February 15, 2017 (2 pages – replaces version dated September 15, 2016)

To: North Carolina Health Care Providers  
From: Zack Moore, MD, MPH, Acting State Epidemiologist  
Scott J. Zimmerman, DrPH, MPH, HCLD (ABB), State Public Health Laboratory Director  
Re: Identification and Management of Suspected Acute Flaccid Myelitis Cases- 2017

This memo is intended to provide information regarding identification and management of suspected acute flaccid myelitis (AFM) cases and updates the clinical specimen submission guidelines.

Background
The U.S. Centers for Disease Control and Prevention (CDC) confirmed an increased number of acute flaccid myelitis (AFM) cases in 2016 as compared to 2015. From January 1 to November 30, 2016, 120 confirmed cases were identified in 37 states. In 2015, 21 people were confirmed to have AFM in 16 states. In North Carolina, four cases of AFM have been confirmed in 2016 with an additional case pending classification. One case was confirmed in North Carolina in 2015.

Changes to Specimen Collection, Shipping, and Testing
Despite extensive pathogen-specific testing of many specimens since 2014, an etiology for AFM cases has not been identified. Consequently, CDC will no longer be performing clinical diagnostics for enteroviruses or metagenomic sequencing. Instead, specimens collected from suspect cases of AFM will be used to expand the search for potential causes. CDC is broadening laboratory approaches and will test for potential infectious and noninfectious causes, including possible immune-mediated mechanisms. Because the new testing to be done at CDC is not intended for clinical diagnosis, individual clinical reports of specific test results will not be provided to submitting providers.

CDC is also no longer requesting that respiratory specimens be collected from suspected cases of AFM. However, respiratory specimens that test positive for enteroviruses/rhinoviruses at other laboratories may be sent to CDC for typing.

Case Classification
Confirmed:
- Acute onset of focal limb weakness, AND
- An MRI showing a spinal cord lesion largely restricted to gray matter* and spanning one or more spinal segments

Probable:
- Acute onset of focal limb weakness, AND
- Cerebrospinal fluid (CSF) with pleocytosis (white blood cell count >5 cells/mm³, adjusting for presence of red blood cells by subtracting 1 white blood cell for every 500 red blood cells present)

*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.
Case Reporting
Clinicians are encouraged to maintain vigilance for cases of AFM among all age groups and to report cases of AFM to the North Carolina Division of Public Health (NC DPH). Reporting of cases will help NC DPH and CDC monitor the occurrence of AFM and better understand factors possibly associated with this illness.

Clinicians should report suspected cases of AFM, irrespective of laboratory results suggestive of infection with a particular pathogen, to the NC DPH Communicable Disease Branch at 919-733-3419.
- NC DPH requests that clinicians complete the patient summary form (available at [http://www.cdc.gov/acute-flaccid-myelitis/hcp/data.html](http://www.cdc.gov/acute-flaccid-myelitis/hcp/data.html)) and submit to NC DPH Communicable Disease Branch via secure fax at 919-733-0490 to the attention of “AFM surveillance”.
- Copies of spinal cord and brain MRI reports should be provided along with the patient summary form.
- 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). All of the following specimens should be collected on each patient:
- CSF specimen
- Blood (serum and whole blood)
  - If any serum samples were collected after receipt of intravenous immune globulin or plasmapheresis, please note this on the patient summary form
- Two (2) stool specimens, in accordance with the recommendations for poliovirus testing in all patients with a compatible clinical picture (ranked by preference)
  - Whole stool>>rectal swab
  Stool specimens should be collected at least 24 hours apart early during the course of illness to rule out poliovirus infection.

If suspected cases are determined by CDC to meet the AFM case definition, NC DPH will work with clinicians to facilitate submission of these specimens to CDC for additional testing. Specimens should be shipped Monday-Thursday in insulated containers using cold packs to the North Carolina State Laboratory of Public Health (SLPH). The following three forms must be included with all submissions:
- CDC 50.34 DASH Form: [http://slph.ncpublichealth.com/forms.asp](http://slph.ncpublichealth.com/forms.asp) (click on “specimen submittal forms”). Select “Picornavirus Special Study” as Test Order Name. Submit one CDC 50.34 DASH Form for each specimen.
- AFM Patient Summary Form, page 1 ([http://www.cdc.gov/acute-flaccid-myelitis/hcp/data.html](http://www.cdc.gov/acute-flaccid-myelitis/hcp/data.html))

Additional instructions regarding specimen collection and shipping can be found at: [http://www.cdc.gov/acute-flaccid-myelitis/hcp/instructions.html](http://www.cdc.gov/acute-flaccid-myelitis/hcp/instructions.html).

For more information
- General resources and references for AFM: [http://www.cdc.gov/acute-flaccid-myelitis/references.html](http://www.cdc.gov/acute-flaccid-myelitis/references.html)
Reporting Communicable Diseases – Mecklenburg County

To request N.C. Communicable Disease Reporting form, telephone 980-314-9201 or 980-314-9220
Mark all correspondence “CONFIDENTIAL”

**Tuberculosis:**
TB Clinic 980.314.9470
Mecklenburg County Health Department 704.432.2493
2845 Beatties Ford Road
Charlotte, NC  28216

**Sexually Transmitted Diseases, HIV, & AIDS:**
Syphilis and HIV/AIDS Reporting 980.314.9226 or 704.614.2993
Other STD Reporting 980.314.9220
Mecklenburg County Health Department FAX 704.336.6200
700 N. Tryon Street, Suite 214
Charlotte, NC  28202

**All Other Reportable Communicable Diseases**
Report to any of the following nurses:
Brian Lackey, RN 980.314.9206
Lori Bowers, RN 980.314.9212
Shawn Wilson, RN (Child Care Nurse) 980.314.9208
Tiffiney McKoy, RN 980.314.9207
Julie Secrest, RN 980.314.9209
Tammy Moss, RN 980-314-9205
Deborah Lentz, RN 980-314-9204
Communicable Disease Control FAX 704.353.1202
Mecklenburg County Health Department Urgent after-hours 24/7 704-432-0871
700 N. Tryon Street, Suite 271
Charlotte, NC  28202

**Animal Bite Consultation / Zoonoses / Rabies Prevention:**
Jose Pena 980.314.9210
Communicable Disease Control FAX 704.353-1202
Mecklenburg County Health Department
700 N. Tryon Street, suite 214
Charlotte, NC  28202
State Veterinarian 919.733.3410
State after hours 919.733.3419

**Suspected Food borne Outbreaks / Restaurant, Lodging, Pool and Institutional Sanitation:**
Food & Facilities Sanitation (Mon-Fri 8-5) 980-314-1620
Mecklenburg County Health Department (evenings; Sat/Sun) 980.314.1660
700 N. Tryon Street, Suite 208 (pager evenings; Sat/Sun) 704.580.0666
Charlotte, NC  28202 FAX 704.336.5306

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