

North Dakota Department of Health

Medical Services Section

Highlights for the 2017

North Dakota Legislative Session

January 5, 2016

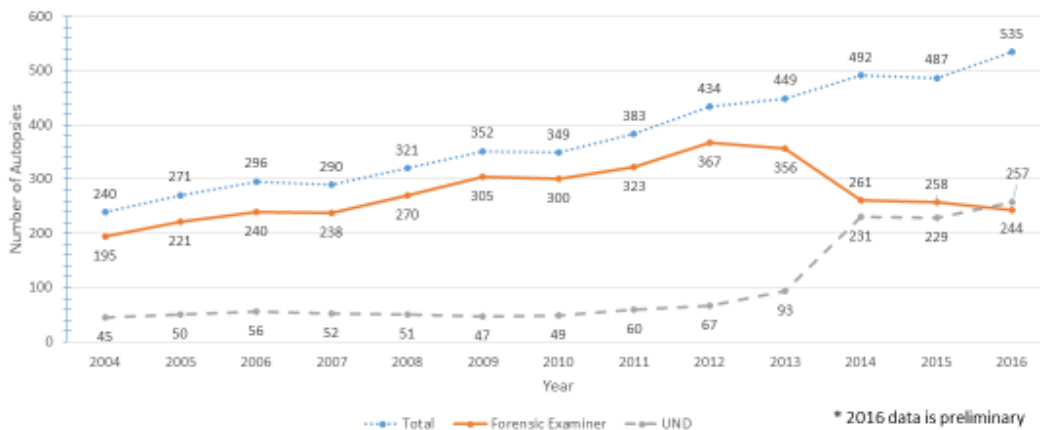
Good afternoon members of the House and Senate Human Services Committee. My name is Kirby Kruger and I am the chief of the Medical Services Section of the North Dakota Department of Health. This sections includes the Office of the Forensic Examiner and the Division of Disease Control.

Forensic Examiner’s Office

The State Forensic Examiner provides vital information needed by the county coroner, family of the deceased, Public Health Department, law enforcement, and many other agencies involved in the investigation of a death. The Forensic Examiner Division provides consultation and/or autopsy services to North Dakota County Coroners. In 2013, the legislature appropriated money to the North Dakota Department of Health (NDDoH) to be used to contract with the Department of Pathology at UND. This contract was needed to ease the case load for the NDDoH. Chart 1 illustrates the autopsy trends in North Dakota and the number of autopsies accepted by each region.

Chart 1. Cases Accepted for Autopsy by Jurisdiction

Total Cases Accepted for Autopsies by Facility in North Dakota
Forensic Examiner’s Office and University of North Dakota, 2004-2016*



The Division of Disease Control

The Division of Disease Control's primary responsibility includes tracking infectious diseases, preventing these diseases and preventing any complications that may result from an infectious disease. The Division:

- Operates a general communicable disease program and provides epidemiology for reportable diseases; programs administered include: Immunization Program, Human Immunodeficiency Virus/Sexually Transmitted Diseases/Tuberculosis/Viral Hepatitis program and Epidemiology and Surveillance program.
- Identifies and analyzes disease trends and implements appropriate intervention activities to reduce morbidity and mortality
- Acts as a resource for healthcare providers and the public regarding public health questions and issues
- Investigates illnesses and outbreaks of communicable diseases
- Works with the media to provide timely public education

An organizational chart can be found in Attachment A.

Immunizations and Vaccine Preventable Diseases Program

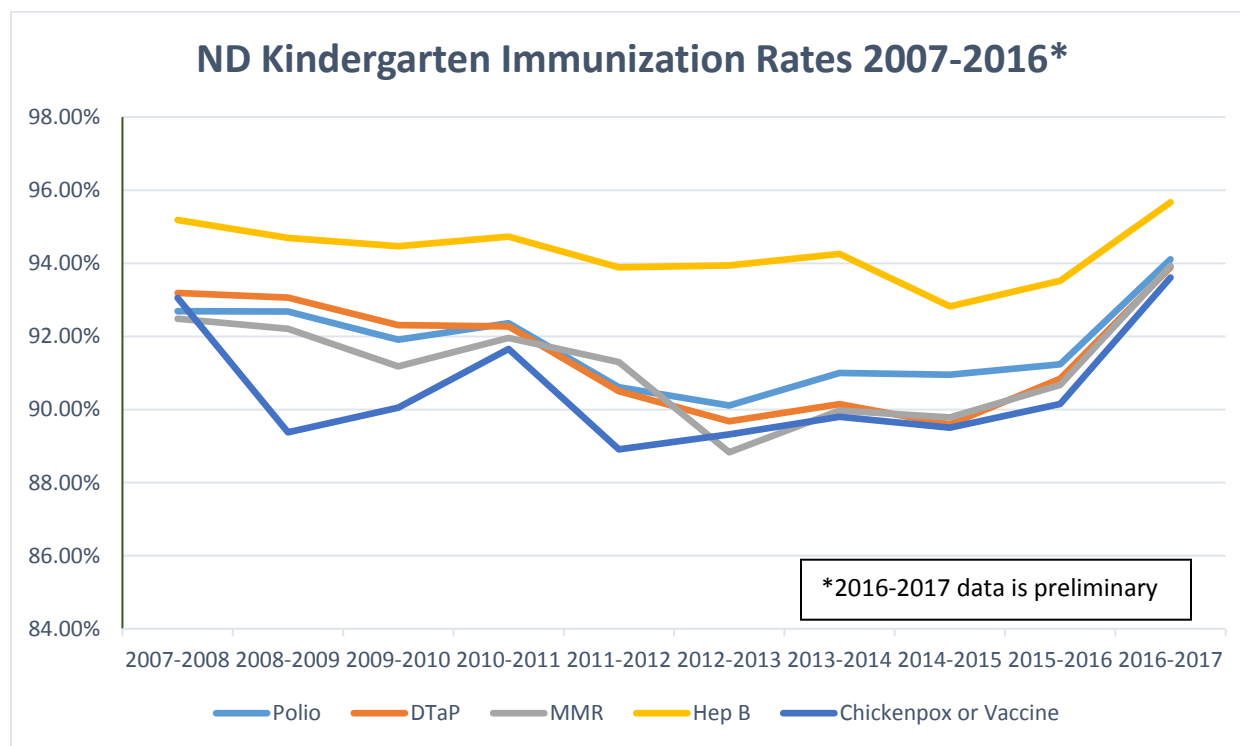
The Immunization Program:

- Supplies free vaccines for children who are eligible for the federal Vaccines For Children (VFC) program
- Coordinates investigations of vaccine-preventable diseases
- Provides education about immunizations and vaccine-preventable diseases
- Monitors the state's immunization rates
- Maintains and updates the North Dakota Immunization Information System (NDIIS)

Although ensuring that all North Dakotans receive the recommended vaccines at the recommended time, the Immunization Program has recently been focusing on increasing the immunization rate for children entering school.

Immunization rates below 95% increase the risk of disease outbreaks in schools. In recent years these levels have been below 95%. After increased efforts by the immunization program, schools, local public health units and health care providers, recent surveillance data reported from schools is indicating rates are now approaching or at 95% for this age group (Chart 2). Also of note is the number of adolescents starting or completing human papillomavirus vaccinations is also increasing.

Chart 2. School Entry Immunization Rates, North Dakota.



The immunization program also manages the statewide immunization information system called the North Dakota Immunization Information System (NDIIS). Currently the system contains immunization information for 100% of children ages 0 through 18 and 92% of adults ages 19 and older. Two hundred seventy-two provider clinics are electronically connected to the NDIIS, leading to 75 percent of the data being received electronically directly from providers’ electronic medical records systems. The NDIIS is not only a registry for immunizations, but also has functionality for vaccine ordering, reminder/recall, forecasting, and analyzing data.

Epidemiology and Surveillance Program

The Epidemiology and Surveillance program (ESP) tracks and investigates diseases that can be spread by animals, insects, ticks, food and water. This program is also responsible for newly emerging disease threats such as Zika virus, influenza virus, and Ebola virus. The healthcare associated infections prevention program helps North Dakota healthcare facilities with infection prevention activities to reduce healthcare-associated infections, combat antibiotic resistant infections, and improve antibiotic prescribing practices. Examples of the many diseases monitored by this program include, salmonella infections, *E. coli*, rabies, West Nile virus, Zika, Ebola, and Influenza.

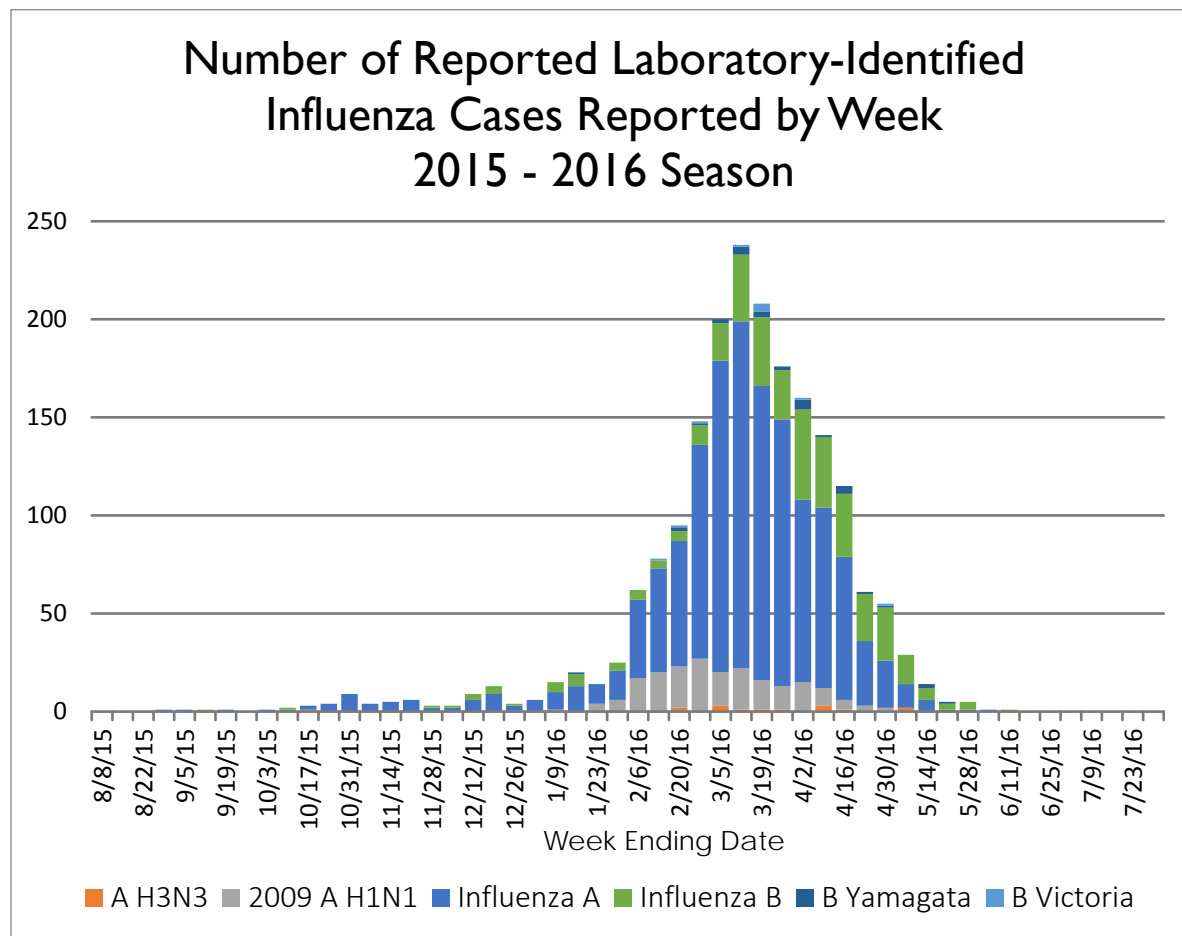
The Division of Disease Control relies on disease surveillance to determine what is happening in our state. The disease reporting and surveillance system relies on healthcare providers and medical laboratories to report diseases that have been diagnosed or laboratory results that may indicate a diagnosis. Currently, North Dakota is only one of two states that has achieved interoperability between the immunization information system and the electronic disease surveillance system. This interoperability allows for more efficient investigations of vaccine-preventable disease.

In 2014, an Ebola hemorrhagic disease outbreak occurred in western Africa. The ESP was responsible for providing information to health care providers in North Dakota regarding symptoms, diagnosis and prevention. The ESP coordinated monitoring of 130 individuals coming to North Dakota from western Africa during their incubation periods. Public information was also disseminated to help our citizens better understand what Ebola is. The ESP has also been working closely with health care facilities in North Dakota to prepare them to provide care for Ebola patients and to improve general infection prevention strategies.

The ESP program also is conducting surveillance for Zika virus infection among people returning or coming from areas of active Zika transmission. Educational efforts have been aimed at both health care providers and the general public.

The ESP program also monitors human cases of influenza and conducts surveillance to detect infections with newly emerging influenza viruses. Chart 3 shows human influenza cases reported to the Department for the current and last four influenza seasons.

Chart 3. Human influenza virus infections, North Dakota

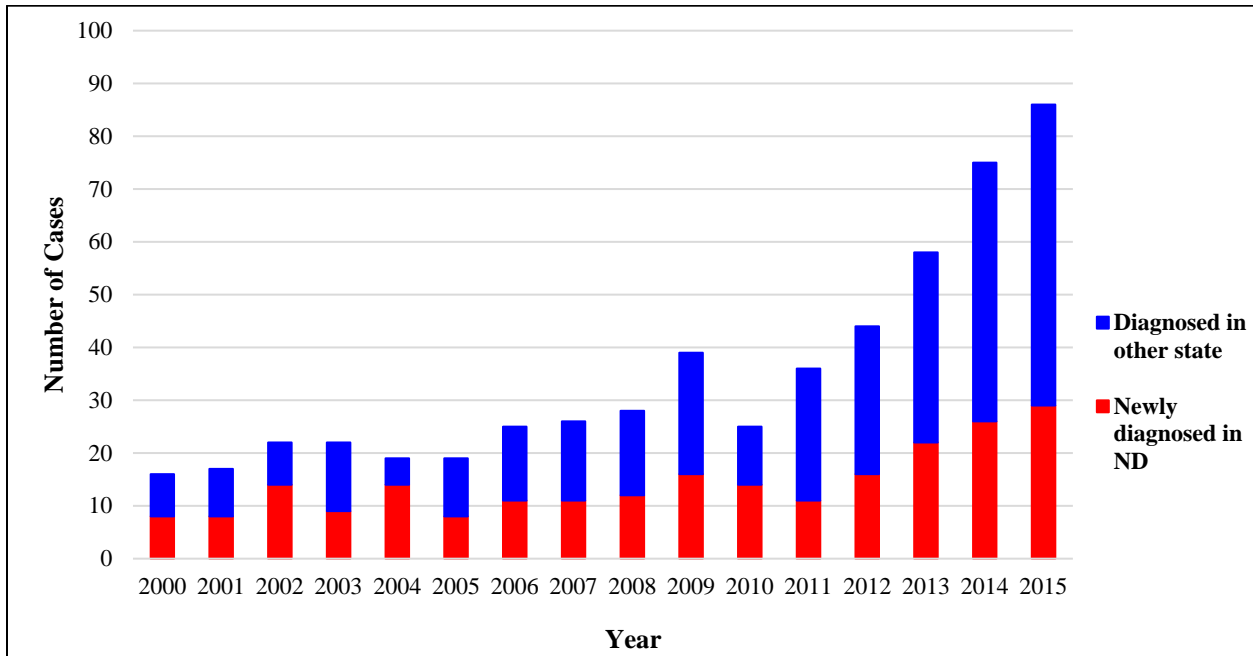


Human Immunodeficiency Virus, Sexually Transmitted Diseases, Tuberculosis, Viral Hepatitis program (HIV/STD/TB/VH)

The (HIV/STD/TB/VH) program conducts disease surveillance, investigations and prevention activities for HIV, syphilis, gonorrhea, chlamydia, tuberculosis, hepatitis B and hepatitis C. This program also administers the federal Ryan White program in North Dakota. Ryan White provides assistance to HIV infected people for medical needs. The Department is currently assisting 215 HIV infected people in North Dakota through this program.

Surveillance activities for HIV, STDs and TB indicates that all of these diseases continue to increase. In 2015, 86 cases of HIV reported to the Department. The 2015 cases represent 10.5% of the 805 total cases of HIV reported since surveillance began in 1984. Increases in HIV reflect both newly diagnosed infections and an increase in infected people moving to North Dakota. Chart 4 summarizes HIV surveillance in North Dakota.

Chart 4. Reported HIV cases in North Dakota.



Reported syphilis, chlamydia and gonorrhea cases have continued to increase. Infectious syphilis has increased from one to two cases per year in the early 2000s to 72 cases being reported in 2015 (Chart 5). Left untreated, syphilis can cause multiple problems that can involve any organ or organ system in the body. It can infect unborn babies and cause miscarriages and birth defects.

Chlamydia and Gonorrhea continue to generally increase as well. About 70% of the cases occur in adolescents and young adults ages 15-24. Charts 6 and 7 illustrate chlamydia and gonorrhea surveillance, respectively in North Dakota.

Chart 5. Reported Cases of Syphilis, North Dakota

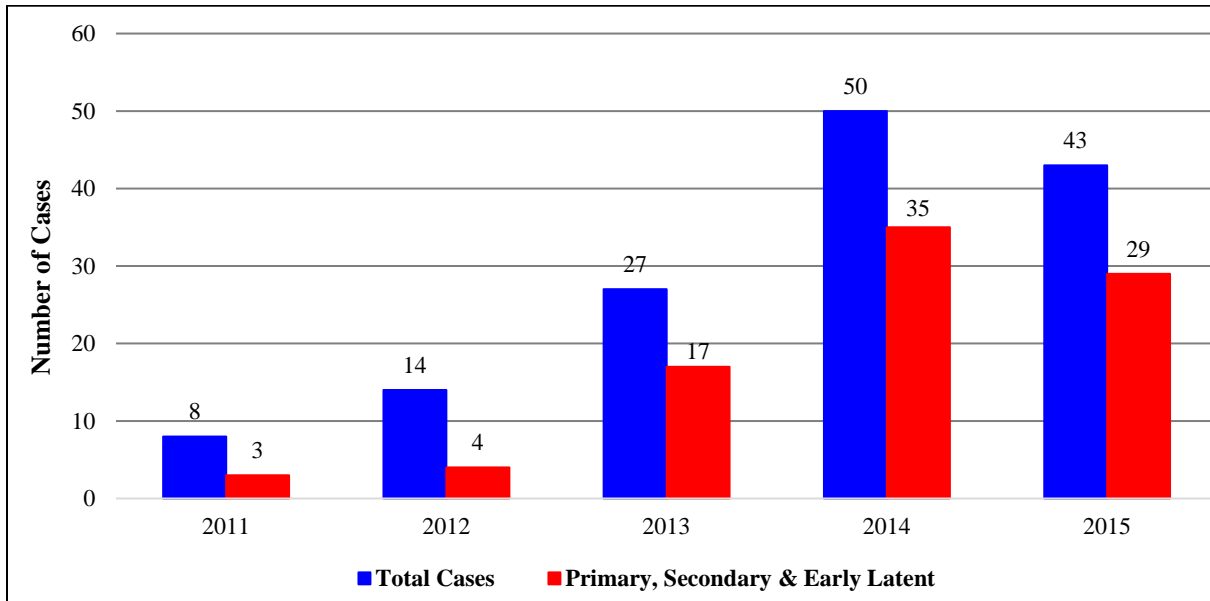


Chart 6. Reported Cases of Chlamydia, North Dakota

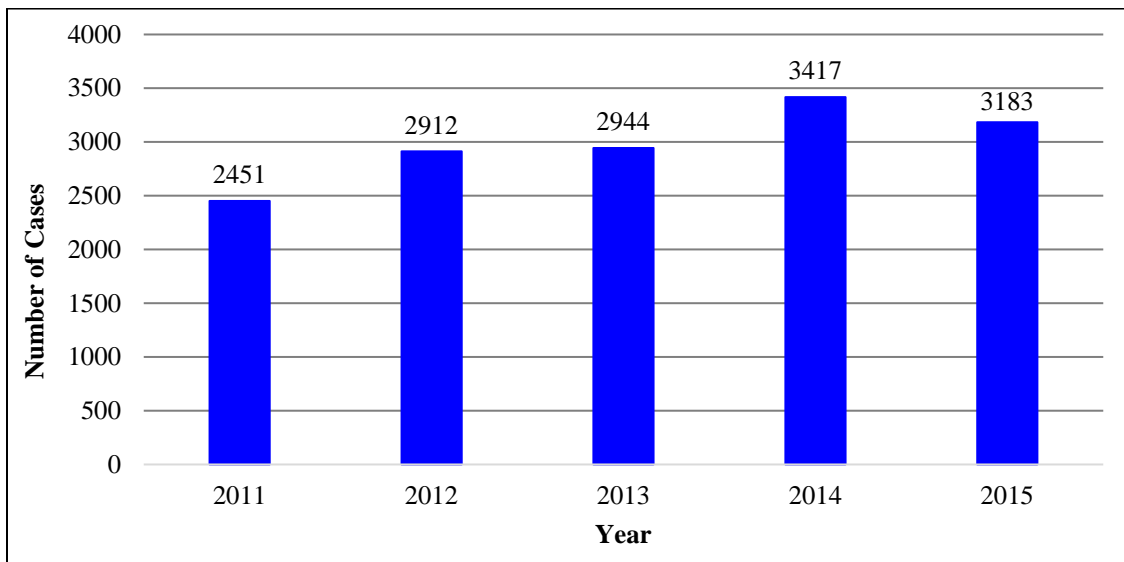
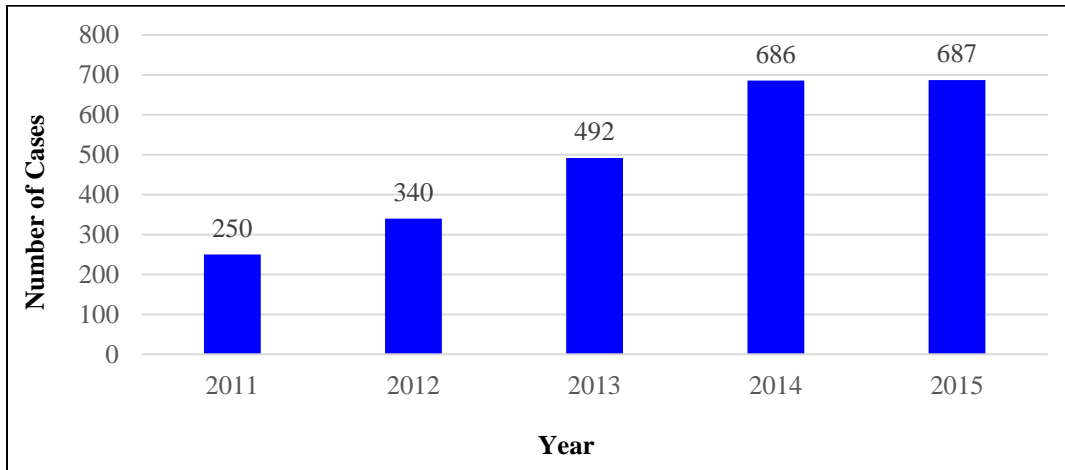


Chart 7. Reported Cases of Gonorrhea, North Dakota



Finally, I would like to provide you with some quick information about tuberculosis (TB) in North Dakota. Like other diseases, we have continued to see increases in the number of cases in North Dakota. From 2000 to 2009, an average of 5.8 cases of TB were reported per year. From 2010 to 2015 that average increased to 13.3 cases. A large outbreak occurred in 2012 and into 2013. Thirty-three cases have been associated with this outbreak with the latest case was just recently diagnosed. Figure 1 illustrates the complex network of cases and contacts associated with the TB outbreak that started in 2012. Chart 11 illustrates TB surveillance in North Dakota.

Figure 1. Tuberculosis Outbreak Cases and Contacts Network.

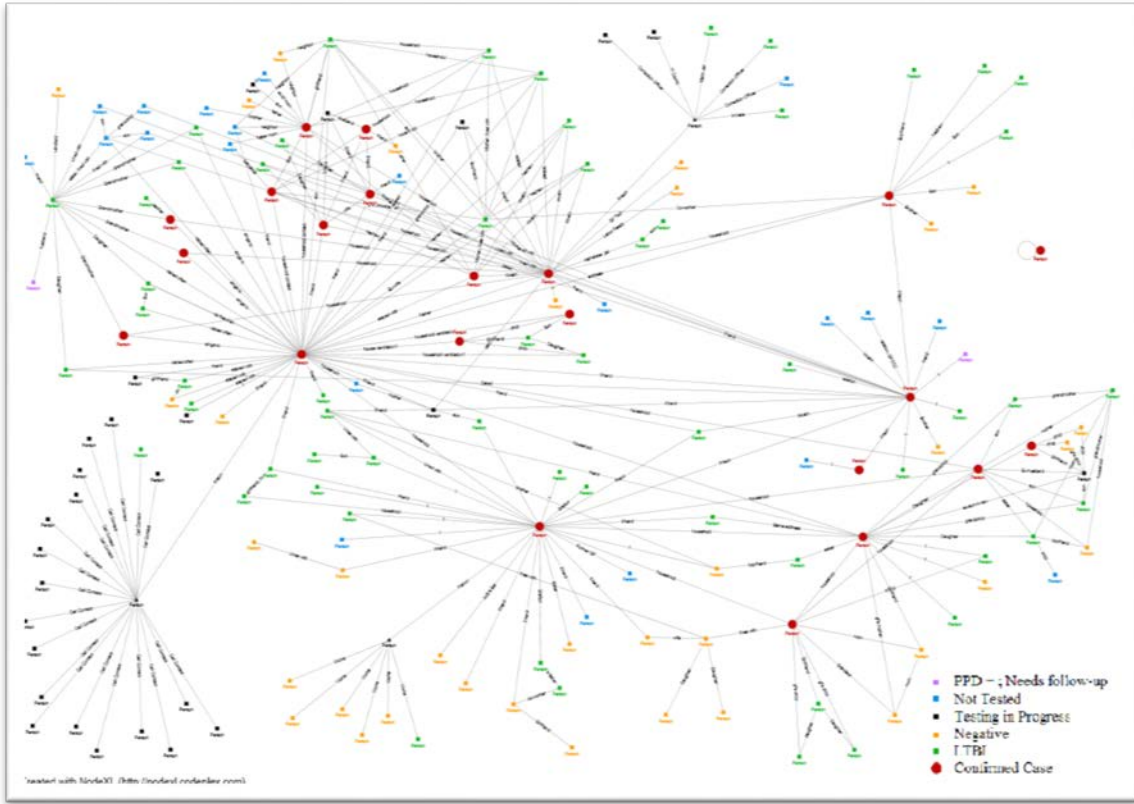


Chart 8. Reported TB cases, North Dakota

