



NEW YORK CITY DEPARTMENT OF
HEALTH AND MENTAL HYGIENE
Thomas Farley, MD MPH
Commissioner

2013 Veterinary Advisory #3: Tularemia Advisory

July 25, 2013

*Please share with your colleagues in Veterinary Medicine, Park Enforcement, Urban Park Rangers,
and Wildlife Rehabilitators:*

- **Three wild rabbits collected from a Brooklyn park tested positive for *Francisella tularensis*.**
- **No cases in human or domestic pets have been identified.**
- **Historically, human cases of tularemia have been identified in all NYC boroughs except the Bronx.**
- **Although cases among humans and domestic pets are extremely rare, veterinarians and animal health care providers should consider *F. tularensis* in pets or wildlife presenting with compatible clinical presentation.**

Dear Colleagues,

Three Eastern cottontail rabbits collected from Prospect Park in Brooklyn recently tested positive for *Francisella tularensis*, the bacteria that causes tularemia. At this time, there are no known human or domestic pet cases of tularemia in NYC. Tularemia is extremely rare in New York City; however, it has been found sporadically among wildlife and humans in New York City (NYC) in all boroughs except for the Bronx. Since 1965, there have been 16 human cases in New York City, with the last occurring in Brooklyn in 2008.

F. tularensis is maintained and amplified in nature in a cycle involving vertebrate hosts (most commonly rabbits and wild rodents) and arthropod vectors such as ticks. Tularemia is usually transmitted to humans by ticks, biting flies or by touching or eating an infected animal, but can also be transmitted by contact with contaminated water or soil, by a bite from an infected animal or by inhalation of contaminated particles. Tularemia is not spread directly from person to person. In the United States, approximately 100-200 cases are reported annually, with most occurring in the south central and western states. In some instances, small animal die-offs have preceded outbreaks.

In animals, disease has been associated with tick infestation. Signs may include high fever, anorexia, lethargy and death. Dogs are resistant to the disease. Cats are more susceptible to *F. tularensis*, and may develop signs clinically similar to feline infectious peritonitis (FIP), plague, or other diseases. Affected animals may develop abscesses at the site of the arthropod bite with progression to regional or generalized lymphadenopathy, hepatosplenomegaly, pneumonia, or enterocolitis. At necropsy, lesions include multifocal or disseminated necrosis (white or red/white spots) in the liver, spleen, lungs, lymph nodes, and possibly the gastrointestinal tract. Puppies and kittens are often more severely affected than older animals.

Serologic testing of acute and convalescent samples is the standard diagnostic method. Culture and fluorescent antibody (FA) testing can be performed on tissues from animals with suspicious lesions or tissue collected on necropsy. If you have a suspect or diagnosed case of tularemia, report to Dr. Sally Slavinski at 347-396-2672.

Tick control will help diminish arthropod borne transmission of tularemia as well as other potentially infectious diseases associated with ticks. Use gloves when handling potentially infectious fluids and tissues and disinfect equipment after use on suspect animals.

For more information about tularemia, please visit the following websites.

DOHMH: <http://www.nyc.gov/html/doh/html/diseases/cdtul.shtml>

Centers for Disease Control and Prevention: <http://emergency.cdc.gov/agent/tularemia/>

AVMA: www.avma.org/News/Journals/Collections/Documents/javma_222_6_725.pdf

USGS: <http://www.nwhc.usgs.gov/publications/tularemia/>

Tularemia is one of the diseases in animals reportable to the NYC Health Department as defined by Section 11.64 of the NYC Health Code. This section requires routine reporting of the following suspected or confirmed animal diseases to the DOHMH: anthrax, brucellosis, glanders, Q fever, tularemia, plague, monkeypox, rabies, SARS (severe acute respiratory syndrome), and influenza (novel virus with pandemic potential), and if confirmed by laboratory diagnosis, leptospirosis, psittacosis, Rocky Mountain spotted fever, salmonellosis, tuberculosis, and arboviral encephalitis, or an outbreak of any disease or condition of unknown etiology which may be a danger to public health. The NYC Animal Disease Report Form is available at <http://www.nyc.gov/html/doh/downloads/pdf/zoo/zoo-disease-report-form.pdf>.

As always, we appreciate your continued collaboration with our efforts to monitor illness in New York City.

Sincerely,

Sally Slavinski, DVM, MPH

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Public Health Veterinarian

Bureau of Communicable Disease