"I had an interview with the Board of Guardians of St. James’s parish, on the evening of Thursday, 7th September, and represented the above circumstances to them. In consequence of what I said, the handle of the pump was removed on the following day."

John Snow, 1855

Topics
- North Dakota Sees First Case of Acute Flaccid Myelitis – Jill Baber
- Multistate Outbreak of Shiga toxin-producing E. coli O157:H7 associated with Romaine Lettuce – Laura Cronquist
- WNV Update – Michelle Dethloff
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North Dakota Sees First Case of Acute Flaccid Myelitis

A North Dakota child previously under investigation for Acute Flaccid Myelitis (AFM) has been confirmed as an AFM case by the Centers for Disease Control and Prevention (CDC). The North Dakota Department of Health (NDDoH) was first notified of the potential AFM case in October of this year. This is the first case of AFM confirmed by CDC in North Dakota. Providers are asked to report patients with possible AFM to the NDDoH. The NDDoH coordinates with providers and the CDC to obtain clinical information and specimens for review and testing as part of the AFM case classification process.

Acute Flaccid Myelitis is a rare, polio-like condition that can develop as a complication of viral illness, environmental exposures, or genetic factors. Primarily characterized by weakness of the limbs, other symptoms of AFM include neck weakness or stiffness, drooping eyelid of facial droop, and difficulty swallowing or slurred speech. Increases in AFM in a national scale were noted in 2014 and have occurred every two years since.
The exact cause for these increases is unknown, which is why the NDDoH is working with the CDC to identify and evaluate cases of AFM. Since 2014, most cases of AFM have been identified in children, but people of any age can be affected.

**Multistate Outbreak of Shiga toxin-producing E. coli O157:H7 associated with Romaine Lettuce**

State and federal public health and regulatory officials are investigating another multistate outbreak of Shiga toxin-producing *E. coli* (STEC) O157:H7 infections associated with romaine lettuce. There are currently no cases in North Dakota linked to this outbreak. Interestingly, the current outbreak is not related to the O157 outbreak linked to romaine lettuce that occurred earlier this year. Whole genome sequencing (WGS) analysis of isolates from the current outbreak has shown they are closely related genetically to isolates from a 2017 outbreak linked to leafy greens in the United States and romaine lettuce in Canada. Epidemiologic and traceback information indicates a likely source of the current outbreak is romaine lettuce from the Central Coastal growing regions of northern and central California. However, the traceback investigation has not identified a single farm, grower, harvester, or distributor. The U.S. Food and Drug Administration (FDA) recommends that consumers not eat romaine lettuce from the Central Coastal growing regions, which includes the following California counties: Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz, and Ventura. There is no recommendation to avoid romaine lettuce grown hydroponically, in a greenhouse, or outside the Central Coastal growing regions. The romaine lettuce harvest season in the California central coast has ended. To help consumers identify where and when their lettuce was harvested, the FDA is working with the romaine lettuce industry to provide this information on product labels. Additional information on the FDA investigation and consumer labeling can be found at [www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm626716.htm](http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm626716.htm).

The most common symptoms of STEC include diarrhea, bloody diarrhea, abdominal pain, nausea and vomiting. Symptoms typically begin three to four days after exposure to the bacteria but can take as long as 10 days. Treatment with antibiotics is not recommended. Most cases resolve on their own, but severe cases and cases involving complications may require hospitalization. The CDC estimates that around 5-10 percent of people with STEC infections develop a complication known as hemolytic uremic syndrome (HUS), which affects the red blood cells and can cause kidney failure. Indications that a person may be developing HUS include decreased frequency of urination, feeling very tired, and loss of pink color in cheeks and inside the lower eyelids.
As of December 6, 52 cases from 15 states have been reported to the CDC. Illnesses started on dates ranging from October 5, 2018, to November 18, 2018. Ill people range in age from 1 to 84 years, with a median age of 30. Sixty-nine percent of ill people are female. Of the 45 cases with information available, 19 (42%) have been hospitalized, including two people who developed HUS. No deaths linked to this outbreak have been reported.

To learn more about the outbreak of STEC infections linked to romaine lettuce, please visit the CDC’s website at [www.cdc.gov/ecoli/2018/o157h7-04-18/index.html](http://www.cdc.gov/ecoli/2018/o157h7-04-18/index.html) or contact Laura Cronquist, NDDoH, at 701.328.2378.

**West Nile Virus Update**

As of December 12, 2018, there have been 203 West Nile virus (WNV) disease cases reported to the NDDoH. The cases have been identified in 31 counties. Sixty-one of the 203 cases have been hospitalized. There have been two deaths reported. Additionally, positive mosquito pools have been identified in Burleigh, Cass, Grand Forks, Ramsey, Richland, Stark, Stutsman, Ward, and Williams Counties. Cass County and Grand Forks County have reported WNV positive dead birds. For the most up to date WNV information, visit our website at [www.ndhealth.gov/wnv](http://www.ndhealth.gov/wnv).

**Get to Know Your Field Epidemiologist**

**Name:** Linda Larson

**Title:** Field Epidemiologist

**Area of ND Covered:** Bottineau, McHenry, McLean, Rolette, Sheridan, Ward Counties

**Education Background:** I have a bachelor’s degree in Health Sciences from Trident University in Cypress, California.

**Past Experience:** An interest in rural health nursing landed my family in Rugby, ND where I worked as a staff nurse for 3 years at the Heart of America Medical Center. During this time, I accepted a commission as an officer in the ND Army National Guard as a first lieutenant in the 815th Medical Detachment located in Bismarck, ND. Some of
my duties were to assist in the operation of annual physical exam clinics and teaching soldiers how to start intravenous lines in the field environment. I then accepted a position in Rolla, ND as the director of nursing and administrator for the Rolette County Public Health Unit. In 2001, I opened the doors of the Rolette County Public Health Unit. At that time, I wore all the hats! From there a friend mentioned a position as a field epidemiologist in Minot, ND which was my hometown. It sounded like very interesting work, so I applied. Kirby Kruger called and offered me the opportunity to work for the Division of Disease Control in 2002. I accepted and have spent the past 16 years as a field epidemiologist. It has been a tremendous learning experience with many adventures along the way. I have to say that I truly enjoy disease investigations and all that goes with it!

**Family/Hobbies:** I love exploring nature and all that it beholds. I really enjoy growing a garden, camping and fishing with family, friends and my dog. Orchestral music and art are also of great interest to me. Photographing my grandchildren due to their candidness is an activity that I pursue often.

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Kirby Kruger, Director, Division of Disease Control; Chief of Medical Services Section
Molly Howell, MPH, Assistant Director, Division of Disease Control
Jenny Galbraith, Managing Editor