Department of Public Health
CITY OF PHILADELPHIA

Philadelphia Department of Public Health
Division of Disease Control

THOMAS A. FARLEY, MD, MPH
Health Commissioner

CAROLINE JOHNSON, MD
Deputy Health Commissioner

STEVEN ALLES, MD, MS
Director, Division of Disease Control

Health Advisory

Acute Flaccid Myelitis: Clinical Reminders and Reporting Requirements

October 3, 2018

SUMMARY POINTS

- An increased number of acute flaccid myelitis (AFM) cases have been reported nationally in 2018
- Healthcare providers should report any suspect cases of AFM to PDPH by calling 215-685-6742
- Cerebrospinal fluid (CSF), blood, stool, and respiratory specimens should be collected as close to illness onset as possible for laboratory testing. PDPH can facilitate testing of clinical specimens

During the summer, the Centers for Disease Control and Prevention (CDC) began receiving an increased number of suspected acute flaccid myelitis (AFM) cases. From January 1 through August 20, 2018, 43 suspected cases in persons from 20 states were reported to CDC; 14 met the surveillance definition for a confirmed case of AFM (median age 3.7 years, range 1.1-13.7 years). In 2014 and 2016, increases in AFM cases that peaked seasonally from August through October were documented. Given this biennial trend, an increase in AFM cases during 2018 is anticipated.

Clinical Syndrome: AFM generally presents with a prodromal respiratory or gastrointestinal illness for 1 week and neck or back pain followed by onset of weakness of one or more limbs. Other neurologic symptoms include cranial nerve findings such as slurred speech, difficulty swallowing, eyelid or facial droop, poor tone and diminished reflexes. Weakness can also affect respiratory muscles, leading to respiratory failure. Cerebrospinal fluid may show a lymphocytic pleocytosis and elevated protein and MRI findings include lesions in the central or gray matter of the spinal cord. There is no specific treatment for AFM. Most patients recover with supportive care and physical and occupational therapy but severe neurologic complications can result in death.

Reporting Guidelines: Clinicians should notify PDPH's Division of Disease Control of any patient you are evaluating for AFM by calling 215-685-6742. **Approval from PDPH is required for specimen testing**. To receive approval clinicians must complete the patient summary form (https://www.cdc.gov/acute-flaccid-myelitis/hcp/data.html) and include (if available) admission and discharge notes, neurology and infectious diseases consults, magnetic resonance imaging (MRI) images and reports, and vaccination history. Laboratory results including initial hospital or commercial laboratory testing for enteroviruses, arboviruses, and adenoviruses should also be provided. **Information should be submitted to PDPH regardless of any laboratory or MRI results.** AFM neurology experts at CDC will review all case information and lab results to determine case classification.

Specimen Collection and Testing Recommendations: Although enteroviruses, West Nile virus, other flaviviruses, and adenoviruses are known to cause AFM, surveillance efforts aim to explore and identify all possible etiologies for this illness. PDPH advises collecting specimens from patients as early as possible after symptom onset, preferably on the day that limb weakness develops. Specimens to collect for submission to CDC include: **CSF, Serum, Stool, and nasopharyngeal (NP) or oropharyngeal (OP) swabs. All specimens must be accompanied by the** CDC Form 50.34. 'Picornavirus Special Study' must be selected for test order name. Additional instructions regarding specimen collection and shipping to CDC can be found at https://www.cdc.gov/acute-flaccid-myelitis/hcp/instructions.html.

For more information:

- PDPH AFM Resources: https://hip.phila.gov/DiseaseControlGuidance/DiseasesConditions/AFM
- AFM Surveillance in the US: https://www.cdc.gov/acute-flaccid-myelitis/afm-surveillance.html
- Materials for Clinicians and Health Departments: https://www.cdc.gov/acute-flaccid-myelitis/hcp/index.html
- References: https://www.cdc.gov/acute-flaccid-myelitis/references.html