Public Health Advisory

CDC Reports Increase of Suspected Acute Flaccid Myelitis Cases – 2016

July 28, 2016

Situation:

Twenty-one confirmed cases of acute flaccid myelitis (AFM) have been reported to CDC from January 1 through June 30, 2016 among persons 6 months to 64 years of age. CDC is alerting public health officials to this increase and requesting prompt reporting and specimen collection of suspect AFM cases.

Description:

From January 1, 2016 through June 30, 2016, CDC received 36 reports of suspected acute flaccid myelitis (AFM) in persons from 20 U.S. states; a total of 21 met the Council of State and Territorial Epidemiologists (CSTE) case definition for a confirmed case of AFM and 3 were classified as probable. During the same period in 2015, CDC received only 8 reports of suspected AFM, of which 5 were classified as confirmed. Among the 21 confirmed cases reported in 2016, median age was 7 years (range, 6 months – 64 years). Dates of onset for confirmed cases ranged from December 1, 2015 through June 18, 2016; 48% (10/21) had onset of limb weakness after May 1, 2016. Because of the reports of a possible epidemiological association of EVD-68 and AFM in 2014, cerebrospinal fluid (CSF) specimens available from 86% (18/21) of confirmed cases were tested at CDC; all specimens were negative for enterovirus. Pleocytosis was present in 81% (17/21) of confirmed AFM cases with a median of 50/mm3 (range, 6-758/mm3).

CDC is alerting public health officials to this increase in suspected AFM cases. Reporting of cases will help states and CDC monitor potential increases in this illness and better understand potential causes, risk factors, and preventive measures or therapies. CDC is emphasizing the importance of vigilance by clinicians for AFM among all age groups.

The Council of State and Territorial Epidemiologists (CSTE) 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/mm3)

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).

*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).

CDC advises clinicians to report cases of AFM classified as confirmed or probable, irrespective of laboratory results, to the local and/or state health department using the patient summary form (http://www.cdc.gov/acute-flaccid-myelitis/hcp/data.html). Forms can be faxed to the Southern Nevada Health District Office of Epidemiology (SNHD OOE) at (702) 759-1414. To help expedite review of cases at CDC please provide copies of spinal cord and brain MRI reports to SNHD OOE along with the patient summary form.

Recommendations for specimen collection and testing

CDC advises clinicians to 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) including **CSF; whole blood; serum; peripheral blood mononuclear cells (PBMC); stool; a nasopharyngeal aspirate, nasopharyngeal wash, or nasopharyngeal swab (with lower respiratory specimen if indicated); and an oropharyngeal swab**. Collection of specimens as close to the onset of illness as possible has the best chance to yield a diagnosis.

- Clinicians treating patients meeting the AFM case definition should consult with the SNHD OOE at (702) 759-1300 option 2 to arrange laboratory testing of CSF, blood, serum, respiratory, and/or stool specimens for enteroviruses, West Nile virus, and other infectious etiologies known to be associated with AFM.
- If suspect cases are confirmed at CDC to meet the AFM case definition, CDC would like any remaining samples of these specimens to be provided to CDC for additional testing. SNHD OOE will work with the healthcare providers and laboratories to obtain and or store these specimens.

Recommendations for clinical management and follow-up of patients

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

Additional Resources:

http://www.cdc.gov/acute-flaccid-myelitis/references.html

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Reference: http://www.cdc.gov/acute-flaccid-myelitis/about-afm.html