

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

October 2013 Topics

- Update on Hepatitis C Outbreak Investigation in Ward County
- Review of Recent Hepatitis A Investigations
- Disease Reporting – It's Everyone's Business
- Influenza Update



Update on Hepatitis C Outbreak Investigation in Ward County

The North Dakota Department of Health (NDDoH) is investigating a cluster of Hepatitis C virus (HCV) cases in Ward County. As of November 22, 2013, there have been 40 identified cases related to the outbreak. The number of confirmed cases in this outbreak has been increasing since August 2013. This increasing case number does not reflect recent infections, but is a result of additional testing efforts and laboratory analysis.

At this time, the NDDoH has made progress in analyzing data from this outbreak. Data analysis has assisted in narrowing the focus of the investigation. Although the investigation has direction, we have not conclusively identified the source of hepatitis C transmission.

In this investigation, over 500 people that may have had exposure to the virus have been tested for hepatitis C. Additional individuals may be recommended for testing as part of this investigation as the NDDoH continues to investigate and analyze data.

Providing education regarding hepatitis C transmission is essential for this outbreak investigation. Hepatitis C is spread when blood from a person infected with the hepatitis C virus enters the body of someone who is not infected. The hepatitis C virus is **not** spread

by sharing eating utensils, hugging, kissing, holding hands, coughing, or sneezing, and it is not spread through food or water. You cannot catch hepatitis C from visiting someone or being around someone who has the virus unless the blood of that person comes in contact with your blood.

Members of the public who have questions about this outbreak of hepatitis C may call the department's Public Health Hotline toll-free at 1.866.207.2880. This hotline is open from 8 a.m. to 5 p.m. weekdays. Information is also available on the NDDoH website at www.ndhealth.gov (click on link in the Current Issues Box), our Facebook page at www.facebook.com/ndhealth and on Twitter with the hashtag #ndhepc.

Additional information on HCV can be found on the NDDoH viral hepatitis website at www.ndhealth.gov/disease/Hepatitis/ or www.cdc.gov/hepatitis/c/.



Review of Recent Hepatitis A Investigations

Hepatitis A virus is found in the stool (feces) of infected people. The virus is most likely to spread when people do not wash their hands thoroughly after using the toilet or changing a diaper or soiled sheets, then touch their own mouths, prepare food for others, or touch others with their contaminated hands. A person infected with hepatitis A is most likely to spread the disease during the two weeks before symptoms begin. Most people stop being contagious one week after their symptoms start.

In October 2013, the Division of Disease Control investigated two reports of acute hepatitis A infections in North Dakota. The two reports were laboratory confirmed and had clinical symptoms consistent with hepatitis A. Both cases reported travel out of state or out of the country during their incubation period (usually 28-30 days, but can range anywhere from 15-50 days).

Timely reporting of confirmed and suspect hepatitis A cases is essential in order to ensure that close and household contacts receive appropriate prophylaxis in the required timeframe after an exposure to help stop further spread. Hepatitis A cases should be reported immediately to the Division of Disease Control. The first case was not reported until two days following confirmation of the hepatitis A infection. Fortunately, the report was received in enough time to allow for appropriate immunization of contacts. Immunization should be given as soon as possible, but no later than 2 weeks after last exposure.

Likewise, the second case was not immediately reported to the Division of Disease Control, but was reported over a week following identification of the hepatitis A infection. The opportunity to implement any timely control measures associated with this case was diminished as a result of the delayed reporting.

Since January 1, 2013, a total of eight acute hepatitis A infections have been reported to the North Dakota Department of Health. To report a case, call the North Dakota Department of Health's Division of Disease Control, at 701.328.2378 or 800.472.2180 or for more information, visit www.ndhealth.gov/disease/hepatitis.



Disease Reporting – It’s Everyone’s Business

The North Dakota Century Code (NDCC) 23-07 outlines who is required and also when to report diseases, outbreaks, and unexplained events outlined on the mandatory list of reportable conditions (www.ndhealth.gov/Disease/Documents/ReportableConditions.pdf) to the North Dakota Department of Health (NDDoH).

The importance of disease reporting lies in the health department’s ability to identify trends and outbreaks, and provide prevention methods to reduce transmission. Disease surveillance relies on established practices of identifying infectious diseases and reporting to the NDDoH. These practices are the cornerstone of public health surveillance, which allows the NDDoH to identify problems and trigger actions to protect the health of the public.

The NDDoH, Division of Disease Control, is highlighting certain reporting issues and misunderstandings that have led to diseases not being timely reported or not being reported at all.

1. **Who is required to report.** There are many different people or entities that should be reporting. NDCC 23-07-02 indicates the following persons or their designees shall report to the NDDoH any reportable condition of which they have knowledge:
 - All health care providers, including physicians, physician assistants, nurse practitioners, nurses, dentists, medical examiners or coroners, pharmacists, emergency medical service providers, and local health officers.
 - The director, principal manager, or chief executive officer of:
 1. Health care institutions, including hospitals, medical centers, clinics, long-term care facilities, assisted living facilities, or other institutional facilities;
 2. Medical or diagnostic laboratories;
 3. Blood bank collection or storage centers;
 4. Public and private elementary and secondary schools;
 5. Public and private universities and colleges;
 6. Health or correctional institutions operated or regulated by municipal, county or multicounty, state, or federal governments;
 7. Funeral establishments and mortuaries; and
 8. Child care facilities or camps.
 - The state veterinarian, if the disease may be transmitted directly or indirectly to or between humans and animals.
 - A person having knowledge that a person or persons are suspected of having a reportable disease may notify the department and provide all information known to the person reporting concerning the reportable disease or condition of the person or persons.

When a reportable condition is identified, the NDDoH should receive a report from the laboratory **and** healthcare personnel **and** any other individual or institution required to

report. Visit www.legis.nd.gov/cencode/t23c07.pdf?20131112130519 for more information.

2. **When to call.** There are certain diseases that need to be reported by telephone immediately. These diseases are indicated by a phone icon on the reportable conditions list. These diseases should be reported regardless if they are laboratory confirmed. Diseases identified with a telephone should be reported based on provider's clinical suspicion or laboratory screen. The purpose again, is to put prevention efforts into place as soon as possible.
3. **Sending isolate.** Some diseases require that an isolate be sent to the NDDoH Division of Laboratory Services (DLS). Disease Control has noticed a trend of isolates being sent to the DLS but the disease report is not being sent to Disease Control. Sending the isolate to the DLS is a separate requirement from mandatory disease reporting and it **should not** be considered "reported to Disease Control" once the isolate has been submitted. A separate report card, phone call, fax, etc. is still needed by Disease Control. If it is an isolate for a disease that has the telephone icon, a call should be placed immediately to Disease Control in addition to sending in the isolate to DLS.
4. **Enteric disease reporting.** There has been a trend of enteric cultures not being reported when initially identified. For example, a Salmonella species has been identified but the serotype is unknown and the isolate is sent to the DLS. The positive Salmonella initial culture result should be reported regardless of whether the serotype status is still unknown or pending. Once the serotype is received, the ordering facility should be reporting this result to Disease Control regardless of where the serotype testing was performed. Providers and laboratories **should not** rely on reference laboratories to report final results to Disease Control.
5. **CD4 and viral load.** Over this past year we have identified several facilities that were not aware that they were required to report these results. This is a reminder that CD4 counts and viral load results are reportable to Disease Control.
6. **Pregnant women.** This is a reminder that pregnant women infected with a perinatal transmittable disease (i.e., hepatitis B, HIV/AIDS, measles, rubella, etc.) are required to be reported to Disease Control for each pregnancy. The only exception is Group B Strep does not need to be reported.

Please review the reportable list to ensure you are familiar with reporting the diseases and/or results required. If you have any questions on reporting, please contact the Division of Disease Control at 701.328.2378 or 800.472.8120.



Influenza Update

North Dakota continues to see low levels of influenza activity in these early days of the 2013-14 influenza season. As of November 9th, there have been 14 lab-confirmed cases of influenza reported to NDDoH. Of these cases, eight have been influenza type A and three have been influenza type B. Three of the eight influenza A cases underwent additional laboratory testing and were found to be AH1N1 2009 pandemic strain. This strain is the predominant A strain that has been seen nationally so far this season.

Sentinel site data from select North Dakota health care providers, laboratories and schools is consistent with these low, early season numbers.

In addition to routine sentinel surveillance, The NDDoH Influenza Surveillance Program has once again been awarded funding for targeted influenza surveillance through the Influenza Incidence Surveillance Project (IISP), a joint project with the Centers for Disease Control and Prevention and the Council for State and Territorial Epidemiologists. The goal of this project is to describe and monitor the incidence of laboratory-confirmed influenza in North Dakota. A select group of providers has been recruited to provide weekly data on outpatient influenza-like illness (ILI) visits, and to provide weekly specimens from ILI cases to the North Division of Laboratory Services for additional testing and virus identification.

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

Contributing authors of The Pump Handle include Alicia Lepp, Jill Baber, Sarah Weninger, 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.



Terry Dwelle, MD, MPHTM, State Health Officer
Kirby Kruger, Director, Division of Disease Control; Chief Medical Services Section
Tracy K. Miller, MPH, State Epidemiologist