"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

**February 2009 Topics**
- Influenza Update
- May Is National Hepatitis Awareness Month
- Viral Gastroenteritis Activity Update
- World Tuberculosis Day

**Influenza Update**

As of Feb. 28, 2009, a total of 521 laboratory-identified influenza cases have been reported to the North Dakota Department of Health (NDDoH) from 40 counties. Of the 521 reported cases, 89 percent were identified as type A (n=462), 9 percent as type B (n=50) and two percent unknown type (n=9). Of the 462 influenza A cases, 39 have been sub-typed, with 34 identified as type A H1 and five as type A H3.

Since Oct. 1, 2008, 16 influenza viruses have been submitted to the U.S. Centers for Disease Control and Prevention (CDC) for resistance testing. Results have been received on one influenza type A H1 and one influenza type A H3 viruses. The influenza A H1 virus was found to be resistant to oseltamivir (Tamiflu) and sensitive to Zanamivir (Relenza) and Adamantanes. The influenza type A H3 virus as found to be resistant to Adamantanes and sensitive to Oseltamivir and Zanamivir. These antiviral resistance patterns are consistent with current national influenza virus resistance trends.

For more information about influenza, antiviral resistance, influenza activity or to order educational materials free-of-charge, visit the NDDoH influenza website at [www.ndflu.com](http://www.ndflu.com).
May is National Hepatitis Awareness Month

May is National Hepatitis Awareness Month, and May 19 is World Hepatitis Day. It is important to raise awareness about the global impact of viral hepatitis and preventing hepatitis-related liver disease. Visit the following websites for more information and educational materials about these events: www.worldhepatitisday.org or www.cdc.gov/hepatitis/index.htm.

More than three million people in the United States have chronic hepatitis C virus (HCV) infection. Injection drug use and blood transfusions received prior to 1992, when blood donor screening for HCV became available, are common risk factors for HCV infection. People should get tested for hepatitis C if they are at risk for infection. Hepatitis C is the most common bloodborne infection, the major cause of chronic liver disease and the leading reason for liver transplantation in the United States.

In 2006, an estimated 32,000 new hepatitis A virus (HAV) infections and 46,000 new hepatitis B virus (HBV) infections occurred in the United States. As a result of vaccination, new cases of HAV and HBV are now at an all-time low. To prevent viral hepatitis and associated liver disease, all children should be vaccinated against hepatitis A and hepatitis B. Adults also should be vaccinated if they have risk factors for hepatitis A, B or C.

People should get tested for hepatitis B if born in a country where hepatitis B is common, live or have sex with someone who has hepatitis B, have HIV infection or have ever been on long-term hemodialysis treatment. Anyone with chronic HBV or chronic HCV infection should see a doctor regularly to be checked for signs of worsening liver disease and to find out if they are a candidate for available treatment options.

In North Dakota, 10 HIV counseling, testing and referral (CTR) sites test high-risk individuals for HCV infections and provide hepatitis A and B vaccinations. The CTR sites offering these viral hepatitis services include Bismarck/Burleigh Public Health, Central Valley Health Unit, Custer Health, Fargo Cass Public Health, First District Health Unit, Grand Forks Public Health Department, Lake Region District Health, Richland Country Health Department, Southwestern District Health Unit and Upper Missouri District Health.

Call the Viral Hepatitis Program at 701.328.2378 or 800.472.2180 for more information about hepatitis services offered in North Dakota, or visit our website at www.ndhealth.gov/disease/Hepatitis.

Viral Gastroenteritis Activity Update

Since Dec. 1, 2008, 14 viral gastroenteritis outbreaks have been reported to the NDDoH from institutional settings. Eleven outbreaks have been reported from long-term care facilities, one outbreak reported from an assisted living facility and two outbreaks have been reported from schools. Four outbreaks have been laboratory confirmed as being norovirus.

A viral gastroenteritis outbreak is considered consistent with norovirus if ALL of the following are met:

- Vomiting is present in more than 50 percent of cases.
- The incubation period is from 24 to 48 hours.
- The duration of illness is from 12 to 60 hours.
- No bacterial pathogens are isolated from stool.
Report all outbreaks of suspected acute viral gastroenteritis using the online report form located on the NDDoH Division of Disease Control website at www.ndhealth.gov/disease/Gastroenteritis/. For more information about norovirus surveillance in North Dakota, call Sarah Weninger at 800.472.2180 or 701.328.2378.

World Tuberculosis Day
March 24, 2009, is the 27th Annual World Tuberculosis (TB) Day. Established by the World Health Organization in 1982, World TB Day is intended to raise awareness of the devastating health and economic consequences of tuberculosis disease. This is the second year of the two-year campaign endorsed by the World Health Organization, “I am stopping TB.” This slogan is a message of empowerment that means all people can help to eliminate TB. TB patients are stopping TB by taking all of their anti-TB medication. Health-care workers are stopping TB by recognizing the symptoms of TB and providing prompt diagnoses and treatment. Communities are stopping TB by sharing information to help prevent the disease and get treatment to those who need it.

North Dakota is stopping TB. There were three cases of TB disease in North Dakota in 2008, which is down from seven cases in 2007. Although this drop in cases is encouraging, there is still a long way to go to eliminate TB in North Dakota. With the help of the citizens of North Dakota, TB elimination is possible.

People at risk for getting TB include people from countries where TB is common; people who live or work in residential group settings, such as prisons and nursing homes; and those with chronic medical conditions, such as diabetes. Symptoms of TB disease include a cough that lasts more than three weeks, night sweats, unexplained weight loss, loss of appetite and fatigue. The NDDoH recommends that anyone experiencing these symptoms should be evaluated by a physician immediately.

Contributing authors of The Pump Handle include Michelle Feist, Julie Wagendorf, Kirby Kruger, Tracy Miller, Rachel Birk and Sarah Weninger. 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 email at sweninger@nd.gov.

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