Strategies, objectives, definitions and steps for AFP surveillance for polio eradication in Kenya. Colour lithograph by Ministry of Public Health and Sanitation, ca. 2000.

AFP SURVEILLANCE FOR POLIO ERADICATION

I. STRATEGIES FOR POLIO ERADICATION INITIATIVE

1. **Routine Immunization** Attaining high coverage (at least 80%) with at least 3 doses of Oral Polio Vaccine (OPV)
2. **Supplementary Immunization** with administration of OPV to all children aged less than 5 years old, during National Immunization Days (NIDs);
3. **Surveillance of Acute Flaccid Paralysis** (AFP); See AFP case definition.
4. **"Mopping up" Campaign** when transmission of wild poliovirus is limited to a precise area or when there has been an importation.

II OBJECTIVES OF SURVEILLANCE OF AFP

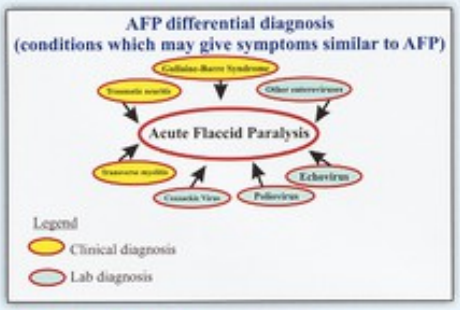
1. Monitor progress made in the Polio Eradication initiative (performance indicators for AFP surveillance).
2. Identify areas or groups at risk.
3. Demonstrate the absence of circulation of Wild poliovirus through laboratory.

III AFP CASE DEFINITION

All cases to be notified and investigated are cases suspected of being AFP which meet the following definition:

Any child under 15 years of age with Acute (sudden onset) Flaccid Paralysis (weakness of the limb – arm, leg or both), or any person of any age when Polio is suspected by a clinician.

In other words, we can define AFP as any case of a child who was walking and cannot any more or any child who was crawling and cannot any more or can't use any of the limbs anymore.



IV ACTORS AND THEIR ROLES

Those involved in AFP surveillance are: All health personnel in both public and private sectors, the traditional healers and community health workers and members of the community (community liaisons, members of health committees, teachers etc).

1. Actors at National level will be responsible for:
a. Ensuring logistics are in place for investigation.
b. Providing regular and timely feedback.
c. Facilitating relaying of laboratory results.

2. Actors at the Provincial/District level will be responsible for:
a. Ensuring logistics are in place for investigation.
b. Providing regular and timely feedback.
c. Facilitating shipment of samples to KEMRI.
d. Following up of cases 60 days from onset of Paralysis.

3. Actors at the facility level (focal points) will:
a. Notify all AFP cases
b. Investigate all AFP cases and collect samples,
c. Ensure the reverse cold chain until the shipment of samples,
d. Ensure all tools for investigation are in stock.

4. Community Health Worker will be responsible for:
a. Notifying cases to health workers
b. Sensitizing/mobilizing community members

V CONDUCTING ACTIVE AFP SURVEILLANCE IN A SITE BY FACILITY SURVEILLANCE COORDINATOR

All health institutions private, public, faith based, must have a surveillance coordinator whose responsibilities consist of actively searching for AFP cases in the facility in order to:

- Identify cases not reported by passive surveillance.
- Encourage health personnel to report all AFP cases.
- Train/sensitize health personnel.
- Ensure that surveillance activities are carried out normally and correct eventual mistakes.

The areas for search will include; Outpatient, wards where children under 15years of age are admitted, physiotherapy, occupational therapy, and the records departments. During Active AFP search, the surveillance focal point will:

1. Ask the head of the section if he/she saw patients presenting with paralysis of the limbs.
2. Go through the outpatient and inpatient consultation registers in these departments on the diagnostic column.
3. Search for all cases with paralysis, paresis, paraplegia, hemiplegia, hemiparesis or functional limitation of the limbs
4. For each such identified case, identify all cases aged 15 yrs or less noting their file numbers (Outpatient or inpatient numbers)
5. Have those files retrieved and peruse details to determine whether they are true AFP cases and investigate them if onset of paralysis occurred within 2 months.
6. Sign the register with own name and date of visit.
7. If there are new staff, ensure that you give on the job sensitization.

VI- STEPS OF AFP SURVEILLANCE

1. **Detection** of AFP cases by use of AFP case definition. It can be conducted by community or by health workers.

2. Notification
It is the declaration of any AFP cases encountered in the community. Notification is done to a health worker of a health structure capable and equipped to conduct investigation and collect samples.

3. Investigation
This consists of a systematic medical exam that will allow confirming or not confirming the presence of an acute flaccid paralysis. It should be conducted by the clinician within 48 hours with collection of stool samples. An IDSR investigation form should be correctly filled, according to given instructions. This form will be filled in 4 copies:

- One copy to be kept by the facility
- One copy to the district office
- One copy to the provincial office
- One copy accompanies the sample to the laboratory

Specimen bottles must be labeled with **patient name, date of collection, facility name** and **district name.**

4. Stool Sample Collection
The investigator must explain to the parents the exact reasons for collecting samples. **Two (2) stool samples spaced by 24 to 48 hours** should be collected preferably **in the first 14 days from the date of onset** of the paralysis. However, if the case is detected after 14 days of paralysis onset, specimen should be collected only up to 60 days of paralysis onset.
Note: If only 1 stool sample is collected, or if the stools were collected more than 14 days from onset of paralysis, these stools are called **inadequate stools.** More clinical information should then be obtained from the clinician and sent to the national office to aid in ascertaining what caused the paralysis.

Collection kit:

- Vaccine carrier with frozen ice packs (This should never be reused for vaccines after this),
- Standard stool specimen containers,
- Plastic bags for preservation of the forms and containers,
- IDSR case investigation forms.

5. Stool Samples shipments to the laboratory
Stool samples shipments to the laboratory should be within 72 hrs (3 days) after collection to maintain quality of stool samples. Reverse cold chain must be maintained through out. The accompanying form must be correctly filled with the details of the child.

Shipment of Samples
Before shipping the samples to KEMRI:

- Notify the national level on the mode of shipment;
- Check the status of the reverse cold chain;
- Check that the investigation form is correctly filled out;
- Make sure specimen bottles have been labeled;
- Send the samples(accompanied by the IDSR forms) as soon as possible.
- Call national office or KEMRI to inform of samples' time and date of arrival.

6. Follow up Examination
All cases must be followed up after 60 days from onset date of paralysis to check whether there is residual paralysis. In principle the same person who initially investigated the case, should do follow up examination, but a nurse, doctor or a physiotherapist can review the patient. The initial investigation form must be always be available during this follow-up examination. The findings of the physical examination will be written down on a 60 days follow-up form with copies to all relevant levels. Where necessary, clinical notes may accompany the form. These findings will help the national expert committee conduct final classification of the cases.

The following results are expected:

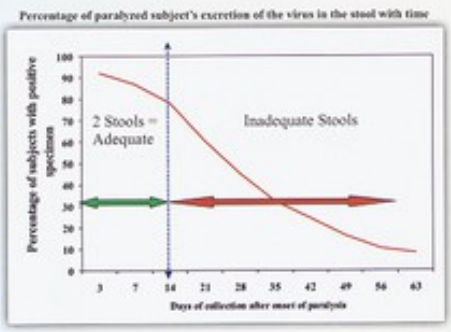
1. **Weakness or residual paralysis: 60 days after, persistent paralysis;**
2. **No residual paralysis : after the 60th day, paralysis has been resolved, the limb(s) functions again, normally;**
3. **Lost follow up: a case for which there is no trace of the patient (change of address…)**
4. **Deceased.**
(Indicate the appropriate code for your finding)

VII SOME IMPORTANT TERMS

INADEQUATE CASES
These are AFP cases:

- With either of the stool samples collected more than 14 days after onset of paralysis
- For which the 2 stool samples have been collected within less than 24 hours or more than 48 hours of interval;
- For which only one stool specimen have been collected;
- Notified but no samples collection.
- For which the amount of stool sample is not sufficient (less than 8-10 grams)
- For which samples arrive to the laboratory and are judged in poor conditions (dry, leakage, evidence of reverse cold chain breakdown, investigation form incorrectly filled out, for example: Omission of certain important variables, such as the date of onset of paralysis…)
- For all inadequate case a late stool questionaire should be administered

ADEQUATE CASES
These are cases with 2 stool specimens of at least 8 grams each collected between 24 and 48 hours apart within 14 days of onset of paralysis and arriving to the lab in good condition.



Further information can be obtained from:

1. **Division of Disease Surveillance and Response (DDSR)**
P. O. Box 30016 - 00100 Nairobi Tel: 020 - 2718292 / 2303348 / 2717077, Email: dcdc@health.go.ke
2. **Provincial Directors of Public Health and Sanitation (PDPHS) -** All respective Provinces
3. **District Medical Officers of Health offices (DMOH) -** All respective Districts
4. **KEMRI – Polio Lab. P.O Box 54628 - 00200 Nairobi, Tel: 2717221 or 2722541 Ext. 2265 Email: polioke@kemri.org**

AFP Pocket Handbook available at DDSR

Ministry of Public Health and Sanitation

World Health Organization