MEMO

TO: North Dakota Providers

FROM: Jill K Baber, MPH
Influenza and Syndromic Surveillance Coordinator

RE: Acute Flaccid Myelitis Surveillance and Enterovirus D68

DATE: August 15, 2016

The North Dakota Department of Health (NDDoH) would like to make providers aware of recent increases in acute flaccid myelitis (AFM) cases at the national level for 2016 compared to 2015. For more information, visit http://www.cdc.gov/acute-flaccid-myelitis/afm-surveillance.html. Some of these cases have been associated with infection with enterovirus-D68 (EVD-68), or with West Nile Virus. The NDDoH is asking healthcare providers to report cases of AFM to assist the NDDoH and the Centers for Disease Control and Prevention (CDC) in monitoring potential increases of this illness, and to better understand potential causes, risk factors, and preventive measures or therapies. The NDDoH and CDC are working together to track AFM, and to provide additional laboratory testing for patients who meet the AFM confirmed or probable case definition.

Case definition for AFM
The Council for State and Territorial Epidemiologists (CSTE) has developed the following case definition for confirmed and probable cases of AFM:

Confirmed Case

1. Acute onset of focal limb weakness, AND
2. An MRI showing a spinal cord lesion largely restricted to gray matter and spanning one or more spinal segments.

Probable Case

1. Acute onset of focal limb weakness, AND
2. 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).

The NDDoH Division of Disease Control is requesting clinicians report cases meeting the confirmed or probable case definition by calling 701.328.2378 or 800.472.2180.
Recommendations for specimen collection and testing
Clinicians should collect specimens from patients meeting the case definition for AFM as early as possible in the course of illness, preferably on the day of onset of limb weakness, including:

- cerebrospinal fluid (CSF),
- blood (serum and whole blood),
- a nasopharyngeal aspirate, nasopharyngeal wash, or nasopharyngeal swab with lower respiratory specimen if indicated, and an oropharyngeal swab, AND
- stool, preferably two stool specimens collected as soon as possible after the onset of limb weakness and separated by 24 hours.

Early specimen collection has the best chance to yield a diagnosis of AFM. Available clinical specimens from patients that meet the confirmed or probable case definition for AFM should be submitted to the NDDoH Division of Laboratory Services (DLS) promptly so that the NDDoH and CDC can test and monitor these cases in as real time as possible. Please contact Disease Control to report AFM cases and receive approval for testing at: 701.328.2378 or 800.472.2180. Questions about specimen collection and transport should be directed to the DLS at 701.328.6272. There will be no charge for testing performed on patients meeting the case definition.

EVD-68 testing at the NDDoH
The NDDoH DLS offers EVD-68 PCR testing for providers interested in this testing for patients that do not meet the case definition for AFM. Testing is available in one of two ways:

1. As a stand-alone confirmation test on a rhinovirus or enterovirus-positive specimen for a fee of $25.00. Providers must obtain a positive rhinovirus or enterovirus result before requesting this test.
2. The DLS also offers a respiratory viral panel (RVP). This PCR assay includes markers for influenza, RSV, parainfluenza, human metapneumovirus, rhinovirus, and adenovirus types. The test is available for a fee of $85.00. Rhinovirus positives may be reflexed to the EVD-68 test upon request for no additional fee. Please indicate your interest in EVD-68 testing when ordering an RVP.

All RVP and enterovirus-D68 specimens should be nasopharyngeal swabs placed in viral transport medium and shipped at 2-8°C. Please contact the division of laboratory services with questions on specimen collection, shipping and transport: 701.328.6272.

Please forward this information on to other applicable health care providers at your facility.

On behalf of the NDDoH, thank you for your assistance. For more information on AFM surveillance, please contact Disease Control at 701.328.2378 or 800.472.2180.