



# Role of clinician in AFP surveillance

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# Disease surveillance- Definition

Surveillance is the ongoing, systematic collection, analysis, interpretation and dissemination of health-related data essential to the planning, implementation, and evaluation of public health practice.



**Surveillance is data collection for action**

# Uses of Disease surveillance

- Predict or detect disease outbreaks with a view to containment;
- Identify high risk populations & areas requiring special attention
- Monitor impact and progress towards eradication, elimination & control
- Identify areas in which systematic performance is poor
- Determine the frequency of occurrence of a disease in a community and burden of disease

# EPI Diseases surveillance in Kenya

- Active Disease Surveillance was initiated in Kenya in 1995,
- Implemented on an integrated approach on 3 EPI target diseases
  - Poliomyelitis - for Eradication
  - Measles - for Control
  - Neonatal Tetanus - for Elimination

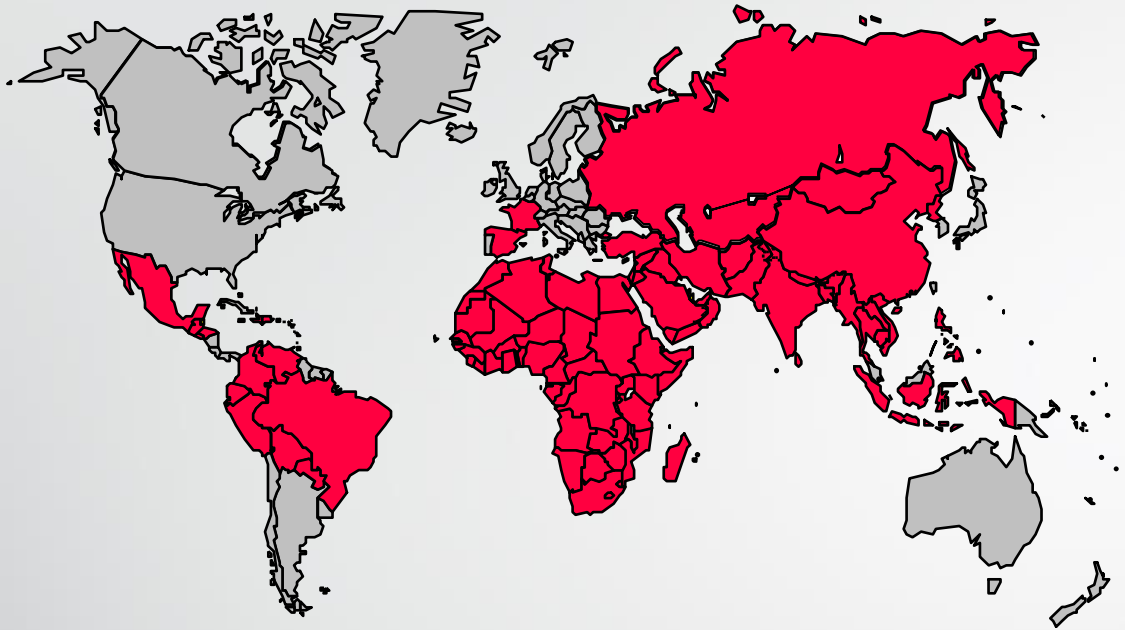
# POLIOMYELITIS

- Type 1 most frequently causes epidemics
- Most vaccine associated cases are due to type 2 or 3.
- Type 2 wild poliovirus has not been isolated since 1999
- Type 3 wild poliovirus has not been isolated since 2012

# Strategies for eradication of polio

- Routine immunization programme – Achieving high routine immunization coverage with at least 3 doses of OPV.
- National Immunization Days – critical for interrupting wild poliovirus circulation or for building population immunity to prevent importation.
- Acute Flaccid Paralysis surveillance - This includes reporting of ALL AFP cases, investigating them and testing all stool specimens collected from such cases for polioviruses in specialized labs.
- Mopping-up immunization – When wild poliovirus is confined to small geographical area.

# Progress in Polio Eradication



1988: WHA  
GPEI Resolution  
350 000 cases  
125 countries



2018:  
3 endemic countries  
Nigeria Afghanistan and  
Pakistan

# AFP surveillance for polio eradication

- Polio is targeted for eradication
- The Polio eradication strategy emphasizes AFP surveillance rather than surveillance for polio
- The intent of the system is to be very sensitive by casting a wide net and collecting stool specimens from all AFP cases, and then using Lab to confirm the presence/absence of the virus.



# AFP Standard case definition

- Any child under 15 years of age with Acute (sudden onset) Flaccid Paralysis (weakness of the limbs),

or

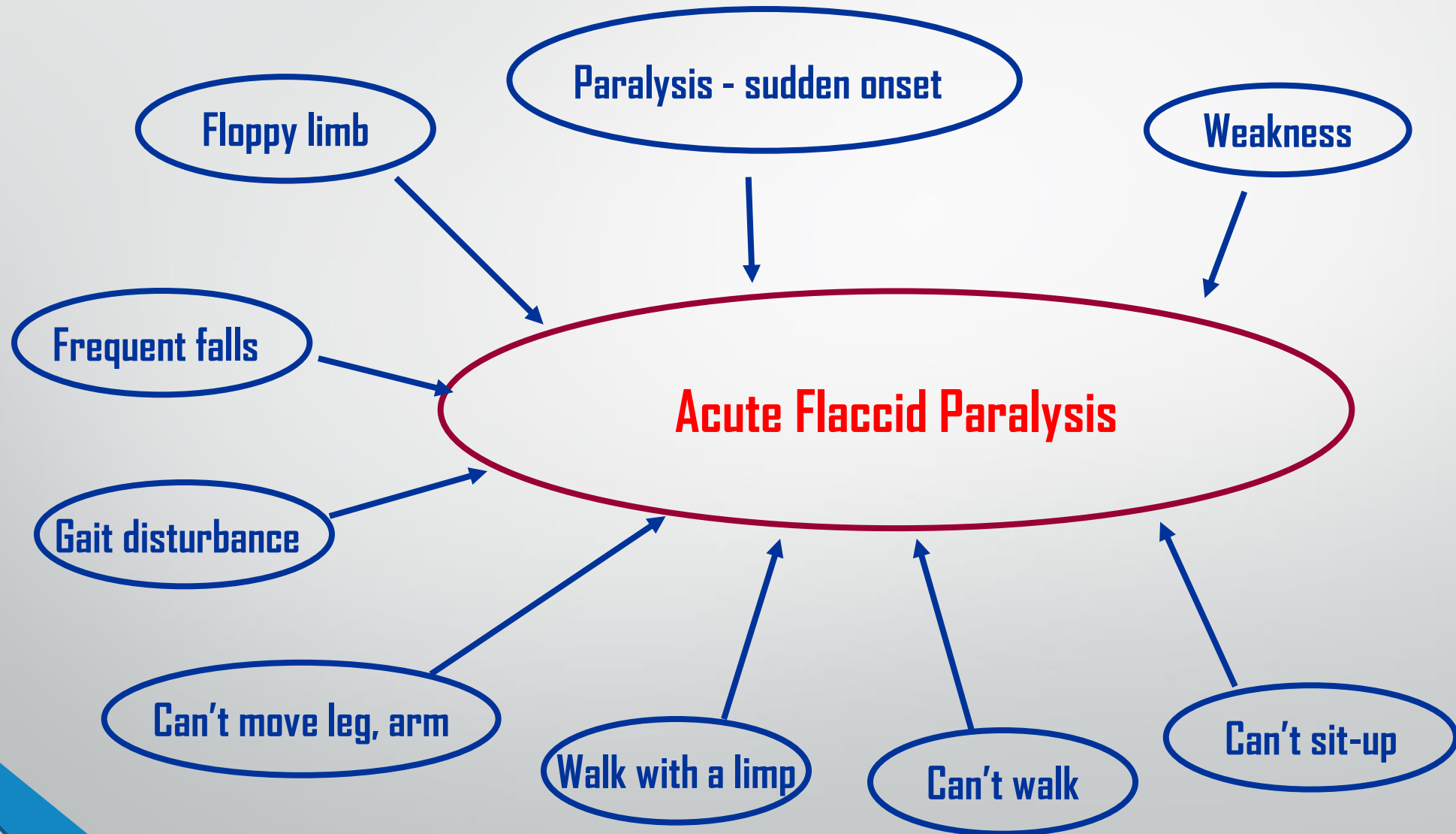
- Any person of any age with paralytic illness if Polio is suspected by a clinician.
- Any case meeting this definition undergoes a thorough investigation to determine if the paralysis is caused by polio.

# Case detection

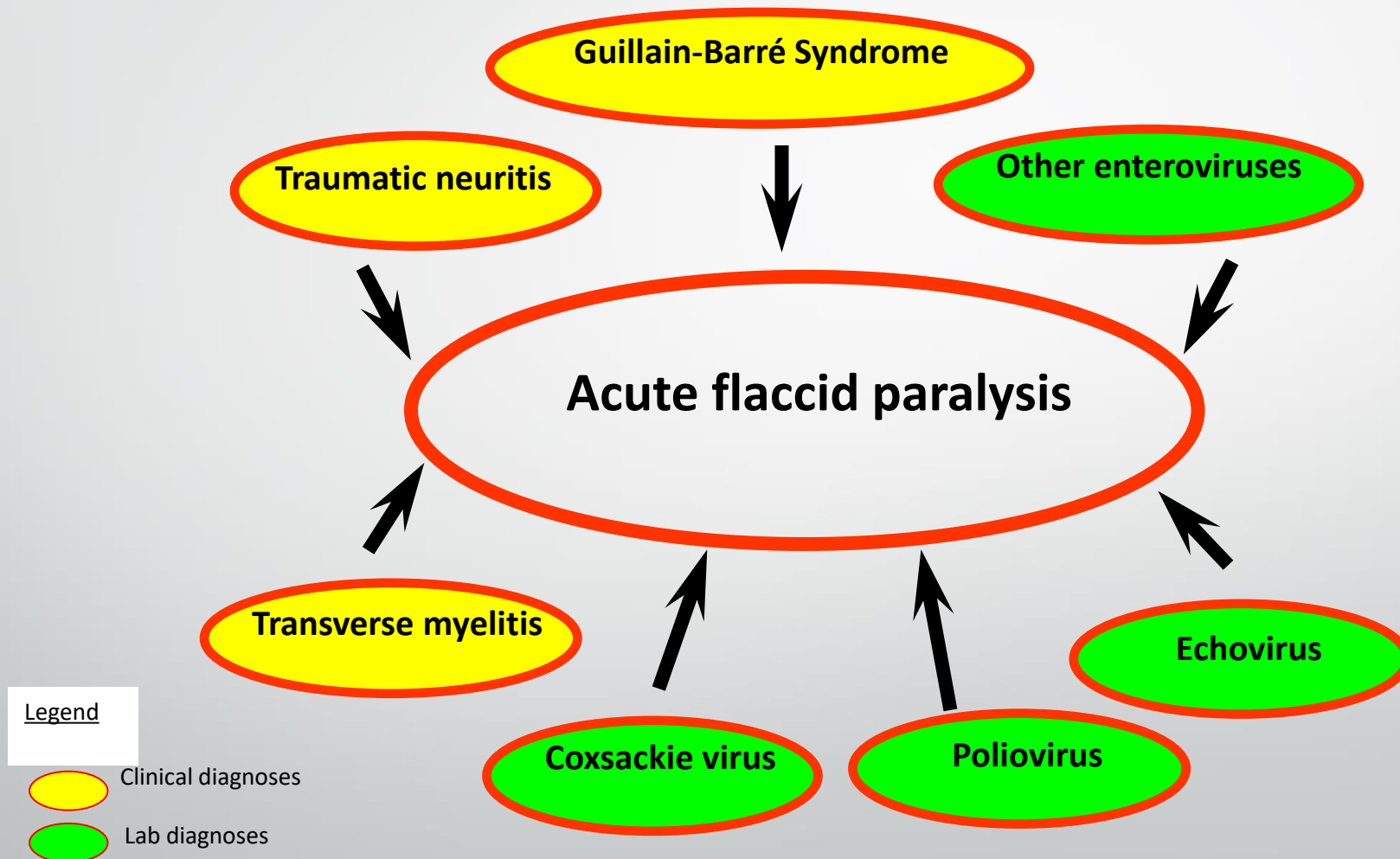
Using the case definition, AFP cases may be detected during:

- Day-to-day clinical exercise;
- Active cases search;
- Retrospective reviews and
- Voluntary reporting from the community.
- Supervision or any visit to the health facility is also an opportunity to inquire about AFP cases not yet reported.

# Symptoms of acute flaccid paralysis



# AFP differential diagnosis

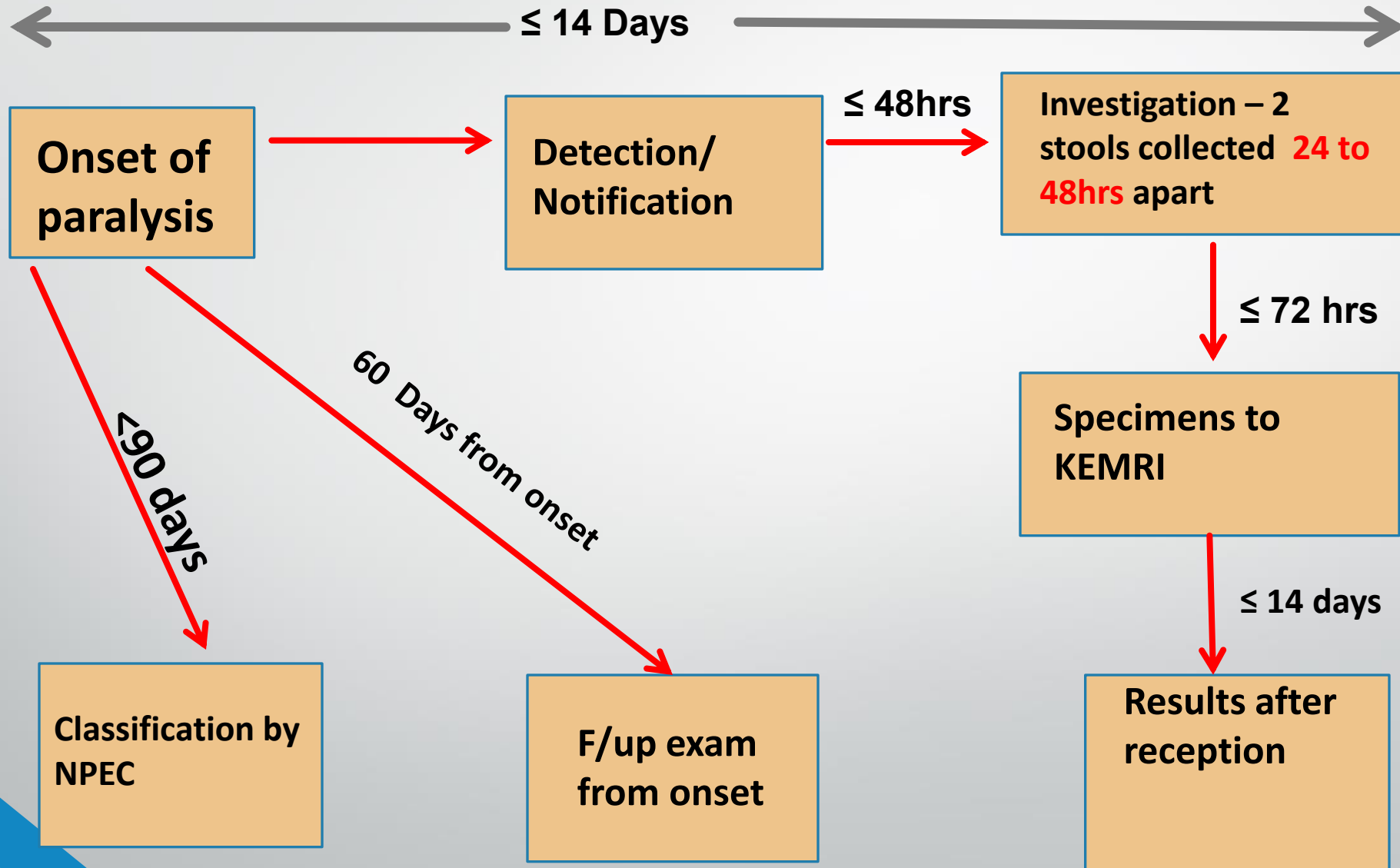


All should be reported to the AFP surveillance system

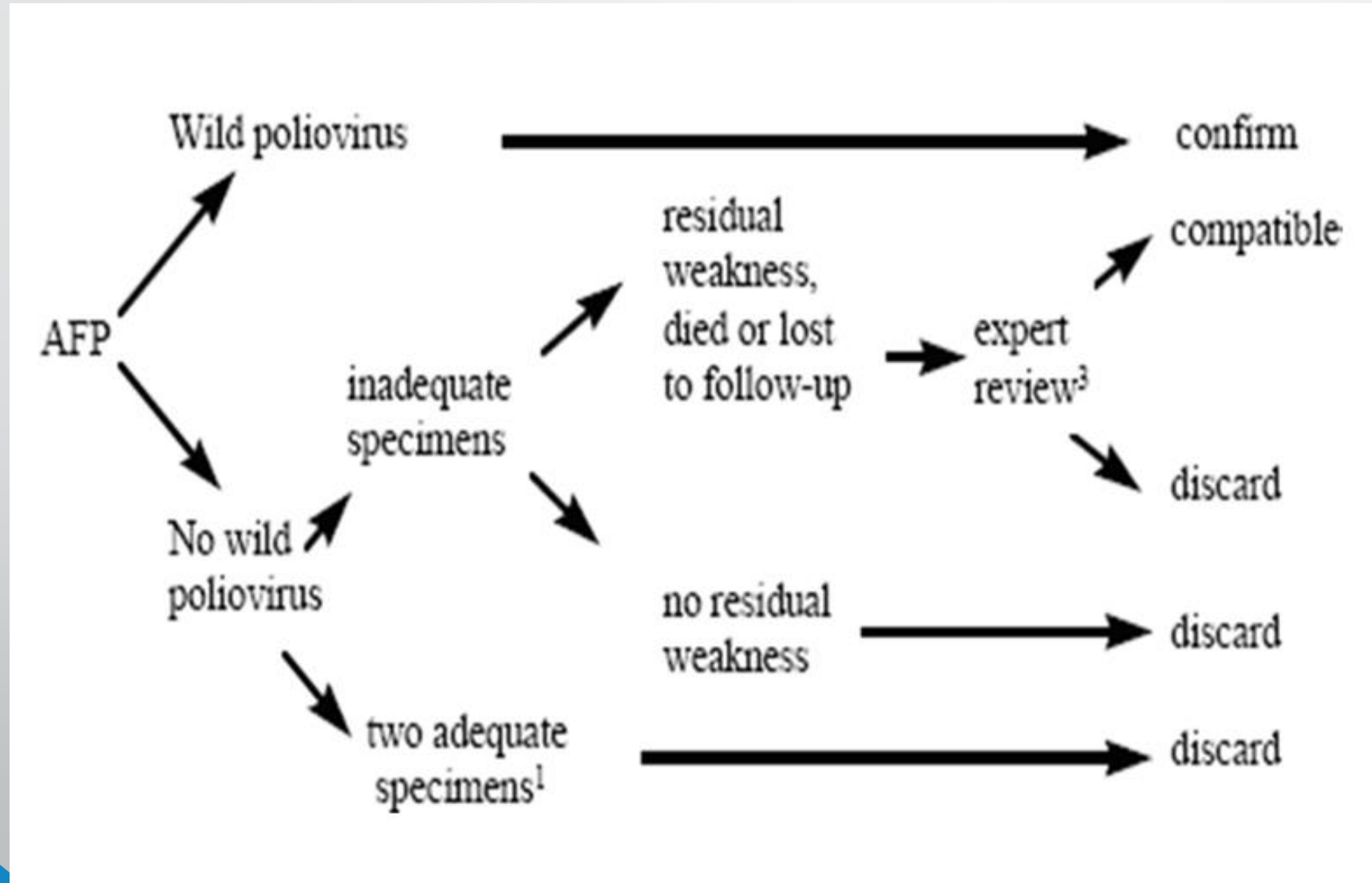
# Investigation of AFP cases

- When a case has met the AFP case definition - As soon as possible collect specimens (**Time is very important**).
- Investigate **within 48 hours** of notification
- **TWO stool specimens** should be obtained 24-48 hours apart as early in the course of disease as possible (ideally within 14 days after onset)
- Complete the **IDSR case investigation** form
- The stool specimens should arrive in **KEMRI Lab within 72 hours** of collection
- The specimens should be transported in **reverse cold chain**.

# Flow of AFP Surveillance data



# Classification of AFP cases



# Conclusion

- Polio remains endemic in three countries – Afghanistan, Nigeria and Pakistan.
- Until poliovirus transmission is interrupted in these countries, all countries remain at risk of importation of polio, especially those with weak public health and immunization services and travel or trade links to endemic countries.
- Kenya urgently needs to address surveillance gaps in view of the fact that it is one of the Key at risk countries.



# Way forward

- Indicators for Certification include Non Polio AFP rate
- Emphasize AFP surveillance rather than polio surveillance
- AFP is not a diagnosis
- Hence, Refer all suspected AFP cases for investigation



Thank You