

Situation Report 6 Polio Outbreak

1 November 2019

Highlights

- **Third confirmed case is a four-year old female from Maguindanao, who tested positive for poliovirus type 2, found to be genetically linked to the Lanao del Sur case. There will be an outbreak immunization activity on 4-8 November for more than 21,000 children under 5 years from 3 municipalities in the area**
- **Synchronized polio vaccination campaigns on 14-27 October covered 1,628,717 children 0-59 months old: 95.5% of the target.**
- 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).

| # of samples confirmed | cVDPV1 | iVDPV2 | cVDPV2 |
|------------------------|--------|--------|--------|
| Environmental | 11 | 0 | 5 |
| Human | 0 | 1 | 2 |



Polio vaccinators from the Department of Health and the Philippines Red Cross managed to vaccinate over 1.6 million children in different parts of the country on 14-27 October 2019

Current Situation

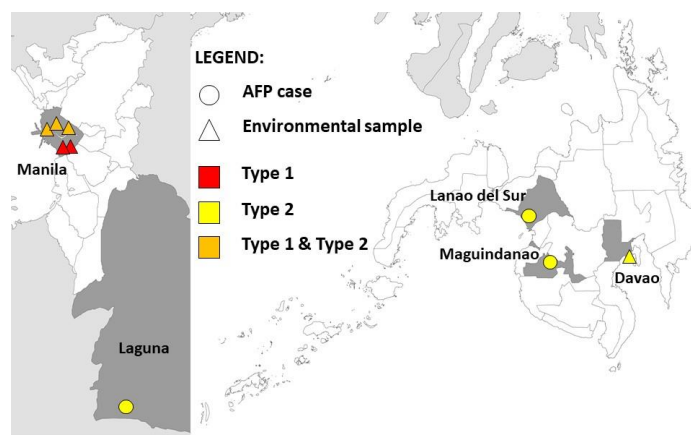
A new cVDPV type 2 case has been confirmed on 24 October 2019 in Maguindanao province of the Bangsamoro Autonomous Region in Muslim Mindanao (BARMM). The date of onset of paralysis for this case is 12 September 2019. Detailed epidemiological investigation for the case is ongoing. This brings the total count to three confirmed cases in the country (two cVDPV2, and one immunodeficiency-related VDPV2 or iVDPV2).

The confirmed polio case is a four-year old female from Datu Piang in Maguindanao who had not received any dose of oral polio vaccine (OPV). On 25 October, stool samples sent to the National Institute of Infectious Diseases (NIID) in Japan tested positive for VDPV2. The polio virus isolated was genetically linked to the VDPV2 from the confirmed polio case in Lanao del Sur.

In response to the newly confirmed case, the Department of Health (DOH) will be conducting an outbreak immunization activity in Datu Piang on 4-8 November for more than 21,000 children under 5 from 3 municipalities connected to the newly confirmed cVDPV2 case.

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: Spot map for confirmed cases 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 is not genetically linked with any other known type 2 poliovirus, indicating new emergence. All other VDPV2 samples are genetically linked.

Synchronized polio vaccination campaigns on 14-27 October covered 1,628,717 children 0-59 months: 95.5% of the targeted 1,703,639. Preparations are ongoing for upcoming rounds in National Capital Region (NCR) using bivalent OPV against poliovirus type 1 and 3 (targeting almost 1.3 million children under 5) and 6 regions of Mindanao using monovalent OPV against poliovirus type 2 (over 3.1 million children)

Table 1: Outbreak Response Immunization Campaigns for cVDPV1 and 2

| When | What | Where | Who | # |
|-------------------|--------|--------------------------|----------|-----------|
| 25 Nov-7 Dec 2019 | cVDPV2 | Mindanao (all 6 regions) | <5 years | 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), with twice-daily meetings and daily bulletins. Preparations are currently underway for the next round of vaccination, taking into consideration the lessons learned during the previous round.

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.

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 and is supporting DOH with strengthening its ICS and EOCs at all levels.
- The Global Polio Eradication Initiative (GPEI) mobilised 13 international consultants who are supporting DOH with the implementation of the campaign: 5 in Mindanao and 8 in NCR.
- One CDC consultant has been supporting the team since the start of the campaign. CDC is mobilising an additional 10 Stop Transmission of Polio (STOP) consultants to support the next rounds of the campaign.

Surveillance

As of epidemiological week 42 (13-19 October 2019), a total of 516 Acute Flaccid Paralysis (AFP) cases have been reported in the Philippines (Figure 2).

The Non-Polio AFP (NPAFP) rate is 1.68, and stool specimen adequacy rate is 46%.

Since week 30, the annualized NPAFP target rate was increased in affected areas from ≥ 1 per 100,000 to ≥ 3 per 100,000 and ≥ 2 per 100,000 in other areas (Figure 3 and 4).

Figure 2: Reported AFP cases by week of onset the Philippines 1 January-31 October 2019

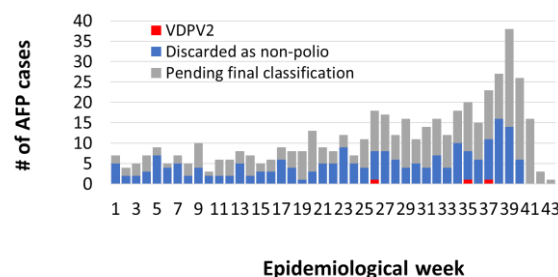
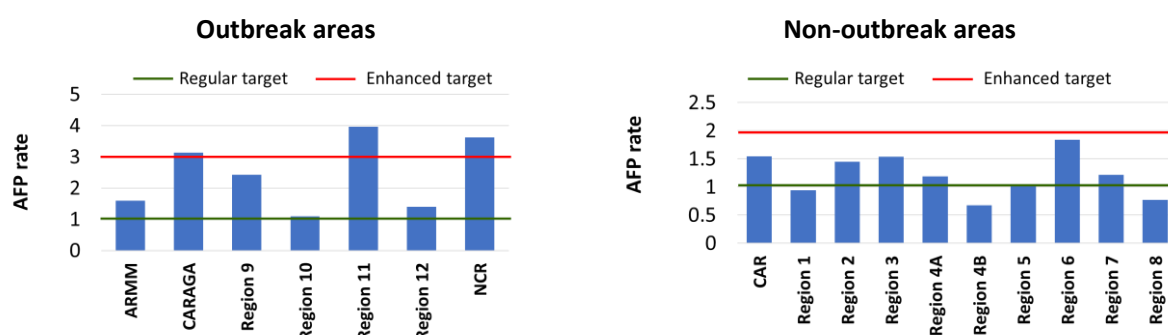


Figure 3 and 4: Non-polio AFP rate by region Philippines

1 January-31 October 2019; data annualized as of week 42 (13-19 October 2019)



A total of fourteen environmental samples from six sites tested positive between 1 July and 28 October 2019. VDPV type 1 has been isolated from eleven 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.

RITM currently collects environmental samples from 35 sites in 11 locations throughout the country.

Immunization

Between 14 and 27 October 2019, a total of 1,628,717 children under 5 were vaccinated against polio throughout the country, representing 95.5% of the total target (Figure 5-7).

Difficult access to remote areas and inaccurate population figures are among the reasons for lower vaccination coverage in Davao del Sur (92%) and Lanao del Sur (85%).

Figure 5: Vaccination coverage per target area in the Philippines 14-27 October 2019

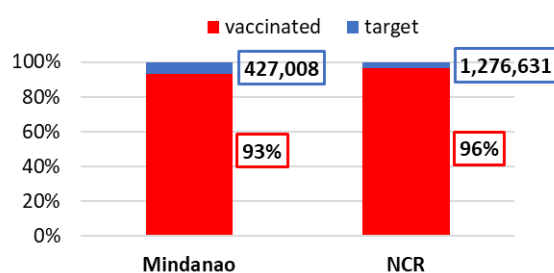
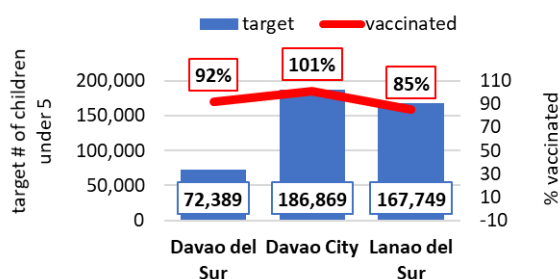
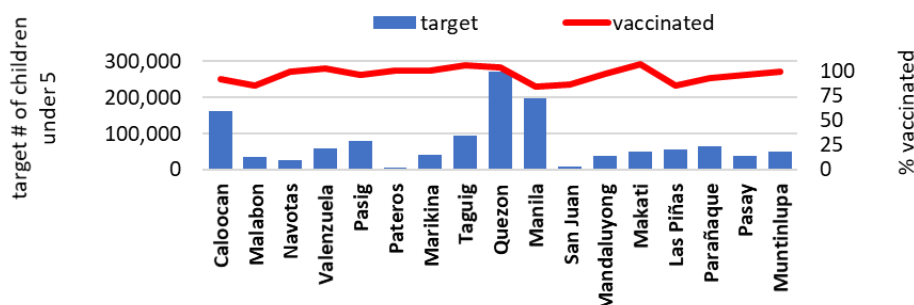


Figure 6: Vaccination coverage per target area in Mindanao 14-27 October 2019



In NCR, cities with large slum population also reported lower coverage e.g. Malabon (85%) and Manila (84%), as well as cities with large number of gated communities and condominiums, e.g. San Juan (87%) and Las Piñas (85%) (Figure 7).

Figure 7: Vaccination coverage per city in NCR
14-27 October 2019



Staff from UNICEF, WHO, DOH, and partner agencies conducted Rapid Coverage Assessments (RCA) in 889 areas (122 in Lanao del Sur, 565 in Davao del Sur and 202 in NCR), checking the vaccination status of over 21,000 children under 5 by looking at finger marks or vaccination cards (Table 2). Monitors visited samples of 20 households in each area, asking caregivers reasons for missed vaccination and how they had received information about the campaign (Figure 8-10). Monitors also conducted market surveys by checking finger marking in 20 children below 5 years of age and asked for reasons of no vaccination.

RCAs found that 8% of children in Davao City, 6% in NCR, and 2% in Lanao del Sur and Davao del Sur had been missed during the campaign. Within NCR, Manila City and Malabon had higher numbers of missed children (9-11%) than other cities.

Table 2: RCA results per target area

| | # Areas checked | # Children Checked | # Children Missed | % Children Missed | # Areas with >1 missed child | % Areas with >1 missed child |
|----------------------|-----------------|--------------------|-------------------|-------------------|------------------------------|------------------------------|
| NCR | 202 | 5,776 | 356 | 6% | 74 | 37% |
| Lanao del Sur | 122 | 4,245 | 86 | 2% | 18 | 15% |
| Davao del Sur | 521 | 10,318 | 214 | 2% | 49 | 9% |
| Davao City | 44 | 1,151 | 88 | 8% | 21 | 48% |
| Total | 889 | 21,490 | 744 | 3% | 162 | 18% |

The most common reasons for missing vaccine was 'child absent from the house' (44%) and 'child sick' (14%), during the vaccinator's visit (Figure 8 and 10).

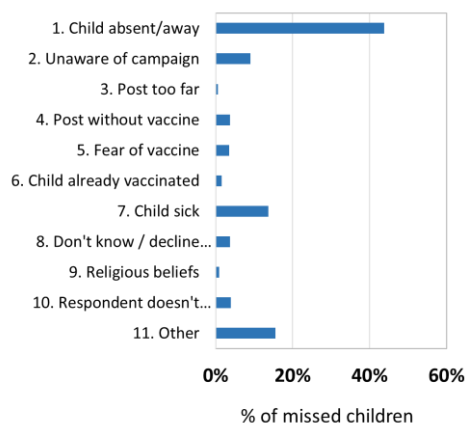
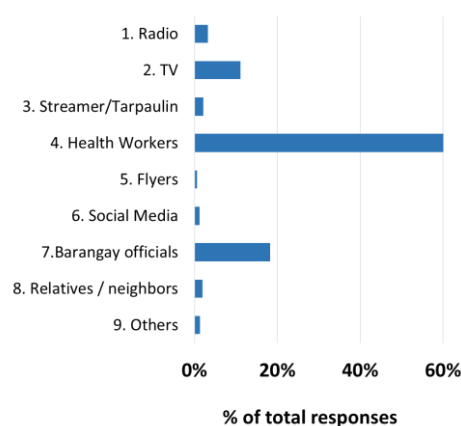
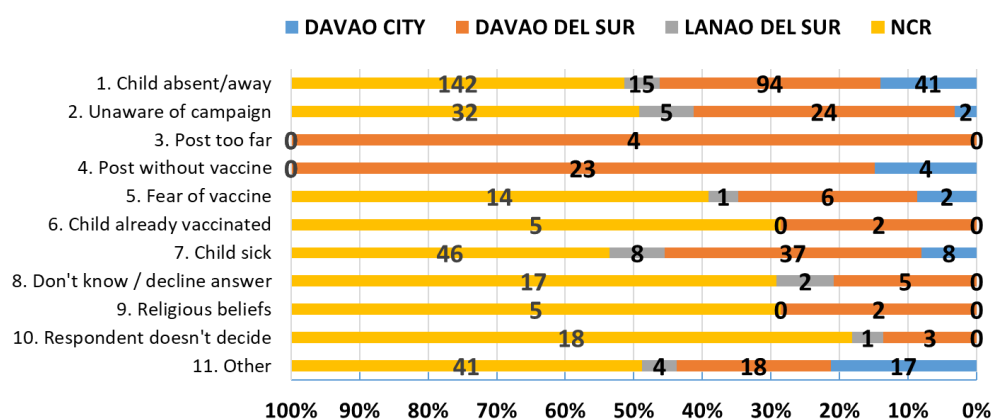
In surveys conducted in gathering areas and day care, a high number of unvaccinated children reported being from another areas which were not covered by the campaign.

Health workers and Barangay officials were the major sources of information about the campaign, with a smaller number of caregivers hearing about the campaign from mass media (TV and radio) (Figure 9).

The data supports the administrative coverage reported in NCR and Davao del Sur and suggest good quality of the campaign in Lanao del Sur even if the coverage is below 90%. In the two large cities, pockets of children may have been missed, especially in crowded areas with depressed and mobile populations.

The monitors shared with local health centres those areas where they identified unvaccinated children, so that local staff could revisit the area to vaccinate all missed children (mop-up vaccination).

This information has also been shared with DOH counterparts to plan vaccination strategies that can reach these missed children in the next campaigns and successfully interrupt poliovirus transmission.

Figure 8: Reasons for missing vaccination
(N=648)**Figure 9: Campaign information sources**
(N=18,068)**Figure 10: Reasons for missing vaccination per target area (N=648)**

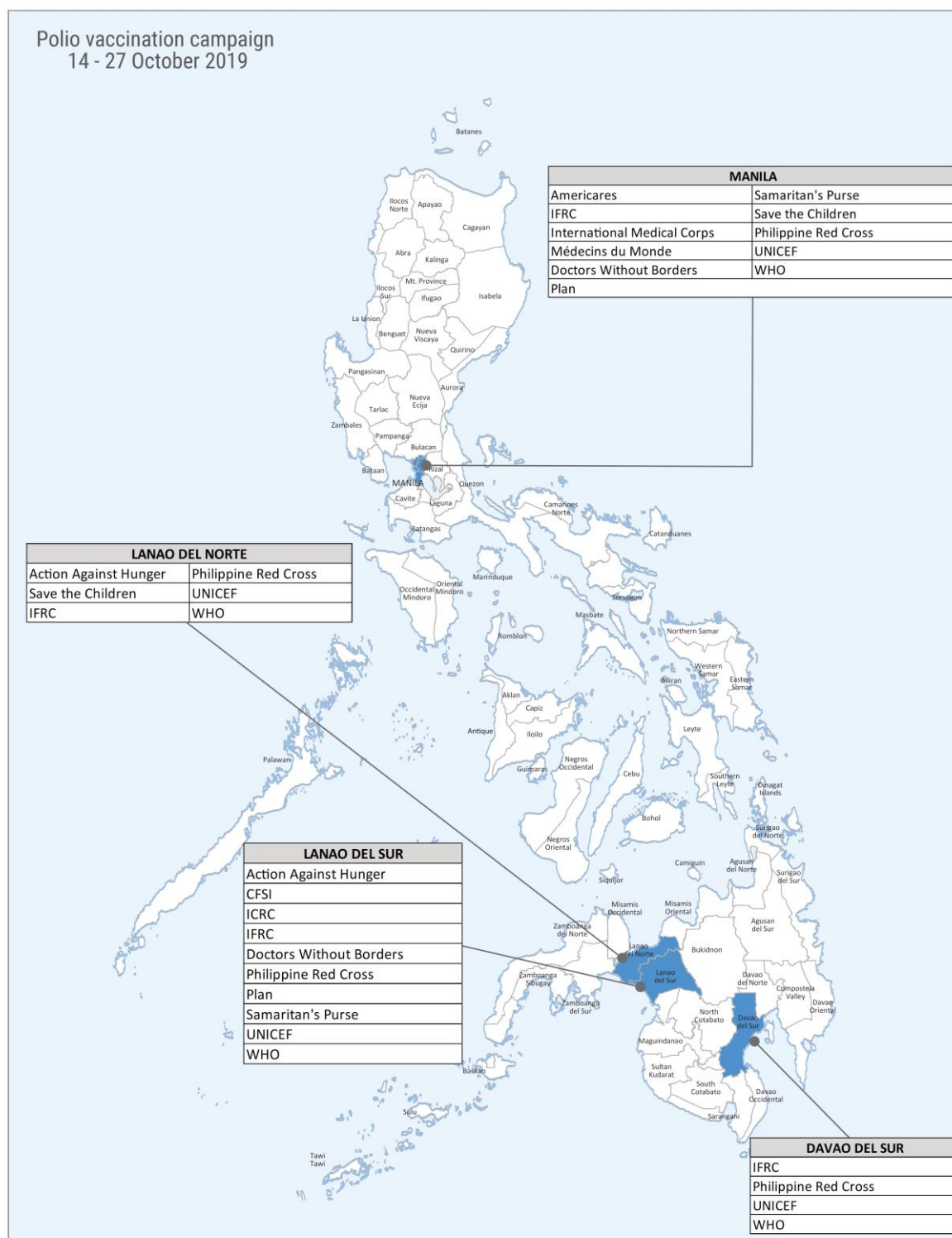
In preparation for the next round of Synchronized Polio Vaccination (SPV) in Mindanao, UNICEF facilitated the customs clearance and distribution of the second batch of mOPV2 vaccines (Table 3), and is currently providing support in Davao Sur and Lanao Sur to ensure implementation of reverse logistics for mOPV2 from health facility to the province/regional level in preparation for the final disposal.

UNICEF also supported with the orientation of health workers in all target regions in Mindanao (9, 10, 11, 12, CARAGA and BARMM). A total of 183,587 vials of mOPV2 will be distributed in Mindanao.

Table 3: mOPV2 Allocation Per Region

| Region | Target Population | mOPV2 Doses | Vials |
|--------------|-------------------|------------------|----------------|
| 9 | 450,008 | 531,009 | 26,550 |
| 10 | 584,076 | 689,210 | 34,460 |
| 11 | 575,845 | 679,497 | 33,975 |
| 12 | 573,130 | 676,293 | 33,815 |
| CARAGA | 327,105 | 385,984 | 19,299 |
| BARMM | 601,485 | 709,752 | 35,488 |
| Total | 3,111,649 | 3,671,746 | 183,587 |

Partners' engagement



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.

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.doh.gov.ph/node/18012>
- <https://www.who.int/philippines/news/detail/19-09-2019-who-unicef-and-partners-support-philippine-department-of-health-s-polio-outbreak-response>
- <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: ***Junaisha: A little girl with polio*** <https://www.who.int/philippines/news/feature-stories/detail/junaisha-a-little-girl-with-polio>