

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

April 2015 Topics

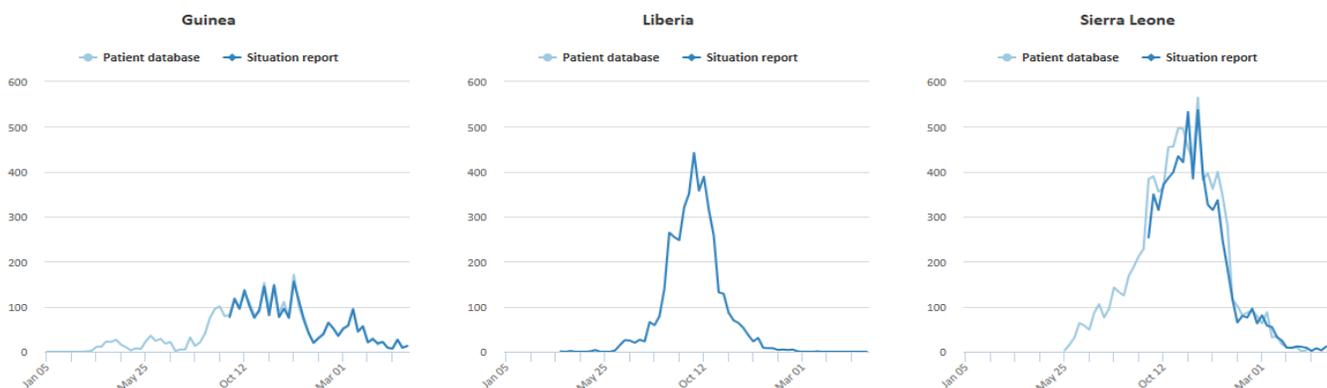
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Ebola Update

Last year at this time, Ebola virus disease transmission in Africa was starting to significantly increase before reaching its height of transmission in the fall of 2014. The comprehensive Ebola response that was launched to interrupt disease transmission has considerably reduced the number of cases. **Figure 1** illustrates the number of reported cases (suspect, probable and confirmed) by month in the three most affected countries of Guinea, Liberia and Sierra Leone.

Figure 1. Reported Ebola Cases in Guinea, Liberia and Sierra Leone, 2014-2015



Source: <http://apps.who.int/ebola/>

On May 9, 2015, the World Health Organization declared the Ebola outbreak over in Liberia following the completion of two incubation periods (42 days) from the date of burial of the last reported Ebola case. Although case reports are declining in Guinea and Sierra Leone, Ebola infections from unknown sources are being reported in those countries which indicate undetected chains of transmission. Providers should continue to screen patients for recent travel (in the past 21 days) to Guinea or Sierra Leone.

For more information about Ebola, visit the NDDoH Ebola website at www.ndhealth.gov/disease/Ebola/Default.aspx.



Avian Influenza

In April of 2015, two outbreaks of high pathogenic avian influenza (HPAI) H5N2 were identified in North Dakota, affecting commercial turkey flocks in Dickey and LaMoure counties. The North Dakota Department of Agriculture led the state and federal collaborative effort to investigate and control the outbreak. The North Dakota Department of Health (NDDoH) provided guidance for potentially exposed individuals regarding self-monitoring, influenza antiviral recommendations and personal protective equipment. A total of 17 people were identified as having possibly been exposed to HPAI, but none subsequently developed symptoms. Between the two outbreaks, 129,000 turkeys and 2,000 chickens were destroyed to help control the pathogen.

North Dakota's outbreaks are two of more than 200 HPAI H5 outbreaks that have been identified in commercial flocks, backyard flocks and single wild birds in the United States beginning in December of 2014. A mixture of H5N1, H5N2 and H5N8 viruses have been identified, with H5N2 making up the vast majority of the outbreaks. These H5 viruses are genetically distinct from the H5 viruses circulating in Europe and Asia. HPAI has been identified in 20 states, with a majority of the outbreaks occurring in the Midwest. No human cases related to these outbreaks have been identified. Avian influenza does not move readily to humans, but transmission is possible. Suspected human infection with avian influenza is immediately and nationally notifiable.



Disease Control New Employee!

Name: Laura Cronquist

Title: Foodborne/Vectorborne and Special Projects Coordinator

Education Background: B.S., Agricultural Systems Management and Psychology, NDSU; Post baccalaureate premedical and medical studies, UNDSMHS

Past Experience: After graduating from NDSU, I spent the next few years completing medical school prerequisite courses, only to realize once I actually got into medical school that it really wasn't for me. During this time, I worked as a Restorative Aide/CNA at a long-term care facility and also as a laborer on my family's farm near my hometown of Gilby, ND.

Family/Hobbies: I enjoy horseback riding, photography, reading, cross-country skiing, snowshoeing, fishing, and running with my Bullmastiff, Augustus the Great. I also enjoy spending time at my family's cabin on Devils Lake and volunteering at Sullys Hill National Game Preserve. My husband, Zak, and I love to go hiking, especially in the mountains of Montana.



Hantavirus – A Rare but Severe Respiratory Disease

Hantavirus pulmonary syndrome (HPS) is a viral infection that causes severe lung disease. The rodent vector is the deer mouse, and the virus is shed in the stool, urine and saliva of infected rodents. Infection usually results from inhalation of the virus when droppings and urine are disturbed.

Thirteen cases of HPS have been reported to the NDDoH since 1993, when the virus was first recognized in the United States. Seven of the 13 reported cases were fatal. Two cases were reported in 2014, one of which was fatal. Nationally, through December 31, 2013, 637 cases have been reported with 36 percent resulting in death. About 75 percent of all cases in the U.S. have occurred in residents living in rural areas. Early symptoms are flu-like, with fever, headache, muscle ache and malaise. Vomiting and diarrhea also have been reported. Pulmonary signs and symptoms develop quickly, with shortness of breath and low blood-oxygen levels. The NDDoH Division of Laboratory Services offers hantavirus testing when testing to rule out other potential diagnoses has been exhausted (e.g., influenza).

Treatment is supportive with careful attention to fluids, electrolytes and blood pressure management. Additional information regarding the clinical management of HPS can be found at www.cdc.gov/ncidod/diseases/hanta/hps/index.htm.

For more information on laboratory testing for Hantavirus, please call the NDDoH Division of Laboratory Services at 701.328.6272. For more information on HPS, please call the NDDoH Division of Disease Control at 701.328.2378 or 800.472.2180 or visit www.ndhealth.gov/disease.



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