Highlights

- **One new vaccine-derived poliovirus type 2 (VDPV2) case has been reported this week, a 4-year old child from Datu Piang, Maguindanao, Mindanao. This is a newly infected province and represents an expansion of the outbreak in Mindanao.**

- **Four new environmental samples also tested positive for poliovirus this week: Three samples from Manila for VDPV1, and one sample from Quezon city for VDPV2 pending genetic sequencing.**

- **Another child from Maguindanao, a 3-year old from Datu Paglas, was also confirmed with VPDV2**

- **Synchronized polio vaccination campaigns are ongoing 14-27 October in the National Capital Region (NCR), Davao City, Davao del Sur, and Lanao del Sur in response to a polio outbreak declared by the Department of Health (DOH) on 19 September 2019.**

- **As of 24 October, almost 1.5 million out of 1.7 million targeted children under 5 have been vaccinated. DOH supported by WHO and UNICEF is analysing coverage data daily and providing additional resources, support and supervision to areas with the highest numbers of missed children.**

- **All Regional Health Directors were convened for a Polio Emergency Consultation on 24-25 October to discuss improving Acute Flaccid Paralysis (AFP) surveillance, lessons learned from the current vaccination round and discuss plans for new provinces to be included in the next round.**

- **Circulating vaccine-derived poliovirus (cVDPV) is considered a public health emergency of international concern (PHEIC).**

Current Situation

In Mindanao, one 4-year old child from Datu Piang, Maguindanao, Mindanao was confirmed with VDPV type 2 on 24 October 2019. The sample showed 7.3% nucleotide divergence from Sabin vaccine virus and is confirmed to be genetically linked to the previous case from Lanao del Sur.

This is the 2nd human case categorised as positive for cVDPV2, as the case from Laguna is categorized as positive for immunodeficiency-related VDPV (iVDPV2). A 3rd child from Maguindano residing in Datu Paglas was confirmed testing positive for VDPV2 on 25 October. It has just been sent for genetic sequencing at the Global Specialized Laboratory National Institute of Infectious Diseases (NIID) in Japan.
The currently ongoing 1st round of vaccination in Mindanao has so far vaccinated 90% of the targeted number of 427,008 children under 5 in Davao City, Davao del Sur, and Lanao del Sur with monovalent OPV (mOPV), which protects against poliovirus type 2. The 2nd and 3rd round will target over 3.1 million children in all 6 regions of Mindanao.

Besides the environmental samples from Davao, no further environmental samples have been tested positive in Mindanao (see Figure 2).

In NCR, 3 new environmental samples were tested positive for cVDPV1, reaching a total of 10 positive samples (see Figure 1).

A 1st round of vaccination was conducted in Manila City on 19 to 31 August with bivalent oral polio vaccine (bOPV), which protects against poliovirus type 1 and 3. Only 53.8% of the targeted children up to 5 years old were vaccinated. The 2nd round of vaccination which started on 14 October has so far vaccinated over 1.1 million children under 5: 87% of the target. The 3rd round of the campaign will be conducted from 25 November to 7 December 2019, targeting almost 1.3 million children.

**Figure 1: VDPV in NCR and Laguna**

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

The NIID and CDC confirmed that all VDPV1 samples were genetically linked but did not find a genetic linkage with any other known VDPV1 detected globally, indicating new emergence.

Comparison done at NIID and CDC in poliovirus databases showed the Laguna case is not genetically linked with any other known type 2 poliovirus, indicating new emergence. All other VDPV2 samples are genetically linked.

**Table 1: Outbreak Response Immunization Campaigns for cVDPV1 and 2**

<table>
<thead>
<tr>
<th>When</th>
<th>What</th>
<th>Where</th>
<th>Who</th>
<th>#</th>
</tr>
</thead>
<tbody>
<tr>
<td>14-27 Oct 2019</td>
<td>cVDPV2</td>
<td>Davao City, Davao del Sur, Lanao del Sur NCR</td>
<td>&lt;5 years</td>
<td>427,008, 1,276,631</td>
</tr>
<tr>
<td></td>
<td>cVDPV1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25 Nov-7 Dec 2019</td>
<td>cVDPV2</td>
<td>Mindanao (all 6 regions)</td>
<td>NCR</td>
<td>3,111,650, 1,276,631</td>
</tr>
<tr>
<td></td>
<td>cVDPV1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6-18 Jan 2020</td>
<td>cVDPV2</td>
<td>Mindanao (all 6 regions)</td>
<td>NCR</td>
<td>3,111,650, 1,276,631</td>
</tr>
</tbody>
</table>

25 October 2019
Response

Risk assessment

The current polio outbreak is not an unexpected event, as the Philippines was assessed as high-risk for poliovirus transmission in the past years by the Western Pacific Regional Commission for Certification of Poliomyelitis Eradication (RCC), because of chronically suboptimal immunisation coverage, suboptimal performance of AFP surveillance, and poor sanitation and hygiene conditions.

The regional risk of potential spread across international borders is assessed as moderate considering the large number of Overseas Filipino Workers (OFW). Although many OFW work globally, the risk of international spread is still considered low, but not negligible, further influenced by dynamic migratory patterns (particularly the USA).

Coordination

In view of the newly confirmed human case with cVDPV2 from Datu Piang in Maguindanao, DOH, WHO and UNICEF are coordinating for outbreak response immunization in the area on 4-8 November. A high-level team will travel to Cotabato on 29 October to meet with the Ministry of Health of the Bangsamoro Autonomous Region in Muslim Mindanao (BARMM).

At the same time, preparations have started for the next round of the vaccination campaign for all 6 regions in Mindanao. A consultation with all Regional Health Directors on Polio Emergency was conducted on 24025 October to discuss enhancing surveillance and lessons learned from the currently ongoing vaccination campaigns in NCR and Mindanao.

Throughout the entire period of the vaccination campaign, DOH’s Incident Management Team has been coordinating the response through its Emergency Operating Centre, with twice-daily meetings and daily bulletins, to discuss progress as updated through the Centres for Health Development (CHD), Provincial and City Health Officers. WHO and UNICEF are closely coordinating the response with DOH at all levels:
- UNICEF allocated emergency funds and mobilized 5 consultants on supply chain and vaccine management, communication for development (C4D) and information management
- WHO allocated emergency funds to support DOH with monitoring and coordination at all levels.
- The Global Polio Eradication Initiative (GPEI) mobilised 13 international consultants who are supporting DOH with the implementation of the campaign: 9 in Mindanao and 4 in NCR. An additional 2,135 finger markers were procured, to be distributed for the next rounds of vaccination.
- One CDC consultant has been supporting the team since the start of the campaign. CDC is mobilising an additional 8 Stop Transmission of Polio (STOP) consultants to support the next rounds of the campaign.

Surveillance

Efforts to strengthen AFP surveillance across the Philippines are continuing. As of epidemiological week 40, the non-polio acute flaccid paralysis (NP AFP) rate was reported as 0.57% with a stool specimen adequacy rate of 40%. Health workers have been tasked with actively looking for AFP cases during the vaccination activities.

Several environmental samples are pending laboratory confirmation collected through RITM’s enhanced environmental surveillance.
**Immunization**

Between 14 and 24 October 2019, a total of 1,499,699 children have been vaccinated in the target areas, representing 88% of the total target. See below figures 3 and 4.

**Figure 3: Vaccination coverage per target area in the Philippines 14-24 October 2019**

UNICEF, WHO, GPEI and CDC staff have been supporting and monitoring the campaign in Mindanao and NCR, covering 496 areas with Rapid Coverage Assessments (RCA) up to 24 October. RCAs are conducted to look for unvaccinated children in those areas where vaccination activities have already taken place. As can be seen in the below table, often missed children are still found. During the currently ongoing polio vaccination campaign in NCR and Mindanao, RCAs have been done jointly with vaccination teams, to ensure missed children can immediately receive the vaccine.

**Table 2: RCA results per target area up to 24 October 2019 2 pm**

<table>
<thead>
<tr>
<th></th>
<th># Areas checked</th>
<th># Children checked</th>
<th># Children Missed</th>
<th>% Children Missed</th>
<th># Areas to mop-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>NCR</td>
<td>114</td>
<td>3,004</td>
<td>225</td>
<td>7%</td>
<td>48</td>
</tr>
<tr>
<td>Lanao del Sur</td>
<td>42</td>
<td>1,494</td>
<td>53</td>
<td>4%</td>
<td>12</td>
</tr>
<tr>
<td>Davao del Sur</td>
<td>306</td>
<td>5,737</td>
<td>151</td>
<td>3%</td>
<td>36</td>
</tr>
<tr>
<td>Davao City</td>
<td>34</td>
<td>883</td>
<td>65</td>
<td>7%</td>
<td>14</td>
</tr>
<tr>
<td>Total</td>
<td>496</td>
<td>11,118</td>
<td>494</td>
<td>4%</td>
<td>110</td>
</tr>
</tbody>
</table>

RCAs also look for the reasons why children were not vaccinated during the initial round, as well as the information sources parents heard about the vaccination activity. In the Philippines, children were mostly not vaccinated because they were not at home (Table 3). Also, health workers and barangay officials have been most effective in raising awareness about the current polio vaccination event (Table 4).

**Table 3: Reasons for missing vaccination**

<table>
<thead>
<tr>
<th>Reason</th>
<th>% of missed children</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Child absent/away</td>
<td>11%</td>
</tr>
<tr>
<td>2. Unaware of campaign</td>
<td>20%</td>
</tr>
<tr>
<td>3. Post too far</td>
<td>6%</td>
</tr>
<tr>
<td>4. Post without vaccine</td>
<td>4%</td>
</tr>
<tr>
<td>5. Fear of vaccine</td>
<td>2%</td>
</tr>
<tr>
<td>6. Child already vaccinated</td>
<td>2%</td>
</tr>
<tr>
<td>7. Child sick</td>
<td>8%</td>
</tr>
<tr>
<td>8. Don't know / decline answer</td>
<td>4%</td>
</tr>
<tr>
<td>9. Religious beliefs</td>
<td>3%</td>
</tr>
<tr>
<td>10. Respondent doesn’t decide</td>
<td>2%</td>
</tr>
<tr>
<td>11. Other</td>
<td>2%</td>
</tr>
</tbody>
</table>

**Table 4: Campaign information sources**

<table>
<thead>
<tr>
<th>Source</th>
<th>% of total responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Radio</td>
<td>15%</td>
</tr>
<tr>
<td>2. TV</td>
<td>7%</td>
</tr>
<tr>
<td>3. Streamer/Tarpaulin</td>
<td>14%</td>
</tr>
<tr>
<td>4. Health Workers</td>
<td>7%</td>
</tr>
<tr>
<td>5. Flyers</td>
<td>4%</td>
</tr>
<tr>
<td>6. Social Media</td>
<td>1%</td>
</tr>
<tr>
<td>7. Barangay officials</td>
<td>2%</td>
</tr>
<tr>
<td>8. Relatives / neighbors</td>
<td>3%</td>
</tr>
<tr>
<td>9. Others</td>
<td>1%</td>
</tr>
</tbody>
</table>
Furthermore:

**Social mobilisation:**
- To improve knowledge of parents and caregivers on polio immunization and increase participation in the mass immunization campaigns, UNICEF and WHO are supporting DOH with the development of location-specific and culture-sensitive implementation plans for social mobilization to improve awareness on polio immunization and the risks of not being vaccinated and increase participation among parents and caregivers of children under 5 years old. This is done in close collaboration with local governments as well as NGO partners.
- Need for improved communication with private sector to ensure private doctors and hospitals are on board (e.g. anecdotal evidence that private doctors have been advocating against polio vaccination)
- Need for improved coordination with management of gated communities to allow entrance to vaccination teams and/or sharing of vaccination status of children under 5
- Need for better access to those slum areas with security concerns with difficult access for health workers.

**Recording of children:**
- Recording of vaccinated children either through finger-marking or vaccination cards, particularly in earlier stage of campaign (1st 5 days), to save time and energy. Vaccination status of children can later be added to their vaccination booklets as per Barangay Health Workers (BHW) master lists.
- Important to emphasize to BHW they should include non-resident children in their vaccination activities, i.e. no need to work with the master list.
- Need for standardized approach to (optional) house marking and use of tally sheets in case markers/vaccination cards are not available.
- Use of the mobile application is not always feasible due to limited internet connectivity, particularly in rural areas.

**Staffing:**
- All trained health staff including BHW can be mobilised as vaccinators, not only nurses and midwives
- Importance of working closely together with NGOs and private sector to mobilise volunteers, including from provinces outside the target areas → e.g. only for Marawi, 256 community-based Social Mobilizers (SocMobs) were involved in the 1st round of the Polio Campaign: with at least one social mobilizer per vaccination team. Partners like play CFSI, with funding support from UNICEF can make a crucial difference in the required human resources for the pending polio vaccination activities.

**Vaccines:**
- Importance to monitor vaccine utilization before properly discarding empty vials (e.g. for mOPV2 they need to be put into ziplocked bags).

**Special vaccination sites:**
- Standardized guidelines to be put in place on fixed sites for transit and hospitals, as well as day-care centres, churches, and malls.
Partners’ engagement

Polio vaccination campaign
14 - 27 October 2019

MANILA
- Americas
- Samaritan’s Purse
- IFRC
- Save the Children
- International Medical Corps
- Philippine Red Cross
- Médecins du Monde
- UNICEF
- Doctors Without Borders
- WHO
- Plan

LANAO DEL NORTE
- Action Against Hunger
- Philippine Red Cross
- Save the Children
- UNICEF
- IFRC
- WHO

LANAO DEL SUR
- Action Against Hunger
- CFSI
- ICRC
- IFRC
- Doctors Without Borders
- Philippine Red Cross
- Plan
- Samaritan’s Purse
- UNICEF
- WHO

DAVAO DEL SUR
- IFRC
- Philippine Red Cross
- UNICEF
- WHO

The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

Creation date: 15 Oct 2019  Sources: PSA, Organization, WHO  Feedback: ochaphilippines@un.org  www.unocha.org  www.reliefweb.int
Risk communication

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 https://poliofreeph.wixsite.com/poliofreeph with password: AdiosPolio:

- Polio Outbreak Communication Plan (26 September 2019)
- Microplanning Tool (18 September 2019)
- Messaging Grid for the Public (11 October 2019)
- Visibility/Out-of-Home Materials
- Social Media Cards Set
- Health Workers’ Conversation Guide
- Media Releases, Print Ads, and Branding Elements

Other relevant information can be found here:

- Disease outbreak news Polio outbreak, The Philippines 24 September 2019
- https://www.doh.gov.ph/node/18012
- https://www.who.int/westernpacific/emergencies/polio-outbreak-in-the-philippines
- Human Interest Story about the 1st human case infected with polio in the Philippines: Junaisa: A little girl with polio
  https://www.who.int/philippines/news/feature-stories/detail/junaisa-a-little-girl-with-polio?fbclid=IwAR0tAihKxdWJfGuG7b1Lg71RdHHT9JSj2oJi5cAgp8b8ivxi8309KmW5T
Upcoming Events

- Orientation Meetings for new provinces to be included in Mindanao next vaccination round 21-30 October
- Outbreak response Immunization in Datu Piang and Datu Paglas targeting more than 8,000 children 0-59 months with mOPV2 in the two municipalities
- WHO consultants deployed to all regions of Mindanao
- Post SPV review meetings in NCR, Davao City, Davao Del Sur and Lanao Del Sur 28 October-2 November