

The Pump Handle The Pump Handle



"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

February 2016 Topics

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Increase in Reported Mumps Cases in North Dakota and Around the Country

Mumps is a highly contagious, vaccine preventable disease that is uncommon in the United States due to the Measles, Mumps, and Rubella (MMR) vaccine. However, in the past year, mumps outbreaks have been occurring across the United States.

From February 24 to March 14, 2016, the North Dakota Department of Health (NDDoH) received reports of four suspected mumps cases. Montana has reported 4 confirmed cases, and Minnesota has reported 6 suspected or confirmed cases. Last summer, the University of Iowa began seeing an increase in mumps cases. As of March 8, 2016, 514 total confirmed mumps cases have been reported in Iowa since July 2015. Similarly, a mumps outbreak continues in Illinois, with 533 reported cases as of March 9. Additional outbreaks have been reported on college campuses in Indiana, New Hampshire, North Carolina, and Kentucky. New Jersey also reported an outbreak as a result of crowded bars, and there have been multiple cases reported in other states across the country.

The mumps virus is found in fluids of the mouth and nose, and may be spread by coughing, sneezing, or talking. It may also be spread by sharing objects such as eating utensils. Outbreaks

are more likely to occur in settings where people are in close contact such as classrooms, sports teams, or students living in dormitories.

The most recognizable symptom of mumps is parotitis (swelling under the ears or jaw on one or both sides of the face). Other symptoms include fever, headache, earache, muscle or joint pain, painful swelling of the testicles in men, and swelling of the ovaries in women, causing abdominal pain.

Because of the MMR vaccine, mumps cases are not common in the United States, but the mumps vaccine can range in effectiveness from 66-95% for two doses, and 49-92% for one dose. Although not 100% effective, the vaccine can limit mumps outbreaks and may also offer some amount of protection, even in those who still get mumps, which is why we do not see severe cases. Ensuring individuals are up to date with the MMR vaccine is the best way to protect themselves against the disease.



Tuberculosis Increase seen in North Dakota in 2016

For the first time in 23 years, the United States is seeing an increase in Tuberculosis (TB) disease. In 2015, 9,563 cases were reported (a 1.7% increase) with all 50 states and the District of Columbia—each reporting at least one case. Cases were reported in 3,201 U.S.-born individuals, including 344 children (under 15 years of age). The number of foreign-born cases decreased by 2.3 percent with 6,335 cases, including 96 children.

North Dakota also experienced an increase in reports of TB disease in 2016. In 2015, nine cases of TB disease were reported. Already in 2016, seven cases have been reported. This does not include the number of TB-infected persons, which can average anywhere from 300 to 500 reports in North Dakota each year.

Of the TB disease cases reported in 2015 and 2016 to NDDoH, all had at least one risk factor identified; over 40 percent had two or more risk factors. High-risk groups for TB include foreign-born persons who have emigrated within the past five years from areas that have high TB incidence, residents and employees of high-risk congregate settings such as prisons, nursing homes, homeless shelters, health care facilities, and drug treatment facilities, and individuals with close contact to contagious cases of TB.

To help reduce TB disease from progressing, it is recommended to screen high-risk groups for TB using an IGRA test or TB Skin Test (TST). If either of these tests is positive, it is recommended to treat the individual for TB infection to prevent the individual from progressing to TB disease.

Worldwide, TB is a leading killer of HIV-positive people. In 2015, one in three HIV deaths was due to complications of TB infection. The risk of TB is also greater for people suffering from other conditions that impair the immune system such as rheumatoid arthritis, diabetes, substance abuse, people taking TNF-alpha inhibitors, or may be pregnant.

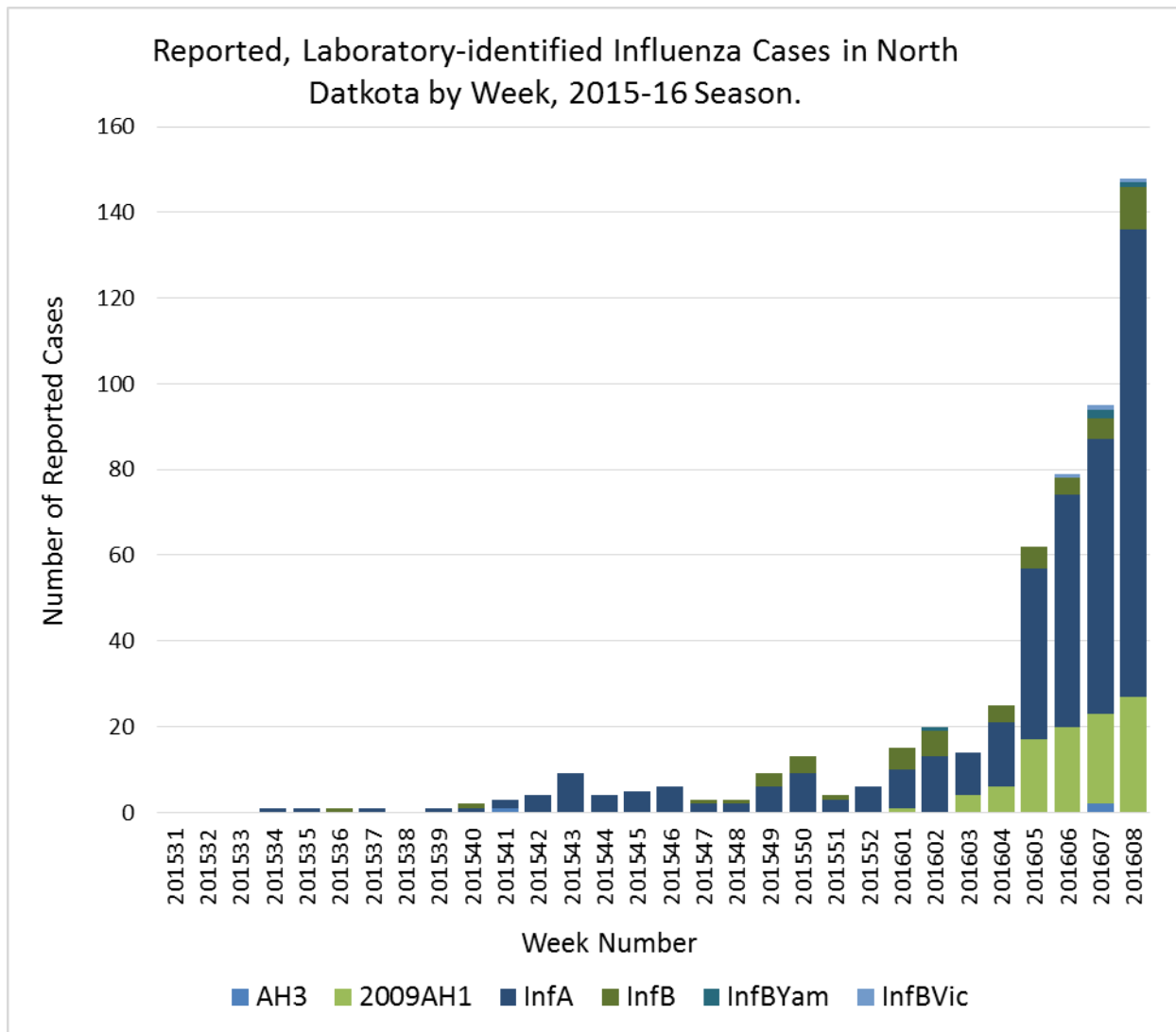
People who have diabetes have a three times greater risk for contracting TB than those who don't have diabetes. Patients with diabetes and TB take longer to respond to anti-TB treatment.

Medications used to treat TB may cause increase blood glucose levels making treatment more challenging.



2015-16 Influenza Update

Cases of laboratory-identified influenza have begun to increase, with 534 seasonal influenza cases reported through the week ending February 27 (week 201608). So far, the influenza A 2009 H1N1 pandemic strain has been the predominant influenza strain for this season. The influenza A 2009 H1N1 strain last predominated during the 2013-14 influenza season.



This influenza season might seem a little late because the three previous influenza seasons peaked early: in late December or early January. However, the “typical” peak for a North Dakota influenza season occurs any time from January to March, so the timing of this season is not abnormal. Cases will likely continue to increase into spring. The best way to prevent influenza is to get vaccinated. So far this season, circulating strains are well matched to the 2015-16 influenza vaccine components. For more information on influenza and current influenza statistics, visit www.ndflu.com.



On the Move!

In February, we said good bye to Amy Schwartz, Vaccine Preventable Disease (VPD) Surveillance Coordinator, who left our division to take a position with the Centers for Disease Control and Prevention (CDC) in Fort Collins, Colorado. We wish her the best of luck in her new endeavors.

The good news; Lexie Barber, who started as a full-time temporary employee in the HIV, STD, and Viral Hepatitis program, applied, interviewed, and accepted the position of VPD Surveillance Coordinator. We all like to think that this happened just in time! During her brief time in this new position, she has already had to tackle possible measles, rubella, and many cases of mumps! So from all of us here in Disease Control, welcome Lexie!



Zika Virus Update

The NDDoH continues to facilitate Zika virus testing for North Dakota residents with appropriate exposure history. Testing is recommended for pregnant women who have traveled to areas affected by Zika virus, regardless of whether or not they experience symptoms consistent with Zika virus infection. Testing is also recommended for patients with acute onset of fever, rash, arthralgia, or conjunctivitis, who traveled to areas with ongoing Zika virus transmission or who had unprotected sex with a person who traveled to one of those areas and developed compatible symptoms within two weeks of returning. An up-to-date list of areas with known Zika virus transmission can be found at <http://www.cdc.gov/zika/geo/active-countries.html>.

As of March 30, 2016, the CDC had a total of 312 travel associated Zika cases from the United States. Of these cases, 27 are in pregnant women, and six were sexually transmitted. No cases have been reported in North Dakota. For more information on Zika virus, please visit www.ndhealth.gov/disease/zika/ or contact the Division of Disease Control at 701.328.2378.



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