"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

August 2016 Topics

- Increase in Reported Pertussis Cases – Lexie Barber
- New TB Treatment Guidelines – Dee Pritschet
- New Disease Control Employees!
- So Long, Farewell! – Laura Cronquist

**Increases in Reported Pertussis Cases**

The North Dakota Department of Health (NDDoH) has recently seen an increase in reported pertussis cases in the state. As of September 2, 2016, there have been 27 cases of pertussis reported to the NDDoH. Cases have been reported out of Ward, Pierce, Burleigh, Grand Forks, Traill, and Cass County, and the age of cases range from less than one year to over 40 years. Pertussis is a highly contagious vaccine preventable disease. Pertussis can be very serious, particularly in infants, where complications can include pneumonia, seizures and even death. Pertussis is caused by a bacteria and is spread when an infected person sneezes, coughs or talks, and the bacteria is sprayed into the air. Other people nearby can then inhale the bacteria and become infected. Infected individuals should be excluded from school, child care or work until five days of recommended antibiotic treatment have been completed. If someone does not take antibiotics, they should be excluded until 21 days after the onset of cough.

The best way to prevent the spread of pertussis is to ensure children are vaccinate against the disease. DTaP and Tdap are both vaccines that protect against pertussis. DTaP is recommended for children at two, four, six and 15-18 months of age, and again at four to six years. Five doses of DTaP are required to attend kindergarten in North Dakota. In addition, one does of Tdap is recommended at 11-12 years, and is required for entry into 7th grade. Pregnant women should receive a dose Tdap during every pregnancy at 27 to 36 weeks gestation. This allows pertussis
antibodies to be passed on to the baby, offering some protection until they are old enough to receive pertussis vaccine. All adults should also receive one dose of Tdap if they have not previously.

For more information on pertussis, visit http://www.ndhealth.gov/Immunize/Disease/Pertussis.htm.

**New TB Treatment Guidelines**

The Centers for Disease Control and Prevention (CDC) has joined the American Thoracic Society (ATS) and the Infectious Diseases Society of America (IDSA) in developing the newly released 2016 Treatment of Drug-Susceptible Tuberculosis Guidelines.

The guidelines update the previous TB treatment guidelines published by ATS/CDC/IDSA in 2003, and have also been endorsed by the European Respiratory Society and the U.S. National Tuberculosis Controllers Association. The current guidelines provide strong recommendations on the management of patients who are co-infected with TB and HIV. The new guidelines recommend that patients begin antiretroviral therapy (ART) while being treated for TB, and provide greater precision about the recommended timing of initiation of ART.

The new guidelines also recommend comprehensive care of all patients with TB disease case management. Case management includes the use of directly observed therapy (DOT), which improves treatment success. In DOT, a health care provider watches the patient swallow each dose of medication during the six-month course of therapy. Case management is essential to ensure TB treatment is effective.

**The preferred regimen for treating adults with TB remains a regimen consisting of an intensive phase of 2 months of isoniazid (INH), rifampin (RIF), pyrazinamide (PZA), and ethambutol (EMB) followed by a continuation phase of 4 months of INH and RIF.**

Use the following practices for treatment of drug-susceptible pulmonary TB during the intensive phase:

- Daily dosing, rather than intermittent dosing, is preferred.
- If intermittent therapy is needed, use treatment three times per week for patients with:
  1. Low risk of relapse (i.e. drug-susceptible TB organisms, that at the start of treatment is non-cavitary and/or smear negative) and
  2. Negative HIV-infection test result (not HIV-infected).
- If it is difficult to treat daily or three times per week, the use of treatment two times per week after an initial two weeks of daily therapy may be considered for patients with:
  1. Low risk of relapse (i.e. drug-susceptible TB organisms, that at the start of treatment is non-cavitary and/or smear negative) and
  2. Negative HIV-infection test result (not HIV-infected).
- When employed, the once weekly INH 900 mg plus RPT 600 mg regimen should be used only in HIV uninfected patients without cavitation on chest radiography and who are smear negative at 8 weeks.

The guidelines provide recommendations on the management of TB in special situation such as extrapulmonary TB, culture-negative pulmonary TB and TB during pregnancy and breastfeeding.
For more information on the management of TB disease and practice recommendations, health professionals who care for and manage patients with TB disease should refer to the full version of the guidelines online. They have been published by IDSA in Clinical Infectious Diseases. Highlights of changes can be found on the CDC TB website.

For more information, please call the NDDoH TB Program at 701.328.2378.

New Disease Control Employee!
★ Name: Gaurav (Gary) Nagar

Title: HIV, STD and Viral Hepatitis Surveillance Coordinator

Education Background: I received my Doctoral degree in Family Medicine from NHL Municipal Medical College, Gujarat, India and my Masters in Public Health from the Wright State University, Dayton, Ohio.

Past Experience: I practiced Family Medicine in New Delhi, India for 5 years before immigrating to the US. My niche was communicable disease and TB management and prevention.

Family/Hobbies: My hobbies have changed with time. These days I love spending time with my 5 year old daughter. As a bachelor, I was into cricket and table tennis. I like to watch movies and read.

New Disease Control Employee!
★ Name: Andy Noble

Title: CDC Public Health Advisor – Immunization Program

Education Background: I received my Public Health degree from Utah State University in 2000.

Past Experience: From 2000-2002, I worked as a Health Program Specialist for Contra-Costa Health Services in Concord, California, where I developed, implemented, and evaluated various public health programs. From 2002-2013, I was the Quality Assurance and Education/Outreach Coordinator for the Idaho Immunization Program. While in this role, I managed the quality assurance and education sections of the Idaho Immunization Program. In 2013, I became Idaho’s Primary Care Program Manager. In this role, I evaluated Idaho’s population to determine access to healthcare and developed and implement programs to increase access to care for identified underserved populations throughout the state.

Family/Hobbies: In August, I moved to Bismarck with my wife and twin daughters, who are die-hard BSU fans. My hobbies include fly fishing, mountain biking, and Judo.
So Long, Farewell!
After 36 years of employment with the North Dakota Department of Health, Renae “RJ” Jansen retired on August 31, 2016. RJ worked in the Division of Disease Control for the past 18 years, most recently as an administrative assistant for the HIV/STD/TB/Viral Hepatitis Program. She was a terrific asset to our entire division, and she will be greatly missed by her coworkers. We wish RJ all the best in her retirement!

Happy Retirement!

Terry Dwelle, MD, MPHTM, State Health Officer
Kirby Kruger, Director, Division of Disease Control; Chief of Medical Services Section
Molly Howell, MPH, Assistant Director, Division of Disease Control
Tracy K. Miller, PhD, MPH, State Epidemiologist
Kelsie Howes, Managing Editor