"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

January 2009 Topics
- Influenza Update
- Salmonella Typhimurium Outbreak Investigation
- Viral Gastroenteritis Activity Update
- Minnesota Reporting an Increase in Haemophilus Influenzae B Cases

**Influenza Update**

As of Feb. 7, 2009, a total of 150 laboratory-identified influenza cases have been reported to the North Dakota Department of Health (NDDoH) from 20 counties. Of the 150 reported cases, 93 percent were identified as type A (n=140) and 7 percent as type B (n=10). Of the 140 influenza A cases, 16 have been sub-typed, with 13 identified as type A H1 and 3 as type A H3.

Since Oct. 1, 2008, 13 influenza viruses have been submitted to the Centers for Disease Control and Prevention 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 was found to be resistant to adamantanes and sensitive to oseltamivir and zanamivir. These findings are consistent with current national influenza resistant virus 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).

**Salmonella Typhimurium Outbreak Investigation**

As of Feb. 10, 2009, 13 North Dakota cases with illness onset dates ranging from Nov. 21, 2008, to Jan. 20, 2009, have been associated with the Salmonella outbreak. Nationally, 600
cases have been reported from 44 states. The age range of the North Dakota cases is younger than 5 to older than 90 (median age of 35). Sixty-two percent of the cases are male. Three cases have been hospitalized; all cases have recovered. Counties where cases were reported include Barnes, Burleigh, Cass, Morton and Ward. The nationwide investigation update can be viewed on the U.S. Centers for Disease Control and Prevention (CDC) website at www.cdc.gov/salmonella/typhimurium/.

On Jan. 28, 2009, Peanut Corporation of America (PCA) recalled all peanuts and peanut products processed in its Blakely, Ga., facility since Jan. 1, 2007. The U.S. Food and Drug Administration (FDA) recommends that consumers avoid eating products that have been recalled and discard them. Major national brands of jarred peanut butter are not affected by the PCA recall. PCA only sells peanut butter to institutions and food manufactures. Food manufactures that use PCA peanut butter or peanut paste in baked or processed foods such as crackers, cookies, cakes or ice cream have issued recalls of these types of products. A list of products and brands associated with the expanded PCA recall is available from the FDA at www.accessdata.fda.gov/scripts/peanutbutterrecall/index.cfm. The list will be updated on a regular basis as additional information is received by FDA and the industry.

For more information, contact Sarah Weninger with the ND DoH Division of Disease Control at 701.328.2378 or 800.472.2180. North Dakota outbreak updates are available at www.ndhealth.gov/disease.

**Viral Gastroenteritis Activity Update**

Since Oct. 1, 2008, seven viral gastroenteritis outbreaks have been reported to the ND DoH from institutional settings. Five outbreaks have occurred in long-term care facilities, and two outbreaks have been reported in schools. Two outbreaks have been laboratory confirmed as 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.

Of the five outbreaks at long-term care facilities, more than 260 residents and staff reported being ill with viral gastroenteritis symptoms. One school reported more than 60 students and staff ill with nausea, vomiting and diarrhea absent from school on the same day. Investigation of this outbreak currently is being conducted. No food workers or their household members reported being ill within the seven days prior to the outbreak. Questionnaires were distributed to the students and staff to aid in the determination of the source of the outbreak.

Report all outbreaks of suspected acute viral gastroenteritis using the online report form located on the ND DoH 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.
Minnesota Reporting an Increase in Haemophilus Influenzae B Cases

The Minnesota Department of Health (MDH) has issued a health alert to report an increase of Haemophilus influenzae type B (Hib) cases in 2008, potentially due to a higher incidence of Hib carriage stemming from a Hib vaccine shortage.

MDH has confirmed five cases of Hib in children ages 3 and younger in 2008, including one unimmunized infant who died. This is the highest number of cases in children younger than 5 that Minnesota has seen since 1992, which suggests a resurgence of invasive Hib disease and the need for additional vaccine statewide. Three of the five cases were unimmunized, one infant was too young to complete the primary series, and one child had received two doses of PRP-OMP (PedvaxHib) as an infant and, after the diagnosis of Hib, was found to have an underlying condition. To date, no other state has reported such an increase in invasive Hib disease.

North Dakota providers should take the same steps as Minnesota to prevent Hib disease from occurring, even though North Dakota has not seen a case since 1991. Health-care providers should be administering the primary series of Hib containing vaccines to all children and continuing to defer the booster dose. Children at high risk for Hib disease include those who are American Indian or Alaskan Native or have asplenia, sickle cell disease, HIV and certain other immunodeficiency syndromes or malignant neoplasms. Those children at high risk should be vaccinated with the primary series and the booster dose.

Any incidence of disease or presumptive diagnosis of Hib should be reported to the NDDoH immediately. For more information, please contact the NDDoH Immunization program at 701.328.2378 or toll-free at 800.472.2180 or consult the MMWR at www.cdc.gov/vaccines/pubs/mmwrpubs.htm.

Contributing authors of The Pump Handle include Michelle Feist, Julie Wagendorf, Kirby Kruger, Tracy Miller, Abbi Pierce 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

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