"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

November 2012 Topics
- Tuberculosis Outbreak
- Influenza Update
- Acute Viral Gastroenteritis Activity Update
- Be Smart About Food Safety

**Tuberculosis Outbreak**

The North Dakota Department of Health, Grand Forks Public Health Department and Altru Health System are investigating a cluster of active tuberculosis (TB) cases in Grand Forks County. Historically North Dakota is a low incidence state for tuberculosis (<3.5 cases/100,000 individuals).

Tuberculosis (TB) is caused by a bacterium called *Mycobacterium tuberculosis*. The bacteria usually attack the lungs, but TB bacteria can attack any part of the body such as the kidney, spine and brain.

Tuberculosis is a disease that is spread from person to person through the air when someone with TB disease has coughed or sneezed into the air, usually in an indoor environment. Exposure to tuberculosis includes frequent or prolonged exposure, such as sitting in a small room or confined area for a long period of time with someone who has active TB and is infectious.

Anyone can get TB. Individuals with weakened immune systems, including those with AIDS or those infected with HIV, are at increased risk. In the United States, the most common risk factors for TB are social factors such as substance abuse, being incarcerated in a correctional facility, minority populations, being born in a country...
where TB is more common and homelessness.

TB is NOT spread by:

- Shaking someone’s hand.
- Sharing food or drink.
- Touching bed linens or toilet seats.
- Sharing toothbrushes.
- Kissing.

The general symptoms of TB disease include feeling sick or weak, weight loss, fever and night sweats. The symptoms of TB of the lungs include productive, prolonged cough (duration of three weeks or longer), chest pain, and coughing up blood. It should be noted that symptoms usually develop gradually and last for a prolonged period of time. This is different than symptoms of the flu, which usually come on very suddenly and go away after a couple of days to a week. Anyone experiencing symptoms of TB should contact his or her health-care provider as soon as possible for an evaluation.

In early October, the state health department confirmed three cases of active TB in Grand Forks County. Additional laboratory testing linked these cases to three earlier confirmed cases in 2012 and two cases in 2010.

The active tuberculosis cases have been interviewed by health officials to identify individuals who may have been exposed to tuberculosis. The individuals identified as contacts are being screened using one of two types of tests available to determine if a person has been infected with TB bacteria: the tuberculin skin test or a TB blood test.

Screening of contacts has identified 11 new active cases of tuberculosis; four of them are children. Students, teachers and staff in the same classroom as the active cases were tested for tuberculosis resulting in three positive screening tests indicating these individuals may have been exposed to TB.

Health officials continue to do contact investigations to identify people who may have been exposed to the active cases. Examples of groups that may be contacted include family members, coworkers, friends and roommates. When TB cases such as this are occurring in a community, it takes a significant amount of time to conduct the investigations around each case and complete the testing and treatment needed. The investigation likely will continue for months, and it is expected that more cases will be identified.

**Influenza Update**

As of December 18, 2012, a total of 175 laboratory-identified influenza cases have been reported to the North Dakota Department of Health (NDDoH) from 26 counties. One hundred thirty-seven cases were identified as Influenza A and 37 as Influenza B. One case was reported to be an unknown subtype of influenza. Of the cases further subtyped at the Division of Laboratory Services, all have been confirmed as Influenza A H3N2 (5 cases). Currently flu activity is rapidly increasing and is expected to only
go up in the coming weeks. This would be an opportune time for anyone yet not vaccinated for flu to do so. Flu vaccine is plentiful and more vaccine has been distributed in the United States than past influenza seasons.

In addition to an increase in cases of influenza, respiratory syncytial virus (RSV) activity is steady to low in North Dakota. While NDDoH does not quantify the number of RSV cases, there are sentinel laboratories in the state that are reporting very few positive RSV tests as well as low positivity for the tests that are being performed. This is indicative that the majority of influenza-like illness being seen in North Dakota is most likely due to influenza and not another respiratory virus.

The NDDoH influenza website is updated weekly on Fridays with the latest influenza data. For more information about influenza, the surveillance program or to order free educational materials, visit the NDDoH influenza website at www.ndflu.com.

**Acute Viral Gastroenteritis Activity Update**

As of December 5, 2012, the North Dakota Department of Health has received reports of two viral gastroenteritis outbreaks in long-term care facilities since the beginning of the season, which is considered to be August 1. One of the outbreaks had 14 percent of residents and 71 percent of staff, including two food handlers ill with vomiting and diarrhea. Stool specimens were not submitted for testing. The other outbreak is currently under investigation.

The North Dakota Department of Health requests that long term and basic care facilities report outbreaks of gastrointestinal illness in which two or more cases of vomiting and/or diarrhea that occur within 48 to 72 hours of each other and in residents/staff that are in close proximity to each other. To report gastrointestinal illness outbreaks to the North Dakota Department of Health, please visit https://www.ndhealth.gov/disease/Gastroenteritis/Gastroenteritis.aspx.

Outbreaks of gastroenteritis most often occur in the winter and early spring. Norovirus is the most common cause of viral gastroenteritis, which is commonly called “stomach flu.” Norovirus is not related to the influenza virus that causes respiratory infections. Symptoms of norovirus infection typically include diarrhea, vomiting, nausea and stomach cramping. It is usually not serious, with most people recovering in one to two days.

Norovirus can spread quickly from person to person in crowded, closed places like long-term care facilities. You can also get it by eating food or drinking liquids that are contaminated with norovirus, touching norovirus-contaminated surfaces or objects and putting your hand or fingers in your mouth, and having direct contact with someone infected with norovirus. The best way to prevent norovirus is to practice good hand hygiene, disinfect contaminated surfaces and to not return to work or school until 24 to 72 hours after symptoms resolved. Additional information about norovirus can be found at http://www.cdc.gov/norovirus/index.html.
Be Smart About Food Safety

Make it your goal this year to keep yourself, your family and your friends healthy by practicing good food safety. Here are some tips that all cooks in the kitchen can follow (source - foodsafety.gov):

- Clean
  - Wash your hands with soap and warm water for 20 seconds before and after preparing food.
  - Wash cutting boards, dishes and utensils with hot soapy water after preparing each food item.
  - Rinse fruits and vegetables.
- Separate
  - Avoid cross-contamination by keeping raw meat and poultry separate from fruits, vegetables, and cooked foods.
- Cook
  - Use a food thermometer to make sure meat, poultry and fish are cooked to a safe internal temperature. To check a turkey for safety, insert a food thermometer into the innermost part of the thigh and wing and the thickest part of the breast. The turkey is safe when the temperature reaches 165°F. If the turkey is stuffed, the temperature of the stuffing should be 165°F.
  - Bring sauces, soups and gravies to a rolling boil when reheating.
  - When making your own eggnog or other recipe calling for raw eggs, use pasteurized shell eggs, liquid or frozen pasteurized egg products, or powdered egg whites.
  - Do not eat uncooked cookie dough, which may contain raw eggs.
- Chill
  - Refrigerate leftovers and any type of food that should be refrigerated within two hours.
  - Leftovers should be used within three to four days, unless frozen.
  - Thaw frozen food safely in the refrigerator, under cold running water, or in the microwave-never at room temperature.

Report a suspected foodborne outbreak (two or more people ill with similar symptoms after consuming a common food) to the North Dakota Department of Health by calling 800.472.2180.

Contributing authors of The Pump Handle include Dee Pritschet, Lindsey VanderBusch, Alicia Lepp, Tracy Miller and Kirby Kruger. For questions, suggestions or inquiries, or to be removed from the mailing list, please contact Sarah Weninger of the Division of Disease Control, at 701.328.2366 or by e-mail at sweninger@nd.gov.

The pump handle picture in the title was obtained from the website www.ph.ucla.edu/epi/snow.html.
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