

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

August 2008 Topics

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Two More North Dakota Residents Exposed to Tuberculosis on International Flight

On Aug. 12, 2008, the North Dakota Department of Health (NDDoH) was notified that two North Dakota residents may have been exposed to tuberculosis (TB) on a March 13 flight from Amsterdam, Netherlands. The exposed individuals currently are being contacted and evaluated for TB infection. This is the second international flight reported to the NDDoH within the previous six months in which North Dakota residents were exposed to TB.

On July 18, 2008, the Nebraska Department of Health reported a case of TB in an individual who had flown on seven international flights since Jan. 1, 2008. This individual had been coughing and experiencing night sweats since December 2007. TB disease was confirmed by an abnormal chest x-ray and positive laboratory results. The patient was started on the standard four-drug treatment for TB on July 16, 2008.

The patient flew from Amsterdam to Minneapolis, Minn., on Mar. 13, 2008, potentially exposing several passengers on the airplane to TB. TB is contracted through inhalation of respiratory droplets containing the TB bacteria. Passengers sitting in the same row and two rows in front and behind the infected individual are at highest risk of becoming infected. The risk of becoming infected with TB also increases when the flight is more than eight hours long.

Symptoms of TB disease include coughing for more than three weeks, fatigue, fever, night sweats and weight loss. People experiencing these symptoms should contact their medical provider immediately. Confirmed and suspected cases of TB disease should be reported to the NDDoH by calling 701.328.2378 or 800.472.2180. More information about TB can be found on the program website at www.health.state.nd.us/disease/tb.



West Nile Virus (WNV) Update

As of Aug. 26, 2008, 23 human WNV infections have been reported to the state health department. In addition, one horse from Grand Forks County, two dogs from Walsh County and one dog from Ramsey County tested positive for WNV.

Nationwide, a total of 342 human infections have been reported to the U.S. Centers for Disease Control and Prevention (CDC) as of Aug. 26, 2008. A map showing the distribution of human, avian, animal and mosquito infection by state can be viewed at www.cdc.gov/ncidod/dvbid/westnile/index.htm.

West Nile virus activity is updated Wednesday mornings each week on the NDDoH website at www.ndhealth.gov/wnv.



Fall Is Just Around the Corner, and So Is the Influenza Season

The flu season starts in October and runs through May. CDC recommends that people get their flu vaccine as soon as vaccine becomes available in their community – don't miss an opportunity to vaccinate.

The primary change to the 2008-2009 influenza vaccine recommendations is to vaccinate all children ages 6 months through 18 years. However, all children ages 6 months through 59 months and children with conditions that place them at risk for influenza-related complications should continue to be the focus of vaccination programs as they transition to routinely vaccinating all children.

Annual influenza epidemics happen every year and are unpredictable as to the timing and severity. The NDDoH influenza website is updated weekly with the latest influenza data. For more information about influenza or the surveillance program or to order free educational materials, visit the NDDoH influenza website at www.ndflu.com.



Pertussis Cluster in Burleigh and Sioux Counties

In July, Burleigh and Sioux counties saw a small cluster of pertussis cases that were epidemiologically linked. The first case reported was in a child who was too young to be vaccinated, and the three other cases were reported in caregivers of the child. Two of the cases reported having onset dates in May prior to the child contracting the illness. All four cases and their contacts were appropriately prophylaxed and no further cases have been linked to this cluster.

This situation highlights the necessity for adults and adolescents to have pertussis protection, especially those who are caregivers for children too young to be vaccinated or medically unable to be vaccinated. The NDDoH supplies tetanus, diphtheria and acellular pertussis (Tdap) vaccine for administration to all (including those with health insurance) parents/guardians of infants younger than 12 months, child-care providers and expecting fathers.

This Tdap campaign is an effort to protect young infants from pertussis. Infants younger than 12 months are at highest risk for pertussis-related hospitalizations, complications and death. Vaccinating adult contacts may reduce the risk for transmitting pertussis to these infants.

The Advisory Committee on Immunization Practices recommends that adults who have or who anticipate having close contact with an infant younger than 12 months should receive a single dose of Tdap. An interval as short as 2 years since the most recent tetanus toxoid-containing vaccine is suggested; shorter intervals can be used. Ideally, Tdap should be administered at least two weeks before beginning close contact with the infant. Women should receive a dose of Tdap in the immediate postpartum period if they have not previously received Tdap.

If you have any questions or concerns, please contact the NDDoH Immunization Program toll-free at 800.472.2180 or 701.328.3386.



Hantavirus Pulmonary Syndrome Death Reported

On Aug. 5, 2008, a young, previously healthy adult died as result of hantavirus pulmonary syndrome (HPS). This is the 10th case and sixth death to be reported to the NDDoH since the virus was discovered in the southwestern part of the United States in 1993.

The case had exposures to outbuildings and spent time outdoors. Onset of illness was on July 30. The case was admitted to a local hospital on August 3 and transferred to a regional medical center on Aug. 4, 2008. On August 14, the Division of Laboratory services reported the presence of IgM antibody to hantavirus.

In North Dakota, HPS is caused by the SinNombre virus, and the rodent vector is the deer mouse *Peromyscus maniculatus*. The virus is shed in the stool, urine and saliva of infected rodents. Infection usually results from inhalation of the virus when droppings and urine are disturbed. People infected with the virus develop a rapidly progressing illness. Early symptoms are “flu-like,” with fever, headache, muscle ache and malaise. Vomiting and diarrhea have also been reported. Pulmonary signs and symptoms develop shortly, with shortness of breath and low blood oxygen levels. Treatment is supportive with careful attention to fluids, electrolytes and blood pressure management. Additional information regarding the clinical management of HPS can be found at the CDC website at www.cdc.gov/ncidod/diseases/hanta/hps/noframes/phys/printtechsection.htm .

Contributing authors of The Pump Handle include Michelle Feist, Abbi Pierce, Julie Goplin, Tracy Miller, Sarah Weninger, Rachel Birk 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 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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