

# 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

## May 2009 Topics

- West Nile Virus Season
- Influenza H1N1 Update
- Seal It! Trap It! Clean It!
- Rabies Update
- Save the Date! Hepatitis C Training Workshop



## **West Nile Virus Season**

As warmer weather approaches, the NDDoH is reminding people to take precautions against West Nile virus (WNV). This includes wearing mosquito repellent when you are outdoors, removing standing water from around your home, and wearing pants and long-sleeved shirts when possible.

Dead bird and mosquito surveillance already has begun. Corvids and raptors are the only birds that will be tested for WNV this year. These groups include the following birds: crows, magpies, blue jays, ravens, hawks, eagles, owls and falcons. While not all birds are acceptable for testing, the NDDoH is interested in dead bird reports. If you find a dead bird that is not eligible or is too decomposed for testing, please report the bird via the online dead bird reporting form found at [www.ndhealth.gov/wnv](http://www.ndhealth.gov/wnv) or by calling your local public health unit or the NDDoH at 800.472.2180.

As of June 1, 2009, the NDDoH Division of Laboratory Services will offer free human WNV testing through Sept. 30, 2009, on serum specimens from patients meeting any one of the following criteria and in the absence of a more likely clinical explanation:

### Criteria I – Neuroinvasive Disease

- The presence of 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 at least one additional symptom 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. For more information about WNV reporting and surveillance, visit the NDDoH West Nile virus website at [www.ndhealth.gov/wnv](http://www.ndhealth.gov/wnv). Website updates began in June and will be updated weekly every Wednesday.



**Influenza H1N1 Update**

On Apr. 17, 2009, the U.S. Centers for Disease Control and Prevention (CDC) determined that respiratory illness in two children from southern California was caused by a swine influenza A H1N1 virus. By May 1, a total of 141 cases from 19 states were confirmed with the novel H1N1 influenza virus. As of June 5, 2009, more than 11,000 cases from all 50 states, the District of Columbia and Puerto Rico have been identified.

On May 9, 2009, the North Dakota Department of Health (NDDoH) announced its first case of novel H1N1 influenza in North Dakota. Through June 10, more than 300 samples have been tested for influenza A H1N1, with 25 confirmed and 10 probable cases from eleven counties.

<b>2009 Influenza H1N1 Confirmed Case Summary</b>			
Total Cases		Age Information	
		Range	Cases
Gender		<10	0
Female	11	10-19	12
Male	14	20-29	8
		30-39	2
Hospitalized	1	40-49	3
		50-59	0
Deaths	0	60 and over	0

A website has been developed that is dedicated specifically to North Dakota information related to the H1N1 influenza outbreak. The website is located at [www.ndflu.com/swineflu](http://www.ndflu.com/swineflu). The site contains links for accessing guidance for health-care professionals, educational information, health alerts, news releases, travel notices and access to the most current case information.

For more information about H1N1 influenza, visit [www.ndflu.com/swineflu](http://www.ndflu.com/swineflu) or call the NDDoH at 800.472.2180 or 701.328.2378. Questions regarding laboratory testing may be directed to the Division of Laboratory Services at 701.328.6272.



### **Seal It! Trap It! Clean It!**

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.

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.

Ten cases of HPS have been reported to the NDDoH since 1993; the most recent was reported in 2008. Six of the cases were fatal, including the case from 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/ncidod/diseases/hanta/hps/index.htm](http://www.cdc.gov/ncidod/diseases/hanta/hps/index.htm).

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), or consult with the North Dakota Department of Health by calling 800.472.2180.
- 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.



### **Rabies Update**

#### Vaccine Supply Update

The two suppliers of human rabies vaccine in the United States, Novartis (RabAvert) and Sanofi Pasteur (IMOVAX), have vaccine available for post-exposure prophylaxis.

Novartis is supplying RabAvert vaccine, both pre- and post-exposure prophylaxis, without supply restrictions. By current ACIP recommendations, pre-exposure vaccination should be considered for individuals whose activities bring them into frequent contact with rabies virus or

potentially rabid animals, such as veterinarians and their staff, animal handlers, rabies researchers, and certain laboratory workers. In addition, some international travelers may be candidates for pre-exposure vaccination if they are likely to come into contact with animals in areas where rabies is constantly present in an animal population such as dogs, raccoons, skunks, etc., and immediate access to appropriate medical care, including rabies vaccine and immune globulin, could be limited.

Sanofi Pasteur continues to have IMOVAX vaccine available for post-exposure prophylaxis following risk assessment from a state or local health department official. If it is determined that rabies post-exposure prophylaxis is indicated, the company will provide you with a passcode to place on the Sanofi Pasteur Rabies Post-Exposure Form. The form must be filled out in its entirety, including the required physician's signature and passcode provided by your rabies state health official. Please contact Sanofi Pasteur at 1-800-VACCINE to obtain the required form.

Rabies immune globulin remains available with no changes in historical supply.

2008 Rabies Update

In 2008, 450 animals were tested for rabies in North Dakota, with 34 (7.6 percent) testing positive. This is an increase in both testing and positive animals from 2007.

Animal Type	Number Positive	
	2007	2008
Bat	2	1
Cat	4	5
Cow	2	4
Dog	7	4
Goat	1	0
Horse	2	1
Raccoon	1	1
Skunk	11	18
Total	30	34

The skunk rabies virus is the major variant seen in North Dakota. The NDDoH reports only laboratory confirmed cases of rabies. Many cases of rabies may occur and be unobserved and therefore untested, particularly in wild populations.

For more information, call the NDDoH at 800.472.2180.



**Save the Date! Hepatitis C Trainig Workshop**

The NDDoH is hosting a hepatitis C training workshop July 20, 2009, at the Holiday Inn in Fargo, N.D. Online registration is available at [www.ndhealth.gov/disease/Hepatitis/Training/HepChtm](http://www.ndhealth.gov/disease/Hepatitis/Training/HepChtm). Applications for CEUs are being requested by the North Dakota Board of Nursing, North Dakota Board of Addiction Counseling Examiners, and North Dakota Board of Social Work Examiners. More information about how to apply for contact hours will be available soon.

Some topics include:

- The liver.
- Hepatitis C transmission and prevention.
- Diagnostic tools.
- Symptoms and disease progression.
- Disease management.
- Treatments.
- Complimentary medicine.

For more information please contact Julie Wagendorf or Sarah Weninger at 701.328.2378 or 800.472.2180.

*Contributing authors of The Pump Handle include Michelle Feist, Julie Wagendorf, Kirby Kruger, Tracy Miller 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](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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