

Acute Flaccid Myelitis:

Acute Flaccid Myelitis (AFM), a very rare syndrome affecting the spinal cord and causing muscle weakness/paralysis, continues to be identified in 2019. According to the CDC, so far this year, there have been 11 confirmed cases in eight states (CA, MD, NE, NC, PA, TX, UT, and WV) with 57 reports of people under investigation (PUIs). The number of cases in 2018 was greater than in any previous year, since it was first identified in large numbers in 2014 and the CDC began to track it. **August through October is the typical AFM “season” and often has the highest numbers of reported cases, so the CDC is requesting that health care providers be aware of the signs and symptoms of AFM. If suspected, provide supportive care including breathing support, if indicated, and transport for further evaluation and management.**

For EMS, this translates to knowing and recognizing the symptoms, providing supportive care as indicated, and transporting to an appropriate hospital for further management. **Symptoms include the rapid onset of limb weakness/paralysis in one or more limbs, with most reporting a respiratory illness and/or fever in the previous month.** The majority of cases are in children, with an average age of 5 years. All known cases have been hospitalized and 59% spent time in the ICU. Most recover well but some continue to have ongoing neurological issues. **The majority of cases develop limb weakness/paralysis, in one or more extremities, but some go on to develop central weakness/paralysis and need assistance with breathing.**

Since 2014, there have been cases every year, with significantly higher numbers in the even years. Typically, most cases occur in the August to October time frame. The total known case number in 2018 was 233 in 41 states; for comparison, in 2017, there were 35 confirmed cases amongst 16 states. To look for cases that may have been missed, the CDC is working with experts to ID patients via charts and MRIs, that had symptoms and changes on MRI, meeting what is now the standard AFM case definition.

The CDC lists it as a confirmed case when the standard case definition is met of a rapid onset of flaccid weakness in one or more limbs, a gray matter spinal cord lesion on MRI, and a certain level of WBCs in the CSF. It is a probable case if there is limb weakness and a certain level of WBCs in the CSF.

There is no known cure. Patients are treated by neurologists on a case-by-case basis, using therapies known to work in other neurological diseases.

Previous posts: AFM articles with the dates 10/12/18 (2) and 2/23/19.

What First Responders Can Do:

1. Develop a plan with your agency and medical direction to assure that EMTs, Paramedics, and other First Responders can recognize the signs and symptoms of AFM and that patients with possible AFM are taken or sent for follow up at medical facilities, preferably one with MRI capabilities.
2. Strongly suspect AFM in patients with acute flaccid limb weakness, especially after respiratory illness or fever.
3. When confronted with a possible case of AFM, use Standard **plus** Respiratory **plus** Contact Precautions when assessing, treating & transporting these patients.
4. Transport suspected AFM patients to an appropriate hospital (most patients will be pediatric and likely need MRI). Evaluate and monitor patient status with particular attention to their ability to protect their airway and maintain adequate breathing, the safety of the affected limb(s) since they can't protect or remove the limb(s) from harm, and provide other supportive care as indicated.
5. Provide decontamination of the areas or equipment on which respiratory droplets or other body fluids may have contacted with or settled, with a disinfectant known to kill a wide array of viruses including enteroviruses.
6. Follow developments of this syndrome for changes in recommendations.

Links to more information from the CDC:

CDC Information on AFM:

<https://www.cdc.gov/vitalsigns/afm/>

CDC Media Release Announcing the Onset of the AFM “Season” & Asking Providers to BOLO:

<https://www.cdc.gov/media/releases/2019/p0709-afm.html>

General Info on AFM with Links to Symptoms, Diagnosis, Treatment, Etal:

<https://www.cdc.gov/acute-flaccid-myelitis/about-afm.html>

MMWR on AFM Cases 2018:

<https://www.cdc.gov/mmwr/volumes/67/wr/mm6745e1.htm>