

Acute Flaccid Myelitis (AFM)

Promptly recognize & rapidly report

www.cdc.gov/afm

Stay Vigilant for Acute Flaccid Myelitis in Fall 2023

As fall approaches, seasonal increases in the circulation of respiratory pathogens, including enteroviruses, is to be expected. Enterovirus D-68 (EV-D68) is believed to be the main enterovirus responsible for the increases in acute flaccid myelitis (AFM) cases observed during 2014, 2016, and 2018. This year the number of reported cases of AFM has remained relatively low.

As of September 5, 2023, CDC has received 27 reports of suspected AFM, with 8 confirmed cases in 8 states. However, in past years, increases in EV-D68 respiratory disease have preceded cases of AFM by about 2 weeks. Therefore, vigilance for possible increases in EV-D68 respiratory disease and AFM is important as we move into the fall season.

The identification of a paralytic polio case in an unvaccinated person in New York in 2022 reinforced the need to also consider polio in the differential diagnosis of patients with sudden onset of limb weakness.

5 years is the average age of patients with AFM

SYMPTOMS:

Sudden arm or leg weakness



Difficulty moving the eyes or drooping eyelids



Facial droop or weakness



Difficulty with swallowing or slurred speech

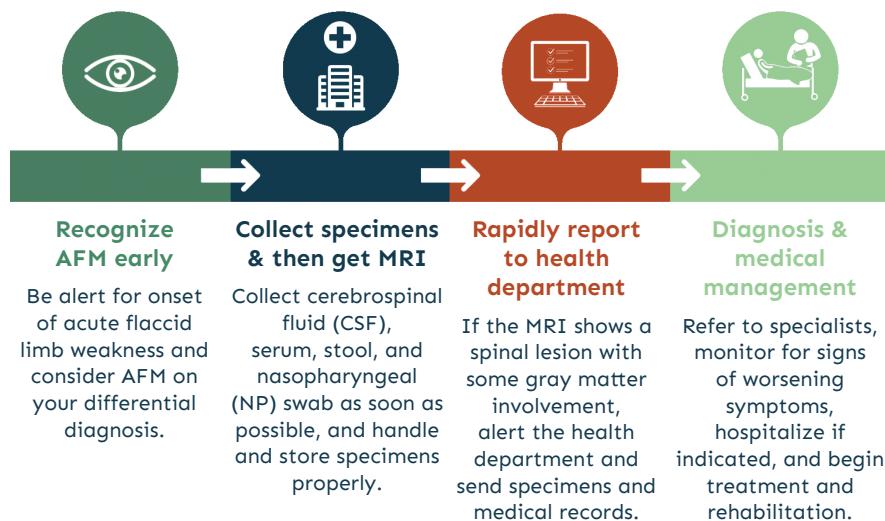


PROBLEM:

Recognizing AFM is challenging:

- AFM is rare, and there is no lab test available yet to diagnose patients.
- When clinicians recognize AFM early, they can quickly:
 - Get patients the best care, including treatment and rehabilitation.
 - Collect lab specimens like blood or CSF to better understand AFM and its causes.
 - Report suspected cases for prompt investigation and outbreak detection.

Clinicians: Timing is Key for AFM



Putting Together the Pieces of AFM



SOURCE: CDC AFM Home Page

Most AFM cases occur in late summer & early fall



Clinicians should:

- Strongly suspect AFM in patients with acute flaccid limb weakness, especially after respiratory illness or fever, and between August and October.
- Hospitalize patients immediately, collect lab specimens, diagnose, and begin medical management.
- Alert the health department and send lab specimens and medical records.

THE WAY FORWARD >>>

ADPH IS:

- Working with CDC to collect medical information, MRI images, and specimens, and classify cases.
- Communicating information about AFM to clinicians and the public.

CLINICIANS CAN:

- Contact neurologists specializing in AFM through the AFM Physician Consult and Support Portal for help with patient diagnosis and medical management. <https://bit.ly/2Y2U3VR>
- Contact ADPH with any questions about AFM, including how to report cases and collect appropriate specimens.

CDC IS:

- Monitoring AFM trends and the clinical presentation.
- Researching possible risk factors.
- Conducting advanced lab testing and research to understand how viral infections may lead to AFM.
- Tracking long-term patient outcomes.

For more information contact:

Temitope Ajala, Epidemiologist at

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Infectious Diseases & Outbreaks
Division

The RSA Tower
201 Monroe Street
Montgomery, AL 36104

Acute Flaccid Myelitis (AFM) Reporting and Procedures

Guidance For Clinicians

1. Identify suspected case of AFM: patient with onset of acute flaccid limb weakness



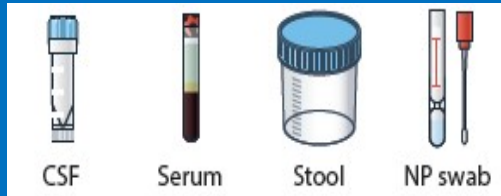
2. Use the REPORT Card to notify Alabama Dept. Public Health (ADPH) of the suspect case



AND

Specimen Collection

Collect specimens as close to onset of limb weakness as possible.



CSF

Serum

Stool

NP swab

See specimen collection and shipping flyer for details.

Patient Information

Copies of the following information should be uploaded to the REPORT Card:

- Patient Summary Form
- Admission and discharge notes
- Neurology & infectious disease consult notes
- MRI reports and images*
- Vaccination history
- Laboratory test results



3. ADPH surveillance team will compile patient information and send to CDC. Patient information is assessed by CDC's AFM experts.



4. Following expert review, patient classification is given back to ADPH. Information is shared with clinician.

*If electronic copies of MRI images are not available, please send a disc copy

to: Attn: Temitope Ajala

Alabama Dept. of Public Health, Bureau of Communicable Disease 201 Monroe

St., Suite 1450

Montgomery, AL 36104



Acute Flaccid Myelitis (AFM) Specimen Collection and Shipping

A Guide for Laboratorians

Specimens should be collected as close to onset of limb weakness as possible.

Specimen Type and Instructions				
Specimen	Amount	Collection	Storage	Shipping
Whole Stool* (preferred specimen)	≥1 gram (2 samples collected 24 hours apart)	Sterile container; rectal swabs are not acceptable	Freeze at -20°C	Ship on dry ice
Respiratory {Nasopharyngeal (NP)/ Oropharyngeal (OP) swabs} (preferred specimen)	≥1mL (minimum amount of medium)	Place in viral transport medium	Freeze at -20°C	Ship on dry ice
Cerebrospinal fluid (CSF)	1mL (collect at same time or within 24 hrs of serum)	Spin and CSF removed to cryovial	Freeze at -20°C	Ship on dry ice
Serum	≥0.4mL (collect at same time or within 24 hours of CSF)	Collect in tiger/red top tube; spin and serum removed to sterile container	Freeze at -20°C	Ship on dry ice
Post-Mortem Specimens				
Fresh-frozen tissue[‡]	Representative sections from various organs	Place directly on dry ice or liquid nitrogen	Freeze at -70°C	Ship frozen tissue in a sealable bag on dry ice
Formalin-fixed/ paraffin-embedded tissue[‡]	Representative sections from various organs	Fix tissue in formalin for 3 days, then transfer to a container of 100% ethanol	Room temperature	Ship at room temperature with paraffin blocks in carriers to prevent breakage
<p>*Stool specimens should be collected within 14 days of symptom onset.</p> <p>[‡]Representative sections from various organs are requested, but particularly from brain/spinal cord (including gray and white matter), heart, lung, liver, kidney, and other organs as available.</p>				

Specimens should be shipped to:
 Bureau of Clinical Laboratories, EID
 204 Legends Court
 Prattville, AL 36006-7893

For BCL Requisition Forms, visit: <https://www.alabamapublichealth.gov/bcl/assets/bclrequisitionform23.pdf>

Questions, contact: Emerging Infectious Diseases (EID) (334) 260-3400