"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 2008 Topics
• Influenza Update
• Pertussis Cases Reported in North Dakota
• Diarrheal Illness in Child-Care Settings
• World AIDS Day 2008

Influenza Update
As of Dec. 16, 2008, a total of five laboratory-identified influenza cases had been reported to the North Dakota Department of Health (NDDoH). The counties with reported influenza activity include Cass and McHenry.

Of the five reported cases, 40 percent were identified as type A (n=2) and 60 percent as type B (n=3). It is too early in the season to identify which strains will be the predominant strains circulating because so far, flu activity has been limited. There have been no influenza-associated pediatric deaths reported to the NDDoH so far this season. Pediatric influenza-associated mortality was made a mandatory reportable condition to the Centers for Disease Control and Prevention in 2004 and must be reported to the NDDoH. For more information on influenza-associated pediatric mortality, visit www.ndflu.com//Reporting/PedInfluenzaMortality.aspx.

Influenza viral isolation is an important part of influenza surveillance. It helps identify what strains are circulating in communities, can identify novel influenza viruses and aids in vaccine strain selection. The NDDoH is encouraging influenza specimen submission when a patient tests positive via a rapid test; call the NDDoH at 800.472.2180 for consultation. Influenza specimens submitted for surveillance purposes will be tested free-of-charge until influenza is characterized in your community.
For more information about influenza or to order educational materials free-of-charge, visit the NDDoH influenza website at [www.ndflu.com](http://www.ndflu.com).

**Pertussis Cases Reported in North Dakota**

Since Nov. 25, 11 new cases of pertussis have been reported to the NDDoH. Of these, four are laboratory confirmed; four are epidemiologically linked to confirmed cases and three are probable. Ten of the 11 cases have had possible links to outbreaks in Minnesota. All of the cases reported are from the eastern part of North Dakota.

**Pertussis Symptoms:**

Pertussis is a serious disease that can lead to pneumonia, encephalopathy or death in infants and unvaccinated children. Adults, teens and vaccinated children often have mild symptoms that mimic bronchitis or asthma. Adults and adolescents are usually the source of the disease in infants. The NDDoH would like to remind providers to consider pertussis as a differential diagnosis in patients presenting with the following symptoms:

- Prolonged cough
- Cough with paroxysms (uncontrollable bursts of coughing)
- Whoop
- Post-tussive gagging/vomiting

People presenting with the above symptoms should be considered as presumptive pertussis cases and should be treated and advised to stay home until antibiotics have been taken for five days or pertussis has been ruled out. All suspect and confirmed cases of pertussis should be reported immediately to the NDDoH.

**Vaccine:**

Diphtheria, tetanus and acellular pertussis vaccine (DTaP) should be administered routinely to infants at 2, 4, 6 and 15 to 18 months of age and a booster dose of DTaP should be given at 4 to 6 years of age. DTaP is required to attend school and day care. Pertussis outbreaks highlight the need for pertussis vaccination in adults and adolescents. Tetanus, diphtheria and acellular pertussis vaccine (Tdap) is routinely recommended for adolescents 11 to 12 years of age. Tdap is required to be administered to all adolescents entering middle school. Adolescents 13 to 18 years of age and adults also are recommended to receive a dose of Tdap.

The NDDoH is now offering Tdap vaccine for administration to new parents/guardians, childcare providers, and expecting fathers. This campaign is an effort to protect young infants from pertussis. Vaccinating adult contacts may reduce the risk of transmission to infants and other susceptible contacts. If health-care providers are interested in enrolling in this program in order to receive state-supplied Tdap, please contact the NDDoH Immunization Program at 701.328.3386 or toll-free at 800.472.2180.

For more information, please contact the NDDoH Division of Disease Control at 701.328.2378 or toll-free at 800.472.2180.
**Diarrheal Illness in Child-Care Settings**

The North Dakota Department of Health (NDDoH) has been receiving reports of diarrheal illness occurring in child-care settings. People of all ages are susceptible to the viruses, bacteria, and parasites that cause acute diarrhea. Depending on the infectious agent, complications are more likely to occur in children younger than five, the elderly or people with compromised immune systems.

There are many types of viruses, bacteria and parasites that can cause diarrheal illness. Treatment, exclusion criteria, infectious periods and symptoms may be variable and depend on the cause of diarrhea. Frequently washing your hands, especially after toilet visits and changing diapers and before eating or preparing food, properly cooking and storing food, and thoroughly cleaning and disinfecting contaminated surfaces are important measures for preventing the spread of any diarrheal illness.

Diarrhea is spread most often through fecally contaminated food, hands or surfaces touched by objects or hands put into the mouth (fecal-oral route). To prevent the spread of diarrhea, children should be excluded from day care or school if they have:

- Diarrhea not contained in the toilet (all infants and children in diapers with diarrhea should be excluded until either the diarrhea stops or the continued loose stools are deemed not to be infectious by a licensed health-care professional).
- Blood or mucus in stool.
- Abnormal color of stool for that child (for example, all black or very pale).
- No urine output in eight hours.
- Fever and behavior change.
- Jaundice (yellow skin or eyes).
- The appearance of being ill.

The child should be excluded if he or she is unable to participate and the staff determines that they cannot care for the child without compromising their ability to care for the health and safety of the other children in the group. Infected child-care staff should be excluded until they no longer have diarrhea.

For more information about infectious causes of diarrheal illness or exclusion criteria in child-care settings, visit the NDDoH [www.ndhealth.gov/Disease/faq/Faqs.aspx](http://www.ndhealth.gov/Disease/faq/Faqs.aspx) or call Sarah Weninger at 701.328.2366 or 800.472.2180.

**World AIDS Day 2008**

December 1st marked the 20th anniversary of World AIDS Day established by the World Health Organization in 1988. World AIDS Day serves as the day when individuals, governments and organizations come together to further global awareness and focus prevention efforts on the devastating impact of the HIV/AIDS epidemic. The theme for World AIDS Day from 2005 through 2010 from the World AIDS Campaign (WAC) is “Stop AIDS, Keep the Promise.” This, in combination with the 2008 promotion “Lead-Empower-Deliver,” urges anyone to take the lead at any and all levels to stop HIV/AIDS.

For more information about HIV/AIDS in North Dakota, visit [www.ndhealth.gov/hiv](http://www.ndhealth.gov/hiv).
Contributing authors of The Pump Handle include Michelle Feist, Julie Wagendorf, Kirby Kruger, Tracy Miller, Abbi Pierce, Krissie Guerard 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.

Terry Dwelle, MD, MPHTM, State Health Officer
Craig Lambrecht, MD, MHSA, MBA, MPH, Chief, Medical Services Section
Kirby Kruger, Director, Division of Disease Control