



KAREN L. SMITH, MD, MPH
Director and State Public Health Officer

State of California—Health and Human Services Agency
California Department of Public Health



EDMUND G. BROWN JR.
Governor

National Increase in Reports of Suspected Acute Flaccid Myelitis Cases
Request for continued vigilance for case recognition and reporting
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Background

Acute flaccid myelitis (AFM) is a rare neurological condition characterized by sudden onset of weakness in one or more limbs and distinct abnormalities of the spinal cord gray matter on magnetic resonance imaging (MRI). Recent media attention has heightened awareness of the cases seen in Colorado, Minnesota, Washington, Illinois, New York, and Pennsylvania this year.

Nationally, from January 1 through October 16, 2018, the Centers for Disease Control and Prevention (CDC) has reported [62 confirmed cases of AFM in patients from 22 U.S. states](#). An additional 65 suspected cases are still under investigation at CDC. During this same time period, five suspected AFM cases have been reported to CDPH. One suspected case has been ruled out and four suspected cases remain under investigation; none have yet been confirmed.

Although there has not been an increase in reported suspect cases in California in 2018, CDC has received an increased number of reports of suspected AFM cases nationwide since August of this year. This increase is notable when compared to the same period in 2017, but comparable to the increase in cases noted nationally in late summer and early fall in 2014 and 2016.

CDPH and CDC remain interested in receiving reports of patients with acute flaccid limb weakness of unknown etiology, i.e., when other conditions that can mimic AFM (e.g., Guillain-Barré syndrome, spinal cord trauma, spinal mass, stroke, and botulism) are not suspected.

CDPH continues to urge clinicians to contact their [local health department](#) as soon as possible when AFM (acute flaccid limb weakness of unknown etiology) is suspected in a patient of any age.

Reporting of cases will help CDPH and CDC monitor the occurrence of AFM and better understand the factors possibly associated with this illness. To date, no single etiology has been identified for AFM. According to the CDC, there are a variety of possible causes including infections, exposure to environmental toxins, and genetic disorders. The seasonal pattern of AFM suggests that some cases may be due to an infectious agent, but no pathogen has been consistently detected in CSF, respiratory specimens, stool, or blood at either CDC or state laboratories. Enterovirus (EV) D68 and EV A71 have both been hypothesized as possible causes of AFM but neither has been consistently detected in every patient with AFM. Collection of specimens as soon as possible after symptom onset is critical to detect possible pathogens.



Action steps

- **CASE REPORTING:** Clinicians should report suspected cases of AFM, irrespective of laboratory results suggestive of infection with a particular pathogen, to the patient's [local health department](#) using the [AFM Patient Case Summary Form](#) as soon as possible after AFM is suspected. Along with the patient summary form, clinicians should include additional information to assist with case classification. Such information includes the admission note, progress notes, discharge summary, neurology consult notes, infectious disease consult notes, MRI brain and spine reports and images, EMG reports if done, immunization records, and laboratory test results.
- **LABORATORY TESTING:** CDPH requests that clinicians collect specimens from suspected AFM patients as early as possible in the course of illness, preferably on the day of onset of limb weakness. Early specimen collection offers the best chance of detecting possible etiologies for AFM. Specimens to collect include:
 - **CSF (2-3 mL) in cryovial or other sterile vial;**
 - **acute serum, prior to IVIG (2-3 mL) in tiger/red top tube;**
 - **2 stool specimens (not rectal swabs) collected 24 hours apart; and**
 - **nasopharyngeal (NP) and oropharyngeal (OP) swabs in viral transport medium**

Pathogen-specific testing should continue at hospital laboratories and may include testing of CSF, serum, stool, and respiratory specimens.

In addition to testing performed at CDC, the CDPH Viral and Rickettsial Disease Laboratory (VRDL) will perform testing for enteroviruses, West Nile virus, rhinovirus, and herpes simplex virus. When indicated, VRDL will also perform testing for dengue, chikungunya, and Zika viruses.

The [CDPH AFM Quicksheet](#) contains additional instructions regarding specimen collection and shipping. For questions about shipping pre-approved specimens to CDPH VRDL, call 510-307-8585.

Infection control precautions for suspected AFM cases

Standard, contact and droplet precautions [have been recommended](#) for suspected AFM cases. Non-enveloped viruses such as EV-D68 and other enteroviruses may be less susceptible to alcohol inactivation than enveloped viruses. Hand hygiene with soap and water upon removal and prior to donning of gloves may be preferred to alcohol-based hand rub.

For more information

- [AFM information for clinicians and health departments](#)
- [AFM case definition](#)
- [AFM references and resources](#)
- [AFM considerations for clinical management](#)

Thank you for your continued efforts to protect the health of all Californians.