

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 2005 Topics

- West Nile Virus Season Approaches
- Hepatitis A Testing Requirements
- National Hepatitis Awareness Month
- Recreational Water Illness Prevention Week



West Nile Virus Season Approaches

The first case of West Nile Virus (WNV) was confirmed in a North Dakota horse in early May of this year. The confirmation of WNV reinforces the need for horse owners to get their animals vaccinated or boosted.

According to the North Dakota State University Veterinary Diagnostic Laboratory, North Dakota reported 40 positive cases of equine WNV in 2003 and none in 2004. The first equine case in North Dakota – the first case west of the Mississippi River – was confirmed in July 2002 in Grand Forks County. More than 500 cases of WNV were confirmed in North Dakota horses in 2002.

Dead bird and mosquito surveillance will begin June 1, 2005. **This year only corvids and raptors will be tested.** These groups include the following birds: crows, magpies, bluejays, ravens, hawks, eagles, owls and falcons. While not all birds are acceptable for testing, the health department is interested in dead bird reports. If you find a dead bird that is not eligible or is too decomposed for testing, please report this bird via the online dead bird reporting form found at www.ndwnv.com/. Sentinel chickens also will be used this summer to monitor viral activity in regions throughout North Dakota.

Beginning June 1, 2005, the North Dakota Department of Health Division of Microbiology will begin offering free human arbovirus testing on serum specimens from **patients meeting any one of the following criteria:**

- Any adult or pediatric patient with presumptive viral encephalitis.
- Any patient 17 years old or greater with presumptive aseptic meningitis with a negative gram stain and culture.
- Any adult or pediatric patient with presumed Guillain-Barre´ Syndrome or acute flaccid paralysis.

Questions regarding laboratory testing may be directed to the North Dakota Division of Microbiology at 701.328.6272. For more information about WNV reporting and surveillance, visit the North Dakota Department of Health West Nile Virus website at www.ndwnv.com/.



Hepatitis A Testing Requirements

Hepatitis A is a reportable condition in North Dakota. In the past five years, 15 cases of acute hepatitis A cases were reported to the North Dakota Department of Health (NDDoH). The case definition of acute hepatitis A infection is an acute illness involving (1) discrete onset of symptoms [i.e., fatigue, abdominal pain, loss of appetite, dark urine, nausea or vomiting] and (2) jaundice or elevated serum aminotransferase levels. Serologic confirmation requires the presence of immunoglobulin M (IgM) antibody to hepatitis A virus (IgM anti-HAV), or by identifying recent exposure to a confirmed hepatitis case.

To improve the predictive value of a positive IgM anti-HAV test, clinicians should limit laboratory testing for acute HAV infection to patients who are symptomatic or to individuals who have been exposed to settings where HAV transmission is suspected. Testing asymptomatic patients in populations where prevalence of acute HAV infection is low decreases the predictive value of the IgM anti-HAV test and may lead to false positive test results. Clinicians and public health officials who receive reports of people who are IgM anti-HAV positive in the absence of symptoms consistent with acute viral hepatitis may need additional information when assessing the need for postexposure immunoprophylaxis among contacts.

All reactive IgM anti-HAV tests should be reported to the NDDoH immediately to determine HAV case status and to initiate public health action if warranted. To report reactive IgM anti-HAV tests, call Kim Weis, hepatitis coordinator, at 800.472.2180.

For more information about testing requirements for acute hepatitis A virus infection, visit www.cdc.gov/mmwr/preview/mmwrhtml/mm5418a1.htm. For reporting requirements, vaccine information and surveillance data, visit the NDDoH viral hepatitis website at www.health.state.nd.us/disease/Hepatitis/default.htm.

National Hepatitis Awareness Month

May is National Hepatitis Awareness Month. Hepatitis A, B and C are the most common types of viral hepatitis in the United States. Prevention of viral hepatitis is a major challenge for the nation’s public health, scientific and medical communities. Hepatitis A is a disease transmitted through the fecal-oral route where children are often the reservoir for infection. Hepatitis A vaccine is the best protection against hepatitis A virus infection. During the late 1990s, when hepatitis A vaccine became more widely used, the number of cases reached historic lows.

Hepatitis B and C are both blood-borne diseases transmitted when blood or body fluids from an infected person enter the body of a susceptible person. Both hepatitis B and C can cause chronic infection that can lead to cirrhosis and hepatocellular carcinoma. Hepatitis B vaccine is the best protection against infection with hepatitis B. The greatest decline in hepatitis B infections has occurred among children and adolescents as the result of routine hepatitis B vaccination. No vaccine exists to prevent hepatitis C infection; therefore, prevention of new hepatitis C infections depends on directing primary prevention activities to people at increased risk of infection.

For more information about primary hepatitis prevention recommendations, see the North Dakota Department of Health Viral Hepatitis Guide at www.health.state.nd.us/disease/Documents/EpiReport/03-04-05.pdf.



Recreational Water Illness Prevention Week

Swimming is a popular physical activity among children, and it is important to improve prevention efforts of drowning, injury and spread of infectious diseases that may be associated with recreational water. The first National Recreational Water Illness Prevention Week was held May 23 through 30, 2005, to raise awareness of the potential for spread of infectious diseases at recreational water venues, such swimming pools, spas, lakes and rivers.

Recreational water illnesses (RWIs) are spread by swallowing, breath or having contact with contaminated water from swimming pools, spas, lakes, rivers and oceans. Diarrheal illness is the most commonly reported RWI and is caused by pathogens such as *Cryptosporidium*, *Giardia*, *Shigella* and *Escherichia coli* O157:H7. Children, pregnant women and people with compromised immune systems are at greatest risk from infection of these pathogens.

The spread of RWIs is facilitated by emergence of chlorine-resistant pathogens such as *Cryptosporidium*, poor pool maintenance and low public awareness. Improving swimming pool operation, training and public education is important to protect swimmers from infectious disease transmission.

For more information about recreational water illness prevention, visit www.cdc.gov/healthyswimming.

Contributing authors of The Pump Handle include Kim Weis, Julie Goplin, Tracy Miller and Kirby Kruger. For questions, suggestions or inquiries, or to be removed from the mailing list, please contact Julie Goplin of the Division of Disease Control at 701.238.2375 or by email at jgoplin@state.nd.us.

The pump handle picture in the title was obtained from the website www.ph.ucla.edu/epi/snow.html.



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