
PUBLIC HEALTH ADVISORY
NATIONWIDE INCREASE IN REPORTS OF
SUSPECTED ACUTE FLACCID MYELITIS CASES
NOVEMBER 9, 2018

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).

Nationally, from January 1 through November 2, 2018, the Centers for Disease Control and Prevention (CDC) has reported 80 confirmed cases of AFM in patients from the United States. Updates on the number of cases can be found at <https://www.cdc.gov/acute-flaccid-myelitis/afm-surveillance.html>. An additional 65 suspected cases are still under investigation at CDC. During this same time period, five suspected AFM cases have been reported to the California Department of Public Health (CDPH). One suspected case has been ruled out and four suspected cases remain under investigation; none have yet been confirmed. Locally, two cases are currently under investigation.

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. To date, no single pathogen has been consistently detected in cerebral spinal fluid (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 Riverside County Disease Control by faxing the AFM Patient Case Summary Form located at <http://www.rivco-diseasecontrol.org/> to 951-358-5102 within 24-48 hours after AFM is suspected. In addition to the patient case summary form, clinicians should include additional information to assist with case classification. This includes the history and physical, 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. Healthcare facilities may also report through CalREDIE if enrolled.

- **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;**
 - **Two 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.

Specimens should be submitted to the Riverside University Health System (RUHS) Public Health laboratory (PHL) for forwarding to the CDPH Viral and Rickettsial Disease Laboratory (VRDL) for testing for enteroviruses, West Nile virus, rhinovirus, and herpes simplex virus. The RUHS-PHL can be contacted at 951-358-5070 for questions on specimen submission.

Infection control precautions for suspected AFM cases

Standard, contact and droplet precautions are 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:
<https://www.cdc.gov/acute-flaccid-myelitis/hcp/index.html>
- AFM case definition:
<https://c.ymcdn.com/sites/www.cste.org/resource/resmgr/2017PS/2017PSFinal/17-ID-01.pdf>
- AFM references and resources:
<https://www.cdc.gov/acute-flaccid-myelitis/references.html>

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