

Situation Report 9 Polio Outbreak

| # of samples confirmed | cVDPV1 | iVDPV2 | cVDPV2 |
|------------------------|--------|--------|--------|
| Environmental | 11 | 0 | 5 |
| Human | 0 | 1 | 3 |

9 November 2019

Highlights

- **4th confirmed poliovirus type 2 case is a three-year old female from Maguindanao. Virus was found to be genetically linked to other 2 cases from Mindanao. Outbreak immunization for 18,268 children 0-59 months in the area was conducted on 4-8 November: 16,295 children (89.2%) vaccinated thus far.**
- **Synchronized polio vaccination campaigns on 14-27 October covered 1,628,717 children under 5: 95.5% of the target. Preparations ongoing for the next round on 25 November-7 December in National Capital Region (NCR) and all provinces of Mindanao targeting 4,388,281 children 0-59 months.**
- Current polio outbreak resulting from persistently low routine immunization coverage, and poor sanitation and hygiene.
- Circulating vaccine-derived poliovirus (cVDPV) is considered a public health emergency of international concern (PHEIC).



Outbreak immunization for over 18,000 children under 5 was conducted in Lambayong (Sultan Kudarat province), Datu Piang, and Datu Paglas (Maguindanao province) on 4-8 November after the 3rd and 4th confirmed case for poliovirus type 2 originating from the area

Current Situation

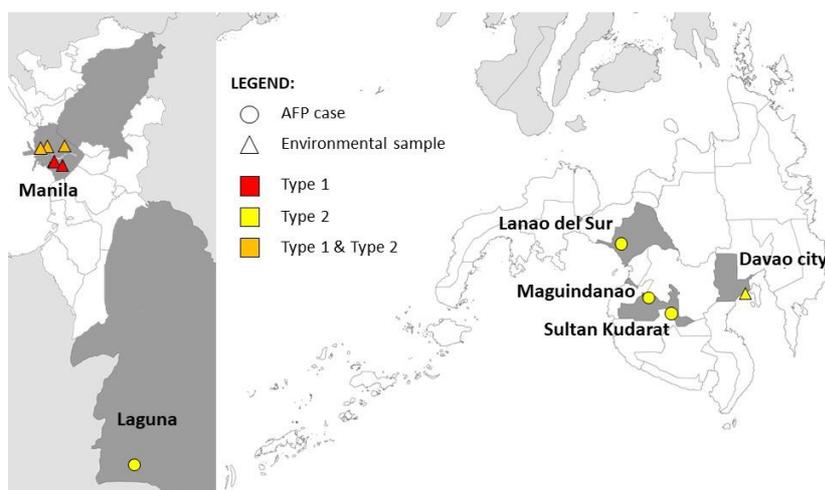
The fourth confirmed polio case is a three-year old female from Lambayong in Sultan Kudarat province (Mindanao), who had not received any dose of oral polio vaccine (OPV). On 4 November, stool samples sent to the National Institute of Infectious Diseases (NIID) in Japan tested positive for VDPV2.

This is the 3rd human case categorised as positive for cVDPV2: all polio viruses isolated are genetically linked. The case from Laguna is categorized as positive for immunodeficiency-related VDPV (iVDPV2).

In response to the 2 newly confirmed cases relatively close to one another, all located in the Bangsamoro Autonomous Region in Muslim Mindanao (BARMM), the Department of Health (DOH) has been conducting an outbreak immunization activity in Lambayong (Sultan Kudarat province), Datu Piang, and Datu Paglas (Maguindanao province) on 4-8 November for 18,268 children under 5.

A total of 16 environmental samples have been tested positive for poliovirus up to date: 11 for cVDPV1 and 5 for cVDPV2 (See Figure 1)

Figure 1: Locations of vaccine-derived poliovirus in the Philippines



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).

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 not to be genetically linked with any other known type 2 poliovirus, indicating new emergence. All other VDPV2 samples are genetically linked.

After the successful round of synchronized polio vaccination campaigns on 14-27 October, where 1,628,717 children under 5 were vaccinated, preparations are currently ongoing for the upcoming round on 25 November-7 December in NCR using bivalent OPV against poliovirus type 1 and 3 (targeting almost 1.3 million children under 5) and the 6 regions of Mindanao using monovalent OPV against poliovirus type 2 (over 3.1 million children under 5).

Particularly the Mindanao vaccination campaign is expected to be challenging, since it involves 6 different regions with a target population of over 3 million children under 5.

Table 1: Outbreak Response Immunization Campaigns for cVDPV1 and 2

| When | What | Where | Who | # |
|-------------------|--------|---|----------|-----------|
| 5-8 Nov 2019 | cVDPV2 | Lambayong (Sultan Kudarat province), Datu Piang, and Datu Paglas (Maguindanao province) | <5 years | 18,268 |
| 25 Nov-7 Dec 2019 | cVDPV2 | Mindanao (all 6 regions) | | 3,111,650 |
| | cVDPV1 | NCR | | 1,276,631 |
| 6-18 Jan 2020 | cVDPV2 | Mindanao (all 6 regions) | | 3,111,650 |

Response

Risk assessment

| Overall risk | | |
|--------------|----------|--------|
| National | Regional | Global |
| High | Moderate | Low |

The risk for further polio transmission in the country continues to be assessed as high at the national level, because of chronically suboptimal immunisation coverage, sub-optimal performance of AFP surveillance, and poor sanitation and hygiene conditions.

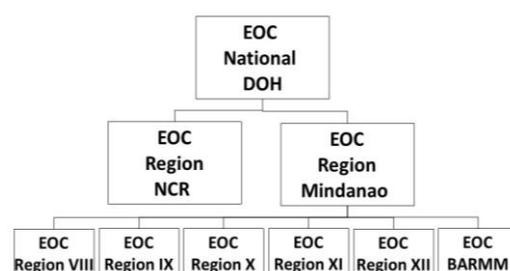
The regional risk of potential spread across international borders is assessed as moderate considering the large number of Overseas Filipino Workers (OFW). Although many OFW work globally, the risk of international spread is still considered low, but not negligible, further influenced by dynamic migratory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

Coordination

The polio response is led by DOH's Incident Management Team through its Emergency Operating Centre (EOC). Preparatory meetings for the next round of vaccination with the 6 regional health directors are being conducted on 6 and 12 November in Davao, under the coordinating authority of the Field Implementation and Coordination Team (FICT) for Mindanao based in Davao.

DOH is strengthening its EOCs in NCR and Mindanao, including for the 6 regions to be included in the next rounds of the vaccination campaign (Figure 2). Training on EOC management is planned in Davao on 19-20 November next.

Figure 2: DOH EOC setup for polio response



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

- UNICEF mobilized 5 international consultants and 3 national consultants on supply chain and vaccine management, communication for development (C4D) and information management in NCR and Mindanao. The UNICEF Mindanao Field Office is closely coordinating the response in BARM with MOH and Local Government Units (LGUs)
- WHO mobilised 13 international consultants who are supporting DOH with the implementation of the campaign: 9 in Mindanao and 4 in NCR, out of which one particularly focuses on strengthening of surveillance. An additional 10 Stop Transmission of Polio (STOP) consultants are expected to support the next rounds of the campaign. WHO is also supporting DOH with strengthening its Incident Command System (ICS) and EOCs at all levels.
- One CDC consultant has been supporting the team since the start of the campaign.

Surveillance

There were 49 Acute Flaccid Paralysis (AFP) cases reported through the weekly Philippine Integrated Disease Surveillance and Response (PIDSRS) System between 20 and 26 October 2019. The accumulative total from 1 January to 26 October 2019 is 573 AFP cases.

After the first environmental samples were tested positive for polio in epidemiological week 30, AFP surveillance has been stepped up (Figure 3), with a notable increase in the number of AFP cases since epidemiological week 40 (29 September-5 October 2019).

The Non-Polio AFP (NPAFP) rate from 1 January to 28 September 2019 is 0.71, whereas the annualised NPAFP rate from 29 September to 26 October is 1.15. Adequacy of stool collection from 1 January to 26 October 2019 is 38%.

Among reported AFP cases, 49% had been vaccinated with at least 3 doses of OPV, whereas the vaccination status of 39% of the cases was unknown (Figure 4).

A total of 16 environmental samples from six sites tested positive between 1 July and 28 October 2019. VDPV type 1 has been isolated from 11 environmental samples, which were collected from sewage collection site and its tributary pumping stations in Manila, between 1 July and 9 October 2019.

VDPV type 2 has been isolated from five environmental samples, which were collected from sewage collection site and its tributary pumping stations in Manila in NCR, and Davao city in Region XI, between 13 August and 9 October 2019.

The number of collection sites for RITM’s environmental surveillance are increased from 11 to 17.

Figure 3: Number of weekly reported AFP cases in the Philippines (epidemiological week 30-43)

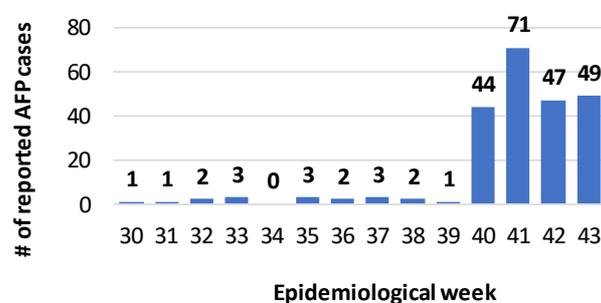
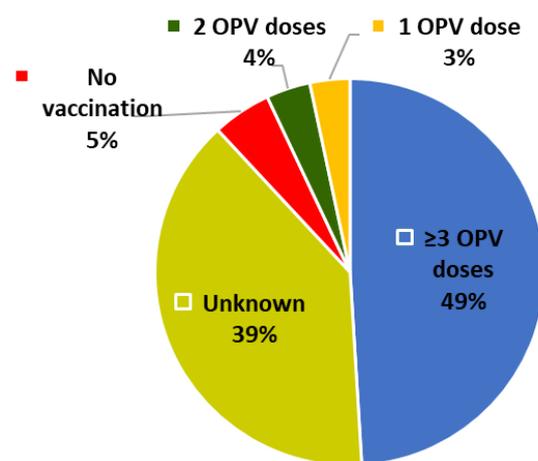


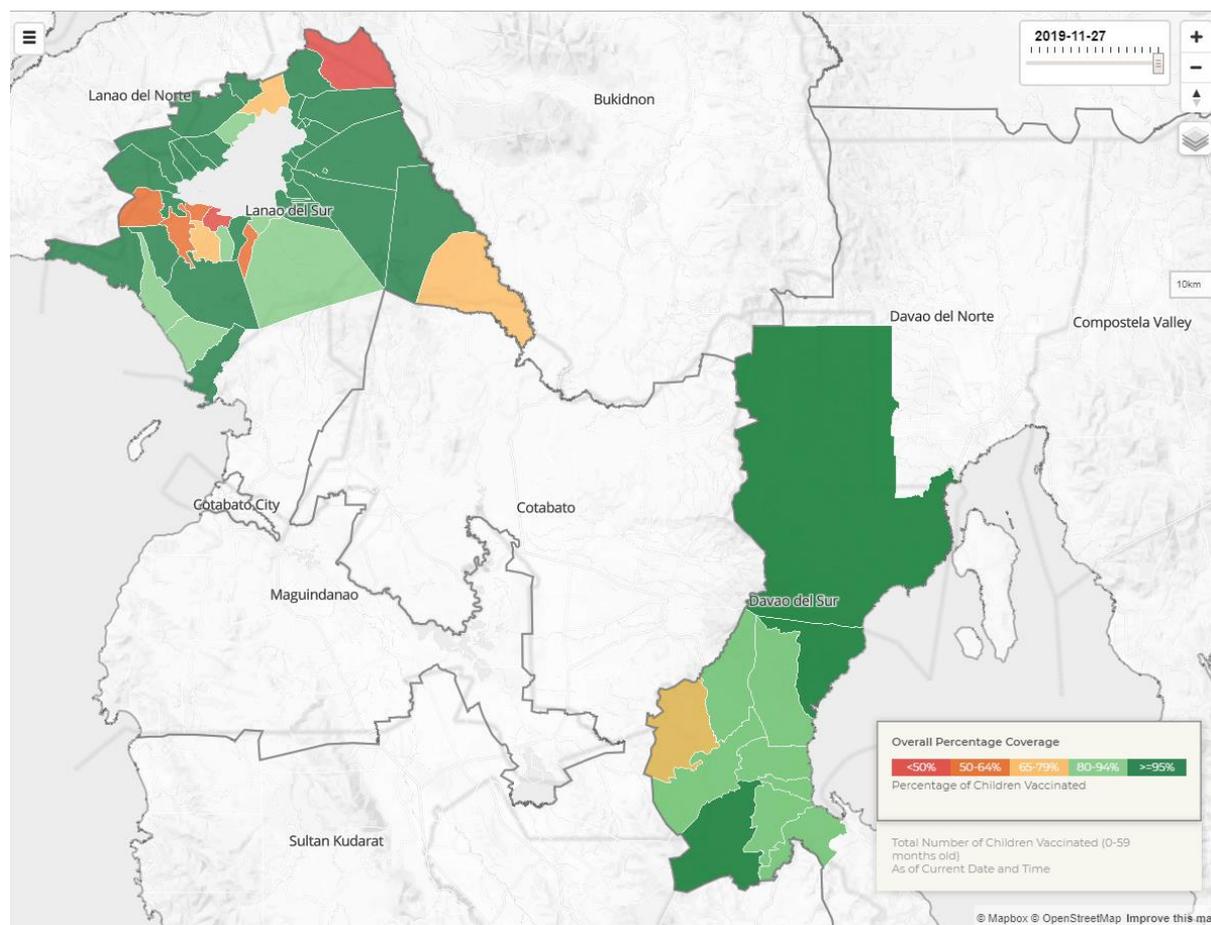
Figure 4: OPV status of reported AFP cases (N=573) the Philippines 1 January-26 October 2019



Immunization response

The first of three rounds of scheduled mass vaccination campaigns has been successfully implemented in polio affected areas. Between 14 and 27 October 2019, a total of 1,628,717 children under 5 were vaccinated out of a targeted 1,703,639 in NCR, Davao del Sur, Davao City and Lanao del Sur. Both NCR and Davao City have reported reaching the target of 95% children vaccinated.

Figure 5: Vaccination coverage in Mindanao provinces targeted during previous campaign as per data collected through mobile ODK application



Courtesy of UNICEF <https://philippines.onalabs.org>

Davao del Sur reportedly reached 92% of targeted children while Lanao del Sur reached 85% of targeted children. Given the large movements of families to and from Lanao del Sur in recent times there is an understanding that current target population for the province may be over-estimated.

Despite the high coverage at provincial level, some variation in coverage was found in a locations at the city and municipality level, indicating that there were pockets of children who were missed during this exercise. Difficult access to remote areas and difficulties in reaching all children in gated communities as well as in cities with slum areas have been cited as specific challenges to overcome in future rounds.

To complement reported data and help local authorities identify areas with potential coverage gaps, Rapid Coverage Assessments (RCA) were conducted by DOH, WHO, UNICEF and partner agencies in provinces that conducted the activity. Overall, 889 RCA were conducted, and more than 21,000 children were sampled during monitoring efforts with just 3 % of sampled children found to be unvaccinated.

DOH conducted additional RCAs in selected barangays in Manila, Makati and Marawi city between 28 October-6 November. Whereas still a significant number of missed children were found (and vaccinated), overall the coverage numbers were found to be representative.

In response to the 2 newly confirmed cases relatively close to one another in Sultan Kudarat and Maguindanao provinces (BARMM), DOH has been conducting an outbreak immunization activity in affected areas on 4-8 November for 18,268 children under 5. So far, 16,295 children have been vaccinated: 89.2% of the target. (Figure 5)

Preparatory meetings for the next round of vaccination starting on 25 November next with the 6 regional health directors and immunization teams was conducted on 6 November in Davao. On 12 November, a meeting with all governors and independent city mayors of Mindanao is planned in Davao. These are all under the coordinating authority of the Field Implementation and Coordination Team (FICT) for Mindanao based in Davao.

All children in these areas will be vaccinated in November-December 2019 and in January 2020. More rounds may be needed in 2020 depending on whether or not additional polio cases are detected.

UNICEF and WHO are continuing to support DOH in the development of communication strategies to address vaccine hesitancy and safety concerns, especially for BARMM, other parts of Mindanao and NCR.

Additional funding may be required for boat transport for the outbreak response vaccination rounds in the Sulu archipelago.

UNICEF is currently conducting cold chain assessment in all regions of Mindanao to assess capacity and gaps for possible support. Initial findings in BARMM have shown need for additional vaccine refrigerators, transport boxes, vaccine carriers and ice packs.

In terms of mOPV2 distribution for the next round, UNICEF has been facilitating the distribution to all regions except BARMM, whose allocation will be delivered next week 10-16 November. Additionally, UNICEF procured ice packs, which were already delivered to Region X, with delivery to remaining Mindanao expected to be finalized by 11 November.

Case management

With an increasing number of polio victims, access to effective rehabilitation services is becoming more important, either through government or if necessary through external support (e.g. ICRC or Rotary).

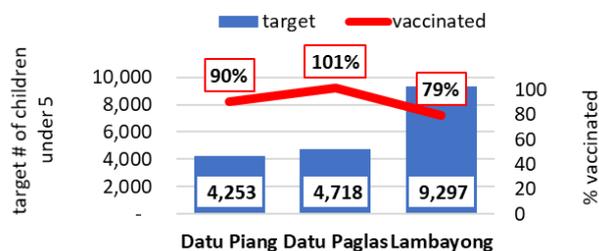
WHO is looking into the review of current guidelines on paediatric injections in the buttocks of paracetamol, antibiotics, or steroids to avoid possible adverse events of accelerating paralysis by poliovirus.

Partners' engagement

Partners' contributions have been significant during the vaccination campaign. The Philippine Red Cross (PRC) alone vaccinated 62,842 children under 5: almost 4% of the total number of children vaccinated. Red Cross volunteers were particularly active in Pasay and Marikina (NCR). In Mindanao, PRC volunteers helped to vaccinate 12,477 children under 5, particularly in Lanao del Sur. During the next round of vaccination, PRC will support the campaign in NCR as well as in Mindanao.

For the next rounds of vaccination, partners have been asked to focus their efforts on social mobilization as well as independent monitoring. A health cluster meeting is planned on 15 November.

Figure 5: Vaccination coverage of outbreak immunization in Lambayong, Datu Piang, and Datu Paglas 4-8 November 2019



International Medical Corps (IMC) provided 25 vaccine carriers, vehicle for vaccinators and supervisors, and visibility materials to Manila Health Department during the October vaccination campaign

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

Other relevant information can be found here:

- Disease outbreak news: Update Circulating vaccine-derived poliovirus type 1, The Philippines 24 October 2019 <https://www.who.int/csr/don/24-october-2019-polio-the-philippines/en/>
- Disease outbreak news Polio outbreak, The Philippines 24 September 2019 <https://www.who.int/csr/don/24-september-2019-polio-outbreak-the-philippines/en/>
- <https://www.who.int/news-room/q-a-detail/questions-and-answers-on-the-polio-outbreak-in-the-philippines>
- <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>

Funding allocation

| | |
|------------------|-------------------|
| Budget | 13,194,312 |
| Allocated | |
| WHO/UNICEF | 954,682 |
| Government | 6,772,249 |
| GPEI | 5,467,381 |