



CLASSIFICATION OF ACUTE FLACCID PARALYSIS (AFP) CASES

AFP surveillance is an essential strategy which aims to look for poliovirus circulation in the community by investigating all possible polio cases. Its role is to identify high risk areas or groups and certify that the Philippines is still polio-free.

A total of **138** reported AFP cases were reported nationwide from January 1 to May 6, 2017 (Figure 1). Of these, **83 (61%)** had two adequate stool specimen collected with **68 (82%)** cases discarded as non-polio, **2 (2%)** cases were classified as not AFP, and **13 (16%)** cases are pending. There were **55 (40%)** AFP cases with inadequate stool specimen; of these, **23 (43%)** of the stools collected were beyond 14 days. Twenty-three **23** cases (43%) had no stool specimen collection while **9 (17%)** of the cases had only 1 stool collected. Among those with inadequate specimen collection, **26** cases have been classified as non-polio and **3** cases were considered not AFP cases and **25** cases are pending for expert panel classification. One AFP case from Region IV-A had sabin-like poliovirus type 1 and 3 isolation and after thorough investigation conducted by the RESU and careful review and assessment of case by the Expert Committee on Poliomyelitis, the case was considered a **vaccine-associated paralytic polio (VAPP)**. Table 1 below shows the classification of AFP cases by Region.

FIGURE 1. CLASSIFICATION ACUTE FLACCID PARALYSIS CASES, PHILIPPINES, JANUARY 1 – MAY 6, 2017 (N=138)

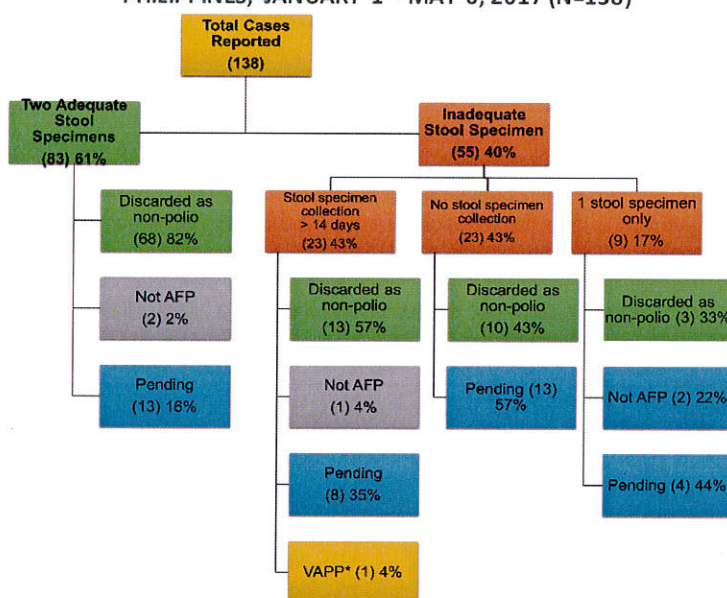


TABLE 1. AFP CASES BY REGION PHILIPPINES, JANUARY 1 – MAY 6, 2017 (N=138)

REGION	2017 Target AFP Cases 2/100k	2017 Target AFP Cases 1/100k	Reported Cases as of MW 18	Classification				Total Number of Classified Cases
				Non-Polio (Discarded)	Sabin- Like	NOT AFP	Pending	
Region I	40	20	18	11	0	2	5	13
Region II	27	14	5	4	0	0	1	4
Region III	87	43	11	5	0	0	6	5
Region IVA	111	56	13	11	1	1	0	13
Region IVB	24	12	2	2	0	0	0	2
Region V	48	24	11	9	0	0	2	9
Region VI	35	18	7	6	0	0	1	6
Region VII	47	24	3	3	0	0	0	3
Region VIII	36	18	5	2	0	1	2	3
Region IX	30	15	3	0	0	0	3	0
Region X	37	18	14	9	0	1	4	10
Region XI	42	21	10	6	0	0	4	6
Region XII	36	18	11	11	0	0	0	11
ARMM	30	15	4	2	0	0	2	2
CAR	14	7	4	3	0	0	1	3
CARAGA	21	11	3	2	0	0	1	2
NCR	98	49	10	6	0	0	4	6
NIR	36	18	4	2	0	0	2	2
PHIL	800	400	138	94	1	5	38	100



Morbidity Week 18: January 1 – May 6, 2017

Epidemiology Bureau
Public Health Surveillance Division

TABLE 2. STOOL SPECIMEN RESULT AMONG REPORTED AFP CASES, JAN. 1 – May 6, 2017, (N= 138), PHILIPPINES

Stool Specimen Result	Reported Cases	Percentage
Positive for poliovirus	0	0
Negative for poliovirus	83	60
Sabin-like	1	1
Vaccine-derived poliovirus (VDPV)	0	0
Non-polio enterovirus (NPEV)	6	4
No stool	32	23
Pending for results	16	12
Total	138	100

VIRUS ISOLATION AND GENOTYPING

Table 2 shows the AFP stool specimen test results from the National Polio Laboratory (NPL) of the Research Institute of Tropical Medicine (RITM). There was 1 sabin-like poliovirus type 1 and 3 isolated from an AFP case from Region IV-A. Among the 138 tested samples, 83 (60%) tested negative for poliovirus, 6 (4%) tested for non-polio enterovirus, 32 (23%) had no stool specimen collected and 16 (12%) are pending for results.

PROFILE OF CASES

Among the reported AFP cases, 85 (62%) are Males and 53 (38%) are Females. Most of the AFP cases reported belong to the 10-14 age group (Figure 2).

Information on the immunization status of reported cases are essential for the EPI coordinators in choosing appropriate strategies on targeting specific age groups for immunization. At present, only 49 (50%) had completed their OPV dose; the rest of the cases had 0 OPV dose or incomplete OPV dose received. (Figure 3).

FIGURE 2 . AFP REPORTED CASES BY AGE AND SEX GROUP, JAN. 1 – MAY 6, 2017 (N=138), PHILIPPINES

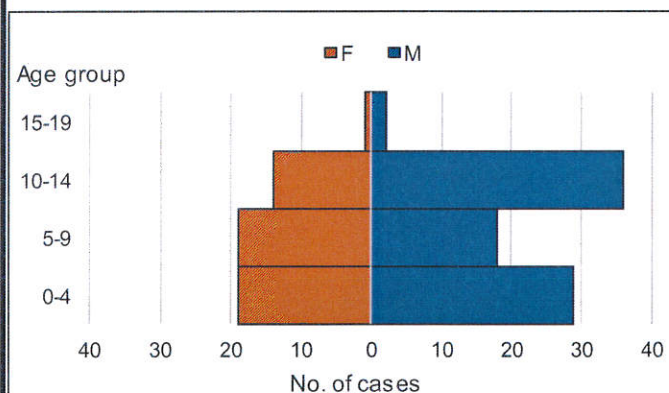


FIGURE 3 . IMMUNIZATION STATUS AMONG AFP CASES BY AGE AND POLIO VACCINATION DOSE, JAN. 1 – MAY 6, 2017 (N=138), PHILIPPINES

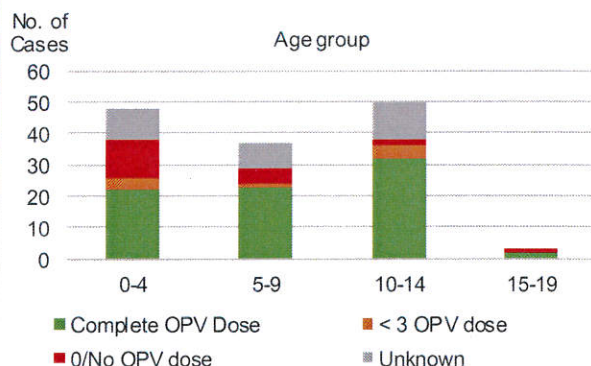
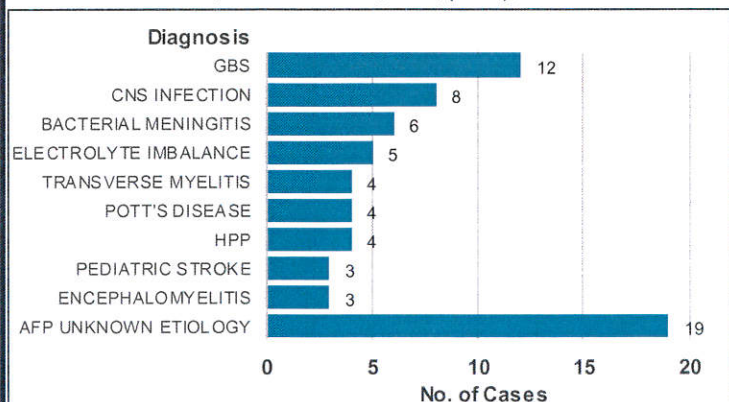


FIGURE 4 . TOP 10 DIFFERENTIAL DIAGNOSIS AMONG NON-POLIO AFP CASES, JAN. 1 – MAY 6, 2017, (n=68), PHILIPPINES



The differential diagnosis of AFP includes but is not limited to, poliomyelitis, Guillain Barre Syndrome (GBS), traumatic neuritis and transverse myelitis. These four are the common diseases that represent the most common causes of AFP; however, there are other differential diagnosis that have numerous etiologies. Hence, any diseases that represents AFP, even if diagnosed as disease other than polio by the physician should be reported and collected with stool specimen. Figure 4 shows that GBS is the most commonly disease reported as AFP.



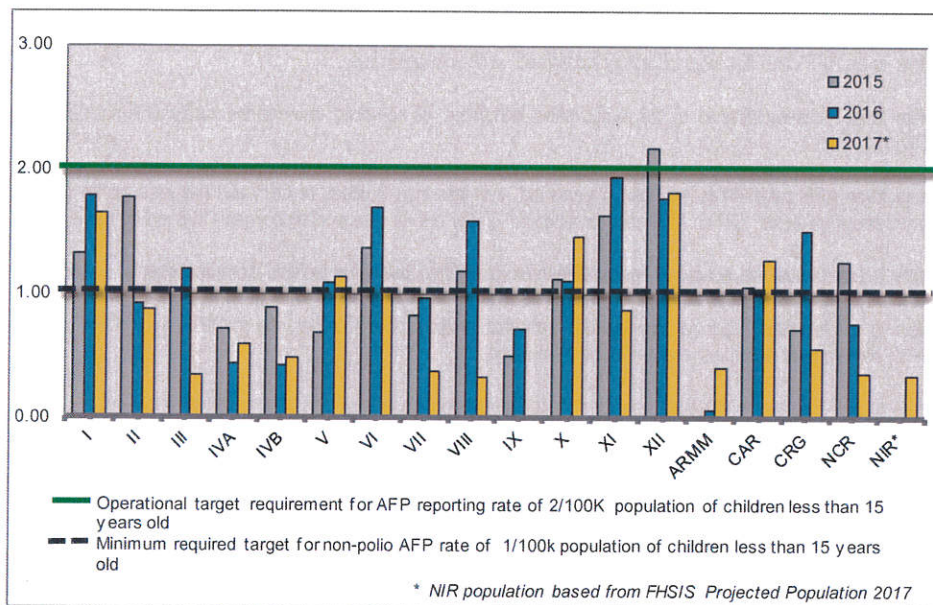
Morbidity Week 18: January 1 – May 6, 2017

**Epidemiology Bureau
Public Health Surveillance Division**

SURVEILLANCE PERFORMANCE INDICATORS - AFP REPORTING RATE AND NON-POLIO AFP RATE

From January 1 to May 6, 2017, there were **138** AFP cases reported, providing the Philippines a reporting rate of **1.04** per 100,000 population of children below 15 years old. Only 8 out of the 18 Regions were able to reach the minimum target. **Ninety-four (94)** have been discarded as non-polio; which gives us a non-polio AFP rate of **0.44/100,000** that is substantially below the target. At present, only **6 out of the 18 Regions** were able to reach the minimum target of 1/100,000. (Figure 5 and table 3)

FIGURE 5. NON-POLIO AFP RATE, JAN. 1 2015 – MAY 6, 2017 PHILIPPINES



Legend
Green Reached or surpassed target
Yellow Nearly reached target: 0.5-0.99 for non-polio AFP target; 60-79% for other indicators
Red Substantially below target

TABLE 3. REPORTING AND NON-POLIO AFP RATE AS OF MW 18

REGION	Reporting Rate	Non-Polio AFP Rate
Region I	2.70	1.65
Region II	1.10	0.88
Region III	0.76	0.35
Region IVA	0.70	0.59
Region IVB	0.49	0.49
Region V	1.39	1.13
Region VI	1.18	1.02
Region VII	0.38	0.38
Region VIII	0.84	0.34
Region IX	0.61	0.00
Region X	2.28	1.46
Region XI	1.44	0.86
Region XII	1.82	1.82
ARMM	0.81	0.41
CAR	1.71	1.28
CARAGA	0.84	0.56
NCR	0.61	0.37
NIR	0.67	0.34
PHIL	1.04	0.71

SURVEILLANCE PERFORMANCE INDICATORS – STOOL SPECIMEN ADEQUACY RATE

All AFP cases should have full clinical and virological investigation with at least 80% of AFP cases having adequate stool specimens collected. From 2015 to 2016, the country remains to fail in reaching the 80% benchmark. Figure 6 shows the adequate specimen collection rate from 2015 to 2017. As of MW 13, the adequate stool specimen rate is 46% with only regions 4B, 8, NCR and NIR able to reach the target.

FIGURE 5. NON-POLIO AFP RATE, JAN. 1 2015 – MAY 6, 2017 PHILIPPINES

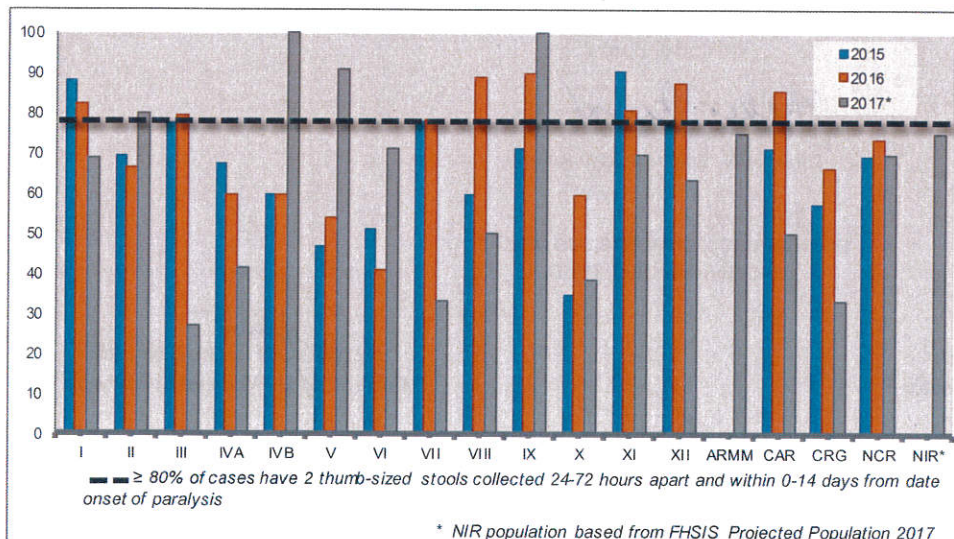


TABLE 4. STOOL SPECIMEN ADEQUACY RATE OF MW 18

REGION	Stool Specimen Adequacy Rate
Region I	69
Region II	80
Region III	27
Region IVA	42
Region IVB	100
Region V	91
Region VI	71
Region VII	33
Region VIII	50
Region IX	100
Region X	38
Region XI	70
Region XII	64
ARMM	75
CAR	50
CARAGA	33
NCR	70
NIR	75
PHIL	61




Morbidity Week 18: January 1 – May 6, 2017

**Epidemiology Bureau
Public Health Surveillance Division**

Definition of Terms

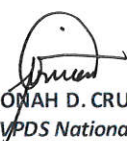
Acute flaccid paralysis (AFP) case	Refers to any child less than 15 years of age with acute onset of floppy paralysis, or a person of any age in whom poliomyelitis is suspected by a physician.
Cluster of AFP cases	Refers to the occurrence of two or more AFP cases in one province or city with the date of paralysis onset of within 1 month of each other.
Circulating Vaccine-derived poliovirus (cVDPV)	Refers to a sub-classification of VDPV found in areas with gaps in OPV coverage; considered in the context of person-to-person transmission when non-identical but related VDPVs are identified in at least 2 AFP cases.
Confirmed polio	Refers to an AFP case that was laboratory-confirmed with wild poliovirus.
Discarded as non-polio	Refers to AFP cases classified by the expert panel committee as non-polio in which the paralysis is not caused by poliovirus.
Hot case	Refers to an AFP case that is less than 5 years old, with less than 3 doses of OPV and has fever at the onset of asymmetrical paralysis; OR an AFP case or a person of any age whose stool specimen/s has poliovirus isolate.
Non-polio Enterovirus	Refers to enterovirus (i.e. echovirus, coxsackie virus) other than poliovirus isolated from specimens.
Oral poliovirus vaccine (OPV)	Refers to an attenuated vaccine administered orally that protects against either one (mOPV), two (bOPV) or three (tOPV) serotypes of poliovirus present in the formulation.
Polio compatible	Refers to an AFP case which does not have an adequate stool collected, died or was lost to follow-up.
Sabin-like	Refers to an AFP case with isolates consistent with a limited period of virus excretion or person-to-person transmission demonstrating less than 1% difference from parent OPV strains for poliovirus types 1 and 3, and less than 0.6% difference from the type 2 OPV strain by full Viral Protein 1 sequence homology.
Vaccine-derived poliovirus (VDPV)	Refers to live, attenuated strains of the vaccine poliovirus that have undergone mutation and recombination and differ from (original) Sabin strains by 1 to 15% of VP1 nucleotides, the extent of genetic change of which is indicative of prolonged replication.
Vaccine-associated paralytic poliomyelitis (VAPP)	Refers to the only rare adverse event associated with OPV use which may occur in vaccine recipients or their contacts. The onset of symptoms with VAPP usually occurs 4-30 days following receipt of OPV or within 4-75 days after contact with a recipient of OPV. In immune-deficient individuals, VAPP may occur outside these windows.
Wild poliovirus (WPV)	Refers to the wild poliovirus that is targeted for global eradication consisting of three types: poliovirus type 1, 2 and 3.


Editorial Board


IRMA L. ASUNCION, MD, MHA, CESO IV
Director IV, Epidemiology Bureau


GENESIS MAY J. SAMONTE, MD, PHSAE
OIC-Division Chief, PHSD


JUNE CANTATA B. CORPUZ, RN
Nurse III, PHSD National Coordinator


JEZA JONAH D. CRUCENA, RN
Nurse III, PHSD National Coordinator


ALLAN P. IGNACIO
Statistician II, PHSD