



The Pump Handle

August 2019

"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

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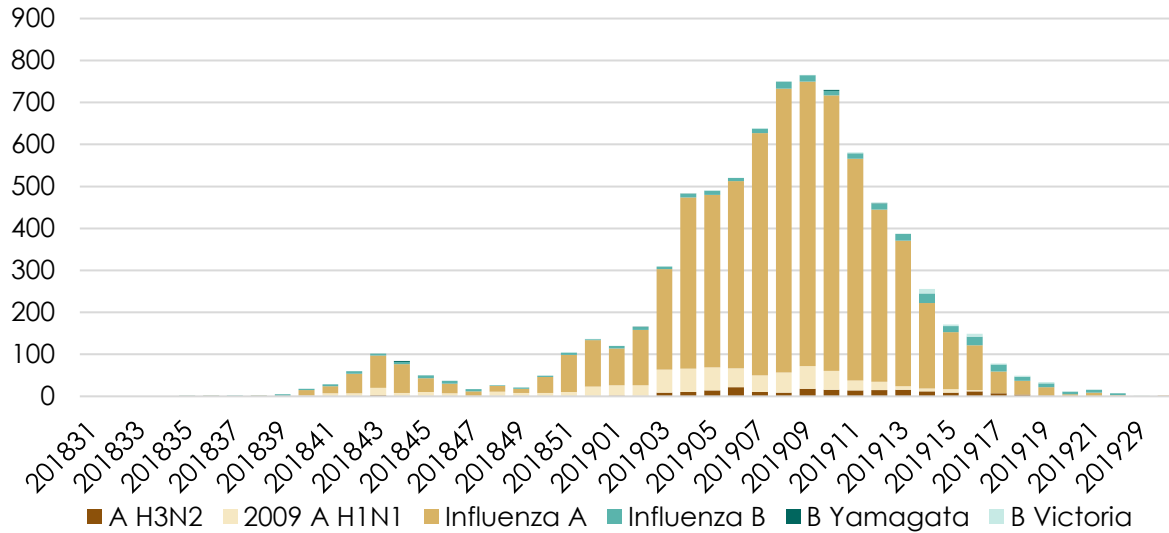
July 2019 Flu Season Wrap-Up

As July comes to a close, we can begin to take a look at final estimates for the 2018-19 influenza season. The North Dakota Department of Health (NDDoH) identified nearly 8,000 cases of influenza, with 546 hospitalizations and 22 deaths. The season peaked Morbidity and Mortality Weekly Report (MMWR) week 09 (ending March 2, 2019). The predominant strain this season was 2009 Influenza A H1N1, which differed from the previous season of AH3N2. As usual, the influenza AH3N2 strain circulated as well, only in much lower numbers, as did both influenza B lineages, with B Yamagata making up a large majority of the influenza B cases. According to the Centers for Disease Control and Prevention (CDC), the 2018-19 season was one of the most severe seasons on records, and the second most severe since the 2009 pandemic.

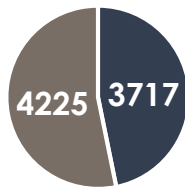
While influenza surveillance continues year-round, the season typically begins on week 40 (ending October 5th) and continuing until week 20 of the following year (ending May 18th).

August 1st represents the beginning of a new influenza morbidity season, and with it comes a wave of preparation. Influenza season kickoff preparation is in the works; the preliminary date for the kickoff event, partnered with Families Fighting Flu, will be Tuesday, September 24th. The Advisory Committee on Immunization Practices, along with the North Dakota Department of Health, recommends that everyone age 6 months and older receive their influenza vaccine.

Number of Reported Laboratory-Identified Influenza Cases by Week Number

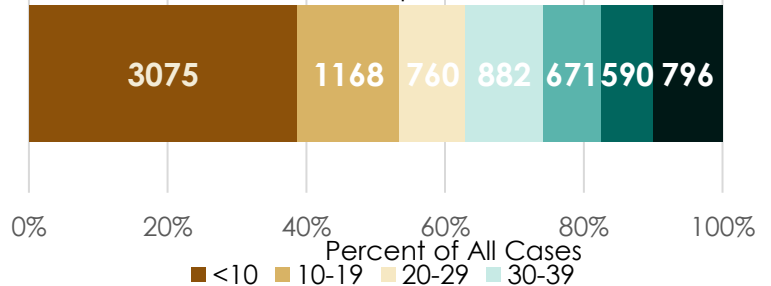


Case Count for Lab-Confirmed Cases by Gender



■ MALE ■ FEMALE

Case Count for Lab-Confirmed Cases by Age Group



Ebola in the Democratic Republic of Congo

The NDDoH is asking healthcare providers to contact the department immediately at 800.211.4451 about any person being evaluated for Ebola and arrange diagnostic testing through the NDDoH Division of Microbiology.

On August 1, 2018, the Ministry of Health (MoH) of the Democratic Republic of Congo (DRC) confirmed an outbreak of Ebola virus disease (EVD) in the province of North Kivu, in eastern DRC; cases have subsequently been reported in the adjacent province of Ituri. In June, three imported cases in a single family (all fatal) were identified in neighboring Uganda, with no secondary transmission. Cases have now been reported from Goma, a major metropolitan area on the eastern border of the DRC, bordering Rwanda. This is the tenth reported Ebola outbreak in DRC, and the 28th independent outbreak in Africa since Ebola was discovered in 1976. This outbreak is now the second largest Ebola outbreak in the history of the disease, surpassed only by the 2014-2016 outbreak in West Africa, and is the largest outbreak ever to have occurred in DRC. As of August 12, 2019, DRC has reported 2,831 total cases with 1,888 deaths.

Early recognition is critical to controlling the spread of Ebola virus. Healthcare personnel therefore should ask about patients' travel histories and consider the possibility of EVD in patients who present with fever and severe headache, fatigue, muscle pain, vomiting, diarrhea, abdominal pain, or unexplained bleeding (e.g., bleeding gums, nose bleeds). Should the patient report a history of recent travel to one of the outbreak areas in DRC and have such symptoms, immediate action should be taken.

Patients in whom a diagnosis of EVD is being considered should immediately be isolated in a single room with a private bathroom or dedicated bedside commode; healthcare personnel should follow standard, contact, and droplet precautions, including the use of appropriate personal protective equipment (PPE). Infection control personnel should be contacted immediately for consultation.

Information for providers and infection preventionists can be found at the following CDC websites:

<https://www.cdc.gov/vhf/ebola/clinicians/index.html>.

<http://www.cdc.gov/vhf/ebola/hcp/infection-prevention-and-control-recommendations.html>.



Updated Rabies Law Takes Effect August 1, 2019

Senate bill 2092 was introduced to update existing rabies control statutes. It was approved by the 2019 legislative assembly and signed into law by Governor Burgum. Among the changes made, language was added to clarify the role of the department when an animal has been exposed to rabies, to work with a veterinarian in determining if animals are exhibiting signs of rabies and to assure that the department is seeking voluntary compliance from animal owners before issuing public health orders or confiscating animals. The updated law can be viewed in its entirety at: <https://www.legis.nd.gov/cencode/t23c36.pdf>.



West Nile Virus Update

As of September 5, 2019, there have been six confirmed cases of West Nile virus (WNV) reported in North Dakota. The individuals reside in McHenry, Mercer, Golden Valley, Grand Forks, Burleigh and Trail counties and none were hospitalized. WNV has also been identified in mosquito pools used for surveillance in Stutsman, Stark, Ward and Grand Forks counties. There have been no reports of birds or any other animal identified with WNV so far in 2019.

As of September 4, 2019, 326 human cases of WNV have been reported to the CDC, with 207 (63%) cases identified as neuroinvasive.

For more information about West Nile virus, contact Evan Bischoff, North Dakota Department of Health, at 701.328.2378 or visit www.ndhealth.gov/wnv.



Screening for *Candida auris* Colonization

The NDDoH, Division of Disease Control (DDC), strongly recommends that hospitals screen on admission inpatients with a history of an overnight stay in a healthcare facility outside the United States in the previous 12 months for *Candida auris* (*C. auris*). Facilities should also consider screening patients who have been hospitalized or have skilled nursing facility stay in the previous 12 months in New York, New Jersey and the Chicago area or other areas where *C. auris* are more common. The CDC tracks *C. auris* and where it is occurring, which can be found [here](#). Patients should be placed on Contact Precautions while awaiting testing results. For more information about *C. auris* screening, visit the CDC's [website](#).

In December 2018, CDC released recommendations to screen patients who have had an overnight stay in a healthcare facility outside the United States in the previous one year for *C. auris* colonization. *C. auris* is a fungus that causes serious infections. Although *C. auris* was just discovered in 2009, it has spread quickly and caused infections in more than a dozen countries and is becoming more common. Most *C. auris* cases in the United States have been detected in the New York City area, New Jersey, and the Chicago area. Strains of *C. auris* in the United States have been linked to other parts of the world. United States *C. auris* cases are a result of inadvertent introduction into the United States from a patient who recently received healthcare in a country where *C. auris* has been reported or a result of local spread after such an introduction.

C. auris can be misidentified as other types of fungi unless specialized laboratory technology is used. This misidentification might lead to a patient getting the wrong treatment. *C. auris* can be

misidentified as *Candida haemulonii*, so if this organism is identified (especially from an invasive site), facilities are encouraged to send the isolate to the NDDoH Division of Microbiology. Other fungal species may also be reported in place of *C. auris* and should be reported to the NDDoH according to the laboratory identification methodology on the CDC [website](#). *C. auris* can cause bloodstream infections and even death, particularly in hospital and nursing home patients with serious medical problems. More than 1 in 3 patients with invasive *C. auris* infection (for example, an infection that affects the blood, heart, or brain) die. Antifungal medicines commonly used to treat *Candida* infections often don't work for *Candida auris*. Some *C. auris* infections have been resistant to all three types of antifungal medicines. *C. auris* has caused outbreaks in healthcare facilities and can spread through contact with affected patients and contaminated surfaces or equipment. Good hand hygiene and cleaning in healthcare facilities is important because *C. auris* can live on surfaces for several weeks. *C. auris* can cause asymptomatic colonization in patients that can lead to transmission of the organism in healthcare facilities if the appropriate infection control measures are not taken.

The mainstay of infection control measures for suspect or confirmed cases of *C. auris* in acute care hospitals and high acuity post-acute care settings is as follows:

- Screening any admission inpatients with a history of an overnight stay in a healthcare facility outside the United States in the previous 12 months. *C. auris* screening is conducted by culture method of skin swab specimens. Specific body sites with the greatest yield for *C. auris* detection are the bilateral axilla and groin, collected using one composite E-Swab™. Culture testing is available through the NDDoH Division of Microbiology. Results are available in 7 business days. Our regional laboratory is the Minnesota Department of Health (MDH) and they will be bringing on a polymerase chain reaction (PCR) test with a result turnaround time of 2 business days or less.
- Placing the patient with *C. auris* in a single-patient room and using [Standard and Contact Precautions](#).
- Emphasizing adherence to [hand hygiene](#).
- [Cleaning and disinfecting](#) patient care environment and reusable equipment (daily and terminal cleaning) with recommended products.
- Inter-facility communication about patient's *C. auris* status at [transfer to another healthcare facility](#).
- [Screening contacts of newly identified case patients](#) to identify *C. auris* colonization.
- Conduct [surveillance](#) for new cases to detect ongoing transmission.



From the Past – 32 Years Ago

In the August 1987 edition of the North Dakota Epidemiology Report, an article reports on vector-borne diseases in the state.

Vector-borne disease: a North Dakota perspective.

The well-publicized die off of the Squaw Valley prairie dog town in the North Unit of Theodore Roosevelt National Park in June 1986, placed one vector-borne disease, plague, in the forefront of public attention in North Dakota. However, a review of recent North Dakota epidemiologic records reveals cases of Q-fever, Rocky Mountain spotted fever, western equine encephalitis, St. Louis encephalitis and no cases of plague in North Dakota.

There is little doubt that the prairie dog die-off in 1986 in a well visited national park caused concern for public health officials. These small ground dwelling animals are enjoyed by many visitors, who often venture into the towns for closer looks. The resulting mix of adoring tourist and plague carrying fleas is a less than desirable combination. The National Park Service continues to monitor and map their prairie dog populations looking for any indication of disease and die-offs. As for vector-borne disease in North Dakota, we can add west Nile virus infections, Powassan, babesiosis, tularemia, Zika, anaplasmosis, ehrlichiosis and others to the list of human infections that are reported through disease surveillance in our state.



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