



May 31, 2023

**TO:** Healthcare Providers, Hospitals, Local Health Departments, Clinical Laboratories, and Local Health Departments

**FROM:** New York State Department of Health (NYSDOH), Bureau of Communicable Disease Control

**HEALTH ADVISORY: ACUTE FLACCID MYELITIS**

*Please distribute to clinical staff in Epidemiology/Infection Control, Infectious Disease, Neurology, Nursing, Pediatrics, Family Medicine, Internal Medicine, Intensive Care, Emergency Department, Pharmacy, Laboratory Service, and all patient care areas*

**SUMMARY**

- Acute flaccid myelitis (AFM) is a rare but serious paralytic condition characterized by the rapid onset of flaccid weakness<sup>1</sup> in one or more limbs. The condition affects the nervous system, specifically the gray matter of the spinal cord, causing muscles and reflexes in the body to weaken.
- AFM is uncommon, with 27 confirmed cases in New York State and 724 confirmed cases nationally since 2014 when the Centers for Disease Control and Prevention (CDC) began tracking<sup>2</sup> the condition. More than 90% of cases have occurred in young children. Cases have been identified at all times of year with most occurring between August and November.
- No one pathogen has been consistently detected in patients with AFM, although data suggest that enteroviruses are important factors in the epidemiology. Persons who tested positive for enterovirus EV-D68 typically had more severe AFM illness requiring intensive care and mechanical ventilation.
- AFM shares many symptoms with other neurological disorders including poliomyelitis. Paralytic polio and AFM can have similar clinical presentations and occur with similar seasonality. **Poliomyelitis should be considered in the differential diagnosis for patients with acute flaccid weakness if they are un/under-vaccinated for polio, if their vaccine history is unknown, or if immunocompromised.** A confirmed case of paralytic polio was identified in an unvaccinated individual in the summer of 2022, with ongoing poliovirus detections in wastewater in several counties signifying many additional non-paralytic polio cases ([Provider Alert - Polio](#)). As part of NYSDOH's ongoing surveillance, updated polio guidance will be released shortly.
- **Clinicians suspecting AFM should collect the following specimens as early in the course of illness as possible and submit to the NYSDOH Wadsworth Center. Do not ship specimens to CDC.** These specimens will be tested for several pathogens associated with AFM, including EV-D68 and poliovirus.
  - Two (2) stool specimens collected 24 hours apart
  - Cerebrospinal fluid
  - NP/OP swabs
  - Serum

*Specifics regarding specimen collection and shipping to Wadsworth Center Virology lab can be found at: <https://www.wadsworth.org/programs/id/virology/services/specimen-collection>*
- Clinicians should **report suspected AFM cases promptly** to the NYSDOH at 518-473-4439 or via email [AFM@health.ny.gov](mailto:AFM@health.ny.gov) during business hours or 1-866-881-2809 evenings, weekends, and holidays.

<sup>1</sup> Low muscle tone, limp, not spastic or contracted

<sup>2</sup> <https://www.cdc.gov/acute-flaccid-myelitis/index.html>

## **CLINICAL PRESENTATION**<sup>3</sup>

Most patients with AFM report having had a febrile respiratory or gastrointestinal illness (e.g., cough, rhinorrhea, vomiting, or diarrhea) in the 1-2 weeks prior to the onset of neurological symptoms.

- Onset of weakness is rapid, within hours to a few days.
- Weakness is noted in one or more limbs, typically more proximal than distal.
- Loss of muscle tone and reflexes may be noted in the affected limb(s).
- Cranial nerve abnormalities may be present and include:
  - Facial or eyelid droop
  - Difficulty swallowing or speaking
  - Hoarse or weak cry
- Some patients may report a stiff neck, headache, or pain in the affected limb(s). Rarely people may also have numbness or tingling.
- MRI will show a spinal cord lesion with gray matter involvement<sup>4</sup> excluding persons with lesions resulting from malignancy, vascular disease, or anatomic abnormalities.
- The most severe symptoms of AFM are:
  - **Respiratory failure**, requiring mechanical ventilation
  - **Serious neurologic complications** such as body temperature changes and blood pressure instability.

Clinicians with questions can contact the NYSDOH at 518-473-4439 or [AFM@health.ny.gov](mailto:AFM@health.ny.gov) during business hours or 1-866-881-2809 evenings, weekends, and holidays.

Clinicians located in New York City can contact the NYCDOHMH Healthcare provider access line at 1-866-692-3641.

## **REPORTING**

Report suspected AFM cases promptly to the NYSDOH at 518-473-4439 or via email at [AFM@health.ny.gov](mailto:AFM@health.ny.gov) during business hours. Call 866-881-2809 on evenings, weekends, and holidays. Patients who are residents of New York City should be reported to the New York City Department of Health and Mental Hygiene. *For questions about AFM reporting, please contact: [AFM@health.ny.gov](mailto:AFM@health.ny.gov).*

## **INFECTION CONTROL**

The CDC recommendation for the management of patients with AFM is Standard + Contact + Droplet precautions<sup>5</sup>.

*Questions about infection control in healthcare facilities should be directed to the NYSDOH Bureau of Healthcare Associated Infections at 518-474-1142 and [icp@health.ny.gov](mailto:icp@health.ny.gov).*

## **RESOURCES**

- CDC, Acute Flaccid Myelitis <https://www.cdc.gov/acute-flaccid-myelitis/index.html>
- NYSDOH Wadsworth Center <https://www.wadsworth.org/programs/id/virology>

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<sup>3</sup> <https://www.cdc.gov/vitalsigns/afm2020/>

<sup>4</sup> Terms in the spinal cord MRI report such as “affecting gray matter,” “affecting the anterior horn or anterior horn cells,” “affecting the central cord,” “anterior myelitis,” or “poliomyelitis” would be consistent with this terminology.

<sup>5</sup> This is consistent with [CDC Infection Control Recommendations EV-D68](#)