"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 2015 Topics
- Rotavirus-Amy Schwartz
- Sexually Transmitted Disease Treatment Guidelines, 2015-Sarah Weninger
- Shigella-Multi-Drug-Laura Cronquist
- Travel History-MERS-Jill Baber

Rotavirus
The North Dakota Department of Health (NDDoH) was recently alerted to the possibility of an increase of rotavirus cases in certain regions of the state. Rotavirus is a virus that causes diarrhea and vomiting. People of all ages are at risk for rotavirus, but it is usually more common among children younger than two. Symptoms include non-bloody, watery diarrhea, nausea, vomiting and dehydration in severe cases. Fever and abdominal pain occur frequently and generally last four to six days.

Since rotavirus is not a mandatory reportable condition in North Dakota, in order to determine if this trend was being seen across the state, the NDDoH distributed a survey on May 13, 2015 to North Dakota laboratories. Eighteen laboratories responded and seven of these laboratories reported that they provide rotavirus testing. Laboratories were asked about the number of specimens tested between January 1 through May 1 in 2014 and 2015. Most laboratories reported an increase in testing.
A vaccine is available to protect children against rotavirus disease. Rotavirus vaccine is routinely recommended for children at 2 and 4 months of age or 2, 4 and 6 months of age depending on the type of vaccine. Children should have received all doses of rotavirus vaccine by 8 months of age. Rotavirus vaccine is required in order to attend early childhood facilities in North Dakota.

**Sexually Transmitted Disease Treatment Guidelines, 2015**

The U.S. Centers for Disease Control and Prevention (CDC) published its updated *Sexually Transmitted Diseases Treatment Guidelines, 2015*. With more than 20 million cases of STDs occurring in the United States each year, it is critical for healthcare providers to have access to scientifically-sound, evidence-based diagnostic, treatment, and prevention recommendations to help reduce the burden of these infections.

CDC revises the *Guidelines* periodically, and the *2015 Guidelines* update the previous *2010 Guidelines* with new guidance, including:

- Alternative treatment regimens for *Neisseria gonorrhoeae*;
- Updated treatment for chlamydial infections during pregnancy;
- Use of nucleic acid amplification tests for the diagnosis of *Trichomonas vaginalis*;
- Updated recommendations for diagnostic evaluation of urethritis;
- The role of *Mycoplasma genitalium* in urethritis/cervicitis and treatment-related implications;
- An additional treatment option for genital warts;
- Updated HPV vaccine recommendations and counseling messages;
- Screening recommendations for gonorrhea and chlamydia;
- Screening recommendations, including Hepatitis C, for men who have sex with men; and
- Information on the clinical management of transgender individuals.

The full *Guidelines* are now available online for download at [www.cdc.gov/std/treatment](http://www.cdc.gov/std/treatment). Presentations on these guidelines or STDs in North Dakota can be requested by contacting your local field epidemiologist ([www.ndhealth.gov/Disease/Contacts/AreaCall.htm](http://www.ndhealth.gov/Disease/Contacts/AreaCall.htm)). Additionally, updated pocket guides, wall charts, and the STD treatment guide app will be available this summer for you to order or download.

For more information contact the NDDoH STD Program at 701.328.2378 or 800.472.2180.

**Shigellosis-Multi-Drug Resistance**

Although antibiotic therapy for shigellosis is generally not recommended for uncomplicated cases, the use of antibiotics to treat shigellosis remains an option. Recent reports from the Centers for Disease Control and Prevention indicate increasing antimicrobial resistance among *Shigella sp.* isolates in the United States. On June 11, the NDDoH distributed a Health Advisory regarding *Shigella* strains non-susceptible to ciprofloxacin and/or azithromycin and recommendations for clinical management and prevention. In 2015, eleven cases of *Shigella sonnei* were reported to the NDDoH from three counties; Rolette (8), Richland (2) and Dunn (1). Of those with susceptibility information, non-susceptible shigellosis has not been reported in North Dakota; however, there have been cases reported in bordering states. Minnesota reported an outbreak of shigellosis with decreased susceptibility to azithromycin (DSA) from May 2014 until December 2014. Montana was one of three states to report cases of extremely drug-resistant (XDR) shigellosis with onset dates from September 7, 2014 through April 4, 2015. The XDR isolates were tested by CDC’s National Antimicrobial Resistance Monitoring System (NARMS) and were resistant to ampicillin, ciprofloxacin, nalidixic acid, streptomycin, sulfisoxazole, tetracycline, and trimethoprim/sulphamethoxazole. The same isolates also showed decreased susceptibility to azithromycin. The CDC stated that most of the non-susceptible shigellosis cases were reported among gay, bisexual, and other men who have sex with men (collectively referred to as MSM), but noted that cases were occurring among other populations as well.

The NDDoH’s Health Advisory also included pertinent exclusion criteria for the healthcare, foodservice and childcare industries, as well as recommendations for preventing shigellosis. Providers were also reminded to report any incidence of shigellosis to the NDDoH. For more information on exclusion criteria and reporting shigellosis, please visit [http://www.ndhan.gov/data/health/Shigella%20HAN%206-11-15.pdf](http://www.ndhan.gov/data/health/Shigella%20HAN%206-11-15.pdf).

**Travel History-MERS**

A fatal case of Ebola in a traveler returning from Liberia last fall in Dallas, TX, highlighted how obtaining a patient travel history can be vitally important. Travel (both in the United States and to other countries) is a risk factor in a variety of diseases, including typhoid, Hepatitis A and other enterics, malaria, yellow fever, dengue, measles, rubella, diphtheria, chikungunya and others. One disease for which gathering a timely travel history is especially important is MERS-CoV (Middle East Respiratory Syndrome Coronavirus).

MERS-CoV has been shown to transmit readily in health care settings, so quick identification of a potential MERS-CoV case is paramount. Suspected and confirmed MERS-CoV patients must
be placed into isolation in a negative pressure room, and standard, contact and airborne infection control precautions must be implemented. Testing involves collecting a variety of specimens to send to the North Dakota Public Health Laboratory (PHL). Recently, a traveler coming to North Dakota from South Korea visited a North Dakota emergency department complaining of a fever, cough, and other respiratory symptoms. Although the outbreak in South Korea was less than two weeks old, the patient’s travel risk was identified soon after the patient was placed in an emergency department room, and the health department was contacted. This was North Dakota’s first potential MERS-CoV case.

By identifying the patient’s risk quickly, hospital staff was able to implement important infection control measures, and testing for MERS-CoV at the PHL was completed less than 24 hours of the initial notification. Ultimately, the PHL was able to confirm the patient was sick with influenza A H3N2, verifying a rapid A result from the hospital. However, MERS-CoV has been demonstrated to present as a coinfection with other respiratory viruses, so treating the patient as a potential MERS-CoV patient until MERS could be ruled out was an important infection control measure. By identifying the patient quickly and promptly initiating the proper infection control measures and a public health investigation, the hospital could have potentially avoided additional hospital-associated infections.

For more information on guidance for potential MERS patients in health care facilities, visit http://www.cdc.gov/coronavirus/mers/interim-guidance.html.

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