



The Pump Handle

June 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

Topics

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Aplisol Shortage

The Centers for Disease Control and Prevention (CDC) is expecting a three to 10 month nationwide shortage of APLISOL[®], a product of Par Pharmaceuticals. APLISOL[®] is one of two purified-protein derivative (PPD) tuberculin antigens that are licensed by the United States Food and Drug Administration (FDA) for use in performing tuberculin skin tests. The manufacturer notified CDC that they anticipate a supply interruption of APLISOL[®] 5 mL (50 tests) beginning in June 2019, followed by a supply interruption of APLISOL[®] 1 mL (10 tests) in November 2019. The expected shortage of APLISOL[®] 1 mL (10 tests) could occur before November 2019, if demand increases before then. The 3-10 month timeframe for the nationwide shortage is the manufacturer's current estimate and is subject to change. More information is available at <https://emergency.cdc.gov/han/han00420.asp>



Updated Employee Health Screening Recommendations

CDC and the National TB Controllers Association released updated recommendations for TB screening, testing, and treatment of health care personnel on May 17, 2019. These recommendations update the health care personnel screening and testing section of the 2005 CDC Guidelines for Preventing the Transmission of *Mycobacterium tuberculosis* in Health-Care Settings.

Highlights include:

- Health care personnel should receive a baseline individual TB risk assessment, symptom screening and TB testing upon hire/pre-placement.
- Annual TB testing of health care personnel is **not** recommended unless there is a known exposure or ongoing transmission at a healthcare facility.
- Health care personnel with untreated latent TB infection should be treated. But if not they should receive an annual TB symptom screen. Symptoms for TB disease include any of the following: a cough lasting longer than three weeks, unexplained weight loss, night sweats or a fever, and loss of appetite.
- Healthcare facilities might consider using annual TB screening for certain groups at increased occupational risk for TB exposure (e.g., pulmonologists or respiratory therapists) or in certain settings if transmission has occurred in the past (e.g., emergency departments). Facilities should work with their state and local health departments to help make these decisions.
- All health care personnel should receive TB education annually. TB education should include information on TB risk factors, the signs and symptoms of TB disease, and TB infection control policies and procedures.

The MMWR with the new guidelines can found [here](#).



Surveillance Activity Increased for the Lone Star Tick in North Dakota

The North Dakota Department of Health (NDDoH) recently issued a media advisory asking people to look for lone star ticks and submit pictures, via email, if they think they have found one. The news release is available [here](#).

During routine tick surveillance activities this spring, the department identified a lone star tick from the Stutsman County area. This species of tick is rare North Dakota, but it has been found three years in a row in different areas of the state. This tick is of public health importance because it is an aggressive biter and prefers to feed on people. It can transmit ehrlichiosis, tularemia, heartland virus, Bourbon virus and southern tick-associated rash illness. Bites from

this tick may be linked to a reaction to galactose which has been called alpha-gal reaction. The most commonly diagnosed manifestation is an allergic reaction to red meat.

A new email address, ndticks@nd.gov, has been established to be used by the public to submit the pictures and information about the ticks they have found. Providers are encouraged to do the same think if they are removing embedded ticks from their patients.

Tickborne illnesses should be considered in patients presenting with a febrile or rash illness and with a history of recent tick bites. More information about ticks, tick surveillance and tickborne disease can be found on our [website](#).

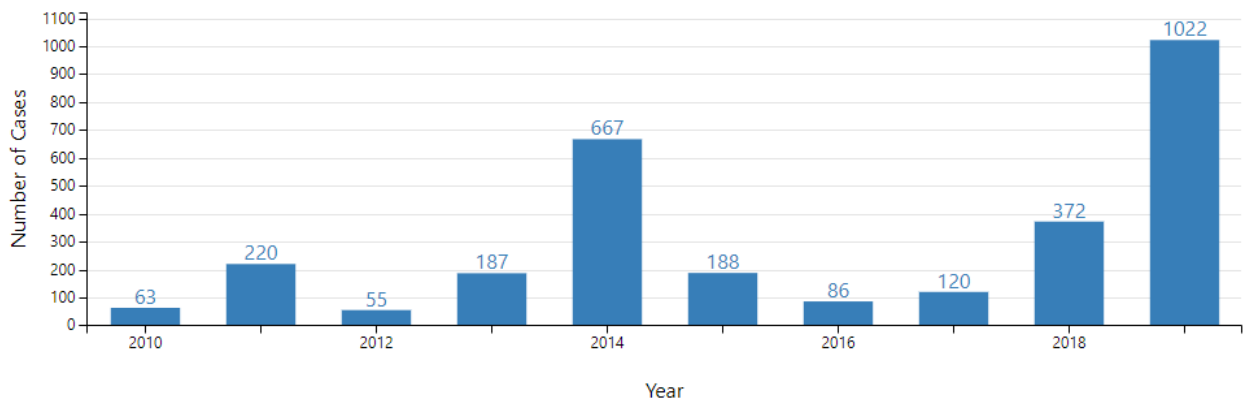


Measles Update

According to the CDC, 372 cases of measles were reported across North America in 2018. As of June 6, 2019, 1,022 cases of measles have been confirmed in 28 states this year. A majority of the infected individuals are unvaccinated. A large percent of the cases are related to outbreaks in New York City and New York state.

Number of Measles Cases Reported by Year

2010-2019**(as of June 6, 2019)



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 the first symptom generally being a fever. 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 when they are 12 to 15 months old and ages four to six. 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. Data shows that North Dakota's rate for MMR vaccination for kindergarten entry for the 2018-2019 school year was 93.63, and the goal is at least 95%. For more information, please visit our [website](#) or contact the NDDoH at 701-328-2378.



Hepatitis A Update

Outbreaks of hepatitis A are occurring in several states across the U.S. including Indiana, Ohio, and Kentucky. As of June 10, 2019 Ohio alone reported 3,039 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.

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.

So far in 2019, North Dakota has had 2 cases of Hepatitis A. Neither case is associated with international travel. One case had 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 other case is still under investigation. 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 vaccine is routinely recommended for all children at 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 children eligible for the Vaccines For Children (VFC) program (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.



Q Fever Case Reported in North Dakota

Q fever is a zoonotic disease caused by the bacteria *Coxiella burnetii*. Domesticated ruminant animals, such as sheep, goats, and cattle, are the primary reservoirs for this bacteria. *C. burnetii* has also been found in many wildlife species, marine mammals, domestic mammals, birds and reptiles. The bacteria is most commonly shed in birth products (e.g., placenta, birth fluids), but it may also be found in the feces, urine, milk, and blood of infected animals. The organism can remain viable for months to years in the environment. According to the CDC, transmission to humans most often occurs through inhalation of bacteria from air that is contaminated with animal waste. Wind can carry airborne *C. burnetii* bacteria for miles. People may also become infected by touching feces, urine, milk, blood, or birth products from an infected animal or consuming unpasteurized (raw) dairy products. Rarely, tickborne transmission and person-to-person transmission have been reported.

C. burnetii can cause acute or chronic Q fever. About half of those infected will be asymptomatic. The incubation period for acute Q fever is usually two to three weeks, but can be up to six weeks. Signs and symptoms of acute Q fever vary and may include high fever, fatigue, headache, malaise, myalgia, chills or sweats, non-productive cough, nausea, vomiting, diarrhea, abdominal pain, and chest pain. Chronic Q fever is a more serious illness that affects less than five percent of people infected with *C. burnetii*. Chronic Q fever can develop months to years after an asymptomatic infection or acute Q fever. Chronic Q fever may present as infections of the heart, bone, liver, vascular aneurysms, or reproductive organs. If left untreated, it can be fatal.

The CDC recommends serologic testing in combination with polymerase chain reaction (PCR) of whole blood or serum in the early stages of acute Q fever. Serum samples should be collected in the acute and convalescent phases of illness, about three to six weeks apart. Culture of *C. burnetii* is not recommended for routine diagnosis.

Most cases of acute Q fever resolve within two to three weeks without treatment. Doxycycline is the recommended treatment for symptomatic cases of confirmed or suspected acute Q fever, including children with severe infections. Treatment has been shown to shorten the duration of illness and reduce the risk of severe complications. If doxycycline is contraindicated due to allergies, moxifloxacin, clarithromycin, trimethoprim/sulfamethoxazole or rifampin can be used. Recommendations for treatment of chronic Q fever can be found [here](#).

In May 2019, the NDDoH was notified of a hospitalized North Dakota resident who had laboratory evidence of acute Q fever. The patient reported experiencing fever, night sweats, severe headache, malaise and rash. Elevated liver enzymes were noted. Laboratory testing of a convalescent specimen demonstrated a fourfold increase in antibody titer. The case recovered without any complications. No high risk exposures were reported during the epidemiologic investigation; however, the case resides within 10 miles of multiple livestock operations. Six

cases of Q fever have been reported to the NDDoH since 2001. Prior to this case, the most recent case was reported in 2014.



Kirby Kruger, Director, Division of Disease Control; Chief of Medical Services Section
Molly Howell, MPH, Assistant Director, Division of Disease Control
Evan Bischoff, MPH, Managing Editor