

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 2008 Topics

- West Nile Virus Surveillance – Human Testing
- Prevention of Perinatal HIV Transmission
- Continued Measles Outbreaks in the United States
- New Web Page About Foodborne Illnesses and More! 



West Nile Virus (WNV) Surveillance – Human Testing

The North Dakota Department of Health (NDDoH) Division of Laboratory Services will offer free human WNV testing through Sept. 30, 2008, 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. Website updates began in June and will be updated weekly every Wednesday.



Prevention of Perinatal HIV Transmission

It is well known that the human immunodeficiency virus (HIV) can be transmitted from an infected individual to another person through sexual intercourse and sharing needles. However, many may not know that HIV also can be passed from an HIV-positive pregnant woman to her child during pregnancy, labor, delivery and breastfeeding. This is called perinatal transmission, and it has become largely preventable in recent years due to HIV testing during pregnancy and the introduction of anti-retroviral drugs.

Certain precautions should be taken to prevent perinatal HIV transmission from occurring. During pregnancy, the mother should be on a regimen of anti-retroviral medications prescribed by her physician. During labor and delivery, the mother should intravenously receive the anti-retroviral drug zidovudine (ZDV). Mothers with a high amount of HIV virus in their blood are recommended to have a Caesarean section rather than a vaginal delivery. Immediately after the child is born, it should receive ZDV for six weeks, either by intravenous infusion or in an oral suspension. HIV-positive mothers are also discouraged from breastfeeding their children. Children born to HIV-positive mothers are closely monitored after birth for signs of HIV infection through tests to detect the virus and/or antibodies to it. However, the chance of perinatal transmission is only 2 percent if the precautions listed above are used appropriately.

Pregnancy in an HIV-positive woman is a reportable condition in North Dakota. To report pregnancy in an HIV-positive woman, please call 328.2378 or 800.472.2180. For questions regarding HIV, please call 800.70.NDHIV or visit www.ndhealth.gov/hiv/.



Continued Measles Outbreaks in the United States

From Jan. 1 through April 25, 2008, there have been 64 reports of confirmed measles cases in the United States. This is the highest number reported for the same time period since 2001. The cases have been reported from nine different states, with outbreaks currently ongoing in four states. Of the 64 cases, 59 occurred among U.S. residents, and 54 were associated with importation of measles from other countries. Only one of the 64 cases had a history of MMR vaccination. The last confirmed case of measles in North Dakota was in 1987.

Although measles is no longer an endemic disease in the United States, it remains endemic in most countries of the world, including some countries in Europe. Large outbreaks currently are occurring in Switzerland and Israel. International travel highlights the ongoing risk of measles importations, the risk of spread in susceptible populations, and the need for a prompt and appropriate public health response to measles cases.

Measles is an acute disease characterized by fever, cough, cold-like symptoms, conjunctivitis and a maculopapular rash lasting more than three days. Serological testing for measles is available from the NDDoH Division of Laboratory Services. IgM acute serum testing should be sent to the lab at onset of symptoms, along with a completed laboratory slip indicating vaccination history. Measles virus also can be isolated from clinical specimens, such as urine, nasal washes or nasopharyngeal secretions.

Two doses of measles vaccine as a combination MMR separated by at least four weeks are routinely recommended for all children ages 12 months and older. Two doses of MMR are required for all children attending kindergarten through grade 12 in North Dakota. Two doses of MMR also are required for people attending colleges in North Dakota. Studies indicate that

99 percent of people who receive two doses of MMR are immune to measles. All adults born in 1957 and after should have documentation of at least one dose of MMR or other evidence of measles immunity. Birth before 1957 is generally considered acceptable evidence of immunity to measles.

Maintaining high levels of vaccination is pertinent in controlling the spread of measles. Timely and aggressive application of isolation, quarantine (when needed), post-exposure vaccination or immune globulin prophylaxis and other important control measures is critical.

More information about the ACIP recommendations for measles vaccination and the elimination of measles can be found at www.cdc.gov/mmwr/preview/mmwrhtml/00053391.htm.

For more information about the 2008 confirmed measles cases, consult the MMWR available at www.cdc.gov/mmwr/preview/mmwrhtml/mm57e501a1.htm?s. For general information about measles, visit the NDDoH website at www.ndhealth.gov/Disease/Documents/faqs/Measles.pdf. Pictures of individuals with measles can be found at www.cdc.gov/vaccines/vpd-vac/measles/photos.htm.

Please contact the NDDoH Division of Disease Control at 701.328.2378 or toll-free at 800.472.2180 with any questions or concerns regarding this issue.



New Web Page About Foodborne Illnesses and More!



Gastrointestinal (GI) illness is caused by a variety of different microbes and germs and causes a variety of symptoms, such as diarrhea, nausea, vomiting, abdominal pain, abdominal cramps, fever and sometimes headaches, rash and paralysis. The Division of Disease Control monitors and investigates GI illnesses that are spread through food, water, person-to-person contact and contact with infected animals.

The NDDoH recently launched a new web page that includes information about foodborne illnesses and provides North Dakota statistics, disease information and educational materials for at home and at work. The new web page can be viewed at www.ndhealth.gov/disease/GI/.

For more information or to report a possible foodborne illness, visit www.ndhealth.gov/disease/GI/ or contact the North Dakota Department of Health at 701.328.2378 or toll free (North Dakota residents only) at 800.472.2180

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



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Pump Handle - 3