

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

June 2012 Topics

- Importance of Following Rabies Recommendations
- West Nile Virus Update
- Influenza Incidence Surveillance Project (IISP)
- Pertussis Cases Reported in North Dakota



Importance of Following Rabies Recommendations

On May 16, 2012, the North Dakota Department of Health received a report of a skunk that tested positive for rabies that was found attacking a puppy. The puppy was reported to have been in a pen with three other puppies. The mother dog was reported to have shaken the skunk off of the puppy. The puppies were too young to have been vaccinated for rabies and the mother dog was not up-to-date on her vaccinations.

The mother dog and all puppies were considered to be exposed to rabies. The North Dakota Department of Health and the Board of Animal Health recommends that when an unvaccinated dog, cat or ferret has been exposed to rabies, that animal should be euthanized. If the owner is unwilling to euthanize the animal, a six-month isolation/quarantine must be carried out. The animal should be kept in a confined area where it will not have contact with other animals or people, except for a primary caretaker. After the six-month isolation/quarantine period, The Centers for Disease Control and Prevention recommends the animal should be evaluated by a veterinarian and be vaccinated prior to release of the quarantine. The North Dakota Department of Health and Board of Animal Health staff was told by the owners that the puppy they saw attacked by the skunk was euthanized, but that they decided to quarantine the remaining puppies and mother dog.

Upon subsequent reports to the North Dakota Department of Health and the Board of Animal Health, it was questioned whether the owners were carrying out the six-month quarantine appropriately and if the remaining puppies had been sold. Further investigation revealed that two of the puppies were sold. The new owners of the puppies were contacted by the North Dakota Department of Health and informed of the puppies' exposure to rabies and the recommendation for euthanization or quarantine for an unvaccinated animal that has been exposed to rabies. The two puppies are currently being isolated for six months by the new owners. The remaining puppy and mother dog have been euthanized.

Rabies is a serious disease that is nearly 100 percent fatal once symptoms develop in humans. Recommendations offered by the North Dakota Department of Health and the Board of Animal Health should be followed. These recommendations are made in order to protect people and other animals from contracting this deadly disease.

Information about rabies can be found at www.ndhealth.gov/disease/Rabies. Please contact the North Dakota Department of Health at 1.800.472.2180 if you have any questions about rabies exposures.



West Nile Virus Update

As of July 18, 2012, no West Nile virus (WNV) infections have been reported in the state of North Dakota. Although no human or animal infections have been reported, the mosquito that transmits WNV, *Culex tarsalis*, typically reaches peak numbers the end of July or the beginning of August. Currently, state mosquito surveillance traps are indicating low numbers of mosquito counts across the state.

The peak of WNV transmission season is approaching and people should be watchful of the signs and symptoms of WNV illness. Symptoms range in severity from fever, rash and headaches to more severe neurological disease such as high fever, severe headache, stiff neck, altered mental state and death.

To reduce the risk of getting WNV, avoid mosquito bites by using EPA-registered insect repellent, avoid outdoor activities during early morning and evening hours (the peak biting time for many mosquitoes), and wear long sleeves and pants when outdoors. You can also reduce mosquitoes near your home by draining standing water where mosquitoes may lay their eggs. By having well-fitting screens on windows and doors, you can keep mosquitoes from entering your home.

Nationwide, there have been a total of 25 human infections reported to the Centers for Disease Control and Prevention as of July 17, 2012. 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 North Dakota Department of Health Website at www.ndhealth.gov/wnv.



Influenza Incidence Surveillance Project (IISP)

The North Dakota Department of Health is one of 12 sites currently participating in a CDC/CSTE joint cooperative project aimed at determining the cause of respiratory illness in people who present with influenza-like illness to outpatient settings. We are currently enrolling practices for the 2012-13 season, which starts August 1, 2012. Some criteria for consideration include seeing between 100 to 150 patients each week encompassing all ages and being able to determine a baseline patient population estimate by age group.

Some of the project activities include a weekly report of a count of all patients who present with influenza-like illness by age group, as well as the counts of the number of patients seen total by age group. Second, for all patients that present with influenza-like illness, we ask that a specimen be collected and sent to the Department of Health's Division of Laboratory Services for analysis. Specimens will be tested for not only influenza, but a battery of respiratory viruses including parainfluenza, rhinovirus, adenovirus, RSV and human metapneumovirus. These results will be returned to your practices as a diagnostic result on each individual case at no cost. All specimen collection products and mailing will be provided by the North Dakota Department of Health.

In return, the North Dakota Department of Health will be able to supplement time spent on submitting the weekly report as well as compensation for the submission of specimens. A potential of \$1,600 can be awarded for each site for the surveillance season. Materials for your patients will also be provided, which may include hand sanitizers, thermometers and cough & cold care kits.

For more information or to inquire about enrolling, please contact Lindsey VanderBusch or Alicia Lepp by calling 701.328.2378 or 800.472.2180.



Pertussis Cases Reported in North Dakota

Since the beginning of 2012, 62 new cases of pertussis have been reported to the North Dakota Department of Health (NDDoH). Of these, 45 are laboratory confirmed and 15 are epidemiologically linked to confirmed cases. These cases have occurred in 15 counties throughout the state.

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 after five days of antibiotics or until pertussis has been ruled out. All suspect and confirmed cases of pertussis should be reported to the NDDoH immediately.

Vaccine:

Diphtheria, tetanus and a cellular 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 a cellular 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.

For more information, please contact the NDDoH Immunization Program at 701.328.2378 or toll-free at 800.472.2180.

Contributing authors of The Pump Handle include Alicia Lepp, Lindsey VanderBusch, Abbi Pierce, Tracy Miller 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 e-mail 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
Kirby Kruger, Director, Division of Disease Control; Chief Medical Services Section
Tracy K. Miller, MPH, State Epidemiologist