"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

June 2010 Topics
- West Nile Virus Update
- Unexpected Number of Tuberculosis Cases for First Half of 2010
- Mumps Alert for Camps
- Immunization Conference August 2010

West Nile Virus (WNV) Update
As of July 7, 2010, one human WNV infection had been reported to the state health department. The case was not hospitalized and was classified as West Nile fever. No WNV cases have been reported in birds or horses.

Nationwide, a total of four human infections had been reported to the Centers for Disease Control and Prevention as of July 6, 2010. A map showing the distribution of human, avian, animal and mosquito infection by state can be viewed at http://www.cdc.gov/ncidod/dvbid/westnile/index.htm.

West Nile virus activity is updated Wednesday mornings each week on the North Dakota Department of Health website at www.ndhealth.gov/wnv.

Unexpected Number of Tuberculosis Cases for First Half of 2010
North Dakota is considered a low-incidence state for tuberculosis (TB), with an average annual case rate of 0.9 per 100,000 people. The year 2009 was a difficult and unique year for TB in North Dakota. A case of mono-drug resistance and an extremely rare cerebral tuberculoma were reported in separate individuals. Not only were the cases more complicated, but the demographics of the cases changed from previous years. From 2004
to 2008, 33 percent of active TB cases were foreign-born. However, this increased to 80 percent in 2009.

Thus far, 2010 also is proving to be a challenging year. Between January 1 and July 1, 2010, seven cases of active TB had been reported to the NDDoH. This is increased from the five cases of active TB reported for the entirety of 2009. Of the seven cases already reported this year, 71 percent have pulmonary involvement. Forty percent of the pulmonary cases had smear-positive respiratory specimens. In the previous three years, there had been no smear-positive pulmonary cases. Seventy-one percent of the active TB cases were born in a country with a high prevalence of TB. Sixty percent of these cases are from African countries, while 40 percent are from Asian countries. Finally, the active TB cases reported so far in 2010 are much younger than in years past. The median age of acute TB cases reported thus far in 2010 is 23, compared to the median age of 32 in 2009.

### Mumps Alert for Camps
Since August 2009, a mumps outbreak that originated in a summer camp has been ongoing in several states, with slightly more than 3,400 cases reported to date. All but 87 have been in one particular religious community. It is possible that mumps cases may occur in camps again this summer. The best protection against mumps is two doses of mumps vaccine (usually given as the measles-mumps-rubella, [MMR], vaccine); however, crowded living conditions (as in a dormitory or camp) can promote the spread of mumps virus even among vaccinated individuals. By following the important actions listed below, camps may reduce the chances of mumps transmission and outbreaks.

#### Recognize the Signs and Symptoms of Mumps
- A camp health director or other health-care provider should (1) discuss the signs and symptoms of mumps with all camp staff and (2) develop a plan to follow should a suspected case of mumps be identified in the camp.
- Learn the most common signs and symptoms of mumps, which include:
  - Swollen and tender salivary glands under the ears on one or both sides (parotitis).
  - Fever.
  - Headache.
  - Muscle aches.
  - Tiredness.
  - Loss of appetite.
- Be aware that most mumps transmissions likely occur before the salivary glands begin to swell and up to five days after the swelling begins. Therefore, CDC recommends isolation of mumps patients for five days after their glands begin to swell.

#### Document the Vaccination Status of Staff and Campers
- Maintain vaccination records for all campers and staff; the records should be readily accessible in case an outbreak should occur. Documentation should include evidence of two doses of MMR vaccine or other mumps vaccine or other
evidence of immunity, such as documentation of physician-diagnosed mumps, laboratory evidence of immunity, or birth before 1957.

- Communicate vaccine recommendations or requirements to campers and staff, including international staff, prior to attending camp.

Two doses of mumps vaccine as a combination MMR separated by at least four weeks are routinely recommended for all children ages 12 months and older. Two doses of MMR are required for all children attending kindergarten through grade 12 in North Dakota. Two doses of MMR also are required for people attending colleges in North Dakota.

Report all suspected cases of mumps immediately to the North Dakota Department of Health (NDDoH). Please contact the NDDoH Immunization program at 701.328.3386 or toll-free at 800.472.2180 with any questions or concerns regarding this issue.

Immunization Conference August 2010
Registration is now open for the North Dakota Immunization Conference. The conference will be held August 24 and 25 in Mandan, N.D., at the Best Western Seven Seas Hotel. For more information or to register, please visit http://conferences.und.edu/immunization/. We hope to see you all there.

Contributing authors of The Pump Handle include, Michelle Feist, Rachel Birk, Abbi Pierce, Julie Wagendorf, Kirby Kruger and Tracy Miller. 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 sweeney@nd.gov.

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