

Philippine Acute Flaccid Paralysis Program: Manual of Operations

Acute Flaccid Paralysis (AFP) is a syndrome manifested as floppy paralysis. It is not a disease condition. An AFP case is any child under 15 years of age with acute onset of floppy paralysis, or a person of any age in whom poliomyelitis is suspected by a physician.

To understand the case definition further, the surveillance staff may use the following as reference to identify a “true” AFP case:

- Acute - means a sudden onset of paralysis. Usually the interval from the first sign of muscle weakness to inability to move the affected limb(s) takes 3-4 days but may extend to two weeks
- Flaccid - is the loss of muscle tone of the affected limb(s) giving it a “*floppy*” appearance (as opposed to spastic or rigid)
- Paralysis - is the reduced or loss of ability to move the affected limb(s)

A. Case Detection and Notification

The Disease Surveillance Officers (DSOs)/Disease Surveillance Coordinators (DSCs) should conduct daily active case finding to detect cases. To ensure that all cases are detected, DSOs/DSCs should also review patient’s records/logbooks of the health facility based on the following differential diagnoses: Poliomyelitis, Guillain-Barré Syndrome, Myelitis (i.e. Transverse myelitis, Pott’s disease), traumatic neuritis, and other disease as long as AFP is manifested. Reporting of all patients that satisfy the standard case definition within 24 hours after detection, regardless of the physician’s diagnosis will be done.

B. Case Investigation

Case investigation should be done within 48 hours upon notification. Complete investigation includes completion of the standard case investigation form, collection of specimen and search for other cases.

1. Verify if the case satisfies the case definition for AFP

Any reported cases from the Disease Reporting Advocate (DRA)/DSC should be verified by the DSO/Epidemiology and Surveillance Unit (ESU) using the questions listed below.

Question	Answer	Remarks
1) Is the patient less than 15 years old?	Yes	If "No", investigate any age if suspected polio by a physician
2) Does the patient have floppy paralysis?	Yes	
3) Did the paralysis develop suddenly/rapidly? (see definition of acute)	Yes	
4) Is the paralysis NOT present from birth?	Yes	
Note: Any "NO" answer in the above will not merit an investigation except for question#1		

2. Interview and examine the case

The DSO uses a **Standard Case Investigation Form (CIF)** to collect adequate information about the case. Data collection is primarily done through interview of the patient's health service provider and family/caregiver.

- ✓ It is important to document the complete contact information and exact residential address, including the name or number of the barangay during the interview.
- ✓ Before the interview ends, review the patient's data in the CIF for completeness and accuracy.
- ✓ The investigator should take note that adult cases with spastic paralysis or paralysis resulting from trauma should not be further investigated.

- ✓ Adult cases with acute flaccid paralysis will only be reported and investigated when the doctor suspects polio.
- ✓ Likewise, generalized body weakness, unless there is evidence of reduced/absence of deep tendon reflexes and/or motor function in any of the limbs, should not be mistakenly reported as AFP case.
- ✓ The DSO should actively coordinated with the attending physician to determine if the case is AFP.

3. Collect additional information

- Once an AFP case is identified, the investigator should review the patients' medical chart for any additional information, particularly if patients have been discharged.
- Usually when the patient is hospitalized, the attending physician makes a working diagnosis which may not necessarily be AFP. Investigators should coordinate with the physician to determine if the case is AFP.

4. Collect specimens from each case

Stools should be collected within 14 days of paralysis onset. Ideally, the two stool specimens should be collected at least 24 hours apart. Refer to the next section for guidelines in specimen collection.

5. Submit the completed AFP CIF

- a. Prior to submission, review CIF for completeness and consistency of information.
- b. Investigators should attach a copy of the patient's medical record (history, clinical abstract, physical examination, progress notes, discharge summary, diagnostic procedures [CT scan, EEG, MRI] and laboratory results [CBC, electrolytes] to the investigation form.
- c. Submit the completed CIF immediately upon investigation to the respective ESUs or to the next higher level and to NEC.
- d. Enclose a copy of the CIF when submitting properly-labeled stool specimens to the National Polio Reference Laboratory (RITM-Virology Department).

Virology Department
Research Institute for Tropical Medicine-Virology Department 9002 Research Drive,
Filinvest Corporate City Compound Alabang, Muntinlupa City, 1781
Tel. No. 02-8097120

- *Refer the cases for appropriate medical treatment*
- *If the case is due for vaccination, make sure that specimens are collected prior to the administration of vaccine.*

6. Search for additional cases

- An AFP cluster is defined as 2 or more AFP cases reported from one barangay/

municipality within a period of 4 weeks.

- Once a cluster is identified, coordinate to find out if there are other cases from the same barangay/municipality.
- Review patient's record/individual treatment record of health facilities (RHUs/HCs/hospitals) based on the differential diagnosis to find out if there are other cases.
- If additional cases are found, investigate.

7. Conduct 60-day follow-up examination

All AFP cases (irrespective of adequacy of stool) are followed up 60 days after the onset of paralysis to determine if residual paralysis or weakness is present.

C. Case confirmation

1. Stool Collection and Storage procedures

- a. Collect two adult's thumb-sized stool specimens (at least 24 hours apart) from each AFP case within 14 days from paralysis onset.
- b. For watery stool specimen, collect at least 5 ml of the stool specimen.
- c. Use a standard stool specimen container or any clean, leak-proof screw-capped container.
- d. Properly label specimens with the name of the patient, date of collection and specimen number (1 or 2). The side of the container, not the cap, should be labeled. Use a water-resistant pen to label specimen container.
- e. Immediately after collection, the specimens must be placed in the body of the refrigerator for shipment or in a specimen carrier box between frozen ice packs at 4-8 °C, changing ice packs every 24 hours and just before specimens are shipped to RITM until transport arrangement has been made.

If immediate shipment within 3 days of collection is not possible, the specimens have to be frozen (at -20 °C) and then shipped frozen, preferably with dry ice or with ice packs that have been frozen at -20 °C

- Adequate stool specimen - 2 stool specimens both collected within 14 days from the onset of paralysis with a collection interval of at least 24 hours
- Inadequate stool specimen - 1 or both stool specimens collected beyond 14 days from the onset of paralysis or only one or no specimen is collected

2. Specimen transport procedure

- a. Wrap the specimen containers in absorbent material (e.g. cotton), seal them in a zip-lock plastic bag.
- b. Enclose a copy of the completely filled up CIF placed inside a separate zip-lock plastic bag. **DO NOT** wrap the forms around the specimens.
- c. Transport the specimens using a well insulated specimen transport box with at least 4 frozen ice packs inside: put frozen ice packs in first, at the bottom and at the sides of the carrier box; then place specimens at the middle so that they are surrounded by the ice packs. Cover the carrier box. Place the sealed CIF on top and secure with tape.
- d. Send the specimens via fastest courier or call the (City Epidemiology and Surveillance Unit (CESU), Provincial Epidemiology and Surveillance Unit (PESU), or Regional Epidemiology and Surveillance Unit (RESU) to arrange pick up. Specimens must arrive at the laboratory within 3 days of collection, otherwise they should be frozen - 20 °C, and then shipped frozen.
- e. If sending of specimens will be done during weekends or holidays, inform RITM Virology staff of the expected arrival of the specimens.
- f. Address shipment to:

<p>Virology Department Research Institute for Tropical Medicine-Virology Department 9002 Research Drive, Filinvest Corporate City Compound Alabang, Muntinlupa City, 1781 Tel. No. 02-8097120</p>

3. “Hot case” definition

An AFP case that satisfies the following criteria:

✓ A child **less than 5 years old** with **less than 3 doses of OPV** and **had fever at the onset of asymmetrical paralysis,**

OR

✓ A person of any age whose stool sample yields a **positive L20B isolate*** regardless of

genotype

** Wild poliovirus/VDPV is ruled out when the Intratypic Differentiation (ITD) result is “Sabin-like”. This means that the isolate is the live-attenuated virus component of the oral polio vaccine (OPV).*

Report all AFP hot cases within 24 hours to RESU and NEC for appropriate and immediate action.

4. What to do when an AFP “Hot case” is reported?

- a. Conduct further investigation of the case to determine the following:
- b. Conduct retrospective records review in the hospital/health facility where the child was seen. It shall cover the period of 60 days prior to onset of paralysis of the case.
- c. Recommend to RHUs and hospitals to continuously monitor and report subsequent AFP cases.
- d. All additional and new AFP cases in the area must be immediately reported and completely investigated.
- e. Conduct OPV follow-up immunization activity among under 5 years old population who did not complete the 3 doses of OPV in the municipality/city.

- *Submit investigation report and immunization activity to ESUs, NEC and EPI*
- *Coordinate with CHD on risk communication and other assistance*
- *Provide medical assistance to the patient and complete the 3 doses of OPV and all other antigens*

D. 60-Day Follow-up

A follow-up visit to an AFP case is important to determine the presence of residual paralysis. All AFP cases should be followed up on the 60th day from onset of paralysis. Priority should be given to AFP case that falls in any of the following: without stool samples, stool samples were collected beyond 14 days from paralysis onset, cases classified as polio-compatible, AFP hot case. For cases with inadequate stool specimen or cases classified as polio-compatible, a complete follow-up neurologic evaluation should be conducted by a physician or a trained health worker to determine if the neurologic deficits are highly suggestive/compatible with polio. The patient may be declared “lost to follow-up” after three failed attempts to locate him or her within 90 days after paralysis onset. Death of the patient before the 60-day follow-up should be reported immediately to RESU and NEC.

If the case moves to another region, the surveillance officer of that region should be

requested to conduct the 60-day follow-up examination.

E. Case classification

Expert Panel Classification: the main responsibility of the AFP/Polio Expert Review Committee is to review and classify all the AFP cases reported and entered into the surveillance system. Complete medical records with relevant information and laboratory results should be provided especially for cases with inadequate stool specimen to facilitate case classification.