



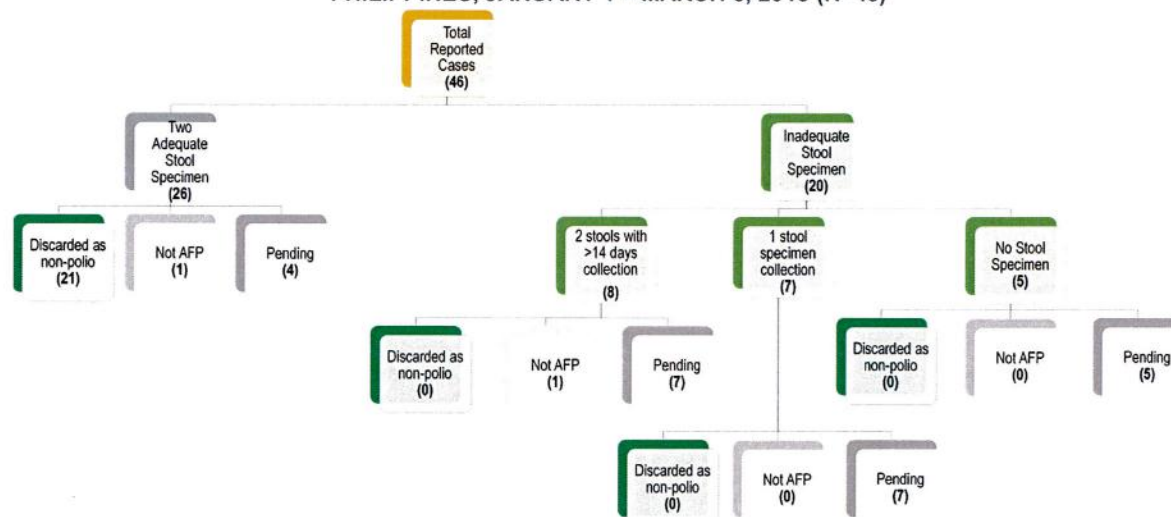
### CLASSIFICATION OF ACUTE FLACCID PARALYSIS (AFP) CASES

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 **46** AFP cases were reported nationwide from January 1 to March 3, 2018 (Figure 1). Of these, **21 (45.7%)** have been **discarded as non-polio AFP**, while **23 (50.0%)** are still pending for 60 day follow-up and official laboratory result (Table 1). There were **2 (4.3%)** reported cases that did not fit the case definition and were classified as **not AFP**.

About **57%** of the total reported AFP cases have adequate stool specimen, while the rest are either with complete stool but with more than 14 days of specimen collection (**8, 17%**), **5 (11%)** had no stool specimen collected and a portion (**7, 15%**) had only 1 stool specimen collected (Figure 1).

**FIGURE 1. CLASSIFICATION\* OF ACUTE FLACCID PARALYSIS CASES, PHILIPPINES, JANUARY 1 – MARCH 3, 2018 (N=46)**



**TABLE 1. AFP CASES BY REGION AND CLASSIFICATION\* PHILIPPINES, JANUARY 1 – MARCH 3, 2018 (N=46)**

| REGION      | 2018 Target AFP Cases** |            | Reported Cases as of MW 1-9 | Classification*       |          |           | Total Number of Classified Cases |
|-------------|-------------------------|------------|-----------------------------|-----------------------|----------|-----------|----------------------------------|
|             | 2/100k                  | 1/100k     |                             | Non-Polio (Discarded) | NOT AFP  | Pending   |                                  |
| Region I    | 31                      | 16         | 2                           | 0                     | 0        | 2         | 0                                |
| Region II   | 22                      | 11         | 1                           | 1                     | 0        | 0         | 1                                |
| Region III  | 71                      | 36         | 5                           | 0                     | 0        | 5         | 0                                |
| Region IVA  | 93                      | 47         | 7                           | 4                     | 0        | 3         | 4                                |
| Region IVB  | 22                      | 11         | 0                           | 0                     | 0        | 0         | 0                                |
| Region V    | 44                      | 22         | 5                           | 4                     | 1        | 0         | 5                                |
| Region VI   | 48                      | 24         | 7                           | 5                     | 0        | 2         | 5                                |
| Region VII  | 50                      | 25         | 1                           | 1                     | 0        | 0         | 1                                |
| Region VIII | 32                      | 16         | 7                           | 3                     | 1        | 3         | 4                                |
| Region IX   | 26                      | 13         | 0                           | 0                     | 0        | 0         | 0                                |
| Region X    | 34                      | 17         | 0                           | 0                     | 0        | 0         | 0                                |
| Region XI   | 33                      | 17         | 1                           | 0                     | 0        | 1         | 0                                |
| Region XII  | 33                      | 16         | 5                           | 2                     | 0        | 3         | 2                                |
| ARMM        | 35                      | 17         | 0                           | 0                     | 0        | 0         | 0                                |
| CAR         | 11                      | 6          | 0                           | 0                     | 0        | 0         | 0                                |
| CARAGA      | 19                      | 9          | 0                           | 0                     | 0        | 0         | 0                                |
| NCR         | 73                      | 37         | 5                           | 1                     | 0        | 4         | 1                                |
| <b>PHIL</b> | <b>676</b>              | <b>338</b> | <b>46</b>                   | <b>21</b>             | <b>2</b> | <b>23</b> | <b>23</b>                        |

\*\*Based on the 2015 PSA single-age cohort projected population





**TABLE 2. STOOL SPECIMEN RESULT AMONG REPORTED AFP CASES, PHILIPPINES, JAN. 1 – MAR. 3, 2018, (N=46)**

| Stool Specimen Result   | Stool Specimen 1 |             | Stool Specimen 2 |             |
|-------------------------|------------------|-------------|------------------|-------------|
| Positive for poliovirus | 0                | 0.0%        | 0                | 0.0%        |
| Negative for poliovirus | 28               | 60.9%       | 23               | 50.0%       |
| Sabin-like poliovirus   | 0                | 0.0%        | 0                | 0.0%        |
| Non-polio enterovirus   | 1                | 2.2%        | 1                | 2.2%        |
| Not tested              | 0                | 0.0%        | 0                | 0.0%        |
| No stool                | 5                | 10.9%       | 12               | 26.1%       |
| Pending Lab Results     | 12               | 26.1%       | 10               | 21.7%       |
| <b>Total</b>            | <b>46</b>        | <b>100%</b> | <b>46</b>        | <b>100%</b> |

**VIRUS ISOLATION AND GENOTYPING**

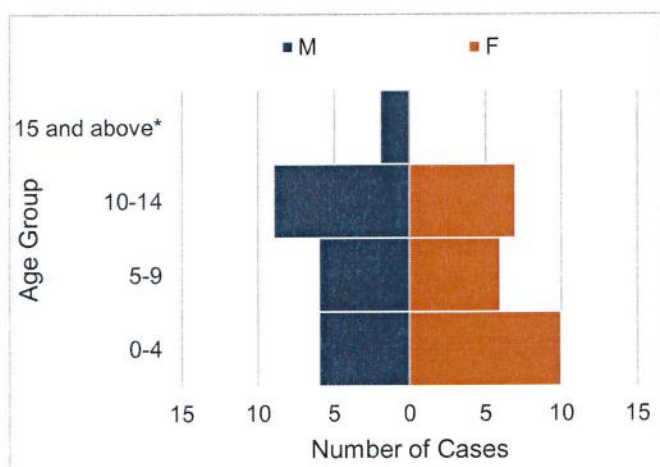
Table 2 shows the AFP stool specimen test results from the National Polio Laboratory (NPL) of the Research Institute of Tropical Medicine (RITM). There were **no** isolated poliovirus from January 1 to March 3, 2018. Among the 46 cases, majority of stool 1 and stool 2 tested negative for poliovirus. The remaining AFP cases are awaiting for official laboratory results.

**PROFILE OF CASES**

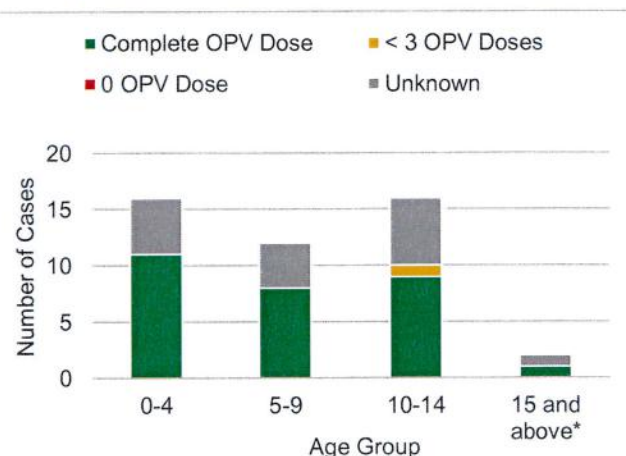
Among the reported AFP cases, there were equal distribution of males and females. Age ranges from 9 months to 16 years of age. Most of the AFP cases reported belong to the 0-4 (**16, 35%**) & 10-14 age group (**16, 35%**) (Figure 2).

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. Among the 46 reported AFPs, **29 (63%)** had completed their OPV dose; the rest of the cases had either, incomplete OPV dose received or unknown. (Figure 3).

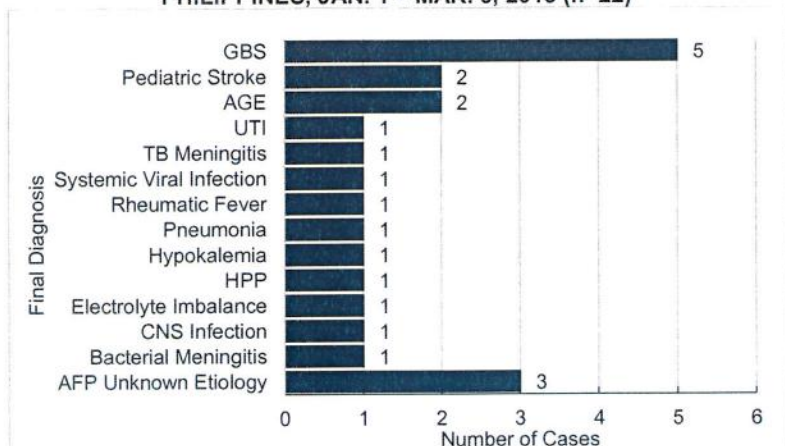
**FIGURE 2 . AFP REPORTED CASES BY SEX AND AGE GROUP PHILIPPINES, JAN. 1 – MAR. 3, 2018 (N=46)**



**FIGURE 3 . IMMUNIZATION STATUS OF AFP CASES BY POLIO VACCINATION DOSE AND AGE GROUP PHILIPPINES, JAN. 1 – MAR. 3, 2018 (N=46)**



**FIGURE 4 . TOP 10 DIAGNOSIS OF NON-POLIO AFP CASES, PHILIPPINES, JAN. 1 – MAR. 3, 2018 (n=22)**



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.

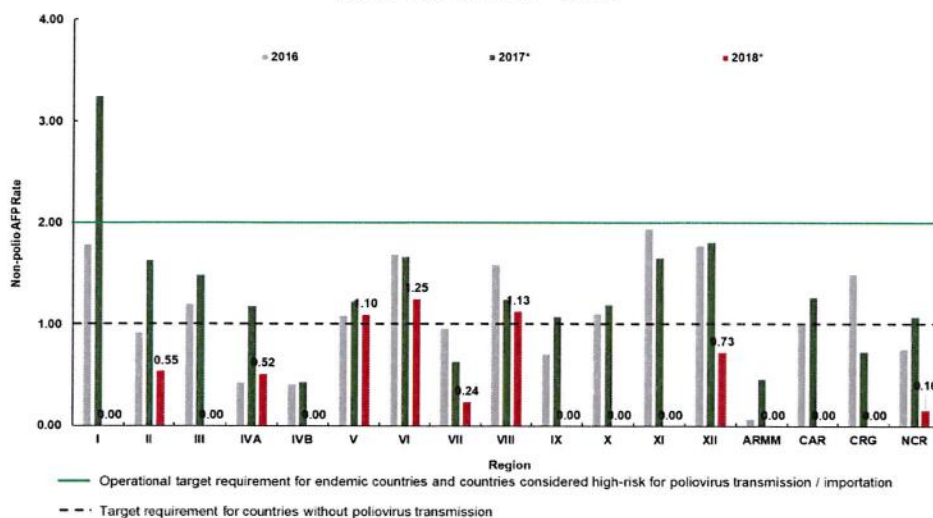




**SURVEILLANCE PERFORMANCE INDICATORS - AFP REPORTING RATE AND NON-POLIO AFP RATE**

From January 1 to March 3, 2018 there were **46** AFP cases reported, providing the Philippines a reporting rate of 0.82 / 100,000 population of children under 15 years old. **Three (3)** regions were able to reach and surpass the target. The incidence of AFP (**non-polio AFP rate**) caused by diseases other than poliomyelitis is **0.37 / 100,000** population of children under 15 years of age. All other regions except **Regions 5, 6 and 8** were below the target. (Figure 5 & Table 3)

**FIGURE 5. THREE-YEAR COMPARISON OF NON-POLIO AFP RATE\* BY REGION, PHILIPPINES, 2016 – 2018\***



\*data from January 1 to March 3, 2018

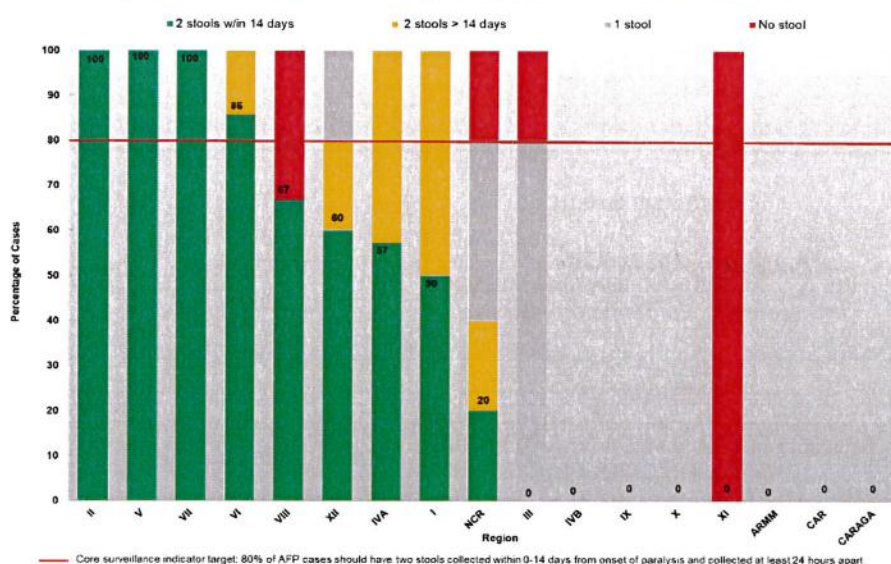
**TABLE 3. REPORTING AND NON-POLIO AFP RATE AS OF MW 1-9**

| REGION | Reporting Rate | Non-Polio AFP Rate |
|--------|----------------|--------------------|
| I      | 0.77           | 0.00               |
| II     | 0.55           | 0.55               |
| III    | 0.84           | 0.00               |
| IVA    | 0.90           | 0.52               |
| IVB    | 0.00           | 0.00               |
| V      | 1.38           | 1.10               |
| VI     | 1.75           | 1.25               |
| VII    | 0.24           | 0.24               |
| VIII   | 2.64           | 1.13               |
| IX     | 0.00           | 0.00               |
| X      | 0.00           | 0.00               |
| XI     | 0.36           | 0.00               |
| XII    | 1.83           | 0.73               |
| ARMM   | 0.00           | 0.00               |
| CAR    | 0.00           | 0.00               |
| CRG    | 0.00           | 0.00               |
| NCR    | 0.82           | 0.16               |
| PHL    | 0.82           | 0.37               |

**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 **44 non-polio** AFP cases, **25 cases** have 2 stool specimens collected within 14 days from onset which gives us an adequacy rate of **57%**. (Table 4). A portion (**7, 16%**) had 2 stool specimen collected beyond the required collection period. Among the 17 Regions, **4** Regions have reached or surpassed the target rate of at 80%. (Figure 6 & Table 4)

**FIGURE 6. STOOL SPECIMEN ADEQUACY RATE AMONG NON-POLIO AFP CASES BY REGION, PHILIPPINES, JAN. 1 – MAR. 3, 2018**



\*Not AFP Cases excluded in the specimen adequacy analysis

**TABLE 4. STOOL SPECIMEN ADEQUACY RATE OF MW 1- 9**

| Region | Stool Specimen Adequacy Rate |
|--------|------------------------------|
| I      | 50                           |
| II     | 100                          |
| III    | 0                            |
| IVA    | 57                           |
| IVB    | 0                            |
| V      | 100                          |
| VI     | 86                           |
| VII    | 100                          |
| VIII   | 67                           |
| IX     | 0                            |
| X      | 0                            |
| XI     | 0                            |
| XII    | 60                           |
| ARMM   | 0                            |
| CAR    | 0                            |
| CRG    | 0                            |
| NCR    | 20                           |
| PHL    | 57                           |

Legend:

|  |
|--|
| Reached or surpassed target                            |
| 0.5 - 0.99 for non-polio; 60-79% for specimen adequacy |
| Substantially below target                             |






**Definition of Terms**

|  |  |
|--|--|
| <b>Acute flaccid paralysis (AFP) case</b>                | 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.  |
| <b>Cluster of AFP cases</b>                              | 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.  |
| <b>Circulating Vaccine-derived poliovirus (cVDPV)</b>    | 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.   |
| <b>Confirmed polio</b>                                   | Refers to an AFP case that was laboratory-confirmed with wild poliovirus.  |
| <b>Discarded as non-polio</b>                            | Refers to AFP cases classified by the expert panel committee as non-polio in which the paralysis is not caused by poliovirus.  |
| <b>Hot case</b>  | 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.  |
| <b>Non-polio AFP Rate</b>                                | Incidence of AFP caused by diseases other than poliomyelitis.  |
| <b>Non-polio Enterovirus</b>                             | Refers to enterovirus (i.e. echovirus, coxsackie virus) other than poliovirus isolated from specimens.   |
| <b>Oral poliovirus vaccine (OPV)</b>                     | 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.  |
| <b>Polio compatible</b>                                  | Refers to an AFP case which does not have an adequate stool collected, died or was lost to follow-up.  |
| <b>Sabin-like</b>  | 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.                  |
| <b>Vaccine-derived poliovirus (VDPV)</b>                 | 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.   |
| <b>Vaccine-associated paralytic poliomyelitis (VAPP)</b> | 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. |
| <b>Wild poliovirus (WPV)</b>                             | 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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