



California Department of Public Health – September 2016

Acute Flaccid Myelitis (AFM) Quicksheet



Acute Flaccid Myelitis

In 2012, CDPH began receiving reports of patients with acute flaccid myelitis (AFM). The clinical picture of these patients was similar to that of poliomyelitis, but they were not infected with poliovirus. Clinical symptoms included respiratory or gastrointestinal prodrome, fever, limb myalgia and pain or burning sensations in weak limbs and/or the back.

To better understand the potential causes of AFM, CDPH is conducting enhanced viral testing and surveillance for patients with AFM.

Clinical Criteria

An illness with onset of acute focal limb weakness;
AND

- a magnetic resonance image (MRI) showing a spinal cord lesion largely restricted to gray matter* and spanning one or more spinal segments; OR
- cerebrospinal fluid (CSF) with pleocytosis (white blood cell count >5 cells/mm³ - may adjust for presence of red blood cells by subtracting 1 white blood cell for every 500 red blood cells present).

Case Classification

Confirmed:

- An illness with onset of acute focal limb weakness; AND
- MRI showing spinal cord lesion largely restricted to gray matter* and spanning one or more spinal segments.

Probable:

- An illness with onset of acute focal limb weakness; AND
- CSF showing pleocytosis (white blood cell count >5 cells/mm³, may adjust for presence of red blood cells by subtracting 1 white blood cell for every 500 red blood cells present).

*Terms used 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. If still unsure if this criterion is met, consider consulting the neurologist or radiologist directly.

Possible Etiology

The specific cause(s) of this illness are still under investigation. However, these cases are most similar to illnesses caused by viruses, including

- enteroviruses (polio and non-polio)
- adenoviruses
- flaviviruses (West Nile virus)
- herpesviruses

Reporting AFM cases

Clinicians should contact the patient’s local health jurisdiction to report confirmed or probable cases, irrespective of laboratory results, using the [AFM Patient Case Summary Form](#) and to obtain approval for laboratory testing before submitting specimens. For questions about surveillance, contact Shrimati Datta at shrimati.datta@cdph.ca.gov or 510-620-3747; or Dr. Kristen Wendorf at kristen.wendorf@cdph.ca.gov or 510-620-3735.

Specimen Collection

Collect specimens on confirmed and probable cases as **early as possible** in the course of illness, preferably on the day of onset of limb weakness, to increase the chance of a diagnosis. Respiratory specimens (swabs) are the preferred specimen for testing.

The following specimens should be collected:

- Nasopharyngeal and oropharyngeal swabs (in viral transport media), or nasopharyngeal wash or aspirate (in sterile collection tube).
- CSF (2-3cc, if available, in sterile collection tube).
- Serum (acute and convalescent), collected **prior to** treatment with IVIG, (2-3 cc in red or tiger-top tube).
- Two stools (two quarter-sized amounts in sterile wide-mouth container) collected 24 hours apart.

Specimen Submittal

Clinicians should complete the [General Purpose Specimen Submittal Form](#) and send it to VRDL with samples. Samples can be sent on dry ice or cold pack for delivery Monday through Friday to:

ATTN: Specimen Receiving
CDPH Viral and Rickettsial Diseases Laboratory
850 Marina Bay Parkway
Richmond, CA 94804

Additional Resource

- [AFM Clinical Management](#)