

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

November 2015 Topics

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Update on Ebola Virus Outbreak

The North Dakota Department of Health (NDDoH) continues to monitor travelers from Guinea and Sierra Leone. On November 7, 2015, the World Health Organization (WHO) declared the end of Ebola transmission in Sierra Leone after two incubation periods (42 days) had passed since the last person confirmed person to have Ebola was determined to be free of disease. The NDDoH will continue to monitor Sierra Leone travelers through the 90-day enhanced surveillance period, which is scheduled to conclude on February 5, 2016. Guinea began its 42-day countdown to Ebola-free status on November 16, 2015.

After once again declaring Liberia Ebola-Free on September 3, 2015, the WHO received a report identifying three new cases of Ebola in the country on November 19, 2015. The NDDoH encourages all healthcare facilities in North Dakota to continue to ask anyone who has traveled to Liberia, Guinea, and Sierra Leone about any possible Ebola virus exposure.

The Ebola virus has killed approximately 11,314 people in Guinea, Sierra Leone, and Liberia. Ebola hemorrhagic fever is caused by infection with the *Ebolavirus*, a virus that belongs to the family Filoviridae. The first Ebolavirus species was discovered in 1976, in what is now the Democratic Republic of the Congo near the Ebola River. Since then, outbreaks have appeared sporadically.



Legionellosis Cases with Possible Association to Hotel in North Dakota

On Nov. 4, 2015, NDDoH was notified by the Centers for Disease Control and Prevention (CDC) of a case of Legionnaires' Disease in a 77 year old male from another state who reported staying at a hotel in North Dakota (hotel A) during his incubation period. This individual reported staying at other hotels in North Dakota and three other states. The NDDoH reviewed all reported Legionnaires' cases since the beginning of 2015 and identified a 61 year old female resident who reported staying at hotel A along with two other hotels in North Dakota during her incubation period. Additionally, the two cases stayed at hotel A within days of each other. Past records also showed a potential cluster associated with hotel A in 2012.

The Division of Disease Control, Division of Laboratory Services and First District Health Unit worked together to conduct an epidemiological and environmental investigation. A call for cases was issued to other state health departments to look for unreported cases associated with hotel A. Management at hotel A were asked if they were aware of any other cases because sometimes cases will contact the accommodation directly about their illness. No additional cases were identified. *Legionella* isolates from the two patients were not available for molecular typing, which could have been used to determine if the two cases were related.

An environmental assessment was conducted and various samples were collected from three guest rooms, including the two rooms visited by the cases, and water from the pool and hot tub. A total of twelve samples were collected from the pool, hot tub, roof-top vents, and guest room shower heads, sinks and air conditioner units. No *Legionella* was isolated from any of the environmental samples collected.

Legionella are bacteria that are found naturally in the environment, usually in warm water. Some people will develop Legionnaires' Disease from breathing in small droplets of water in the air that are contaminated with *Legionella*. Outbreaks are commonly associated with buildings or structures that have complex water systems such as hotels, hospitals and cruise ships. The identification of two or more Legionellosis cases in the same place and around the same time, should be investigated as a possible cluster. The source of infection for the two cases who reported overnight stays at hotel A is undetermined. Because these two cases stayed at multiple hotels during their incubation periods, there were other opportunities for possible exposures. Without other epidemiological or environmental findings, no association could be made to exposures at hotel A.



2014-15 Influenza Season Update

The 2014-15 influenza season began October 1st. Influenza circulation, so far, has been low, with a small number of cases showing up sporadically throughout the state. One outbreak in a long term care facility, attributed to influenza A, has also been reported this season. Thus far, North Dakota has seen fewer early season influenza cases than this time last season. Vaccination is the best way to prevent influenza, and everyone six months of age and older is recommended to receive influenza vaccination. Two of the vaccine strain components in the 2014-15 vaccine are different from the 2013-14 vaccine. Increases in seasonal influenza happen quickly; it takes about two weeks to develop protection after vaccination, so now is a great time to get vaccinated.



First Case of Acute Hepatitis B Reported in North Dakota in Seven Years

In the fall of 2015, one case of acute hepatitis B was reported to the NDDoH in a high risk adult. Prior to this case, the last case of acute hepatitis B reported to the NDDoH was in 2008. The individual was a male, greater than 50 years old who was born in the United States. The case was also a man who has sex with men (MSM). The case was likely having multiple sex partners at the time of his exposure and exchanging sex for money or drugs.

In 2014, there were about 90 cases of chronic hepatitis B reported in North Dakota. A significant portion of these cases were diagnosed in individuals who were born in high endemic countries. Even though the number of hepatitis B cases in North Dakota and the U.S. are relatively low, this case serves as a reminder to vaccinate all at-risk adults for hepatitis B. In addition to all children recommended to be vaccinated, beginning at birth, adults at-risk who should be vaccinated include:

- Men who have sex with men;
- Sexually active persons who are not in a long-term, mutually monogamous relationship;
- Persons seeking evaluation or treatment for a sexually transmitted disease;
- Injection drug users;
- Susceptible household contacts of HBsAg-positive persons;
- Travelers to regions with intermediate or high rates of endemic HBV infection;
- Persons with HIV infection;
- Health care and public safety workers at risk for exposure to blood or blood-contaminated body fluids;
- Persons with end-stage renal disease, including predialysis, hemodialysis, peritoneal dialysis, and home dialysis patients;
- Residents and staff of facilities for developmentally disabled persons;
- Unvaccinated adults with diabetes mellitus who are aged 19 through 59 years.

For more information about hepatitis B, please visit www.cdc.gov/hepatitis/hbv/index.htm or contact Sarah Weninger, NDDoH Viral Hepatitis Prevention Coordinator at 701.328.2366 or sweninger@nd.gov.



New Disease Control Employee!

★ **Name:** Lexie Barber

Title: HIV, STD, and Viral Hepatitis Surveillance Coordinator

Education Background: I received my undergraduate in Microbiology from North Dakota State University, and my Masters in Public Health from the University of Minnesota.

Past Experience: I worked at the Minnesota Department of Health as a student while earning my degree from the University of Minnesota. I am very excited to be starting my career with the North Dakota Department of Health!

Family/Hobbies: My hobbies include playing guitar and anything that involves music, art, or being outside. I love hiking and spending time on the lake during the summer!



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