

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

May 2012 Topics

- Summertime Foodborne Illness
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Summertime Foodborne Illness

Foodborne illnesses are more prevalent in the summer as outdoor activity increases. Warmer weather makes the ideal conditions for outdoor picnics and barbeques; however, it also provides the perfect environment for bacteria and other pathogens in food to multiply and cause foodborne illness. The safety controls that a kitchen provides, such as thermostat-controlled cooking, refrigeration and washing facilities are usually not available when people are outdoors at picnics, barbeques or camping trips. It is important for people to properly handle and prepare food to prevent illnesses this summer.

The following tips can help keep summer picnics, barbeques and outdoor trips safe from foodborne illness:

- Always wash your hands before preparing food, after handling raw foods and before eating. If warm running water and soap are not available, use an alcohol-based hand sanitizer.
- A full cooler will maintain its cold temperature longer than one that is partially filled, so it is important to pack plenty of ice or freezer packs to ensure a constant cold temperature. Keep the cooler out of the sun and keep drinks in a separate cooler than food, because the drink cooler will be opened more frequently.

- Marinate food in the refrigerator. Do not use sauce that was used to marinate raw meat or poultry on cooked food. Reserve a portion of unused marinade to use as a sauce.
- Cook foods properly. Use a food thermometer to ensure that food reaches a safe internal temperature.
 - Chicken and turkey, whole and parts to 165°F.
 - Ground beef, pork, veal or lamb to 155°F.
 - Fresh beef, pork, veal or lamb to 145°F.
 - Fish to 145° F.
- When taking foods off the grill, do not put cooked food back on the same plate that held raw food, unless it has been washed with hot water and soap first.

Improper handling and cooking of poultry products and ground beef are common sources of foodborne illness such as salmonella, campylobacter and *E.coli*. These diseases can cause diarrhea, abdominal cramping, nausea and vomiting. Young children and the elderly are at greatest risk for severe illness including dehydration, infection of the bloodstream and kidney failure.

For more information or to report a possible foodborne illness, call the North Dakota Department of Health at 701.328.2378 or 800.472.2180, or visit www.ndhealth.gov/disease/GI.

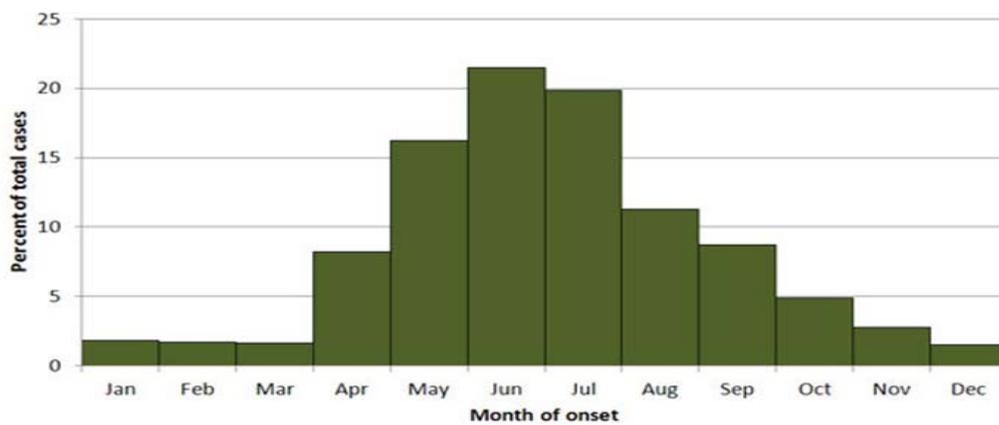


Tularemia Reported in North Dakota

Tularemia, a disease that can affect both animals and humans, is caused by a bacterium, *Francisella tularensis*. Wild animals such as hares, rabbits, muskrats, prairie dogs and other rodents have been known to be infected with tularemia. Some domestic animals like horses, sheep and cats can also be infected.

Tularemia transmission to humans is most common during the spring and summer months (Figure 1). People can become infected through bites from infected ticks or deer flies; handling infected animals; inhaling contaminated dust or aerosols; or ingesting insufficiently cooked infected meat or contaminated water. Bites from infected ticks or deer flies occur during the spring and summer, but illness due to animal handling and hunting can occur at any time of the year. From 2000 to 2011, 12 human tularemia cases have been identified in North Dakota.

Figure 1. Reported human cases of Tularemia by month, United States, 2001-2010.



<http://www.cdc.gov/tularemia/statistics/month.html>

A case of Tularemia was reported to the North Dakota Department of Health (NDDoH) in May 2012. The patient had a tick bite on the scalp that later developed into an ulcer. Other symptoms experienced by the patient included fever, headache, weakness and lymphadenopathy. A specimen from the ulcer was collected and tested positive for tularemia by PCR and culture. The patient had no pre-existing medical conditions and there were no complications as a result of the tularemia infection.

The signs and symptoms of tularemia include fever accompanied by varying symptoms depending on the route of entry into the body. These symptoms can include ulcers on the skin or mouth, swollen and painful lymph glands, swollen and painful eyes and a sore throat. Pneumonia can also develop, which is the most serious form of the disease. This form develops when people breathe in dust or aerosols that contain the bacteria that causes tularemia.

For more information about tularemia, visit the NDDoH website at www.ndhealth.gov/disease/Tickborne.



Managing a Possible Rabies Exposure

The NDDoH receives numerous telephone calls each week about possible rabies exposures. Encounters involve both domestic and wild animals. In North Dakota, the skunk is the most common wild animal identified with rabies. Other wild animals that have tested positive in recent years include raccoons and bats. However, the majority of potential human rabies exposures investigated by the NDDoH each year involve domestic animals (dogs and cats). Many of these animals are unvaccinated, not up-to-date on rabies vaccines or have unknown vaccine histories. Responsible pet ownership, including keeping pets current on rabies vaccinations, is fundamental to help protect people from exposure to the rabies virus and avoid undergoing expensive rabies vaccination.

Post-exposure prophylaxis (PEP) may be required for humans who experience an animal exposure. An exposure is defined as a bite that breaks the skin or saliva that comes in contact with an open cut, sore or wound or to a mucous membrane such as the mouth, nose or eyes. If the exposure involves a wild carnivorous animal or a bat that is unavailable to be tested, the person should receive PEP. Depending on the circumstances, PEP may be deferred if the animal is available for prompt testing.

If a person is exposed to a dog, cat or ferret, the animal should be either euthanized and tested for rabies or evaluated by a veterinarian to confirm that it is healthy. The animal should be confined and observed daily for 10 days. Unwanted animals may be euthanized and tested. If the animal becomes ill or there is a change in behavior during the 10-day isolation period, it should be euthanized immediately and tested for rabies. The decision to initiate PEP should be based on the circumstances of the exposure, vaccination status of the animal and when rabies testing results will be available. If there is no change in the animal's health during the 10-day confinement, which is verified by a veterinarian's evaluation at the end of the 10 days, the animal can be released and PEP does not need to be initiated or can be discontinued if it had been initiated.

The NDDoH provides technical assistance when an exposure to an animal has occurred. For questions about rabies exposure, please contact the NDDoH at 1.800.472.2180, or visit www.ndhealth.gov/disease/Rabies/FactSheets.htm to view an algorithm that can be used to help assess rabies exposure and the need for post-exposure prophylaxis.



New Disease Control Employee!

Name: Bryan LaBore

Title: Epidemiology Intern

Education Background: I have a B.S. in Biomedical Science from Northern Arizona University in Flagstaff, Ariz. I just completed my first year of a two-year Master's of Public Health program at the University of Minnesota in the Twin Cities.

Past Experience: My public health experience is pretty minimal. I volunteered at a malnutrition center in Antigua-San Felipe, Guatemala for six weeks during the summer of 2009 and am one year into my MPH. Other than that, this job is kind of my first exposure to the field. I'm excited to be here!

Family/Hobbies: I have a brother and two sisters who are all older than me. My hobbies include music, working out (when I'm not on crutches), traveling and my dog.

Contributing authors of The Pump Handle include Alicia Lepp, Michelle Feist, Bryan LaBore, Tracy Miller and Kirby Kruger. For questions, suggestions or inquiries, or to be removed from the mailing list, please contact Sarah Weninger of the Division of Disease Control, at 701.328.2366 or by e-mail at sweninger@nd.gov.

The pump handle picture in the title was obtained from the website www.ph.ucla.edu/epi/snow.html.



NORTH DAKOTA
DEPARTMENT of HEALTH

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