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.

Case Classification

**Confirmed:**
- An illness with onset of acute focal limb weakness; AND
- A magnetic resonance image (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
- Cerebrospinal fluid (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), and herpesviruses.

Reporting AFM cases
Clinicians should contact the patient’s local health jurisdiction (LHJ) 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 Victoria Chu (Victoria.Chu@cdph.ca.gov, 510-620-3747) or Cynthia Yen (Cynthia.Yen@cdph.ca.gov, 510-620-3987).

Specimen Collection and Submittal
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.

Clinicians should complete the General Purpose Specimen Submittal Form and send it to VRDL with the following samples:
- 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.

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

Clinicians should also send the following samples to CDC:
- CSF (2cc unspun in sterile collection tube).
- Whole blood (3-5cc unspun in lavender or green top tube with anti-coagulant; EDTA or heparin).

Samples should be stored refrigerated and shipped to CDC directly from the hospital overnight on cold packs within 24-48 hours of specimen collection to arrive at CDC on Tuesdays through Fridays, and should not be routed through VRDL or the LHJ public health laboratory.

Please contact Cynthia Yen (Cynthia.Yen@cdph.ca.gov, 510-620-3987) for the appropriate CDC specimen submittal form and shipping address.

Additional Resource
AFM Clinical Management