

# 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

## April 2012 Topics

- National Recreational Water Illness Prevention Week is May 21-27, 2012
- Rabies Update
- Immunization Conference 2012
- West Nile Virus Season is Approaching
- Snap To It! Hantavirus Prevention Tips
- Awards of Excellence Recipients at the HIV/STD/TB/Hepatitis Symposium



## **National Recreational Water Illness Prevention Week is May 21-27, 2012**

May 21 through 27, 2012, is the eighth annual National Recreational Water Illness Prevention Week. This observance provides an opportunity for public health agencies to increase awareness of recreational water illness and promote healthy water experiences.

Recreational water illnesses (RWIs) are spread by swallowing, breathing or having contact with contaminated water from swimming pools, water parks, interactive fountains, spas, lakes, rivers or oceans. The most commonly reported RWI is diarrhea caused by pathogens such as *Cryptosporidium*, norovirus, *Shigella*, *Escherichia coli* and *Giardia*. Children, pregnant women and people with compromised immune systems are at greatest risk for RWIs.

The following tips can help prevent and protect you from RWIs:

- Refrain from swimming while experiencing diarrhea.
- Avoid swallowing pool water or even getting it in your mouth.

- Shower before swimming, and wash your hands after using the toilet or changing diapers.
- Take children on bathroom breaks or check diapers often.
- Change diapers in a bathroom and not at poolside, and thoroughly clean the diaper-changing area.

For more information regarding healthy swimming or to report a waterborne illness, call the North Dakota Department of Health at 701.328.2378 or 800.472.2180 or visit [www.ndhealth.gov/disease/GI](http://www.ndhealth.gov/disease/GI).



### **Rabies Update**

In early April, the North Dakota Department of Health was consulted by a physician about a possible rabies exposure involving a domestic cat and a skunk. The patient indicated that he had looked outside and noticed his normally indoor pet cat fighting with a skunk. The man ran outside and the skunk ran away. Since the animal had sprayed, the man took his cat inside to try and bathe the animal and in the process was bit by the cat in the arm. The patient sought care worried about the potential of skunk saliva in the mouth of the cat, since moments before they were in what he described as mouth-to-mouth combat. The cat had been previously vaccinated for rabies, but was not up-to-date on its rabies immunization.

The North Dakota Department of Health and the North Dakota Board of Animal Health recommended that the patient start post-exposure prophylaxis (PEP) since there was a chance of skunk saliva being transferred to the cat and the skunk was not caught for testing. It was also recommended that the exposed cat be euthanized and tested for rabies since it was not up-to-date on its rabies vaccination. (We generally recommend that animals euthanized due to rabies exposure be tested for rabies to determine if any previous exposures may have occurred and the domestic animal was presently positive for rabies). The other alternative offered was strict quarantine for the cat for 10 days to assess the cat's health. This would help determine if the bite from the cat was a rabies exposure for the human, and then a strict six month quarantine to watch for signs and symptoms from the exposure to the skunk.

The cat's owner decided that the cat be euthanized and tested for rabies. The cat, shockingly, tested positive for rabies. The incubation period of rabies in cats can be as long as six months, but not much shorter than two weeks. Thus the exposure to rabies for the patient was not from the situation that occurred from the cat and the skunk entanglement, but from the cat itself that was previously exposed to rabies and at the time had active rabies infection without yet showing symptoms. This situation highlights the need for a vigilant assessing of every situation, even if the perceived risk is low. Any animal bites, even from a pet animal, must be treated as potential exposures for rabies. If at any time you have questions about the recommendations and risks of rabies in bite exposures, please do not hesitate to contact the North Dakota Department of Health, Division of Disease Control. We would be more than happy to help guide you through your assessment of rabies exposures.



### **Immunization Conference 2012**

Registration is now open for the North Dakota Immunization Conference. The conference will be held June 12-13, 2012, in Bismarck, N.D., at the Radisson Hotel. For more information or to register, please visit <http://conferences.und.edu/immunization/>.

A full agenda is listed on the conference website with sessions ranging from vaccine safety to how immunization recommendations are made.

We hope to see you all there!



### **West Nile Virus Season is Approaching**

Enjoy the outdoors as we head into summer, but do not forget to take precautions against mosquitoes that may carry West Nile virus (WNV) and other mosquito-borne diseases. To prevent WNV, use mosquito repellent containing DEET, picaridin, IR3535, oil of lemon eucalyptus or permethrin, eliminate standing water where mosquitoes can lay eggs and install or repair screens on windows and doors.

The North Dakota Department of Health (NDDoH) will begin dead bird and mosquito surveillance June 1, 2012. The birds that are tested for WNV are corvids and raptors, which include crows, magpies, bluejays, ravens, hawks, eagles, owls and falcons. Birds that are not a corvid or raptor, or are too decomposed for testing, are encouraged to be reported to the NDDoH through either the online dead bird reporting form found at [www.ndhealth.gov/wnv](http://www.ndhealth.gov/wnv), by calling your local public health unit or by calling the NDDoH at 800.472.2180. Additional surveillance activities that the NDDoH uses for monitoring WNV activity in the state include reporting and testing sick horses and other veterinary animals and monitoring illness in humans.

Free human WNV testing will be offered by the NDDoH Division of Laboratory Services June 1, 2012, through September 30, 2012, on serum samples from patients meeting any of the following criteria and in the absence of a more likely clinical explanation.

#### Criteria I – Neuroinvasive Disease

- The presence of documented fever is required with at least one of the following:
  - Signs of brain dysfunction (e.g., altered mental status, confusion, coma, disorientation and stupor).
  - Signs of other neurologic dysfunction (e.g., stiff neck, sensory deficits, abnormal reflexes or movements, paralysis and pleocytosis in cerebrospinal fluid).

#### Criteria II – Non-neuroinvasive Disease

- The presence of documented fever is required and should include one additional symptoms such as:

- Headache, myalgia, arthralgia, malaise, skin rash, photo-phobia, lymphadenopathy, etc.

Questions regarding laboratory testing may be directed to the Division of Laboratory Services at 701.328.6272. More information about WNV reporting and surveillance and weekly updates beginning in June can be found at [www.ndhealth.gov/wnv](http://www.ndhealth.gov/wnv).



### **Snap to It! Hantavirus Prevention Tips**

People who are cleaning cabins or other buildings that were closed for the winter should protect themselves against hantavirus, a disease transmitted by infected mice. Hantavirus pulmonary syndrome (HPS) is a viral infection that causes severe lung disease. The rodent vector is the deer mouse, and 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.

Eleven cases of HPS have been reported to the NDDoH since 1993; the most recent was reported in 2009. Six of the cases were fatal, with the most recent being in 2008. Early symptoms are “flu-like,” with fever, headache, muscle ache and malaise. Vomiting and diarrhea also have been reported. Pulmonary signs and symptoms develop quickly, 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 [www.cdc.gov/hantavirus/technical/hps/treatment.html](http://www.cdc.gov/hantavirus/technical/hps/treatment.html)

The Department of Health offers the following tips for preventing rodent infestation from occurring and for properly disinfecting areas contaminated by rodents:

- For severe or persistent infestations, contact a pest-control professional for rodent eradication or a building contractor for rodent exclusion (rodent proofing).
- Seal all entry holes through which a rodent can enter.
- Clear clutter and tall grass away from buildings to eliminate sources of nesting materials.
- **Do not** sweep or vacuum areas with evidence of rodent infestation, such as nests or fecal droppings. This action may stir up and aerosolize the viral particles. Wear rubber, latex, vinyl or nitrile gloves.
- Thoroughly wet contaminated area with a disinfectant or bleach solution before wiping up with a paper towel. Soiled cleaning materials may be double bagged and discarded in the trash or disinfected before reuse.

For more information about HPS, please call the NDDoH at 701.328.2378 or 800.472.2180 or visit [www.ndhealth.gov/disease](http://www.ndhealth.gov/disease).



### **Awards of Excellence Recipients at the HIV/STD/TB/Hepatitis Symposium**

The North Dakota Department of Health presented the first recognition of excellence awards at the HIV/STD/TB/Hepatitis symposium held in April. Individuals, businesses and organizations were nominated for these awards based on their contribution to public

health in the areas of HIV, HCV, STD or TB in North Dakota. The NDDoH would like to congratulate JoElle Thomas from Central Valley Health District and Custer Family Planning for receiving awards of excellence at this year's symposium.

JoElle Thomas has been working as a women's health care nurse practitioner since 1994. She is currently working at Central Valley Health District in Jamestown. Her responsibilities include acting as a Ryan White case manager, a sexual assault nurse examiner and working with sexual assault response teams. JoElle has worked as a Ryan White case manager for six years and has given 100 percent to helping HIV positive clients become active members in the community. She established the first HIV support group in her community where clients can share with each other challenges they face with their disease. JoElle also works with clients and their partners in expedited partner therapy through the family planning program. JoElle has committed her career to addressing issues in the field of STDs, HIV and HCV in North Dakota.

Custer Family Planning provides a variety of services to the Bismarck/Mandan community. Custer Family Planning provides free HIV, HCV and STD services. They also sponsored the National HIV Awareness day in 2011. Custer Family Planning has done presentations at schools, colleges and businesses such as Charles Hall, Fort Yates and PRIDE. Custer provides free condoms as a method of preventing STDs and other sexually transmitted diseases. Along with testing, Custer Family Planning provides the needed counseling and prevention education in areas of HIV, STDs, TB and Hepatitis.

Congratulations and thank you for all of your hard work in the areas of STDs, HIV, TB and viral hepatitis.

*Contributing authors of The Pump Handle include Sarah Weninger, Lindsey VanderBusch, Abbi Pierce, Alicia Lepp, Michelle Feist, Julie Wagendorf, 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](mailto:sweninger@nd.gov).*

*The pump handle picture in the title was obtained from the website [www.ph.ucla.edu/epi/snow.html](http://www.ph.ucla.edu/epi/snow.html).*



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