



Date: October 17, 2018

**BCD-2018-17**

To: Wisconsin Health Care Providers, Infection Preventionists, Clinical Microbiology Laboratories, Local Health Departments, and Tribal Health Agencies

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## Acute Flaccid Myelitis (AFM) as a Reportable Condition in Wisconsin

### PLEASE DISTRIBUTE WIDELY

Since May 2018, the Centers for Disease Control and Prevention (CDC) has received an increased number of reported cases of acute flaccid myelitis (AFM), a serious condition that causes weakness in the arms or legs. During 2018, CDC has confirmed 38 cases of sudden onset AFM in 16 states.

The Wisconsin Department of Health Services, Division of Public Health (DPH) has confirmed two cases of AFM in Wisconsin residents during 2018 and is currently investigating other possible cases.

### REPORTING

**Report all cases of onset of acute flaccid limb weakness to DPH within 24 hours (after hours reporting not required) by calling the Bureau of Communicable Diseases (BCD) at (608) 267-9003.**

For each case under investigation, BCD epidemiologists will request the following information be sent securely to DPH:

- [AFM Patient Summary Form](#)
- History and physical (H&P)
- MRI report
- Neurology consult notes
- EMG report (if done)
- Infectious disease consult notes (if available)
- Vaccination record
- Diagnostic laboratory reports
- MRI images

### BACKGROUND

[AFM](#) is a rare neurologic condition that results in inflammation of the spinal cord. Most cases of AFM experience sudden onset of arm or leg weakness with loss of muscle tone and reflexes. Some AFM cases also experience facial droop, difficulty moving their eyes, drooping eyelids, or difficulty with swallowing or speaking. Severe cases can result in respiratory failure and death. AFM can result from a variety of causes, including viruses, environmental toxins, and genetic disorders. AFM is often challenging to diagnose because it shares many of the same symptoms as other neurologic diseases, like

transverse myelitis and Guillain-Barre syndrome. Therefore, it is important to conduct the proper testing and examinations necessary to differentiate between AFM and other neurologic conditions.

Certain viruses that can cause AFM or similar neurologic conditions are poliovirus and non-polio enteroviruses, West Nile virus (WNV) and viruses in the same family as WNV, specifically Japanese encephalitis virus and Saint Louis encephalitis virus, and adenoviruses. Often, despite extensive laboratory tests, the etiology of a patient's AFM is not identified. Included below are the [clinical and laboratory criteria and case classification information](#) for AFM cases from CDC.

## **CLINICAL MANAGEMENT**

While there are no evidence based guidelines for the management of AFM, an [interim guide to the clinical management of AFM](#) is available from the CDC.

## **CASE DEFINITION**

### **Clinical Criteria**

- An illness with onset of acute flaccid limb weakness

### **Laboratory Criteria**

- Confirmatory Laboratory Evidence: a magnetic resonance image (MRI) showing spinal cord lesion largely restricted to gray matter\*† and spanning one or more vertebral segments
- Supportive Laboratory Evidence: cerebrospinal fluid (CSF) with pleocytosis (white blood cell count >5 cells/mm<sup>3</sup>)

### **Case Classification**

Confirmed:

- Clinically compatible case AND
- Confirmatory laboratory evidence: MRI showing spinal cord lesion largely restricted to gray matter\*† and spanning one or more spinal segments

Probable:

- Clinically compatible case AND
- Supportive laboratory evidence: CSF showing pleocytosis (white blood cell count >5 cells / mm<sup>3</sup>)

Final Case Classification:

**To provide consistency in case classification, review of case information and assignment of final case classification for all suspected AFM cases is done by experts in national AFM surveillance at the CDC.**

*\* Spinal cord lesions may not be present on initial MRI; a negative or normal MRI performed within the first 72 hours after onset of limb weakness does not rule out AFM.*

*† Terms in the spinal cord MRI report such as "affecting mostly gray matter," "affecting the anterior horn or anterior horn cells," "affecting the central cord," "anterior myelitis," or "poliomyelitis" would all be consistent with this terminology.*

## **SPECIMEN COLLECTION AND TESTING**

**For testing at CDC**, samples including but not limited to serum and cerebrospinal fluid from suspected AFM cases should be collected as early as possible in the course of illness, preferably on the day of onset of limb weakness. Early specimen collection has the best chance to yield a cause of AFM. Detailed [specimen collection instructions](#) are available from CDC. Coordinate with the Wisconsin State Laboratory of Hygiene (WSLH) and DPH to ship samples to CDC. Because CDC testing protocols include several assays that are not Clinical Laboratory Improvement Amendments (CLIA) approved for clinical diagnosis, **additional specimens for testing at commercial laboratories should be collected for clinical management**. Furthermore, CDC test results will not be available in real time.

Instructions for specimen submission:

- Detailed [specimen collection instructions](#), including specimen type, storage, and shipping are available from CDC.
- Indicate AFM on the WSLH specimen requisition form (general form or outbreak form).
- Complete the [AFM Patient Summary Form](#) and submit to DPH.
- Use the usual courier, or if no courier available use Gold Cross.
- For questions call the WSLH customer service line at 1-800-862-1013.

**For specific questions regarding this notice please contact the DPH Bureau of Communicable Diseases at (608) 267-9003.**