

# 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

## August 2014 Topics

- Ebola Update
- Multidrug Resistant Tuberculosis
- Neisseria Meningitidis Case Reported in North Dakota
- West Nile Virus Death Reported in North Dakota
- Kitten Purchased at Pet Store Tested Positive for Rabies



## **Ebola Outbreak in West Africa**

The Ebola outbreak in West Africa is ongoing. As of September 23, 2014, a total of 6,574 confirmed and suspect cases have been reported (3,626 have been laboratory confirmed) and 3,091 have died. Cases continue to be reported from Guinea, Liberia and Sierra Leone. Nigeria and Senegal have not reported any new cases in over a month.

The first imported case of Ebola diagnosed in the United States was confirmed on September 30, 2014. The patient was not ill during the flights from West Africa but developed symptoms several days later. The patient developed symptoms on September 24 and sought medical care at a Texas hospital on September 26 and was sent home. The patient sought medical care again on September 28 and was admitted to the hospital with symptoms consistent with Ebola infection and was put into isolation. Laboratory testing later confirmed the diagnosis of Ebola.

Providers are reminded to be diligent in asking patients about recent travel history and if necessary, communicating that information quickly to members of the healthcare team or infection control to help assure timely preventative action is taken. Providers should not assume that someone else has already acquired travel history information on patients they

are seeing, especially in light of the ongoing Ebola outbreak in West Africa and the recent imported case in the United States. Providers should immediately report any suspect cases to the North Dakota Department of Health (NDDoH) by calling 1.800.472.2180 or 701.328.2378.



### **Multidrug Resistant Tuberculosis**

In August, the NDDoH confirmed its first case of multidrug resistant tuberculosis (MDR TB). MDR TB is caused by an organism that is resistant to at least isoniazid and rifampin, the two most potent TB drugs. These drugs are used to treat all persons with TB disease.

Resistance to anti-TB drugs can occur when these drugs are misused or mismanaged. Examples include when patients do not complete their full course of treatment; when health-care providers prescribe the wrong treatment or the wrong dose, the length of time taking the drugs, when the supply of drugs is not always available, or when the drugs are of poor quality.

The most important thing a person can do to prevent the spread of MDR TB is to take all of their medications exactly as prescribed by their health care provider. No doses should be missed and treatment should not be stopped early.

Drug-susceptible TB and drug-resistant TB are spread the same way. TB bacteria are put into the air when a person with TB disease of the lungs or throat coughs, sneezes, speaks, or sings. These bacteria can float in the air for several hours, depending on the environment. Persons who breathe in the air containing these TB bacteria can become infected.

Among all culture-positive TB cases in the United States with initial drug-susceptibility testing results, the percentage of MDR TB cases increased slightly from 1.2% (86 cases) in 2012 to 1.4% (95 cases) in 2013.

Since 1997, among U.S.-born culture-positive cases with initial drug-susceptibility testing results available, the percentage of cases that are MDR TB has remained below 1.0%. Of the total number of reported MDR TB cases, the proportion occurring among foreign-born persons increased from 30.8% (149 of 484) in 1993 to 89.5% (85 of 95) in 2013.



### **Neisseria Meningitidis Case Reported in North Dakota**

In August, a case of *Neisseria meningitidis* was reported to the NDDoH. The case was an adult residing in the eastern part of the state. The *N. meningitidis* was found to be serogroup Y, which is included in the four-valent meningococcal conjugate vaccine (MCV4).

The case was hospitalized, treated and released. The NDDoH worked with clinicians to ensure that all close contacts received appropriate prophylactic treatment.

Meningococcal meningitis is spread by direct contact through the respiratory droplets from the nose and mouth of infected people. Some people carry the bacteria in their nasal passages but do not get sick, yet they can still spread the bacteria to others. The incubation period for meningococcal disease may range from one to 10 days, but illness usually occurs less than four days after exposure. Prophylactic antibiotics are given to eliminate carriage in exposed individuals and prevent secondary cases. Two meningococcal vaccines are available in the United States. MCV4 is required for individuals entering seventh grade. It is also required at college entry. This vaccine is routinely recommended for unvaccinated adolescents ages 11 through 18. Meningococcal polysaccharide vaccine should be used for people at increased risk for meningococcal disease when MCV4 is unavailable or for individuals ages 55 and older. Neither vaccine protects against group B meningococcal disease. It is anticipated that two meningococcal group B vaccines will be available in late 2014 or 2015.



### **West Nile Virus Death Reported in North Dakota**

On September 9, 2014, the NDDoH announced the state's first West Nile virus-related human death in 2014. The case was a female who was older than 60. The death was one of the 12 West Nile virus (WNV) cases reported to the state health department as of September 9, 2014. The news release about this case and others can be viewed at [www.ndhealth.gov/wnv/News/](http://www.ndhealth.gov/wnv/News/).



### **Kitten Purchased at Pet Store Tested Positive for Rabies**

On September 5, 2014, the NDDoH received a report of a kitten that tested positive for rabies. Upon follow-up, it was discovered that the kitten had been purchased from a pet store in Minot, ND. The kitten was part of a litter of six that was anonymously dropped off at the pet store on August 29, 2014. The NDDoH contacted all of the individuals who had purchased the kittens and recommended that they be humanely euthanized and tested for rabies, since these kittens had direct exposure to the rabid kitten. In addition, there were two kittens that were in a cage adjacent to the cage that held the rabid kitten at the pet store. These kittens also had the potential to have contact with the rabid kitten and were recommended to be euthanized and tested as well.

A news release was deployed on September 5 to alert the public and to call the health department if anyone had contact with the kittens at the pet store and to try and find the previous owners who had dropped the kittens off at the pet store anonymously. The owners saw this information through the media and contacted the health department. They still had the mother cat, which was recommended to be tested as well because of the direct contact with the rabid kitten. All kittens and the mother cat tested negative for rabies. A number of individuals who had direct contact with the kittens at the pet store who reported being bitten or scratched were recommended to receive rabies vaccinations.



**NORTH DAKOTA**  
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