

## Summary and Action Items

1. To provide information regarding identification and reporting of acute flaccid myelitis (AFM) cases.
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 five 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, 2016 and 2018, with smaller numbers reported in 2015 and 2017. However, 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 at any time.

CDC has received 76 reports of suspected AFM in persons across the U.S. in 2019 to date with 13 confirmed cases. In 2018, there were 233 confirmed cases in the U.S. and nine of those were reported in Illinois. 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 report AFM cases to their local health department. Additional information about 2018 AFM data and can be found in CDC's 'Vital Signs' [report](#).

## 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,
- 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 be on alert for identifying acute flaccid limb weakness and consider AFM on the differential diagnosis.

- 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.)
- Clinicians should get an MRI on anyone they suspect as having AFM.
- 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 as soon as possible.
- Clinicians can utilize the CDC [Job Aid](#) for specific instructions specimen and data collection.
- Clinicians or infection control practitioners should have access to also 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 the [IDPH web portal](#) 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. LHDs are asked to assist in gathering data and specimens from reporting providers.

#### **Specimen Collection and Testing**

Clinicians should collect specimens from patients suspected of having AFM as early as possible in the course of illness, preferably at 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.

Specimen collection and shipment should be coordinated with your local health department. *Please note: the specimen approval process may take several days and case determination by CDC can take several months; therefore, clinical decisions should not be delayed or hinge upon 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 laboratories using cold packs. Specimens will then be forwarded to CDC for testing. **In addition to CDC testing, clinicians are encouraged to pursue laboratory testing for diagnostic purposes at private or commercial laboratories.**

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)

#### **Contact**

IDPH CD Section 217-782-2016

## Additional Resources

<a href="#">AFM Investigation Information</a>	<a href="#">CDC Vital Signs Report</a>
<a href="#">AFM Data Collection</a>	<a href="#">CDC Specimen Collection Procedures</a>
<a href="#">Information for Clinicians</a>	<a href="#">FAQ's for Healthcare Providers</a>
<a href="#">AFM Case Definition</a>	<a href="#">Job Aid</a>
<a href="#">Patient Summary Form</a>	<a href="#">Instructions for Completing the Patient Summary Form</a>

## Target Audience

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

## Date Issued

August 29, 2019