"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

Topics

- Measles Case Reported in Burleigh County – Molly Howell
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- Sexually Transmitted Diseases in North Dakota – Shari Renton
- New Disease Control Employee!

Measles Case Reported in Burleigh County

On Tuesday, September 4, 2018, a case of measles was reported to the North Dakota Department of Health (NDDoH). The case met the clinical case definition, had an unknown vaccination or immune status, and was serologically positive for measles. The individual resided in Burleigh County and had a history of out-of-state travel and exposure to foreign individuals reporting illness during the incubation period. Subsequently, the NDDoH initiated a contact investigation and mitigation strategies.

While potentially contagious, the reported measles case traveled between numerous locations in the Bismarck area, prior to being diagnosed with measles. People who were at certain locations in Bismarck on specific dates and times were notified of their exposure and encouraged to watch for symptoms and contact a health care provider if symptoms developed. A news release and health alert were distributed on Wednesday, September 5 to notify the public and healthcare providers about the case, potential public exposures, and prevention activities. Based on CDC recommendations and in accordance with North Dakota Century Code 23-07-17, children who did not have two doses of MMR when exposed and who attended schools in the Bismarck area where the measles case had been while infectious were notified they should be excluded from school and other activities for 21 days from the date of exposure.

On Thursday, September 6, 2018, the NDDoH was notified by the Centers for Disease Control and Prevention (CDC) that their testing found the individual with measles in Burleigh County to be negative. After receiving negative measles test results, the NDDoH distributed a health alert
and news release to notify the public and health care providers that the case was negative and that excluded children may return to school.

Measles is a serious disease that can lead to hospitalization and even death. Symptoms include a high fever, cough, runny nose and watery eyes followed by a rash that typically spreads from the head to the rest of the body. It generally takes eight to 12 days, but can be as long as 21 days, from exposure to the first symptom, usually fever. The measles rash usually appears two to three days after the fever begins. Measles is highly contagious and spreads easily by coughing, sneezing or even being in the same room with someone who has measles. People with measles are contagious from four days before to four days after rash onset.

All children are recommended to be vaccinated against measles at ages 12 to 15 months and 4 to 6 years. Measles is included in a combination vaccine with mumps and rubella (known as MMR vaccine). All adults born in 1957 or later should have at least one dose of MMR vaccine. All health care workers should have two doses of MMR vaccine. Currently, North Dakota’s rate for MMR vaccination of infants is 95.7 percent, compared to the United States average of 91.5 percent. North Dakota’s rates for MMR vaccination for kindergarten entry for the 2017-2018 school year was 94.24 percent. The goal is at least 95 percent.

Although this reported measles case ended up being negative and not a case, healthcare providers are encouraged to maintain a heightened awareness for measles, especially in international travelers with an unknown or no MMR vaccination history.

If measles is suspected in a patient, airborne infection control precautions should be followed stringently. IgM and PCR testing for measles is available from the NDDoH Division of Laboratory Services. IgM acute serum testing and a nasopharyngeal swab and urine collection for PCR testing should be sent to the lab at the onset of symptoms. These should be sent along with a completed laboratory slip indicating vaccination history. Specimens for rubella testing should be ordered simultaneously, as measles and rubella are clinically indistinguishable.

As with other tests for infectious diseases, interpretation of measles IgM testing should be evaluated in conjunction with the clinical findings and epidemiologic risks, including vaccination or immune status. Both false positive and false negative IgM results can occur in the presence or absence of a febrile rash illness.

Healthcare providers should not wait for laboratory results to report suspected cases of measles. Timely reporting of suspected measles cases allows the NDDoH to investigate cases and contacts and as needed and make recommendations to reduce transmission in the community. As required by North Dakota law, any incidence of measles must immediately be reported to the NDDoH by phone at 701.328.2378, toll-free at 800.472.2180 or by confidential fax at 701.328.0355.

So far in 2018, the United States has had 137 cases of measles. The last case of measles reported in North Dakota was from Cass County in 2011.

For more information about measles or immunizations, contact the NDDoH at 701.328.2378 or visit our website at www.ndhealth.gov/immunize.
**WNV Update**

As of October 10, 2018, there have been 184 West Nile virus (WNV) disease cases reported to the NDDoH. The cases have been identified in 31 counties. Fifty of the 184 cases have been hospitalized. There have been two deaths reported. Additionally, positive mosquito pools have been identified in Burleigh, Cass, Grand Forks, Ramsey, Richland, Stark, Stutsman, Ward and Williams Counties. Additionally, Cass County and Grand Forks County have reported WNV positive dead birds. For the most up to date WNV information, visit our website at [www.ndhealth.gov/wnv](http://www.ndhealth.gov/wnv).

**STD/Syphilis**

In September, the CDC released the [2017 STD Surveillance Report](https://www.cdc.gov/std/tg2015/default.htm) and found that sexually transmitted diseases (STDs) have continued to increase in the United States and are at an all-time high. North Dakota is seeing the trend continue for 2018, with expected annual increases for gonorrhea and syphilis.

**Syphilis**

North Dakota continues to see an increase in syphilis, especially among women of childbearing age. As of October 1, 2018, there have been 67 reported cases of syphilis, 21 are female and 5 have been pregnant. The NDDoH continues to recommend screening for syphilis three times throughout pregnancy for all pregnant women, regardless of risk, to prevent mother to child transmission. Others at risk for syphilis should be screened routinely, this includes men that have sex with men and persons living with HIV.

**Gonorrhea**

There was a slight decrease in gonorrhea cases reported from 1,005 in 2016 to 967 in 2017. However, there have already been 910 reported cases of gonorrhea in North Dakota as of October 1, 2018. Screening recommendations for gonorrhea/chlamydia include the following:

- Sexually active women under the age of 25 and those at increased risk over the age of 25
- All pregnant women under the age of 25 and pregnant women over the age of 25 if at increased risk
- At least annually for sexually active men who have sex with men at sites of contact (urethra, rectum, pharynx) and every three to six months if at increased risk
- Annual screening for persons living with HIV that are sexually active

The NDDoH is asking all health care providers to obtain a complete sexual history of their patients to identify individuals who may be at high risk for STDs. For treatment guidelines for syphilis and gonorrhea, as well as other STDs, refer to [https://www.cdc.gov/std/tg2015/default.htm](https://www.cdc.gov/std/tg2015/default.htm). For any questions, please contact the NDDoH STD program at 701.328.2378 or 800.472.2180.
New Disease Control Employee!

Name: Ione Eckroth

Title: MDRO Surveillance Coordinator

Education Background: Bachelor of Science in Nursing from Mary College (now University of Mary) and Master of Science in Nursing, Nursing Administration track, from the University of Nebraska Medical Center. At this time, I am still nationally certified in Nephrology and Organ Transplantation.

Past Experience: I worked in various health care settings in several different hospitals during my nursing career. My most recent was 32 years at Sanford Health in Bismarck. While there, I oversaw various med-surg units, outpatient clinic departments, the kidney transplant program and the three dialysis departments that Sanford operates. I am very pleased to be offered the opportunity to work at NDDoH in a temporary position. I am finding the work performed by Disease Control to be very fascinating.

Family/Hobbies: My husband and I have 4 grown children and 5 grandchildren. We have lived in Bismarck since 1983, but both of us were born and raised in this area. We moved to pursue advanced education. But, our desire was always to move back to North Dakota. My hobbies are reading, music, and football, at all levels. I belong to a fantasy football league and enjoy it immensely. Last year my sister and I attended the Super Bowl in Minneapolis. What an experience!