"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

- E. coli Infection Outbreaks Linked to Leafy Greens
- Influenza Update
- Hepatitis C Testing
- Update to Reportable Diseases and Conditions
- New Disease Control Employee – Nathan Fix
- Save-the-Date – Immunization Conference 2020

Multiple Outbreaks of E. coli Infections Linked to Leafy Greens

The Centers for Disease Control and Prevention (CDC), the U.S. Food and Drug Administration (FDA), and state health officials are investigating multiple outbreaks of E. coli O157:H7 infections linked to leafy greens. One of the outbreaks has been linked to romaine lettuce harvested from the Salinas, California, growing region. As of December 4, 102 people infected with the outbreak strain have been reported from 23 states. Illnesses started on dates ranging from September 24, 2019, to November 18, 2019. Cases range in age from less than 1 to 89 years, with a median age of 25. Sixty-five percent of ill people are female. Of 98 ill people with information available, 58 hospitalizations have been reported, including 10 people who developed hemolytic uremic syndrome (HUS), a type of kidney failure. No deaths have been reported. Consumers should not eat, and retailers should not sell, any romaine lettuce grown in Salinas, California. The investigation of this outbreak is ongoing to determine the source of contamination and if additional products may be linked to illness.
As of December 9, a smaller outbreak involving a different strain of *E. coli* O157:H7 has affected eight people in three states, including one person in North Dakota. Cases range in age from 21 to 91 years, with a median age of 32. Three cases have been hospitalized, including one person who developed HUS. No deaths have been reported. The Public Health Agency of Canada has also reported 16 cases in five provinces with the same strain of *E. coli*. Information collected during the ongoing investigation of this outbreak indicates that Fresh Express brand Sunflower Crisp chopped salad kits are a likely source. Health officials have not yet determined which ingredient in the salad kit was contaminated. The NDDoH is warning consumers, restaurants, and retailers not to eat or sell Fresh Express Sunflower Crisp Chopped Kit salads with this identifying information: UPC 0 71279 30906 4, a lot code beginning with Z, and a best-before date up to and including 07DEC19. This information is printed on the front of the bag in the top right corner.

The most common symptoms of *E. coli* infection include diarrhea, bloody diarrhea, abdominal pain, nausea, and vomiting. Symptoms typically begin three to four days after exposure to *E. coli* 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 HUS. Although anyone can develop HUS, this complication is more likely to occur in younger children, older adults, and those with impaired immune systems or other underlying health conditions. 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.

To learn more about the outbreaks of *E. coli* infections linked to leafy greens, please visit the CDC’s website at www.cdc.gov/ecoli/outbreaks.html or contact the NDDoH Division of Disease Control at 701.328.2378.

**Influenza Update**

The 2019-20 influenza season is quietly ramping up, with 360 total cases as of December 3rd. 32 counties are now reporting influenza activity across the state with some counties receiving higher than average numbers of the flu. The most common virus circulating so far this season has been the influenza B virus with the predominant strain being Influenza B Victoria. However we are beginning to see increasing numbers of influenza A with confirmed cases of both the 2009 A H1N1 and A H3N2 strains.

Historically we are seeing less cases then we did at this period last year; last flu season saw a large amount of early influenza activity which decreased slightly before peaking in March. The
number of hospitalizations for the season is relatively low at 10, and there have been no deaths attributed to influenza in ND at this point. Influenza-like illness currently accounts for 3.16% of all outpatient visits, and 15.24% of testing for influenza submitted is positive.

With the holiday season fast approaching the North Dakota Department of Health wants to remind everyone that it is not too late to get your influenza vaccination. As of December 3rd, a total of 233,484 doses of 2019-20 influenza vaccine has been administered and entered in the North Dakota Immunization Information System (NDIIS). The vaccine may take up to two weeks to provide immunity.

**Hepatitis C Testing**

There are an estimated 2.4 million people living with the hepatitis C virus (HCV) in the United States. Hepatitis C related mortality has been at an all-time high and, according to the Centers for Disease Control and Prevention (CDC), has surpassed the total combined number of deaths from 60 other reportable infectious diseases. An estimated one in two individuals living with HCV do not know they have the virus. Current testing recommendations from the CDC are below.

- Adults born from 1945 – 1965 should be tested once regardless of HCV risk factors
- Persons with current or former injection drug use, including those who injected just once or many years ago
- Persons who received clotting factor concentrates produced before 1987
- Persons who were on long-term hemodialysis
- Persons with persistent abnormal alanine aminotransferase levels (ALT)
- Persons living with HIV
- Persons who received a transfusion of blood, blood components or an organ transplant before July 1992
- Persons with a recognized exposure (needle sticks, sharps or mucosal exposures to HCV-positive blood or children born to HCV-positive women)

To diagnose HCV initial testing should include a hepatitis C antibody test (anti-HCV test) and, if reactive, followed by an RNA test to determine if the patient is currently infected. For more information on HCV screening please visit [https://www.cdc.gov/hepatitis/hcv/](https://www.cdc.gov/hepatitis/hcv/).
Update to Reportable Diseases and Conditions

On January 7th, 2020 at noon (CST), the NDDoH will be hosting a webinar to provide information about updated mandatory reportable conditions in North Dakota. The webinar will also be archived for viewing at a later date. To register for the webinar, please visit https://www.health.nd.gov/events.

New Disease Control Employee

Name: Nathan Fix
Title: HIV/STI Outreach Coordinator
Education Background: B.S. degrees in Microbiology and Philosophy, MPH from North Dakota State University (Management of Infectious Diseases Specialization)
Past Experience: Sr. Research Specialist for the North Dakota Healthcare Workforce Group at the University of North Dakota School of Medicine and Health Sciences
Family/Hobbies: Nathan enjoys running, biking, traveling, listening to and playing music, and spending time with his wife.
Role in the Division of Disease Control: Nathan is employed with North Dakota State University through a contract with the North Dakota Department of Health, Division of Disease Control. He will provide education and feedback to healthcare providers and clinic staff about HIV/STI screening, treatment and prevention.

Save-the-Date – Immunization Conference 2020

The 2020 North Dakota Immunization Conference will be held on July 14th and 15th, 2020, at the Bismarck Event Center. Various immunization-related topics will include vaccine preventable diseases, childhood/adolescent/adult immunization updates, best practices to increase immunization rates and even an immunization game show! Registration will be available in early 2020 at https://www.health.nd.gov/events.

Hope to see everyone there!
Kirby Kruger, Director, Division of Disease Control; Chief of Medical Services Section
Molly Howell, MPH, Assistant Director, Division of Disease Control
Brandy Chap, Managing Editor