# Organization Organization

### **Epidemiological Alert:**

#### Poliomyelitis due to wild poliovirus

## Protocol for response to imported case of poliomyelitis due to wild poliovirus<sup>1</sup>

3 October 2011

This protocol defines steps that should be taken at national levels in the Region of the Americas in response to an imported case of wild poliovirus.

#### I. Background

The last case of wild poliovirus occurred in the Americas in 1991 and as of the 28<sup>th</sup> of September 2011 wild poliovirus continued to circulate in 26 countries located in Asia and Africa.

As of the 28<sup>th</sup> of September 2011, the Global Polio Eradication Initiative had reported 410 cases of poliomyelitis caused by wild poliovirus; 153 were registered in endemic countries<sup>2</sup> and 257 in non-endemic countries. Of the total registered cases, 352 were due to wild poliovirus type 1 (WPV1) and 58 to wild virus type 3 (WPV3).<sup>3</sup>

#### II. Objectives

The objective of this Protocol is to:

- Prevent the occurrence of national poliomyelitis epidemics caused by the importation of wild polio virus.
- Prevent an outbreak from spreading among countries in the Americas.
- Prevent renewed circulation of wild polio virus in any country that experiences an imported case.

#### III. Conditions that the country must take into account in the outbreak response.

- Knowledge of the national annual coverage of vaccination against poliomyelitis (third vaccine dose) starting from the date of the last reported case of wild poliovirus.
- Knowledge of municipal level (or district level) third dose coverage.
- Calculate (for cohorts) the number of individuals susceptible to poliomyelitis.
- Knowledge of available vaccines against poliomyelitis and the capability to acquire them rapidly (loans, purchases).

<sup>&</sup>lt;sup>1</sup> Document prepared by the Immunizations Group

<sup>&</sup>lt;sup>2</sup> Afghanistan, India, Nigeria and Pakistan

<sup>&</sup>lt;sup>3</sup> Wild Poliovirus Weekly Updated. Global Polio Eradication Initiative. 28 September 2011. Available at: <a href="http://www.polioeradication.org/">http://www.polioeradication.org/</a>

- Define the surveillance system's capacity to detect polio virus circulation in geographic areas of the country under the second administrative level (eg. Departments, Regions). This implicates knowledge of compliance with indicators of epidemiological surveillance of Acute Flaccid Paralysis (AFP), identification of silent areas (in the last five years), the analysis of sample handling conditions from the moment taken to arrival at the laboratory and verify if the national reference laboratory has received the corresponding annual accreditation.
- Know the political, social and epidemiological implications of information management in the event of an imported poliomyelitis case due to wild polio virus.

#### IV. Actions to undertake

In detecting a suspected case of poliomyelitis due to wild polio virus, the following actions must be taken:

- 1. Confirming that a case is due to wild polio virus: The confirmation must be made by an accredited laboratory which is part of the Global Polio Laboratory Network.
- 2. Immediate notification: Notification must be made in accordance with the mechanisms established in the International Health Regulations (2005).4
- 3. **Establish a working group**: The group must respond to an event of wild polio virus as a matter of national emergency and at a minimum should include those responsible for the following activities:
  - Decision-making
  - Group management: assigning and verifying compliance of activities and goals
  - Social Communication: with media and community
  - Intersectorial coordination: with other government agencies
  - Institutional coordination: with units of the Ministry of Health
  - Coordination with scientific societies
  - Logistics
  - Vaccination
  - Epidemiological surveillance
  - Situation Analysis
  - International reports

#### 4. Control activities against its importation

- Vaccination against poliomyelitis: This is based on the susceptible cohorts. A nationwide vaccination campaign should be conducted targeting the group regardless of prior immunization status. A coverage level higher than 95% in the

<sup>&</sup>lt;sup>4</sup> Case definitions for the four diseases requiring notification to WHO in all circumstances under the IHR (2005). World Health Organization. Available at: http://www.who.int/ihr/survellance\_response/case\_definitions/en/index.html

target group should be achieved and should be verified immediately by monitoring coverage.

The Pan American Health Organization/World Health Organization (PAHO/WHO) recommends three rounds of polio vaccination. If cases continue to appear four weeks after the last completed round of vaccinations than international support should be sought to reassess the import control strategy.

#### Epidemiological surveillance:

- Daily notification of the presence or absence of AFP cases.
- Active search for cases in affected communities and in places that have been identified as silent.
- Taking feces samples from contacts and from the community where the case was detected, as well as in communities with an epidemiologic nexus.
- Ensure proper handling of AFP case samples (timely collection, delivery according to standards, verification of receipt at the laboratory).

#### V. Final report of the event

The working group must complete a final report one year after the last detected case. It is important to note that this is aside from the progress reports and ongoing publications developed towards achieving the goal.

#### Additional comments

- Keep in mind that requesting international travelers entering a country to come adequately vaccinated is for the protection of the arriving individual and not to protect the country.
- It is recommended that travelers going abroad be properly vaccinated to prevent inconveniences during their trip (even though there is no regulation requiring this).
- Also important to note that in general, delays in notification of an event or minimizing its importance have resulted in loss of credibility.

#### References

- 1. Wild Poliovirus Weekly Updated. Global Polio Eradication Initiative. 28 September 2011. Available at <a href="http://www.polioeradication.org/">http://www.polioeradication.org/</a>
- 2. Final report of the XIX Technical Advisory Group (TAG) Meeting on Vaccine-preventable Diseases of the Pan American Health Organization, held in Buenos Aires, Argentina, July 2011. Available at: <a href="http://new.paho.org/hq/index.php?option=com\_content&task=view&id=1862&Itemid=1674&lang=en">http://new.paho.org/hq/index.php?option=com\_content&task=view&id=1862&Itemid=1674&lang=en</a>