"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

- Syphilis Update
- PrEPcost.org
- First OXA-48 Detection in North Dakota
- Rat Bite Fever
- New Disease Control Employee – Donna Davidson

Syphilis Update

As of November 13, 2019, the North Dakota Department of Health (NDDoH) has 79 confirmed reports of syphilis infections across the state, with growing clusters of infection in Stark and Cass Counties. Stark County has had ten reported cases of syphilis in 2019 with seven cases diagnosed in the past six weeks and Cass County has had 28 reported cases in 2019 with eight diagnosed in the past six weeks. The majority of the infections involved in the clusters have been early infections in the primary and secondary stages. The predominant risk factors have been illicit drug use and multiple sexual partners.

The NDDoH is recommending healthcare providers screen all sexually active patients for syphilis as well as other sexually transmitted diseases, including HIV. In order to stop the transmission of syphilis, those infected and all their sexual partners need to be treated. The treatment for early syphilis is 2.4 million units benzathine penicillin G IM. Persons who have had sexual contact with an infected person within 90 days of an early syphilis diagnosis should be tested and treated.
presumptively with 2.4 million units benzathine penicillin G IM. For treatment guidelines and clinical management of syphilis, please refer to the STD Treatment Guidelines. For any questions, please contact the NDDoH STD program at 701.328.2378 or 800.472.2180.

**PrEPcost.org**

The National Alliance of State and Territorial AIDS Directors (NASTAD), an organization which provides technical assistance to state health and local health departments around HIV Prevention and Care, is pleased to release its updated version of PrEPcost.org. This tool will assist providers and navigators in helping patients to compare the best health insurance coverage options for their clients during the 2020 Open Enrollment. The 2020 version of PrEPcost.org will allow users to look-up formulary coverage for Truvada® and Descovy®, the two medications currently approved for PrEP. For more information, visit: PrEPcost.org or email: PrEP@nastad.org.

**First OXA-48 Detection in North Dakota**

The NDDoH Division of Microbiology confirmed North Dakota’s first OXA-48 gene detection in a Carbapenem-resistant *Enterobacteriaceae*, sub group *Escherichia coli* (*E. coli*) from a urine isolate collected at a clinic this fall. The patient was treated as an outpatient at the clinic. The patient had no recent risks of travel outside the U.S., no procedures in a healthcare facility and no indwelling medical devices in the past 12 months. The patient has recently been on oral antibiotics multiple times for urinary tract infections and sinus infections. The significance of the diagnosis and transmission prevention was discussed with patient.

The clinic and hospital where the patient receives healthcare were contacted and their infection prevention policies were reviewed including environmental cleaning, disinfecting equipment between patient use, hand hygiene, and the importance of flagging charts to notify staff during future care to implement transmission prevention processes.

For more information on Multi-drug Resistant Organism (MDRO) containment response visit https://www.cdc.gov/hai/containment/guidelines.html.
Rat Bite Fever

An individual was recently reported to the NDDoH with symptoms clinically compatible with meningococcal meningitis. Through further testing, *Streptobacillus moniliformis* was identified which causes Rat-bite fever (RBF). RBF is considered rare in the United States but is likely underdiagnosed due to the difficulty in confirming the disease. This case serves as a reminder that while rodents can make great pets for the right family, it's important to follow the appropriate measures to ensure you and your pets stay safe and healthy.

RBF is an infectious disease characterized by an abrupt onset of fever, muscle pain, vomiting, headache, and rash. Complications including septic arthritis, pneumonia, endocarditis and meningitis can occur. Symptoms usually begin three to 10 days after contact with the bacteria but can be as long as three weeks after exposure. The treatment for RBF is antibiotics. Without early diagnosis and appropriate treatment, RBF can be fatal.

*Streptobacillus moniliformis* is part of the normal respiratory flora of rodents. It can be found in their saliva, urine, or droppings. This bacteria can be spread to humans through broken skin, bites, or scratches. It can also be spread from inadvertently ingesting food or drink that have been contaminated.

You can lower your risk of becoming infected with RBF by avoiding direct contact with rodents and places with rodent infestations. Rodents are not recommended as pets for families with children 5 years old or younger, pregnant women, or people with weakened immune systems. You should always wash your hands immediately after touching, feeding, or caring for pet rodents or cleaning their environment.

More information about RBF and the caring for pet rodents can be found on CDC’s [website](#). If you feel you have signs and symptoms of RBF after coming into contact with rats or other rodents, contact your healthcare provider.

New Disease Control Employee

**Name:** Donna Davidson, RHIA

**Title:** Health Information Systems Data Quality Coordinator

**Role in the Division of Disease:** The Health Information Systems (HIS) Data Quality Coordinator is responsible for assisting the Electronic Surveillance System Coordinator and the Syndromic Surveillance Coordinator in data quality activities. This position will work with two of the health information systems that are used in the Division of Disease Control, the electronic
surveillance system, also known as Maven, and the syndromic surveillance system. This position is responsible for maintaining and improving data quality in these systems, performing data cleaning activities, and developing reports. In addition, this position will also support several key electronic laboratory reporting activities, including managing configurations and monitoring electronic laboratory reporting (ELR) activity/volume and assessment of reporting standards.

Kirby Kruger, Director, Division of Disease Control; Chief of Medical Services Section
Molly Howell, MPH, Assistant Director, Division of Disease Control
Brandy Chap, Managing Editor