survey submission process-monitoring and receiving surveys; survey coverage, including distribution of participating laboratories
- Consolidation of information and data analysis

**5. RESULTS**

5.1 Total # of laboratories/facilities selected to participate: \_\_\_\_\_

5.2 Total surveys sent: \_\_\_\_\_

5.3 Total surveys received: \_\_\_\_\_

5.4 Sector(s) of participating laboratories/ facilities

Laboratory / facility belongs to the sector	Total
1. Ministry of Health/Health Sector	
2. Ministry of Education/Education Sector	
3. Ministry of Defense/Defense Sector	
4. Ministry of Environment/Environmental Sector	
5. Other Sectors	

5.5 Type of laboratories with capacity for storage of biological and water samples (from any source) at temperatures of -20°C or below (-40°C, -70°C)

Specialization of laboratory / facility	Total
Virology	
Bacteriology	
Mycology	
Parasitology	
Pathology	
Environmental	
Biology	

5.6 Laboratory / facility with WPV/VDPV infectious poliovirus material

Name and address of the laboratory / facility	Type of the laboratory / facility	Storage WPV				Proposed disposition for the stored material		
		Type 1	Type 2	Type 3	Not typed	Eliminate or Destroy	Transfer to essential facility	Continue storing in the facility <sup>1</sup>
<b>TOTAL</b>								

<sup>1</sup> If your laboratory/facility chooses to maintain infectious material of poliovirus, then it must meet the criteria for an poliovirus essential facility, as outlined in the GAP III and be certified by your National Authority of Containment.

5.7 Laboratory / facility with WPV/VDPV potentially infectious poliovirus material

Name and address of the laboratory / facility	Type of the laboratory / facility	Proposed disposition for the stored material		
		Eliminate or Destroy	Transfer to essential facility	Continue storing in the facility <sup>1</sup>
<b>TOTAL</b>				

<sup>1</sup> If your laboratory/facility chooses to maintain potentially infectious material of poliovirus, then it must meet the criteria for an poliovirus essential facility, as outlined in the GAP III and be certified by your National Authority of Containment.

5.8 List of poliovirus essential facilities

5.8.1 Activities performed to obtain certification of poliovirus essential facilities (short description)

5.9 List of professionals involved in the implementation, development, review or approval of this report (include NCC, NPCC)

Full name	Entity	Position	e- mail	Signature

**6. CONCLUSIONS**

**7. ATTACHMENTS**

- National Survey format (This only applies to countries that created and used their own survey/questionnaire)
- Copy of evidence of destruction or transfer of the stored material (signed by the person responsible for the laboratory and an external observer)
- Copy of the survey completed by the poliovirus essential facility only
- Other (directives, resolutions or binding documents).