

The Pump Handle The Pump Handle



"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

May 2018 Topics

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Multistate Outbreak of *E. coli* O157:H7 Infections Linked to Romaine Lettuce

The North Dakota Department of Health (NDDoH) recently investigated three cases of *E. coli* O157:H7 infection that were part of a multistate outbreak. The outbreak was likely linked to romaine lettuce originating from the Yuma, Arizona, growing region. As of May 30, 2018, 197 people infected with the outbreak strain of *E. coli* have been reported from 35 states. Illnesses started on dates ranging from March 13, 2018, to May 12, 2018. Ill people range in age from 1 to 88 years, with a median age of 29. Sixty-eight percent of ill people are female. Of 187 people with information available, 89 (48%) have been hospitalized, including 26 people who developed hemolytic uremic syndrome, a disorder causing fragmentation of erythrocytes and can lead to kidney failure. Five deaths have been reported from Arkansas (1), California (1), Minnesota (2), and New York (1).

The most common symptoms of *E. coli* 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 *E. coli* infections develop a complication known as hemolytic uremic syndrome (HUS). 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.

Romaine lettuce is no longer being produced or distributed from the Yuma growing region. Due to its 21-day shelf life, romaine lettuce from the Yuma area is no longer available in stores or restaurants. The U.S. Food and Drug Administration (FDA) continues to conduct traceback investigation efforts to try to identify factors that contributed to contamination of romaine lettuce. Thus far, the investigation indicates that the illnesses associated with this outbreak cannot be explained by a single grower, harvester, processor, or distributor. The FDA has stated they are examining all possibilities, including that contamination may have occurred at any point along the growing, harvesting, packaging, and distribution chain before reaching consumers.

For additional information about the *E. coli* O157:H7 multistate outbreak, please visit www.cdc.gov/ecoli/2018/o157h7-04-18/index.html or contact Laura Cronquist, North Dakota Department of Health, at 701.328.2378.



NDDoH Tick Surveillance Program and Tickborne Diseases in North Dakota

The NDDoH Division of Microbiology has collected nearly 7000 ticks since the beginning of the 2018 tick surveillance season. The NDDoH Tick Surveillance Program has expanded this year to include additional veterinary clinics and wildlife officials located throughout the state. Participants submit ticks each week from April until November for identification and tickborne pathogen analysis. The majority of ticks submitted so far have been identified as *Dermacentor variabilis*, or American dog ticks (6782). Twenty-two ticks were identified as *Ixodes scapularis*, or deer ticks. One *Amblyomma americanum*, or Lone Star tick, was also identified. Tickborne pathogen analysis will be performed on all submitted ticks that are suitable for testing (i.e., not engorged).

All tickborne diseases are mandatorily reportable to the NDDoH. As of June 13, there have been five tickborne disease cases from three counties reported to the NDDoH in 2018. Cases reported include anaplasmosis or ehrlichiosis (1), Lyme disease (3), and Rocky Mountain spotted fever (1). Two of the cases were hospitalized.

For more information about the NDDoH Tick Surveillance Program or tickborne diseases, please visit www.ndhealth.gov/disease/Tickborne or contact Laura Cronquist at lcronquist@nd.gov or 701.328.2378.



School Immunization Requirements

The start of the new school year will be here soon, and it is time to ensure students are up to date on immunizations. A few changes to North Dakota school immunization requirements will go into effect with the upcoming 2018-2019 school year.

One dose of meningococcal conjugate vaccine (MCV4) is now required for students entering 7th through 10th grade and a second dose of MCV4 is required for those entering grades 11th and 12th. Most students have not received their second dose. If a student receives their first dose of MCV4 on or after their sixteenth birthday, only one dose is required.

School immunization requirements for students entering kindergarten have remained the same. Students in all grades should be compliant with immunization requirements before starting school. All students must be compliant by October 1 or be excluded from school. Health care providers should ensure their patients are up to date on all recommended vaccinations, not only school requirements.

Number of Required Doses

<u>Vaccine</u>	Kindergarten - 6 th grade	Grades 7-10	Grades 11-12
<i>DTaP</i>	5	5	5
<i>Hepatitis B</i>	3	3	3
<i>Polio</i>	4	4	4
<i>MMR</i>	2	2	2
<i>Varicella (chickenpox)</i>	2	2	1
<i>Meningococcal (MCV4)</i>	0	1	2
<i>Tdap</i>	0	1	1

More information regarding the 2018-2019 school immunization requirements can be found at <http://www.ndhealth.gov/Immunize/Schools-ChildCare/>. Please contact the NDDoH Immunization Program at 701.328.3386 or 800.472.2180 (toll-free) with any questions regarding school immunization requirements.

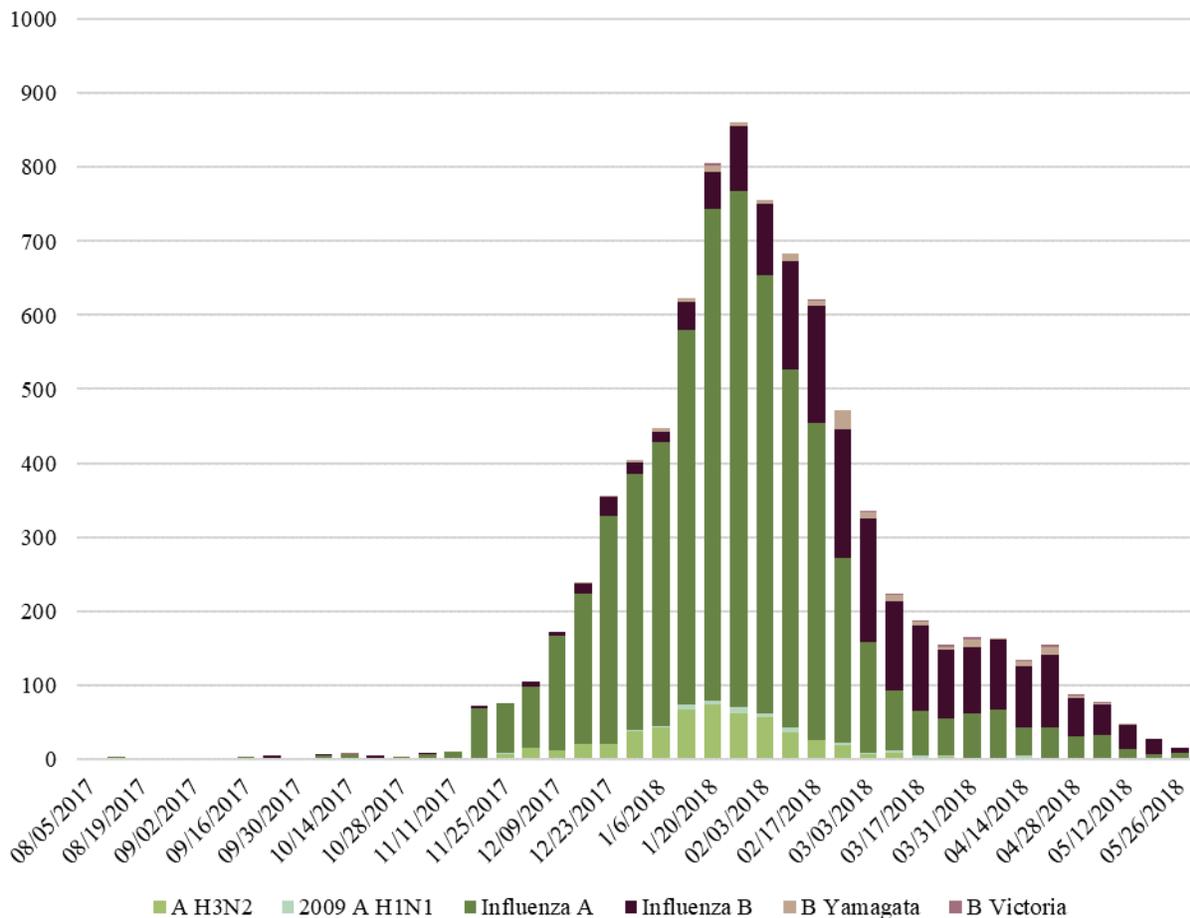


Influenza Season Wrap-up

With 8,515 cases, the 2017-18 influenza season has been our largest season on record. The season began early, with a significant number of cases being reported beginning in November. Case counts continued to increase until a peak the week ending January 27, 2018 and tapered off slowly through May. The influenza A H3N2 virus was the predominant circulating virus for the second year in a row, with the 2009 influenza A H1N1 and both influenza B lineages circulating at lower numbers. Influenza B numbers increased in the latter half of the season, which is typical for seasonal influenza. Nationally, this influenza season caused a record number of hospitalizations and the season was considered one of most severe seasons in the past 20 years.

Influenza Cases by Type	
A, unspecified	5,904
2009 A H1N1	52
A H3	536
B, unspecified	1,861
B Yamagata	142
B Victoria	20

Number of Reported Laboratory-Identified Influenza Cases by Week Ending Date





Get to Know Your Field Epidemiologist

★**Name:** Shawn McBride

Title: Regional Field Epidemiologist

Area of ND Covered: Grand Forks, Nelson, Griggs, Steele, Traill, Walsh, Cavalier, and Pembina Counties.

Education Background: BS in Biology and BA in Psychology from UND.

Past Experience: Before working as a field epidemiologist, I worked several years at an inpatient psychiatric hospital. Once becoming a field epidemiologist, I have had great opportunities to work with many health professionals on a variety of issues aside from the standard disease control activities like occupational health research.

Family/Hobbies: I am married to a wonderful gal named Lizzie and I have two charming sons; Kellen is 3 and Elliot will be 2 in July. When I am not spending time with my family, I am usually up to my elbows in water in one of my aquascapes (aka planted aquarium). I submit my creations to international contests each year. I just recently finished my 2018 International Aquatic Plant Layout Contest work and hope to rank highly. Last year I ranked 273 out of thousands of entries and hope to break into the elusive top 100 for 2018. I have also produced a podcast series "The Aquascaping Podcast." Aside from that, I enjoy playing sports, occasionally watching them, exercise, chess, and I have been known to play video games. I enjoy traveling and backpacking in Montana where I grew up. I like to cook, but I don't like to clean it up. I've recently taken up Yoga. I enjoy new challenges and meeting new and interesting people.



One of Sean's aquascapes



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