"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

Topics
- Mumps, Measles and Hepatitis A Updates – Jenny Galbraith
- 2018-19 Seasonal Influenza Update – Laura Cronquist
- April is STD Awareness Month – Shari Renton

Mumps, Measles and Hepatitis A Updates

Mumps
In 2018 there were 14 cases of mumps reported in North Dakota. So far in 2019, five individuals with mumps have been reported: three in Stark County, and two in Williams County. The North Dakota Department of Health (NDDoH) is reminding providers to consider testing for mumps in anyone with clinically compatible symptoms. The most recognizable symptom of mumps is parotitis (acute onset of unilateral or bilateral tender, self-limited swelling of the parotid or other salivary glands). Other symptoms include fever, headache, earache, muscle or joint pain, and painful swelling of the testicles in men or swelling of the ovaries in women, causing abdominal pain. Mumps vaccination is not 100 percent effective, so mumps should be suspected in individuals meeting the clinical case definition even with a history of MMR vaccination. The NDDoH recommends providers collect a buccal swab for RT-PCR testing if a provider suspects mumps. Health care providers are also encouraged to test for influenza, as influenza is currently widespread in North Dakota and can present similar symptoms. For more information on mumps cases in North Dakota, visit http://www.ndhealth.gov/Immunize/Disease/.

Measles
According to the Centers for Disease Control and Prevention (CDC), in 2018, 372 cases of measles were reported across North America. As of February 14, 2019, 127 cases of measles
have been confirmed in 10 states. This includes outbreaks in two New York State counties, and Washington State.

Measles is a serious disease that can lead to hospitalization and even death. Symptoms include a high fever, cough, runny nose and watery eyes followed by a rash that typically spreads from the head to the rest of the body. The incubation period is generally eight to 12 days, but can be up to 21 days, with fever generally as the first symptom. The measles rash usually appears two to three days after the fever begins and people are contagious from four days before, to four days after rash onset. Measles is highly contagious and spreads easily by coughing, sneezing or even being in the same room with someone who has measles.

All children are recommended to be vaccinated against measles at ages 12 to 15 months and 4 to 6 years. Measles is included in a combination vaccine with mumps and rubella (known as MMR vaccine). All adults born in 1957 or later should have at least one dose of MMR vaccine. All health care workers should have two doses of MMR vaccine. Preliminary data shows that North Dakota’s rate for MMR vaccination for kindergarten entry for the 2018-2019 school year was 93.83, and the goal is at least 95 percent.

Hepatitis A
In January 2019, the NDDoH received a report of a confirmed case of hepatitis A in Ward County, North Dakota. The case is not associated with international travel. The case recently moved from an area of the United States currently experiencing a hepatitis A outbreak occurring among homeless individuals and people using injection and non-injection drugs. The NDDoH is reminding providers to consider hepatitis A as a diagnosis in anyone with jaundice and clinically compatible symptoms. Providers should not wait for laboratory results to report suspected hepatitis A cases to the NDDoH, and a phone call should be made to 701.328.2378.
Hepatitis A is a liver infection caused by the hepatitis A virus. Symptoms of hepatitis A may include fever, fatigue, loss of appetite, nausea, abdominal discomfort, dark urine, pale stools, and jaundice. It could take up to seven weeks after an individual is exposed to the virus for symptoms to begin. Hepatitis A is highly transmissible, primarily person-to-person, through the fecal-oral route. Someone sick with hepatitis A is most likely to spread the virus during the two weeks before feeling sick and for eight days after jaundice onset, or if no jaundice, two weeks after disease onset.

Outbreaks of hepatitis A are occurring in several states across the U.S., including Indiana, Ohio, Michigan and West Virginia. As of February 8, West Virginia alone reported 2,324 cases associated with their outbreak. The outbreaks have occurred primarily among the homeless population and injection and non-injection drug users. Many factors have made these outbreaks difficult to control including: transience, economic instability, limited access to health care, distrust of public and state officials, and difficulty obtaining follow-up contact information.

People at increased risk for hepatitis A include:
- People with direct contact with individuals infected with the virus
- People who use street drugs regardless if the drug is injected
- People who are incarcerated
- People experiencing homelessness
- Men who have sex with men
- People who have traveled to other areas of the U.S. currently experiencing outbreaks
- Persons traveling to or working in countries that have high or intermediate endemicity of hepatitis A

The NDDoH recommends providers collect a serum sample for hepatitis A antibody (IgM) testing from all persons with suspected hepatitis A. Hepatitis A testing is available for $26 from the NDDoH Division of Microbiology. Providers and laboratories should save reactive serum samples for additional testing to assist the NDDoH in the investigation or transmission.

Children can return to child care and school one week after the day their symptoms started, unless there are other circumstances in which they should be excluded. A food handler should be excluded from work until one of the following conditions is met:
- The food handler has been jaundiced for more than seven days
- The food handler has been symptomatic with symptoms other than jaundice for more than fourteen days
- The food handler provides to the person in charge written medical documentation from a health practitioner stating the food employee is free of a hepatitis A viral infection

The following individuals should receive post exposure prophylaxis within 14 days of exposure to hepatitis A:
- All household contacts of the case
- Sexual contacts of the case
- Individuals for whom the case prepared food
• Child care contacts of the case

The guidelines vary by age and health status.

Hepatitis A vaccine is routinely recommended for all children at ages 12-23 months of age. It is also recommended for all individuals considered to be at high risk. The NDDoH supplies hepatitis A vaccines for all Vaccines For Children (VFC) eligible children (i.e. 18 and younger and either Medicaid eligible, American Indian, uninsured or underinsured). Local Public Health Units can order state-supplied hepatitis A vaccine for vaccinating homeless individuals or uninsured/underinsured adults. Please refer to the Immunization Program website at www.ndhealth.gov/Immunize for additional information regarding hepatitis A.

2018-2019 Seasonal Influenza Update

Influenza activity in North Dakota continues to increase. A total of 2,827 cases have been reported to the NDDoH during the 2018-19 flu season. A season high of 513 cases were reported during Morbidity and Mortality Weekly Report (MMWR) week 6, the week ending February 9, 2019. Influenza A H1N1 viruses have been the predominant circulating viruses throughout the nation and in North Dakota during the 2018-19 season, a change from the previous two seasons in which influenza A H3N2 viruses predominated.

At this time last year, a total of 5,641 flu cases had been reported to the NDDoH during the 2017-18 season. That season ended up being the largest on record in North Dakota with a total of 8,530 reported influenza cases. The 2017-18 season peaked in late January and cases gradually tapered off until the end of May. It is too early to determine whether flu activity has reached a peak for the current season. According to the CDC, influenza forecasts elevated flu activity in the United States will continue for several weeks. For more information on influenza and current statistics, please visit www.ndflu.com. A new MMWR released by the CDC indicates that the overall estimated effectiveness of seasonal flu vaccine during the 2018-19 season was
47 percent based on data collected from November 23, 2018-February 2, 2019. To view this report in its entirety, please visit
www.cdc.gov/mmwr/volumes/68/wr/mm6806a2.htm?s_cid=mm6806a2_w.

April is STD Awareness Month

April is National Sexually Transmitted Diseases (STDs) Awareness Month, an observance created to increase awareness about STDs, including their transmission, prevention and treatment. STDs continue to be a major health threat in the United States and are at an all-time high. North Dakota has seen an increase in all STD rates from 2017 to 2018. Preliminary data for 2018 shows a 5 percent and 7 percent increase among chlamydia (3,507 cases) and syphilis (82 cases) infections respectively, but most notable is a 40 percent increase in gonorrhea (1,357 cases) infections.

The NDDoH is encouraging providers to have a conversation around sexual health with their patients and implement routine STD screening. The following are a few key points to remember:

- **Site Specific Screening.** Patients at risk for STD infections should have a comprehensive sexual health risk assessment. Chlamydia and gonorrhea testing should be based on the type of sex, oral, anal or vaginal, reported by the patient. Based on their site of exposure, patients may be recommended for urethral, vaginal, rectal and/or pharyngeal testing. In addition to the FDA approved sites, the NDDoH’s Division of Microbiology has internally validated Nucleic Acid Amplification testing for oral and rectal specimens on persons aged 18 years and older.

- **Dual Therapy.** The recommended treatment for gonorrhea is dual therapy of ceftriaxone 250mg IM plus 1g azithromycin. These medications are recommended to be given at the same time. It is best practice to administer these medications in the clinic to ensure the patient takes both medications appropriately and in a timely manner.

- **Partner Services.** Providing testing and treatment to partners of a confirmed case is an important step in the prevention and control of STDs. Contact your local field epidemiologist on how to best provide partner services to your patients diagnosed with a STD.

Additional information about STDs is available at [www.cdc.gov/std](http://www.cdc.gov/std) or contact the NDDoH STD program at 701.328.2378.

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