

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

July 2010 Topics

- Rabies Update: Positivity and High Risk
- West Nile Virus
- FDA Approves Rapid Test for Antibodies to Hepatitis C Virus
- Immunization Conference August 2010



Rabies Update: Positivity and High Risk

The North Dakota Department of Health Division of Disease Control is providing data relating to the positivity of animals by species for rabies. This data is intended to help provide situational awareness for providers when posed about risk of rabies when a human presents with a potential exposure. **Every animal bite** should be taken as a serious and potential exposure to rabies. The following data provides information on rabies in North Dakota by species and may be used to evaluate risk after potential exposure in conjunction with other exposure information.

Figure 1. Rabies in Domestic Animals, United States

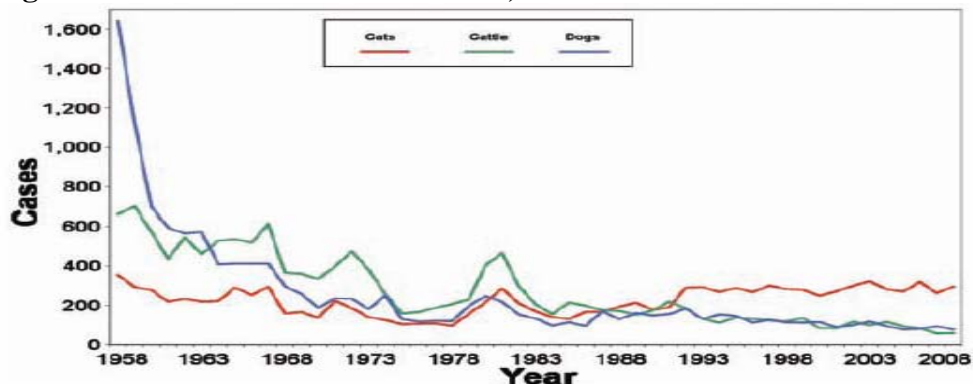
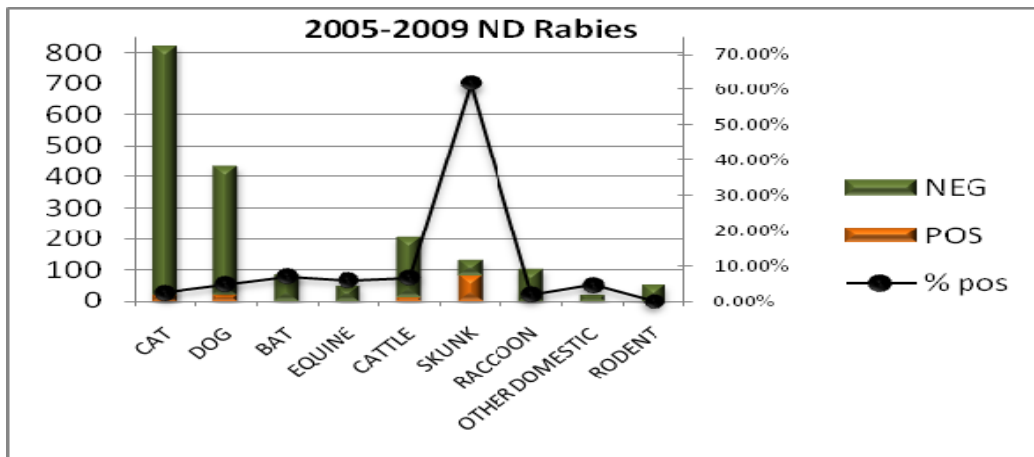


Figure 2. Rabies in N.D. Animals, United States, 2005-2009 (NDDoH)



From 2005 to 2009, a large number of potential exposures to rabies by domestic animals in North Dakota were evaluated. The percent of domestic animals testing positive for rabies remained less than five percent (**Figure 2**). This is likely due to rabies vaccination programs for domesticated animals. Nationwide, the number of rabies cases in domestic animals has been decreasing since 1958 (**Figure 1**). This should be a consistent reminder to pet owners that through vaccination and responsible pet ownership, risk of rabies exposure to humans can be greatly reduced which in turn can help decrease the number of people requiring rabies post-exposure prophylaxis.

Skunks are the main reservoir for rabies in North Dakota. Consistently over the past five years the trend continues that skunks tested for rabies tend to be positive. Thus skunks should be regarded as rabid until rabies has been ruled out by laboratory testing.

All potential exposures to rabies (domestic or wild) should be assessed by a health-care provider. The North Dakota Department of Health can offer assistance to help determine risk and exposure as well as management of exposed cases. For assistance, please call 701.328.2378 or toll-free at 800.472.2180.

For more information about rabies and rabies exposures, visit www.ndhealth.gov/disease/Rabies/.



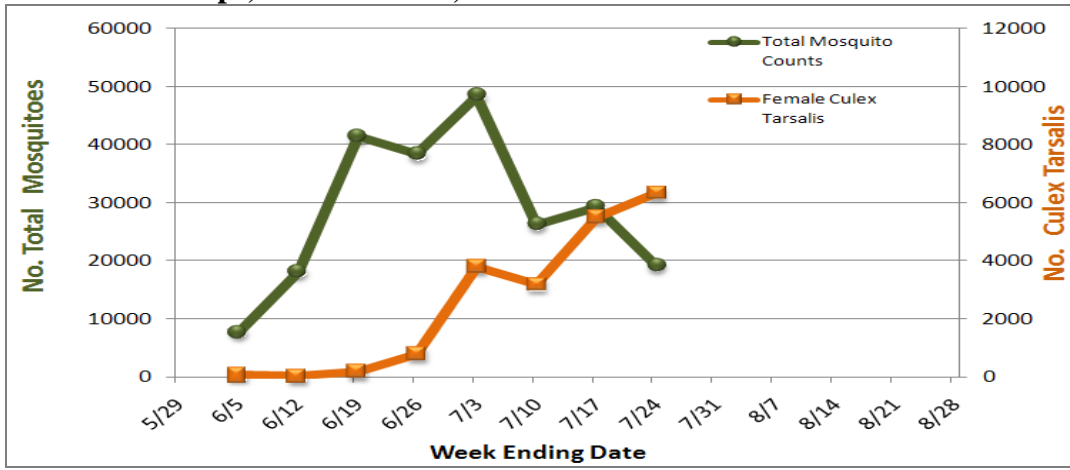
West Nile Virus (WNV)

As of Aug. 17, 2010, four human WNV infections have been reported to the state health department. One of the four cases was hospitalized and all are classified as West Nile fever. One horse and one dog have tested positive for WNV. No WNV cases have been reported in birds.

The mosquito that transmits WNV, *Culex tarsalis*, typically reaches peak numbers the end of July or the beginning of August. State mosquito surveillance traps are demonstrating increases in female *Culex tarsalis* counts across the state which may indicate an increase risk for human WNV infection (**Figure 1**). Overall mosquito counts

from surveillance traps have been declining since the beginning of July which is due to the decrease in nuisance mosquito numbers across the state.

Figure 1. Total number of mosquitoes and female *Culex tarsalis* mosquitoes from surveillance traps, North Dakota, 2010



Nationwide there have been a total of 85 human infections reported to the Centers for Disease Control and Prevention as of Aug. 10, 2010. A map showing the distribution of human, bird, animal and mosquito infections 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/wny.



FDA Approves Rapid Test for Antibodies to Hepatitis C Virus

On June 25, 2010, the U.S. Food and Drug Administration (FDA) announced approval of the first rapid blood test for antibodies to the hepatitis C virus (HCV) for individuals 15 years and older.

The OraQuick HCV Rapid Antibody Test is a test strip and does not require an instrument for diagnosis. Currently, the OraQuick test made by OraSure is only approved for venous blood specimens and is only to be used in a laboratory setting. The test has not been approved for use with oral fluid or a finger stick.

“Approval of OraQuick means that more patients can be notified of their HCV infection faster so that they can consult with their physicians for appropriate health measures,” said Jeffrey Shuren, M.D., J.D., director of the FDA’s Center for Devices and Radiological Health.

OraSure will be submitting a pre-market application to the FDA for point-of-care specimens in the next few weeks or months to allow the test to be utilized in health-care settings other than the laboratory. No Clinical Laboratory Improvement Amendment (CLIA) waiver has been issued for the OraQuick HCV rapid test. This waiver is necessary for any test to be performed outside a laboratory. The earliest a test will be available on the point-of-care market is early in 2011.

For more information on hepatitis C, please contact the Viral Hepatitis Program at the NDDoH at 701.328.2378 or 800.472.2180, or visit www.ndhealth.gov/disease/hepatitis.



Immunization Conference August 2010

Registration is now open for the North Dakota Immunization Conference. The conference will be held Aug. 24 and 25 in Mandan, N.D., at the Best Western Seven Seas Hotel. For more information or to register, please visit <http://conferences.und.edu/immunization/>. We hope to see you all there.

Contributing authors of The Pump Handle include, Michelle Feist, Lindsey VanderBusch, Sarah Weninger, Abbi Pierce, Julie Wagendorf, Kirby Kruger and Tracy Miller. 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.



NORTH DAKOTA
DEPARTMENT of HEALTH

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