Situation Report 11
Polio Outbreak

11 December 2019

Highlights

- 5 new human cases reported in the past week
- In response to first human Vaccine Derived Polio Virus type 1 (VDPV1) case from the island province of Basilan, in the Bangsamoro Autonomous Region in Muslim Mindanao (BARMM), outbreak immunization was conducted in Maluso, Basilan with bivalent Oral Polio Vaccine (bOPV) against polio type 1, vaccinating 13,547 children under 10 years old (102% of the target)
- Currently 9 human cases confirmed with circulating VDPV type 2 (cVDPV2): one case with VDPV1, one case with cVDPV1; and one case with immunodeficiency-related VDPV type 2 (iVDPV2).
- A case with VDPV1 from Sultan Kudarat is pending genetic analysis
- One case of cVDPV1 from Malaysia was confirmed as genetically linked to the Basilan case.
- Synchronized polio vaccination campaign conducted on 25 November-10 December (including 2 days of extension) vaccinated 4,309,566 children under 5, which is 98% of the target total 4.4 million children under 5. A total of 1,395,365 children under 5 were vaccinated in National Capital Region (NCR), which is 109% of the target, and 2,914,201 (94%) in Mindanao.
- DOH planning to conduct outbreak immunization with bOPV targeting 710,296 children under 10 in the Sulu Archipelago, Zamboanga City and Lambayong, Sultan Kudarat on 6-12 January 2020.
- Current polio outbreak resulting from persistently low routine immunization coverage, and poor sanitation and hygiene.
- Philippines is affected by both cVDPV1 and cVDPV2. cVDPV is considered a public health emergency of international concern (PHEIC).

Current Situation

Table 1: Age and Gender per Type and Location of Polio Cases*

<table>
<thead>
<tr>
<th>Type</th>
<th>Age</th>
<th>Gender</th>
<th>Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>VDPV1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>cVDPV1</td>
<td>13</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>iVDPV2</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>cVDPV2</td>
<td>17</td>
<td>9</td>
<td>5</td>
</tr>
</tbody>
</table>

* Age and gender of latest cases as yet unknown

Figure 1: VDPV Locations in the Philippines as of 10 December 2019

The Department of Health conducting community AFP case finding and vaccination survey in barangay Townsite, Maluso, Basilan on 28 November 2019
Circulating Vaccine Derived Polio Virus type 1 (cVDPV1)

In response to the first human case confirmed with VDPV1 from Maluso, Basilan (BARMM), outbreak immunization was conducted in the area with bOPV for children under 10 years old, vaccinating 13,547 children under 10 years of age (102% of the target).

A cVDPV1 case in Sabah State, Malaysia was confirmed to be genetically linked to the Basilan case by the Victorian Infectious Diseases Reference Laboratory (VIDRL) in Australia. Since the two viruses are genetically linked they are both classified as circulating.

A new VDPV1 case from Sultan Kudarat (Region XII) was confirmed on 6 December 2019 and is pending further genetic analysis.

All 13 cVDPV1 environmental samples found in Manila are all genetically linked.

Circulating Vaccine Derived Polio Virus type 2 (cVDPV2)

All 9 human cases and 17 environmental samples confirmed with cVDPV2 are genetically linked. All human cases were reported from Mindanao (BARMM and Region XII), whereas environmental samples were found in NCR and Davao.

All samples were tested by the National Polio Laboratory at the Research Institute for Tropical Medicine (RITM), whereas sequencing and genetic analysis is done at the NIID in Japan and additional genetic characterization provided by the United States Centers for Disease Control and Prevention (CDC).

Response

Risk assessment

The risk for further polio transmission continues to be assessed as high at the national level as an increasing number of human cases and environmental samples testing positive for poliovirus type 1 and 2, because of chronically suboptimal immunisation coverage, sub-optimal performance of AFP surveillance, and poor sanitation and hygiene conditions.

With the first confirmed VDPV1 case exported from the Philippines to Malaysia, the regional risk of potential spread across international borders remains moderate, especially considering the large number of Overseas Filipino Workers (OFW) and the ease of travel between islands without any form of control (Figure 2), especially by traders from Mindanao.

Coordination

The Department of Health (DOH) is coordinating the polio response through its Incident Command Structures (ICS) and Emergency Operation Centers (EOC) set up in each region, as well as the Mindanao and national levels. DOH is issuing daily bulletins with coverage data, Adverse Events Following Immunization (AEFI), AFP and environmental surveillance updates from the 7 regions.

DOH’s contribution to the polio outbreak response has been very significant in terms of operational costs, supervision, and social mobilization materials, including for 3 million doses of bOPV.

WHO and UNICEF are closely coordinating the response with DOH at all levels:

- UNICEF mobilized 5 consultants on supply chain and vaccine management, 3 local immunization technical consultants, 2 communication for development (C4D) consultants and information management.
- WHO mobilised 20 international consultants who are supporting DOH with the implementation of the campaign: 14 in Mindanao and 6 in NCR. These include the Stop Transmission of Polio (STOP) consultants. WHO is also supporting DOH with strengthening its ICS and EOCs at all levels.
Surveillance

The annualized Non-Polio AFP (NPAFP) rate from 1 July to 23 November 2019 is 2.25, which is below the recommended rate of 3 for outbreak-affected regions, with only 1 region meeting the standard (Figure 3). Adequacy of stool collection from 1 July to 23 November 2019 is 39%, with none of the affected regions the recommended 80% (Figure 4). Of all AFP cases, 45% is female, and 55% is male.

Immunization response

The latest round of the synchronized polio vaccination campaign conducted on 25 November-10 December vaccinated 4,309,566 children under 5, which is 98% of the target 4.4 million children under 5. The campaign was extended with 2 days.

In National Capital Region (NCR) 1,395,365 children were vaccinated (109%), whereas in Mindanao 2,914,201 were vaccinated (93%) (Figure 5 and 6).

In spite of high coverage, there are over 77,000 children that remain unvaccinated in all target regions except for NCR. The majority of unvaccinated children are from North Cotabato and Sulu (BARMM).

Figure 6: Mindanao coverage* 25 November-10 December 2019

* As recorded through mobile application ODK
Staff from UNICEF, WHO and DOH not directly involved in vaccination activities conducted a total of 4,912 Rapid Conveniency Assessments (RCA) at household level, as well as 293 market surveys.

Monitors visited in each area a sample of 10 households, to check whether children below 5 years had received the vaccine during the campaign (i.e. finger mark or vaccination card). Monitors also asked caregivers for reasons for missing vaccination and how they knew about the campaign (Figure 7 and 8).

Overall RCA data support the administrative coverage reported and suggest good quality of the campaign in most regions. Monitors shared with local health centers those areas where they identified unvaccinated children, so that local staff could revisit the area for mop-up vaccination. This information has also been shared with DOH counterparts to plan vaccination strategies to reach missed children in the next campaigns and successfully interrupt poliovirus transmission.

There is a need to review target populations in areas with extreme coverage with support of RCA findings.

Other reasons for unvaccinated children are related to remote location of island barangays with islet sites or villages, mobile populations, presence of lawless elements and insurgent groups, lack of internet access and intermittent telephone signal, and weather conditions (recent typhoon Tisoy) which negatively affected the campaign in coastal and island barangays. In large cities, pockets of children may have been missed in crowded areas with depressed and mobile populations.

In response to first human VDPV1 case from the island province of Basilan, outbreak immunization was conducted in Maluso, Basilan with bOPV against polio type 1, vaccinating 13,547 children under 10 years old (102% of the target). An additional campaign is planned in Basilan, Sulu, Tawi Tawi, Zamboanga City and Lambayong on 6-12 January 2020 targeting 710,296 children 0 to 10 years old. Further bOPV campaigns are proposed for February-March 2020 targeting 3,461,134 children under 5 in Mindanao.

In response to the increasing number of environmental samples testing positive for cVDPV2 in Manila, two rounds of vaccination campaigns using monovalent OPV (mOPV) against poliovirus type 2 are planned in NCR for January and February 2020 targeting 1,276,993 children under 5.

**Vaccine Logistics**

UNICEF conducted cold chain inventory in Mindanao to address critical gaps. DOH provided refrigerators and vaccine carriers which were transported by UNICEF to the regions. UNICEF procured freezers, ice-packs, Ziploc bags, plastic bags, generators, solar refrigerates, automatic voltage regulator (1000 watts) and small size vaccine carriers. In general, health facilities are equipped with vaccine refrigerators and often with more than two: a sign of adequate storage capacity. It is recommended to redistribute the second fridges to more needy health facilities which currently use commercial refrigerators.
Vaccines are properly stored in freezers but often not properly labelled. Vaccinators are advised to ensure proper storage and management of vaccines and to return the opened vials for use in next vaccination sessions.

Distribution of mOPV2 for the next round will start on 22 December 2019.

DOH borrowed bOPV from the routine immunization stocks for the NCR October and November rounds as well as for the upcoming round in Mindanao in January. There will be no new government stock available until March 2020. Therefore, there is a serious risk these rounds will have to be postponed.

**Social Mobilization and Partners’ engagement**

Partners’ contributions have been significant.

Community mobilization events in NCR, such as kiddie shows, and distribution of dental and hygiene kits have been a hit among both parents and children, significantly improving acceptance of the vaccination during the campaign.

UNICEF has initiated partnership with Relief International and Human Development and Empowerment Services Inc (HDES) to intensify social mobilization efforts in high risk areas in Mindanao.

**For updated communication and social mobilization resources, visit:**

https://poliofreeph.wixsite.com/poliofreeph

Over 1000 Philippine Red Cross (PRC) volunteers vaccinated over 130,000 children out of the target of 100,000 children. Rotary Clubs and local government units (LGU) have been providing a significant amount of IEC materials, banners and stickers for house marking which facilitates house-to-house vaccination.

**Upcoming activities**

On 12-13 December, DOH with support from WHO and UNICEF, will hold a **Communication Review Workshop for the Polio Outbreak Response** for regional and provincial health promotion focal points from Mindanao to share best practices and review communication workplans for future polio campaigns.

**Risk communication**

- Global Polio Eradication Initiative: http://polioeradication.org/where-we-work/philippines/
- DOH Advisory: Polio Vaccination for Travelers Coming to the Philippines 10 October 2019
  https://www.doh.gov.ph/advisories/Polio-Vaccination-for-Travelers-coming-to-the-Philippines
- DOH approved risk communication messages for different audiences available at

Other relevant information can be found here:

- Disease outbreak news: Update Circulating vaccine-derived poliovirus type 1, The Philippines 24 October 2019
- Disease outbreak news Polio outbreak, The Philippines 24 September 2019
- https://www.who.int/westernpacific/emergencies/polio-outbreak-in-the-philippines
**Funding allocation and budget**

<table>
<thead>
<tr>
<th>(US$)</th>
<th>Budget</th>
<th>Allocation</th>
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</thead>
<tbody>
<tr>
<td>Government*</td>
<td>6,772,249</td>
<td>6,772,249</td>
</tr>
<tr>
<td>WHO</td>
<td>3,176,858</td>
<td>574,320</td>
</tr>
<tr>
<td>UNICEF</td>
<td>3,245,205</td>
<td>380,362</td>
</tr>
<tr>
<td>Other partners (IFRC, Red Cross)</td>
<td>522,807**</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>13,194,312</strong></td>
<td><strong>8,249,738</strong></td>
</tr>
</tbody>
</table>

*Government has pledged US$ 9 million

** Equivalent to CHF 517,719