

# 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 2009 Topics

- Three *Salmonella* Outbreaks in North Dakota, June 2009
- New Recommendation for Human Rabies PEP
- Influenza H1N1 Update
- West Nile Virus Season
- *Campylobacter* and Calving Season



### **Three *Salmonella* Outbreaks in North Dakota, June 2009**

On June 15, 2009, the North Dakota Department of Health (NDDoH) received a call from a physician in Bismarck, N.D., who reported seeing patients with diarrheal illness who spoke of attending either a family reunion in Wilton, N.D., or a wedding in Washburn, N.D., on June 13, 2009. Upon further investigation, it was learned that the meals served at the two events were catered by the same unlicensed caterer. On June 23, 2009, the NDDoH received further complaints of illness associated with attending a wedding in McClusky, N.D., on June 20, 2009. This wedding also was served by the caterer from the previous two outbreaks.

As of July 1, 2009, 46 of the 54 (85%) Wilton reunion attendees had been interviewed and reported diarrheal illness within three days following the event. At the reunion, both a lunch and a dinner were served. Eight individuals were diagnosed with *Salmonella* Montevideo from this outbreak, of which seven were hospitalized and have since recovered. Several food times were collected from both meals for laboratory testing. None were positive. Preliminary analysis of the outbreak data showed potato salad to be statistically significant. Information collected indicates that the potatoes and eggs were prepared the night before in the caterer's home.

As of July 1, 2009, 183 attendees of the wedding in Washburn, N.D., had been interviewed. Thirty-two of 183 (17%) became ill. Eight individuals were diagnosed with *Salmonella* Montevideo from this outbreak. Two were hospitalized and have since recovered. Analysis of the outbreak data showed ground beef served as taco meat was statistically significant. The ground beef tested positive for *Salmonella* Montevideo.

As of July 1, 2009, 153 attendees of the wedding in McClusky, N.D., had been interviewed. Fifty-six people (37%) became ill. Six individuals were diagnosed with *Salmonella* Montevideo from this outbreak. Shredded beef and noodle salad samples from this event tested positive for *Salmonella* using a screening test. Confirmatory testing is pending.

The type of *Salmonella* that caused these three outbreaks was the cause of an outbreak in North Dakota in 2007 associated with baby chicks. The caterer for these three events lives on a farm with baby chicks. Cross contamination from the farmyard to the kitchen is one possible source of contamination that the health department is investigating. Environmental sampling of the caterer's kitchen and baby chicks farm was performed, and laboratory results are pending.



#### **New Recommendation for Human Rabies PEP**

At the June 24, 2009, Advisory Committee on Immunization Practices (ACIP) meeting, the rabies working group presented evidence in support of a recommendation to reduce the number of vaccine doses in the human rabies postexposure prophylaxis (PEP) series from five to four doses. After much discussion, ACIP voted in favor of accepting the recommendation.

This will effectively change the 2008 ACIP recommendations for human rabies prevention as follows:

- PEP series will consist of the administration of human rabies immune globulin (20 IU/kg body weight) on day 0, and
- Administration of four doses of vaccine (1 ml intramuscularly) on days 0, 3, 7, and 14.

Formal publication of the updated recommendations reflecting the new four-dose schedule will be published in the MMWR. Implementation of these new recommendations will begin following the MMWR publication. Additional information on this new schedule is available at [www.cdc.gov/rabies/qanda/ACIP4dose.html](http://www.cdc.gov/rabies/qanda/ACIP4dose.html).



#### **Influenza H1N1 Update**

The NDDoH continues to monitor novel influenza H1N1 infections in the state. As of July 8, more than 400 samples had been tested for influenza A H1N1, with 58 confirmed cases from 14 counties. The median age of reported cases is 18 years, and the ages have ranged from 3 to 57 years. Two cases have required hospitalization.

2009 Influenza H1N1 Confirmed Case Summary			
Total Cases		Age Information	
		Range	Cases
Gender		<10	5
Female	36	10-19	26
Male	22	20-29	13
		30-39	6
Hospitalized	2	40-49	6
		50-59	2
Deaths	0	60 and over	0

A website dedicated specifically to North Dakota information related to the H1N1 influenza outbreak can be accessed at [www.ndflu.com/swineflu](http://www.ndflu.com/swineflu). The site contains links for 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.



#### **West Nile Virus (WNV) Update**

As of July 7, 2009, no WNV cases in humans, birds, or horses had been reported to the NDDoH. For more information about WNV, visit the NDDoH website at [www.ndhealth.gov/wnv](http://www.ndhealth.gov/wnv).

2009 West Nile Virus Samples and Testing			
Beginning: Monday, June 01, 2009			
Through: Wednesday, July 07, 2009			
	Tested To Date*	Positive to Date* †	Nationwide Positive°
Humans	42	0	6
Horses	2	0	1
Dead Birds	2	0	27
Mosquito Pools	0	0	65

\* Results may change pending further investigation

† Confirmed and Probable Cases

° Reported to CDC

In the United States as of July 7, 2008, six human West Nile virus cases had been reported to the CDC from Arizona, Arkansas, Idaho, Nevada, South Dakota and Texas. For nationwide WNV data, visit [www.cdc.gov/ncidod/dvbid/westnile/index.htm](http://www.cdc.gov/ncidod/dvbid/westnile/index.htm).

West Nile virus educational materials are available for 2009! In addition to the colorful brochures, posters and 16-page activity book for kids, mosquito repellent towelettes are available for order by city officials and other outdoor event hosts in limited quantities. If you are interested in the repellent and feel that your event may qualify for free towelettes, contact Michelle or Tracy at 701.328.2378.

Ordering any of the above materials (excluding the towelettes) is free and easy; go to [www.ndhealth.gov/WNV/Materials/](http://www.ndhealth.gov/WNV/Materials/). Additionally, a kid-friendly tick brochure and bookmark have been developed. Call Michelle or Tracy at 701.328.2378 if you have questions or would like to place an order.



### **Campylobacter and Calving Season**

Reported cases of campylobacteriosis in North Dakota typically increase each year in early spring and peak during the summer. As of June 30, 2009, 43 cases had been reported to the NDDoH. About 65 percent of the cases reported have been related to exposure to farm animals, mainly cattle. The increase in cases beginning in early spring coincides with calving season and often is attributed to improper hand washing after contact with manure.

The causative agent, *Campylobacter spp.*, can be found in all regions of the world and is responsible for many diarrheal illnesses, such as traveler's diarrhea. Often transmitted through cattle and poultry, campylobacter is the leading cause of enteric illness in North Dakota.

*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).*



**NORTH DAKOTA**  
DEPARTMENT of HEALTH

Terry Dwelle, MD, MPHTM, State Health Officer  
Craig Lambrecht, MD, MHSA, MBA, MPH, Chief, Medical Services Section  
Kirby Kruger, Director, Division of Disease Control