GEORGIA DEPARTMENT OF PUBLIC HEALTH

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Health Update: Acute Flaccid Myelitis (AFM) in Georgia, November 2024

ACTION STEPS:

District and County Health Departments: *Please forward this to hospitals and clinics in your jurisdiction.*

Hospitals and clinics: *Please distribute to infectious disease physicians, infection preventionists, emergency department physicians, intensive care physicians, neurologists, radiologists, primary care providers, and pediatricians*.

SUMMARY

The Georgia Department of Public Health (DPH) urges healthcare providers to strongly consider acute flaccid myelitis (AFM) in patients with sudden flaccid limb weakness, especially 1 to 2 weeks after respiratory or gastrointestinal illness with fever.

AFM is a rare, serious paralytic disease that mainly affects children. Enterovirus D-68 (EV-D68) has been found to be the main enterovirus responsible for AFM observed during 2014, 2016, and 2018. As fall approaches, seasonal increases in the circulation of respiratory pathogens, including enteroviruses, are to be expected. It is important for clinicians to be aware of the signs and symptoms of AFM to ensure patients receive timely and appropriate care. Reporting all suspected AFM patients to public health will help states and the Centers for Disease Control and Prevention (CDC) to monitor AFM and better understand the factors associated with this illness.

BACKGROUND

In the summer and fall of 2014, an increase in reports of AFM occurred in the U.S. In 2015, standardized surveillance of AFM was established. From the summer/fall of 2014 through December 2020, 650 confirmed cases of AFM from 49 states and the District of Columbia were reported to the CDC, with peaks occurring in 2014, 2016, and 2018. The increase in AFM cases in 2014 coincided with a national outbreak of severe respiratory illness caused by EV-D68, and increased circulation of EV-D68 was observed in 2016 and 2018. EV-D68 was the most common virus detected in specimens from patients with AFM, usually in respiratory specimens. All confirmed patients had distinctive abnormalities of the spinal cord gray matter on MRI, and a majority reported a respiratory or febrile illness in the days before the onset of neurologic symptoms. One fatality was reported in a confirmed case of AFM during the acute phase of illness in 2017. In Georgia, there have been 19 cases of AFM (10 confirmed, 6 probable, and 3 suspect) since 2014.

Nationally, as of November 1, 2024, there have been 15 confirmed cases out of 26 patients under investigation (PUIs) in 2024 and 18 confirmed cases out of 40 PUIs in 2023. There have been 760 confirmed cases since the CDC began tracking AFM in August of 2014. 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 warranted 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. Clinicians should obtain whole stool samples from all patients with suspected AFM to rule out poliovirus infection, especially if the patient is under-vaccinated and has had recent international travel to countries where poliovirus is circulating.

CLINICAL PRESENTATION

- Median age is 5.1 years of age (majority of cases less than 18 years of age)
- Most patients present with febrile illness 1–2 weeks before sudden onset of flaccid limb weakness
- Cranial nerve abnormalities may be present, including facial or eyelid droop; difficulty swallowing or speaking; hoarse or weak cry
- Some patients may complain of stiff neck, headache, or pain in the affected limb(s)
- Uncommonly, people may also have numbness or tingling.

The most severe complications include respiratory failure and serious neurologic manifestations such as body temperature changes and blood pressure instability that could be life-threatening.

DPH RECOMMENDATIONS

- **Suspect AFM:** Clinicians should suspect AFM in patients with acute flaccid limb weakness, especially after respiratory illness or fever. Clinicians should remain vigilant for AFM throughout the year, but most AFM cases have been reported between August and November.
- **Consider Polio:** Clinicians should consider polio in patients with sudden onset of limb weakness, especially in persons who are not vaccinated or under-vaccinated for polio and have traveled to areas with higher risk of polio.
- **Hospitalize Immediately:** Patients with AFM can progress rapidly to respiratory failure. Clinicians should monitor the respiratory status of patients and order MRI of the spine and brain with the highest Tesla scanner available. The clinical signs and symptoms of AFM overlap with other neurologic conditions. Therefore, consulting with specialists in neurology and infectious diseases is critical for appropriate diagnosis and management.
- **Collect Specimens:**
    - Clinicians should collect specimens from patients suspected of having AFM as early as possible (preferably on the day of onset of limb weakness)
        - The following specimens should be collected: CSF; serum; stool (two stool samples collected at least 24 hours apart, both collected as early in the illness as possible and ideally within 14 days of illness onset); and a nasopharyngeal or oropharyngeal swab.
        - **DO NOT send specimens directly to CDC.** Contact DPH at 404-657-2588 for approval to ship specimens to the Georgia Public Health Laboratory (GPHL) for forwarding to CDC's AFM laboratory.

        - Additional instructions regarding specimen collection and shipping can be found at https://dph.georgia.gov/afm-healthcare-providers
- **Report Cases:** AFM is a reportable condition in Georgia, and suspected AFM cases that meet the below clinical and laboratory criteria should be reported to DPH within seven (7) days.
  AFM Clinical Criteria for Reporting (even if lab results are still pending):
    - Acute onset of flaccid limb weakness AND
    - MRI showing a spinal cord lesion in at least some gray matter (excluding malignancy, vascular disease, or anatomic abnormalities)
- **How to Report:**
    - Report cases through the State Electronic Notifiable Disease Surveillance System (SendSS) https://sendss.state.ga.us/ords/sendss/login.screen OR complete and submit AFM case report form https://dph.georgia.gov/document/document/afmcasereportform22020pdf/download to your District Public Health Department
    - Call your District Public Health or DPH at 404-657-2588 (during business hours), or 1-866-PUB-HLTH (866-782-4584) after hours or weekends
    - Suspected AFM cases will be submitted by DPH to CDC for determination of case status (i.e., confirmed, probable, suspect, not a case)

ADDITIONAL INFORMATION

- AFM in Georgia: https://dph.georgia.gov/acute-flaccid-myelitis
- AFM in the United States: https://www.cdc.gov/acute-flaccid-myelitis/index.html
- Summary for reporting patients under investigation for Acute Flaccid Myelitis https://www.cdc.gov/acute-flaccid-myelitis/downloads/job-aid-for-clinicians-508.pdf
- Clinical overview of AFM https://www.cdc.gov/acute-flaccid-myelitis/hcp/clinical-overview/index.html
- Tools and resources for health professionals: https://www.cdc.gov/acute-flaccid-myelitis/hcp/tools-resources/index.html
- Consultation on a suspected case with an AFM expert: https://wearesrna.org/living-with-myelitis/resources/afm-physician-support-portal/
- The CSTE standardized case definition for AFM surveillance: https://cdn.ymaws.com/www.cste.org/resource/resmgr/ps/ps2021/21-ID-02_AFM.pdf

CONTACT INFORMATION

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