

Summary and Action Items

1. To provide information regarding identification and management of acute flaccid myelitis (AFM) cases (suspect and confirmed).
2. To remind providers and local health departments to remain vigilant in identifying cases.

Background

Acute flaccid myelitis (AFM) is an illness characterized by acute onset of flaccid limb weakness and magnetic resonance imaging (MRI) showing lesions in the gray matter of the spinal cord. AFM has been under investigation by health departments and the Centers for Disease Control and Prevention (CDC) for the past four years. Surveillance has shown that AFM cases generally peak in the months of September and October. A biennial pattern has been observed with the majority of cases reported in 2014 and 2016, and smaller numbers reported in 2015 and 2017. If this pattern continues, we would expect to see an increase in AFM cases in 2018. As a result, public health partners are encouraged to be aware of the symptoms of AFM and related resources to assist with identifying and reporting of suspected AFM cases and collecting specimens.

The CDC received 43 reports of suspected AFM in persons across the U.S. between January 1 and August 20, 2018. Although numerous pathogens (e.g., enteroviruses (West Nile virus, other flaviviruses, and adenoviruses) are known to cause AFM, CDC is interested in investigating all possible etiologies. Reporting of these cases will help public health officials monitor increases in illness and improve understanding of potential causes, risk factors and preventive measures or therapies. Clinicians are asked to voluntarily report AFM cases to their local health department.

Symptoms

Symptoms of AFM include:

- sudden onset of arm or leg weakness and loss of muscle tone and reflexes,
- facial droop/weakness,
- difficulty moving the eyes,
- drooping eyelids, or
- difficulty swallowing or slurred speech.

Numbness or tingling is rare in people with AFM, although some people have pain in their arms or legs. Some people with AFM may be unable to pass urine. The most severe symptom of AFM is respiratory failure that can happen when the muscles involved with breathing become weak. This can require urgent ventilator support. In very rare cases, it is possible that the process in the body that triggers AFM may also trigger other serious neurologic complications that could lead to death.

Diagnosis

For Clinicians

Clinicians suspecting AFM in patients meeting the [probable or confirmed case definition](#) (irrespective of laboratory testing results) are asked to report these cases to their [local health department](#), or to the IDPH Communicable Disease Control Section at 217-782-2016.

- Clinicians should consult with their local health department regarding laboratory testing of CSF, blood, serum, respiratory, and stool specimens for enteroviruses, West Nile virus, and other known infectious etiologies. (For further information, please see ‘Specimen Collection and Testing’ below.)
- The [CDC AFM Patient Summary Form](#) should be completed for cases classified as confirmed or probable and submitted to their local health department via secure fax.
- Clinicians or infection control practitioners should have access to enter reportable diseases into the Illinois National Electronic Disease Surveillance System (I-NEDSS). Those without access can report case information by fax or phone to their LHD and visit idphnet.illinois.gov to sign up for I-NEDSS.

For Local Health Departments

Local health departments enter AFM cases into I-NEDSS as an ‘Acute Flaccid Myelitis’ case if the clinician has not done so.

Specimen Collection and Testing

Clinicians should collect specimens from patients suspected of having AFM as early as possible in the course of illness, preferably on the onset of limb weakness. Early specimen collection has the best chance to yield a diagnosis of AFM. Please refer to CDC’s [specimen collection procedures](#) for the most up-to-date instructions. Specimens should include:

- Cerebrospinal fluid (CSF);
- Blood (serum and whole blood);
- A nasopharyngeal aspirate, nasopharyngeal wash, or nasopharyngeal swab with lower respiratory specimen(s) if indicated, and an oropharyngeal swab; and
- Stool.

CDC will review the completed AFM patient summary form and determine if case definition has been met and whether specimen testing authorization is granted. Please note: the specimen approval process may take several days and case determination by CDC can takes several months; therefore, clinical decisions should not be delayed or determined by the CDC case determination or test results. Once authorized by CDC and IDPH, the LHD or IDPH will provide an “authorization number.” Specimens submitted for testing must be labeled with the authorization number. All available clinical specimens must be shipped in insulated containers to one of the IDPH laboratory using cold packs. Specimens will then be forwarded to CDC for testing.

The following three forms **must** be completed and included with all specimen submissions:

- [IDPH Laboratory Test Requisition Form](#)
- [CDC 50.34 DASH Form](#): (Please contact the IDPH laboratory if assistance is needed with this form.)
- [CDC AFM Patient Summary Form](#) (located at the bottom of this link)

Resources

AFM Investigation Information	CDC Specimen Collection Procedures
Information for Clinicians	FAQ’s for Healthcare Providers
AFM Case Definition	Job Aid for Clinicians
Patient Summary Form	Instructions for Completing the Patient Summary Form

Contact

IDPH CD Section 217-782-2016

Target Audience

Local Health Departments, Hospital Emergency Departments, Infection Control Professionals, Infectious Disease Physicians, Pediatricians, and Family Practice Physicians.

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