

Situation Report 23 Polio Outbreak

26 June 2020

Highlights

- The total number of polio cases in the country remains at 16 as of 26 June 2020. The Philippines is affected by both cVDPV1 and cVDPV2. cVDPV is considered a public health emergency of international concern (PHEIC).
- Currently, there are 13 cases of cVDPV2, one case with cVDPV1; one case with VDPV1; and one case with immunodeficiency related VDPV type 2 (iVDPV2).
- The Regional EPI Managers in Mindanao Region have already started conducting online orientation and microplanning for the third round of bOPV targeting 3,102,974 children below 59 months old and 373,570 children from 60 months old to 119 months old.
- Region 3 and 3 provinces of Region 4A started conducting online orientation and microplanning for the first round of mOPV2 targeting 2,532,010 children below 59 months old.
- The implementation of the mOPV2 campaign in Regions 3 and 4A are phase approach to gain important operational experience for conducting a vaccination campaign in the context of COVID-19 pandemic.

Schedule of the Synchronized Polio Vaccination (SPV) in Region 3:

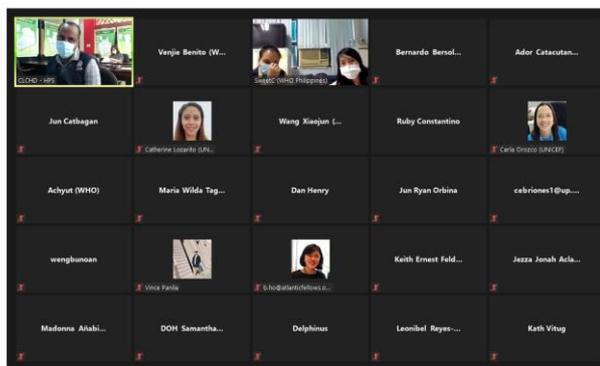
Round 1	20 July – 2 August 2020	Provinces of Aurora and Nueva Ecija
Phase 1		Cities of Angeles in Pampanga and San Jose Del Monte in Bulacan
Round 1	3 – 16 August 2020	Provinces of Bataan, Bulacan (excluding San Jose Del Monte), Pampanga (excluding Angeles City), Tarlac, and Zambales
Phase 2		
Round 2	7 – 20 September 2020	Regionwide

Schedule of the Synchronized Polio Vaccination (SPV) in Region 4A:

Round 1	3-16 August 2020	Provinces of Laguna
Phase 1		
Round 1	17-31 August 2020	Provinces of Cavite and Rizal
Phase 2		
Round 2	14-27 September 2020	3 Provinces (Laguna, Cavite and Rizal)

# of samples confirmed	Environment		Human			
	ES (+)	Last ES (+) collection	AFP	Healthy	Cont acts	Last AFP (+)
cVDPV1	14	28 Nov 2019	1			28 Nov 2019
cVDPV2	23	15 Jan 2020	13	5	2	15 Jan 2020
iVDPV2			1			
VDPV1			1		1	

Data as of 26 June 2020



Feedback of the readiness assessment conducted by the 3 WHO consultants in Region3 for Round1 SPV using mOPV2 via video Conferencing

- On 15 June 2020, the Inter-Agency Task Force on Emerging Infectious Diseases (IATF-EID) issued a new classification of community quarantine in the Philippines. There are 5 regions (NCR, II, III, IV-A, VII) and 6 highly urbanized cities (Davao City, Lapu-Lapu City, Mandaue City, Olongapo City, Santiago City and Zamboanga City) under General Community Quarantine (GCQ) from 16 to 30 June 2020.

In Cebu City, where increasing number of new cases and wide spread community transmission in majority of barangay it returned into Enhance Community Quarantine (ECQ), rest of the country already under Modified General Community Quarantine (MGCQ).

Table 1: Details of completed vaccination campaigns (2020)

Date	Vaccine	Place	Target	Total No	Coverage
6-12 Jan	bOPV	BaSulTa*/Zamboanga, Isabella/Lambayong	<10	705,089	95%
20 Jan-2 Feb	mOPV2	Mindanao regions	<5	3.1 million	99%
27 Jan-7 Feb	mOPV2	NCR	<5	1.4 million	99%
17 Feb-1 Mar	bOPV	BaSulTa/Zamboanga, Isabella/Lambayong	<10	739,640	99%
	bOPV	Rest of Regions IX/XII/BARMM and rest of Mindanao	<5	3 million	99%
24 Feb-8 Mar	mOPV2	NCR	<5	1.4 million	102%

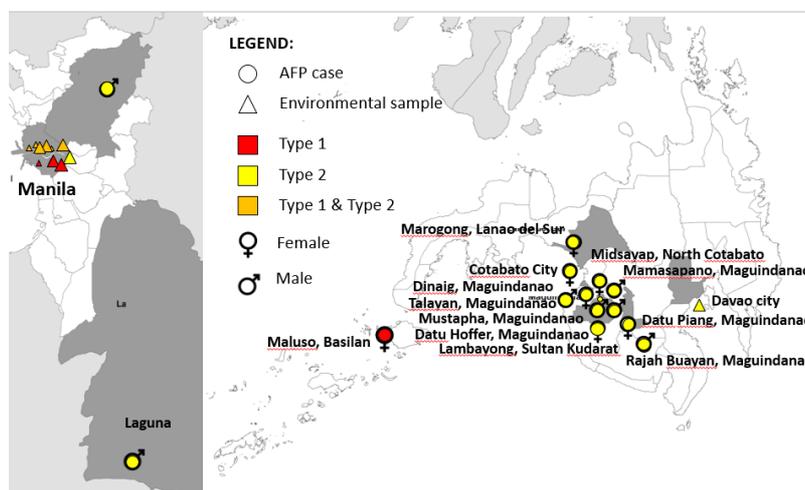
* Basilan, Sulu and Tawi-Tawi

Current Situation

Table 2: Age and Gender per Type and Location of Polio Cases

Type	Age	Gender	Region
VDPV1	4	F	XII
cVDPV1	9	F	BARMM
iVDPV2	5	M	IV-A
cVDPV2	3	F	BARMM
cVDPV2	4	F	BARMM
cVDPV2	3	F	XII
cVDPV2	2	F	BARMM
cVDPV2	2	M	XII
cVDPV2	4	F	XII
cVDPV2	2	M	BARMM
cVDPV2	<1	M	BARMM
cVDPV2	<½	M	BARMM
cVDPV2	2	M	BARMM
cVDPV2	3	M	BARMM
cVDPV2	2	M	XII
cVDPV2	1	M	III

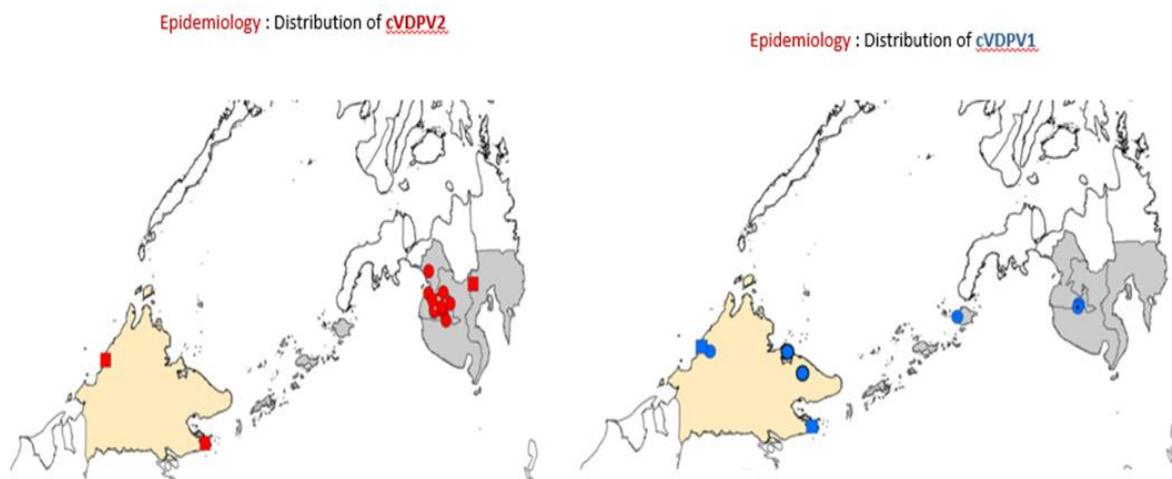
Figure 1: VDPV Locations in the Philippines as of 21 March 2020



Circulating Vaccine Derived Polio Virus type 1 (cVDPV1)

Thus far, there is one cVDPV1 case confirmed in the Philippines, from the island province of Basilan, with onset of paralysis on 19 October 2019. Three cVDPV1 cases from Sabah State, Malaysia were confirmed to be genetically linked to the Basilan case by the Victorian Infectious Diseases Reference Laboratory (VIDRL) in Australia (Figure 2). All 14 cVDPV1 environmental samples (ES) found in Manila are all genetically linked. The last ES positive for cVDPV1 was taken on 28 November 2019 in Tondo, Manila. Further ES taken were negative for cVDPV1.

The VDPV1 case from Lamboyang, Sultan Kudarat (Region XII) is not genetically linked to the Basilan and Malaysia cases and is therefore not categorised as circulating.

Figure 2. Distribution of cVDPV1 and cVDPV2 in Philippines and Malaysia

Circulating Vaccine Derived Polio Virus type 2 (cVDPV2)

The total number of cVDPV2 cases is 13 and the last cVDPV2 case was detected in Cabanatuan City, Nueva Ecija, and Region 3 with onset of paralysis on 15 January 2020. Verification of the sample taken from the 3-year-old boy from Quezon City was done by the US CDC and was found to be negative for poliovirus. The National Polio Laboratory (RITM) officially reported on these samples retested in US CDC which was presented to the Polio EOC and subsequently these are classified as nonpolio AFP. Furthermore, the 3yr old male contact positive child from Sultan Kudarat of R12 previously tested VDPV2 with 8 nucleotide differences was found as negative for VDPV from US CDC and subsequently reclassified as Sabin Like Type 2.

There are 23 cVDPV2 from Environmental Samples (ES), and the last ES positive for cVDPV2 was isolated on 16 January 2020 from Tondo, Manila and from Butuanon River, Mandaue, Cebu. As part of routine ES surveillance, the last ES collected from Tondo, Manila on 29 April 2020 was negative for cVDPV2. 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).

Immunodeficiency related Vaccine Derived Polio Virus type 2 (iVDPV2)

The case of iVDPV2 is a 5-year-old male from Calamba City, Laguna in Region 4A, with onset of paralysis on 25 August 2019 and the boy has been continuously shedding the virus until May 2020. There is ongoing coordination between DOH, RITM hospital, WHO and Viro Defense. An ethical review is ongoing in RITM for the provision of Pocopavir an anti-retroviral drug against Polio virus to the patient. The stool sample could not be taken from the patient for the month of March and April due to ECQ in Luzon regions, however the sample collection resumed from the month of May and the monthly collection has been resumed. The last samples were collected on 8th and 9th June 2020 and awaiting laboratory results. The community sampling was also taken on 17th June 2020 from 13 healthy children in the locality and lab results will be released on 1st July 2020. This is the second community sampling; the first collection was in Feb 2020 in which 15 samples collected were all negative.

Response

Risk assessment

There have been no new polio cases reported after 15 February 2020.

While there are three cVDPV1 cases from Malaysia confirmed to be related to the Philippine cVDPV1 case, the regional risk of potential spread across international borders remains moderate. However, travel restrictions have been imposed by the Philippine government as well as other neighbouring countries in response to the COVID-19 pandemic.

Coordination

DOH is coordinating the polio response through its Incident Command Structures (ICS) and Emergency Operation Centers (EOC) set up in each of the region, as well as the Mindanao hub and at national level. DOH issues regular bulletins with preparedness assessment, coverage data, Adverse Events Following Immunization (AEFI), AFP and environmental surveillance updates from the 17 regions.

- Following the COVID-19 outbreak response, the Polio EOC meetings at national level have been reduced to once a week and conducted virtually since the ECQ was implemented in mid-March.

OBRA recommendation

- Recognizing the detection of cVDPV2 outbreak virus in two new areas, the OBRA team encourages urgent consultation with the mOPV2 Advisory Group to discuss possible immunization response options
- These options include the possible expansion of the geographical scope of the planned 2nd round of mOPV2 for NCR to include Regions 3 and Region 7
- High priority should be given to defining the extent of transmission in the newly identified transmission foci through targeted intense surveillance measures
- Urgently address vaccine procurement issues by developing more long-term vaccine procurement strategies
- Government prioritization for and investment into the outbreak response will need to continue until the cVDPV outbreaks are over
- To further improve and guide outbreak response activities, all sources of available data (SIA, RCA, and surveillance data) should be routinely analysed to identify gaps and implement corrective action
- Assure that the updated AFP surveillance guidelines incorporate OBRA recommendations, and implement them nationwide

There is ongoing process to effectively review the progress made in the implementation of OBRA recommendations at all levels. National EOC has coordinated with all the relevant stakeholders at national and subnational level to initiate the review process. A tool to monitor implementation status and verification method is in final stage and will be shared to regions and be part of EOC meeting agenda. Through Regional consultation meetings and reports received from Polio consultants, the following thematic areas are currently being implemented:

- Campaign micro plans: DOH has shared OBRA recommendations to regions, these recommendations are part of guide in the ongoing microplanning process at subnational levels and will be reviewed as part of campaign readiness assessment for upcoming campaigns.
- Vaccine management: Vaccine stock status report at subnational level is now part of the agenda in weekly EOC meetings and Polio consultants' reports. Currently there is no reported stockouts of vaccines at service delivery points to affect routine immunization activities.
- Strengthening surveillance system: Orientations of surveillance managers have been conducted and ongoing progress of orienting hospitals and LGU surveillance focal persons despite

pandemic context Recruitment of adequate surveillance officers deployed in regions and sub regional levels to support AFP surveillance activities.

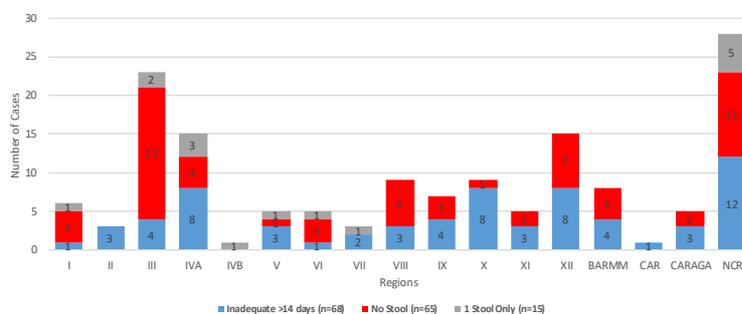
- o Specimen collection, transport: Reverse cold chain monitoring has been included in RTM reports to EB line listing and used as a parameter to calculate stool adequacy rates.

There has been challenges in implementing some of the OBRA recommendations due to COVID-19 situation. DOH in collaboration with partners is exploring different strategies to mitigate these challenges including utilization of revised guidelines and strategies developed by WHO on implementation of routine immunization activities and campaigns amid COVID-19 pandemic.

Surveillance

From 1 January to 13 June 2020, a total of 411 AFP cases have been reported to PIDSRS with AFP rate of 2.54 and annualized NP-AFP rate of 1.50. The stool adequacy is 64% nationwide. Among the outbreak regions, Regions 9, 10, 12, and NCR have reached the target NP-AFP rate of 3 per 100,000 under 15 years. For the non-outbreak regions, Regions 1, 2 and CAR have reached the target of NP-AFP rate of 2 cases per 100,000 under 15 years. However, only 3 regions reached the target Stool Adequacy Rate of 80%, i.e., Regions 7, 9 and CAR. The main reasons why stool adequacy rate is low are due to delayed collection of stool sample beyond 14 days or no stool was collected at all (Figure 3). This issue has been raised to the different surveillance officers during their orientation meeting.

Fig: 3 Reasons for Stool Inadequacy per Region (N=148)
Philippines, January 1 – June 13, 2020



WHO has supported DOH by recruiting 18 AFP surveillance officers: one surveillance officer assigned per region, except for NCR and BARMM which have two surveillance officers. Region Caraga and Region 9 hired AFPSOs utilizing their own fund. From June 2020 the number of surveillance officers increased to 20 as some regions are prioritized for more support. The surveillance officers have been trained prior to their deployment to their respective regions in February. The 3days TOT on AFP surveillance for newly hired 5 national surveillance officers completed on 1st week of June. There were 2 surveillance officers deployed each in regions 3, 4A and 4B where the AFP surveillance performance indicators are substantially low.

Training materials for hospital, province and city level surveillance officers have been distributed. All 17 regions have established expert review panels, and revised guidelines on AFP surveillance have been disseminated on the first week of March. However, cascading of AFP surveillance training from regions to the provinces, cities and hospitals have been postponed until further notice due to the COVID-19 pandemic response. Few regions have managed to conduct the AFP surveillance training before the lockdown measures due to COVID 19. In recent weeks WHO and DOH have had extensive discussions with regions to

Fig:4 AFP Cases Reported by Region (N=411)

Philippines, January 1 – June 13, 2020

Region	AFP cases reported as of MW 24	AFP cases expected by June 2020	AFP Rate	Annualized NP-AFP rate	Stool Adequacy Rate	NPEV Rate
Philippines	411	350	2.54	1.50	64	4.3
Outbreak & High Risk Regions (Target Non Polio AFP Rate: 3/100,000)						
03	40	55	2.35	0.82	43	4
07	22	39	1.84	1.09	86	2
09	35	20	5.65	4.20	80	9
10	43	26	5.37	4.87	79	5
11	22	26	2.77	2.02	77	0
12	40	26	5.08	3.55	63	9
BARMM	20	28	2.36	1.30	60	16
CARAGA	13	15	2.91	1.34	62	0
NCR	64	57	3.67	2.06	56	2
Non Outbreak Regions (Target Non Polio AFP Rate: 2/100,000)						
01	15	16	2.03	1.22	60	0
02	14	11	2.69	1.73	79	0
04A	29	49	1.28	0.53	48	4
04B	3	11	0.58	0.39	67	0
05	12	22	1.16	0.58	58	9
06	16	25	1.41	0.62	69	0
08	14	16	1.85	0.00	36	0
CAR	9	6	3.43	3.05	89	11

Reporting Rate*

- 10 out of 17 regions are reporting below expectations
- Regions III, IVA, IVB, V, VI, VII, VIII, XI, CARAGA, and BARMM have the lowest AFP Rate

Adequacy of Specimen*

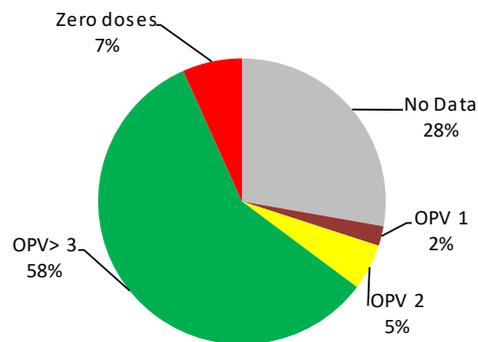
- 14 out of 17 regions have NOT reached the target stool adequacy rate
- Regions III, IVA and VIII having <50% performance

Substantially below target
Nearly reached target
Reached or surpassed target

conduct virtual orientation to some priority hospitals and local government units. The training materials will be revised accordingly. So far, NCR, region 2 and some other regions has scheduled the AFP surveillance training for Hospital and LGU level starting July onwards and EB, RITM, WHO, FETPAFI, will provide technical support to make training more effective. Furthermore, NCR and Region 2 have rescheduled the zoom training on AFP surveillance starting from 7th July to 10th July 2020 for hospitals and LGU level.

Due to travel restrictions and enhanced community quarantine from March 16 to May 31 imposed on NCR, entire Luzon and other parts of the country, community-based AFP case investigation and needed follow up for stool collection and 60 days investigations could not be accomplished, but hospitals continue to do AFP surveillance and stool sample collection. Collection of stool samples and transport to RITM in Manila is still ongoing despite the cancellation of commercial flights through cargos and courier services that are still operating. As community AFP surveillance was affected because of the COVID 19 lockdowns, the AFP surveillance performance of the country as expected has suffered negatively, (Figure 4). However, from the 2nd week of June all AFP surveillance officers are going to hospital visit for active surveillance except for Region 1, Davao and Cebu where still not allowed to visit hospitals due to fear of nosocomial infection of COVID 19. Vaccination status of the AFP cases are as shown in Figure 5 with 58% found to have completed the 3 doses or more.

Fig: 5 Vaccination Status of AFP Cases (n=411)
Philippines, MW 24 2020



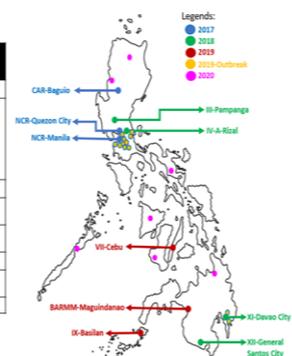
Environmental Surveillance

There are 19 routine ES sample collection sites, 10 sites are in National Capital Region and 9 sites in other regions spread across the country. The sample collection is biweekly in some of the priority sites in NCR, Cebu and Davao whereas other sites are monthly. In NCR the collection was also done in Lift Stations and Manholes as per identified priority areas. After the enhanced community quarantine, the collection has been limited to NCR and Region 4A.

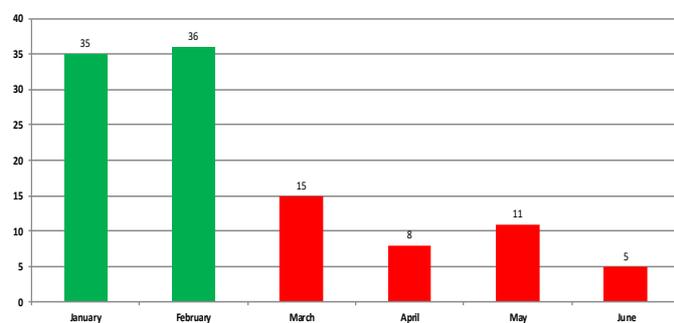
The last ES sample isolation was positive for cVDPV2 on 16th January 2020 that was collected from Tondo site in Manila. After January there have not been detected any cVDPV2 neither from NCR nor from other regions. Similarly, ES isolation was positive for

ES started in April 2017
19 Routine sites, 10 Lift Stations, 18 Manholes

Region	No. of Sites	Lift Stations	Manhole
CAR	1 Baguio City		
NCR	1 Quezon City	5	6 Sta Cruz
	1 Tondo		Sta Cruz
	1 Pasay		Lumeta
	1 Calocan-Valenzuela		Laganda
	1 Las Pinas-Alabang		Paco Malinao
			2 Paco
III	1 San Fernando, Pamp.		
IV-A	1 Rizal		
	2 Laguna		
XII	1 Davao City (Bolton)		
	2 (23-C, Leon Garcia)		
XIII	1 Gen Santos City		
BARMM	1 Maguindanao		
	1 Basilan		
VII	1 Cebu City		



ES Samples Collected by Month, 2020 (n=110)



cVDPV2 on 16th January 2020 from Butuanon river of Cebu City of Region VII. Onward January, the ES samples were negative for cVDPV2 in February and March collected from Cebu city. After March ES samples could not collect outside NCR due to suspension of flight and other movement restrictions.

Immunization response

The Immunization Program issued the signed Interim guidelines on the implementation of Polio Epidemic Response for cVDPV type1 in Mindanao amidst the COVID-19 pandemic.

For the implementation of the proposed bOPV and mOPV2 campaigns, preparations are being undertaken in providing personal protective equipment (PPE) to health workers with strict adherence to physical distancing measures as recommended in the COVID 19 guideline.

- The Department of Health will sub-allot funds to all regions for PPE such as surgical masks, face shields and alcohol-based hand sanitizers.

UNICEF has ongoing procurement for surgical masks and face shields for the vaccination teams of entire Mindanao regions as well as Regions 3 and 4A.

UNICEF Mindanao Field Office facilitated the readiness assessment for BARMM at the regional and provincial level. As of four weeks prior to the polio campaign, overall BARMM readiness for the polio campaign was at 51%. Of the provinces, Basilan is the least prepared.

UNICEF and WHO supported the consultative meeting of with Laguna Province last 24 June 2020 for the mOPV2 campaign scheduled on 3-16 August 2020. The planned campaign orientation to include mOPV2 vaccine management and Infection and Prevention Control measures will be scheduled as soon.

Vaccine, Cold Chain and other Logistics

Vaccine deliveries from RITM-SDD (National Vaccine Store) to the subnational/provincial vaccine stores is now on full swing as lockdown restrictions begin to ease with the lifting of the enhanced community quarantine in most parts of the country. With the distribution underway, RITM would be able to free up the much-needed storage space to accommodate the incoming vaccine shipments.

UNICEF is facilitating the delivery of 4,268,525 doses of mOPV2 bound for the Philippines. The 1st tranche of mOPV2 (1,594,000 doses) arrived in the country last 17 June (Wednesday) and subsequently delivered to the national vaccine store on 19 June. The 2nd tranche of mOPV2 (2,674,525 doses) is expected to arrive on the week of July 6-10.

Please see below for the latest inventory of mOPV2 in the country:

Site	Vaccine	Manufacturer	Expiration Date	VVM Status	Quantity (in doses)
RITM-SDD	mOPV2	Biofarma	Apr-21	Use Point	770,340
			May-21		
		GSK	Oct-27		2,042,520
CHD III	mOPV2	Biofarma	May-21	Use Point	87,000
TOTAL					2,899,860

UNICEF through its contracted company facilitated retrieval of used mOPV2 vaccine vials in NCR , Reg 9 and 10 and this will brought to Cavite for final disposal. Retrieval in other regions of Mindanao will soon follow.

WHO provided 7,000 finger markers to Region 3 for the upcoming mOPV2 round 1 campaign.

Risk Communication and Social Mobilization

UNICEF and WHO continue to support the development and finalization of key messages, FAQs and communication materials for the polio campaign. The following activities were also conducted, according to the Communication and Social Mobilization Plan:

- Consultation meeting with regional Health Education and Promotion Officers (HEPOs) on microplanning standards and contents of the advocacy kit for local chief executives (LCEs); conducted 17 June 2020
- Orientation of regional, city, and municipal HEPOs on the updated Polio Communication and Social Mobilization Plan; conducted 24 June 2020

Preparations are also under way for the following activities:

- Training on Interpersonal Communication and Social Mobilization for health workers and vaccination teams on 30 Jun 2020 (for Mindanao regions except Reg 12), and on 3 July 2020 (Regions 3, 4a and 12)
- DOH Virtual Presser on 1 July 2020 on immunization, particularly on the polio campaign. Dr. Wilda Silva, NIP Manager, will be the resource speaker.
- Joint DOH/WHO/UNICEF press release on the upcoming polio campaigns
- High-level advocacy with governors and mayors of outbreak areas is also being planned by the DOH Health Promotion and Communication Service.

Currently, WHO and UNICEF are providing support in the updating of the monitoring and evaluation framework and tools to include the OBRA findings, in addition to priority indicators for the communication and social mobilization objectives.

UNICEF is currently coordinating with non-government organizations to provide support for social mobilization particularly in high-risk and hard-to-reach areas and reaching special populations.

A new set of communication materials including a supplemental guide for health workers and vaccination teams, tricycle banners, and streamers are being finalized for printing and dissemination to the different regions. Some communication materials from the previous campaigns, which will still be used for the upcoming campaign, are being delivered to the DOH regional offices for dissemination.

UNICEF also continues to work on the technical narrative and documentation report of the polio outbreak response in Mindanao and NCR and this will be shared to GPEI and other partners.

UNICEF Mindanao Field Office team met with BARMM MOH to discuss the polio campaign, especially focusing on social mobilization and communication. Plan include development of IEC prototype adopted for BARMM, meeting with Grand Mufti Darul Ifta to ask for support (thru memo or issuance) for the polio campaign and enjoin support from Muslim Religious Leaders and MOH to send letters to Regional COVID-19 IATF, MILG, WestMinCom, and MHT to lobby for support to the polio campaign.

UNICEF facilitated delivery of tricycle banners, posters and health worker's guide to Regions 3 and 4A in old format. On-going production and delivery of additional health worker's guide for Mindanao .

Funding allocation and budget

(US\$)	Budget		Allocation
	1 st	2 nd	
Government*	6,772,249	5,839,221	6,772,249
GPEI	6,422,063	9,189,726**	9,200,000
WHO	3,176,858	802,063	2,201,541
UNICEF	3,245,205	1,101,962	2,891,625
<i>Other partners</i>			
Philippine Red Cross			297,143***
IFRC			345,983****

* Government has pledged US\$ 9 million

** Includes vaccine replenishment from routine stock

** Equivalent to PHP 15,000,000

*** Equivalent to CHF 336,302

COVID 19 response support from Polio consultants

Polio surge capacity, which includes Polio international and local consultants from WHO and UNICEF, Polio Alumni Stoppers from US CDC, along with WHO and UNICEF EPI staff from CO, have been providing support to the COVID pandemic response

- Attending in the regular regional/ provincial/ city emergency operations centre meetings for COVID-19, and providing technical inputs for the response strategies
- Facilitating the conduct of COVID-19 gaps assessment for local government units
- Supporting the training of health workers in contact tracing, infection prevention and control, isolation; risk communication and community engagement and orientation with new/updated COVID guidelines
Organizing and facilitating training of health workers, local officials, youth leaders, academe and other non-government organizations for COVID-19 infection prevention and control in community settings and WASH
- Supporting the development and pre-test of communication materials for polio campaign and routine immunization in the context of COVID-19.
- Supporting the development of the IPC guidelines for health care workers during polio campaigns in the context of the COVID-19 pandemic.
- Working closely with Epidemiological Surveillance Units (ESUs) and Barangay Health Emergency Response Teams (BHERTs), and hospital staff by providing guidance in the conduct of active case finding and contact tracing
- Analysing data and helping coordinate and manage the effective rollout of COVID-19 response interventions in communities
- Setting up of laboratory capacity for testing COVID-19: assessing laboratory facilities, skilling of staff with molecular diagnostic and biosafety skills, conducting proficiency testing and laboratory accreditation for COVID-19 testing
- Conducting Inspection and Supportive Supervision to COVID-19 Facilities and Checkpoints focusing on quality assurance and operational Standards;
- Conducting supportive supervision to BHERT, Health Centres and Districts.
- Preparation of recovery response and rehabilitation plan for COVID-19 survivors.
- Locally-hired AFP surveillance officers have also been supporting the COVID 19 response mainly in data encoding and hospital follow-ups for the completion of the CIF and contact tracing via phone.



Orientation and planning workshop for implementation of Polio response for CVDPV2 type 1 in Region X in the context of COVID 19 Outbreak. Photo: WHO/Mammat



Stakeholders Advocacy meeting for R3 polio campaign, General Santos City. Photo: WHO/Getnet



Loading of mOPV2 vaccines from the NAIA warehouse to RITM cold storage facility Photo: UNICEF/ Gimeno



Meeting with BARMM MOH and Bureau of Public Information to discuss the preparations for the Round 3 bOPV campaign. Photo: UNICEF/Lozarito



Retrieval of used mOPV2 vials in DOH Reg 9 for final disposal. Photo: DOH/Lagos