



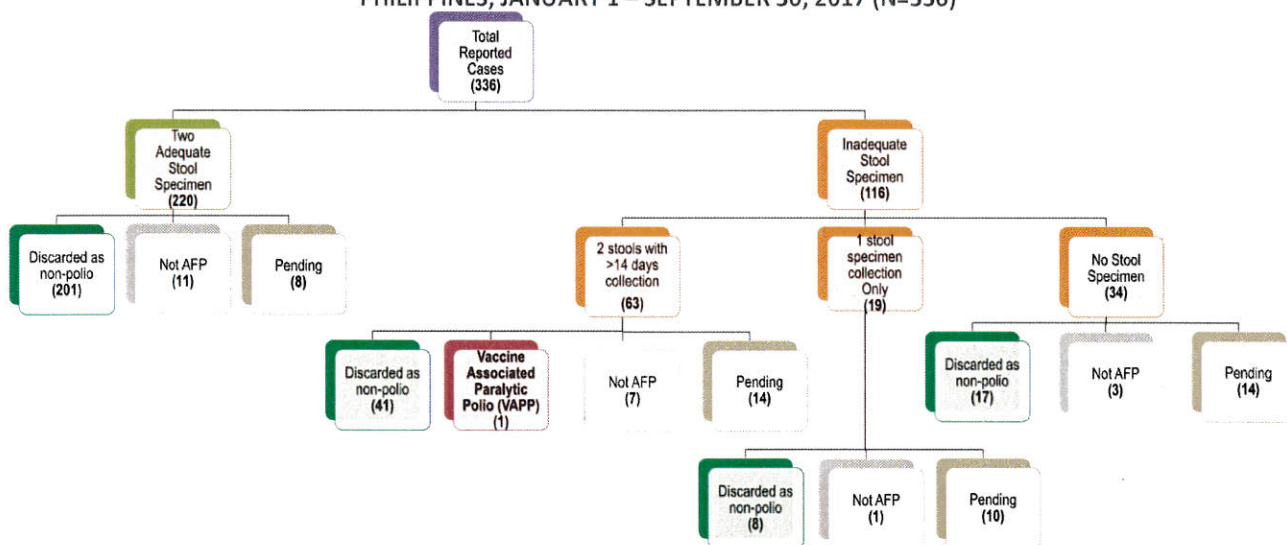
**CLASSIFICATION OF ACUTE FLACCID PARALYSIS (AFP) CASES**

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 **336** AFP cases were reported nationwide from January 1 to September 30, 2017 (Figure 1). Of these, **267 (79%)** have been **discarded as non-polio AFP**, **22 (7%)** did not fit the standard case definition and were classified as **Not AFP**, while **46 (14%)** are still pending for classification and **1 (1%)** was classified as **vaccine associated paralytic polio (VAPP)** (Table 1).

About **220 (65%)** of the reported AFP cases have adequate stool specimen, while the rest are either with complete stool but with more than 14 days of specimen collection (**63, 19%**), **34 (10%)** had no stool specimen collected and a portion (**19, 6%**) had only 1 stool specimen collected.

**FIGURE 1. CLASSIFICATION OF ACUTE FLACCID PARALYSIS CASES, PHILIPPINES, JANUARY 1 – SEPTEMBER 30, 2017 (N=336)**



**TABLE 1. AFP CASES BY REGION AND CLASSIFICATION PHILIPPINES, JANUARY 1 – SEPTEMBER 30, 2017 (N=336)**

REGION	2017 Target AFP Cases 2/100k	2017 Target AFP Cases 1/100k	Reported Cases as of MW 39	Classification				Total Number of Classified Cases
				Non-Polio (Discarded)	VAPP	NOT AFP	Pending	
Region I	40	20	50	42	0	3	5	45
Region II	27	14	19	15	0	1	3	16
Region III	87	43	39	28	0	1	10	29
Region IVA	111	56	36	26	1	4	5	31
Region IVB	24	12	5	4	0	0	1	4
Region V	48	24	23	20	0	1	2	21
Region VI	71	36	30	26	0	0	4	26
Region VII	47	24	11	11	0	0	0	11
Region VIII	36	18	10	8	0	1	1	9
Region IX	30	15	11	8	0	2	1	10
Region X	37	18	18	15	0	3	0	18
Region XI	42	21	25	21	0	2	2	23
Region XII	36	18	19	16	0	2	1	18
ARMM	30	15	6	3	0	0	3	3
CAR	14	7	7	6	0	0	1	6
CARAGA	21	11	5	5	0	0	0	5
NCR	98	49	22	13	0	2	7	15
<b>PHIL</b>	<b>800</b>	<b>400</b>	<b>336</b>	<b>267</b>	<b>1</b>	<b>22</b>	<b>46</b>	<b>290</b>





**TABLE 2. STOOL SPECIMEN RESULT AMONG REPORTED AFP CASES, PHILIPPINES, JAN. 1 – SEP. 30, 2017, (N=336)**

Stool Specimen Result	Stool Specimen 1		Stool Specimen 2	
Positive for poliovirus	0	0%	0	0%
Negative for poliovirus	259	77%	249	74%
Sabin-like poliovirus	5	1%	5	1%
Non-polio enterovirus	33	10%	23	7%
Not tested	1	0%	1	0%
No stool	34	10%	53	16%
Pending Lab Results	4	1%	5	1%
<b>Total</b>	<b>336</b>	<b>100%</b>	<b>336</b>	<b>100%</b>

**VIRUS ISOLATION AND GENOTYPING**

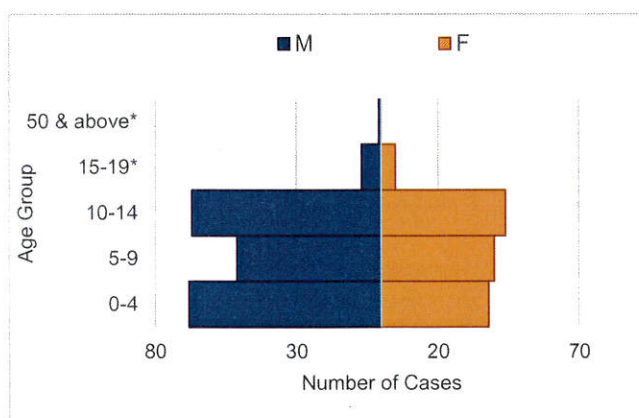
Table 2 shows the AFP stool specimen test results from the National Polio Laboratory (NPL) of the Research Institute of Tropical Medicine (RITM). There were **0** isolated poliovirus from January 1 to September 30, 2017. Among the **336** cases, **259 (77%)** from the 1<sup>st</sup> stool specimen and **249 (74%)** from the 2<sup>nd</sup> stool specimen tested negative for poliovirus. **Five (5)** cases had viral isolation of Sabin-like poliovirus type 1 and 3 from both stool 1 and stool 2 specimen. These cases were reported from Regions III, IV-A and XI respectively.

**PROFILE OF CASES**

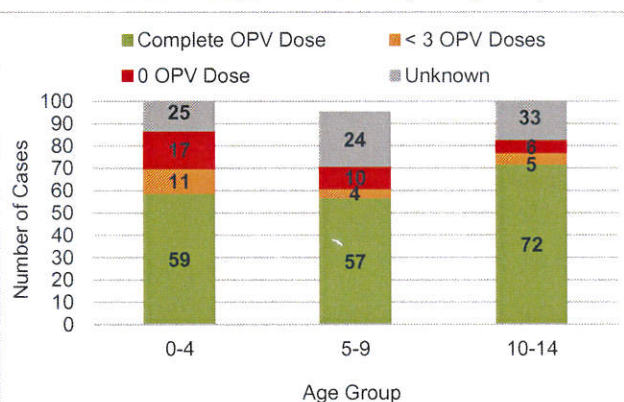
Among the reported AFP cases, **194 (58%)** are Males and **142 (42%)** are Females. Age ranges from 0 days to 78 years of age. There were **13 (4%)** cases ages 15 and above who were reported as AFP but were classified as not AFP. Most of the AFP cases reported belong to the 10-14 age group (**116, 35%**) (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. Between ages 0-14 yrs old, only **188 (58%)** had completed their OPV dose; the rest of the cases had either no OPV dose, incomplete OPV dose received or unknown. (Figure 3).

**FIGURE 2 . AFP REPORTED CASES BY SEX AND AGE GROUP PHILIPPINES, JAN. 1 – SEP. 30, 2017 (N=336)**

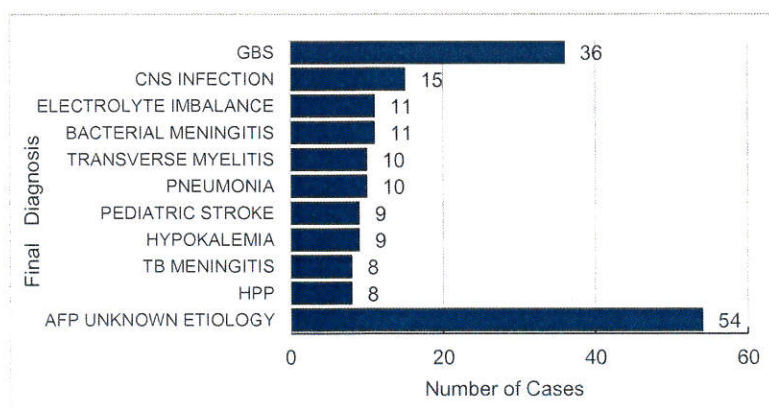


**FIGURE 3 . IMMUNIZATION STATUS AMONG AFP CASES BY POLIO VACCINATION DOSE AND AGE GROUP PHILIPPINES, JAN. 1 – SEP. 30, 2017 (n=323)**



\*Not AFP cases

**FIGURE 4 . TOP 10 DIAGNOSIS OF NON-POLIO AFP CASES, PHILIPPINES, JAN. 1 – SEP. 30, 2017, (n=181),**



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 common disease among the non-polio AFP cases reported.

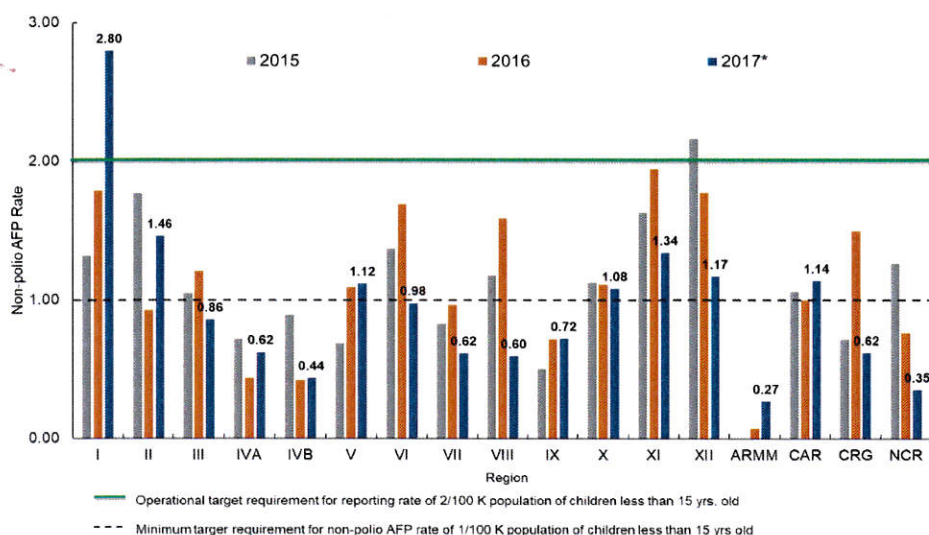




## SURVEILLANCE PERFORMANCE INDICATORS - AFP REPORTING RATE AND NON-POLIO AFP RATE

From January 1 to September 30, 2017, there were **336** AFP cases reported, providing the Philippines a reporting rate of **1.12** per 100,000 population of children under 15 years old. **Ten (10)** Regions were able to reach and surpass the minimum target. **Two hundred sixty-seven (267)** have been discarded as non-polio; which gives us a non-polio AFP rate of **0.89/100,000** population of children under 15 years old. **Seven (7)** Region reached the target while **three (3)** Regions were substantially below the target. (Figure 5 & Table 3)

FIGURE 5. THREE-YEAR COMPARISON OF NON-POLIO AFP RATE BY REGION, PHILIPPINES, 2015 – 2017\*



\*data from January 1 to September 30, 2017

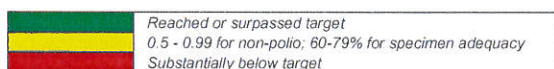


TABLE 3. REPORTING AND NON-POLIO AFP RATE AS OF MW 1-39

REGION	Reporting Rate	Non-Polio AFP Rate
I	3.33	2.80
II	1.85	1.46
III	1.20	0.86
IVA	0.86	0.62
IVB	0.55	0.44
V	1.29	1.12
VI	1.13	0.98
VII	0.62	0.62
VIII	0.75	0.60
IX	0.99	0.72
X	1.30	1.08
XI	1.60	1.34
XII	1.39	1.17
ARMM	0.54	0.27
CAR	1.33	1.14
CRG	0.62	0.62
NCR	0.60	0.35
PHL	1.12	0.89

## 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. Among the **268\*** AFP cases, **201 cases** have 2 stool specimens collected within 14 days from onset which gives us an adequacy rate of **75%**. (Table 4). A portion (**42, 16%**) had 2 stool specimen collected beyond the required collection period. Among the 17 Regions, **8 Regions** have reached or surpassed the target rate of at 80%. (Figure 6 & Table 4)

FIGURE 6. STOOL SPECIMEN ADEQUACY RATE BY REGION, PHILIPPINES, JAN. 1 – SEP. 30, 2017

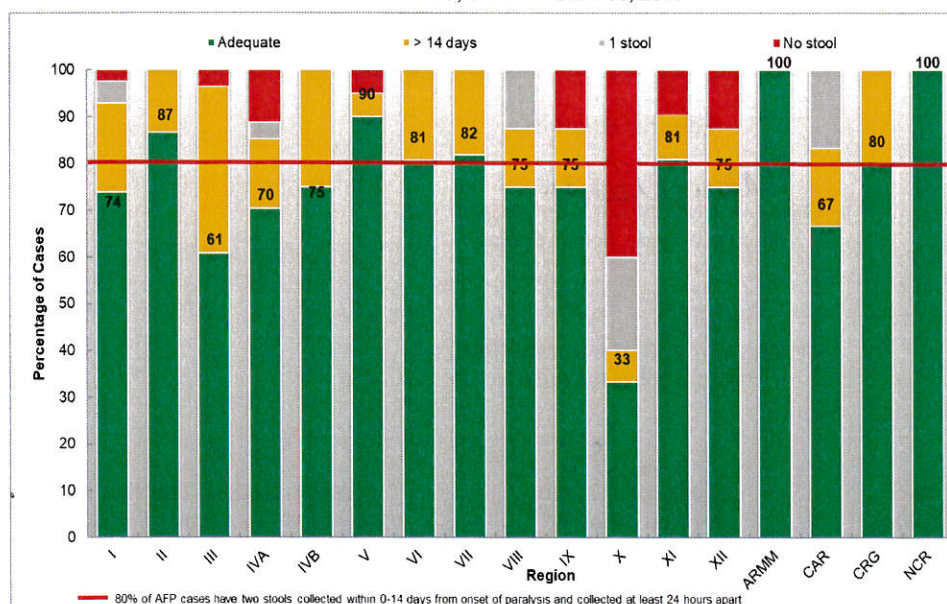


TABLE 4. STOOL SPECIMEN ADEQUACY RATE OF MW 1-39

Region	Stool Specimen Adequacy Rate
I	74
II	87
III	61
IVA	70
IVB	75
V	90
VI	81
VII	82
VIII	75
IX	75
X	33
XI	81
XII	75
ARMM	100
CAR	67
CRG	80
NCR	100
PHL	75

\*not AFP and pending cases excluded in the stool specimen adequacy analysis

Case counts reported here do NOT represent the final number and are subject to change after inclusion of delayed reports and review of cases.





**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.

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