Indiana State Department of Health

Indiana Health Alert Network Advisory—October 14, 2016

INCREASE IN REPORTS OF SUSPECTED ACUTE FLACCID MYELITIS CASES--2016

Summary

The Centers for Disease Control and Prevention (CDC) has received an increased number of reports of suspected acute flaccid myelitis (AFM) from May through August 2016; this increase is notable when compared to the same period in 2015. Clinicians are encouraged to maintain vigilance for cases of AFM among all age groups and to report cases of AFM to the Indiana State Department of Health (ISDH). Reporting of cases will help states and CDC monitor the occurrence of AFM and better understand factors possibly associated with this illness.

Background

From January 1, 2016 through July 31, 2016, CDC received 49 reports of suspected acute flaccid myelitis (AFM) in persons from 24 U.S. states; 32 met the Council of State and Territorial Epidemiologists (CSTE) case definition for confirmed AFM and 5 were classified as probable. During the same period in 2015, CDC received 10 reports of suspected AFM, of which 7 were classified as confirmed. Among the 32 confirmed cases reported in 2016, median age was 5 years (range, 5 months – 18 years). Dates of onset for confirmed cases ranged from January 19 through July 31, 2016; 78% (25/32) had onset of limb weakness after May 1, 2016. Pleocytosis was present in 81.2% (26/32) of confirmed AFM cases with a median CSF cell count of 45/mm^3 (range, 6-1460/mm^3). To date, no single pathogen has been consistently detected in CSF, respiratory specimens, stool, or blood at either CDC or state laboratories.

Recommendations

In response to the increase in the number of reports of suspect AFM, CDC recommends the following:

- CASE REPORTING: Clinicians should report suspect cases of AFM, irrespective of laboratory results suggestive of infection with a particular pathogen, to Mandy Billman (317.233.7125) at ISDH. If possible, complete and fax a patient summary form for each suspect AFM case (http://www.cdc.gov/acute-flaccid-myelitis/hcp/data.html). Copies of spinal cord and brain MRI reports should be provided along with the patient summary form. Completed forms can be faxed to the ISDH Epidemiology Resource Center (fax: 317.234.2812).
    - Reports from suspect cases of AFM will be submitted to CDC for determination of case status (i.e., confirmed, probable, not a case)

- LABORATORY TESTING: Clinicians should collect specimens from patients suspected of having AFM as early as possible in the course of illness (preferably on the day of onset of limb weakness)
    - The following specimens should be collected: **CSF;** *whole blood***;** *serum***; stool; or nasopharyngeal swab (with lower respiratory specimen if indicated); and an oropharyngeal swab. ***Specimens in **bold** will be accepted for testing at the ISDH Laboratory, other specimens listed can only be tested at CDC.
        - Please note: Collection of stool is required for AFM surveillance. Two stool specimens should be collected at least 24 hours apart early during the course of illness to rule out poliovirus infection.
    - If suspect cases are determined by CDC to meet the AFM case definition, the ISDH will work with clinicians to facilitate submission of remaining samples of these specimens to CDC for additional testing. Additional instructions regarding specimen collection and shipping can be found at: http://www.cdc.gov/acute-flaccid-myelitis/hcp/instructions.html.
- Information to help clinicians and public health officials manage care of persons with AFM that meet CDC's case definition was posted in 2014 and can be found at: http://www.cdc.gov/acute-flaccid-myelitis/downloads/acute-flaccid-myelitis.pdf

For more information

- AFM surveillance: http://www.cdc.gov/acute-flaccid-myelitis/afm-surveillance.html
- The CSTE standardized case definition for AFM is:
  Clinical Criteria
    - 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, OR
    - cerebrospinal fluid (CSF) with pleocytosis (white blood cell count >5 cells/mm^3)

  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/mm^3).

    *Terms 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 a neurologist or radiologist directly. http://c.ymcdn.com/sites/www.cste.org/resource/resmgr/2015PS/2015PSFinal/15-ID-01.pdf
- Resources and references for AFM: http://www.cdc.gov/acute-flaccid-myelitis/references.html
- Report suspect cases to Mandy Billman, ISDH Invasive Disease Epidemiologist, at abillman@isdh.in.gov or 317.233.7125