

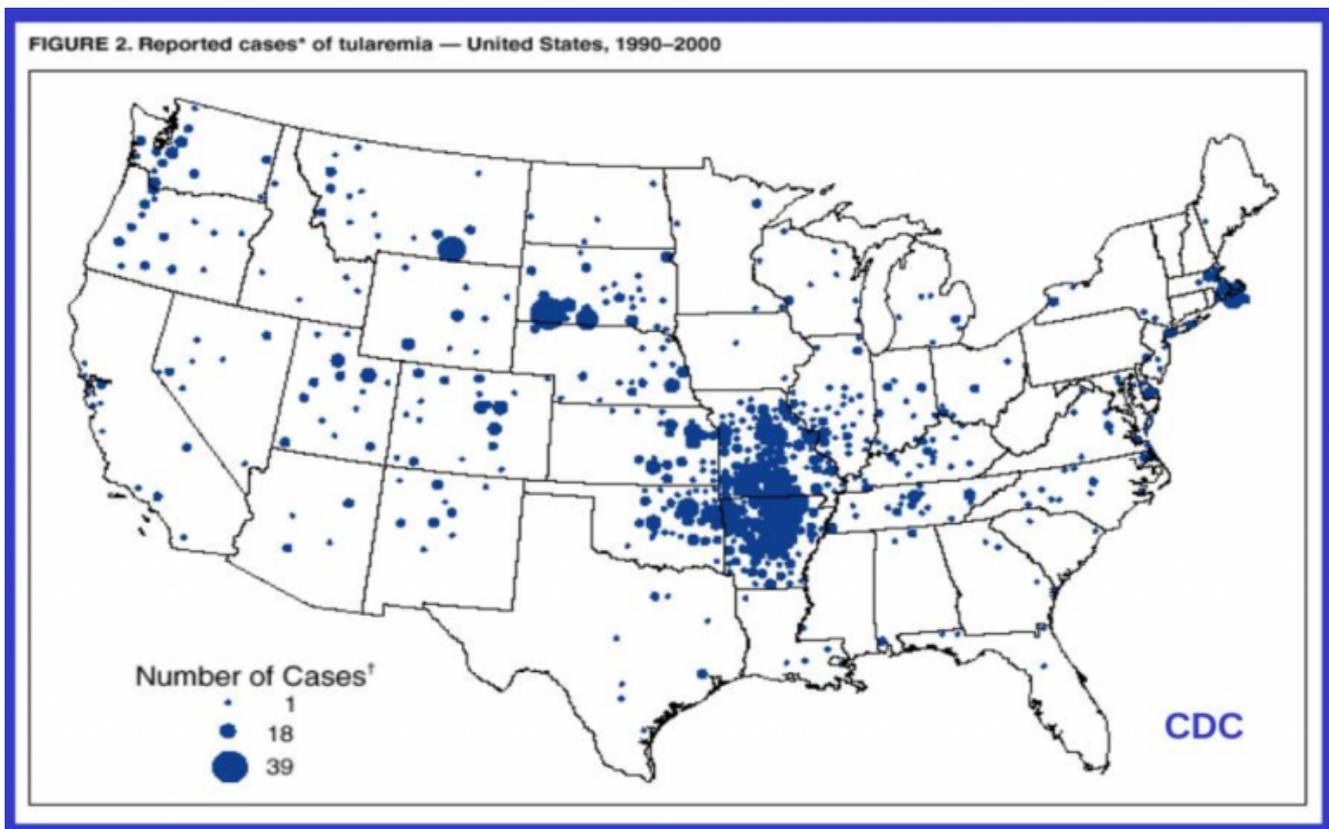
# Tularemia in Cats - Thumper & Mickey Mouse are not Garfield's Friends!

Everybody knows the most famous rodent in the world - Mickey Mouse. We all also know Bambi's beloved woodland buddy - Thumper. But did you know Mickey and Thumper could pose a risk to everybody's lasagna-loving cat, Garfield? That's right! Rodents and rabbits can transmit a potentially fatal disease called tularemia to our feline friends. This week I'm sharing information about serious disease to increase awareness of it, so please share with other feline parents. Happy reading!



## Tularemia - What is it?

Tularemia - also called rabbit fever - is a serious infection caused the bacterium, *Francisella tularensis*. It's found in temperate regions of the Northern Hemisphere, and has been reported in all US states except Hawaii.



It's highly infectious, and can be transmitted several ways, including:

- Ingestion of tissues or body fluids of an infected infection - In the United States, lagomorphs (hares & rabbits) are most commonly infected, and they can readily transmit the infection to felines
- Drinking contaminated water
- Skin contact
- Vector transmission - Ticks, including the American dog tick (*Dermacentor variabilis*), the Lone Star tick (*Amblyoma americanum*), and the Rocky Mountain wood tick (*Dermacentor andersoni*), serve as vectors and can contribute to the spread of this disease



Rabbits are major source of tularemia infection in cats. Image courtesy of Jerry Genesio.

## **Tularemia - What does it look like?**

Tularemia causes acute illness that manifests as various clinical syndromes, including:

- Ulceroglandular - a localized infection of the skin and draining lymph nodes
- Typhoidal - severe systemic infection
- Oropharyngeal - involving the oral cavity
- Pneumonic (affecting the lungs)

Classically, affected cats have high fevers (104-106°F), icterus, internal organ

dysfunction, abdominal discomfort, and particularly enlarged, painful lymph nodes in the head and neck. Some cats have ulcers on the gums and tongue.

## Tularemia - How is it diagnosed?

After obtaining a thorough patient history and performing a complete physical examination, a veterinarian will perform some non-invasive blood and urine tests. These assays are both to confirm infection and to screen for major organ dysfunction. Common abnormalities include hypoglycemia, hyponatremia (low blood sodium), hematuria (blood in urine), and hyperbilirubinemia (elevated blood bilirubin). Diagnostic imaging - chest radiographs / x-rays and abdominal sonography - may be recommended. Sampling of enlarged lymph nodes via aspiration should also be performed. Cat parents will likely find it invaluable to partner with a board-certified veterinary internal medicine specialist to develop a cost effective and logical diagnostic plan.



## Tularemia - How is it treated?

Successful treatment of tularemia requires early diagnosis and prompt aggressive treatment in hospital. Sick kitties typically benefit from intravenous fluid therapy and antibiotic administration. The most common classes of antibiotics with known efficacy against *Francisella tularensis* are aminoglycosides, tetracyclines, and fluoroquinolones.

Tularemia is a zoonotic disease, meaning it can be transmitted to humans. The most common method of transmission is through bites and scratches. Cats are maintained in strict isolation while hospitalized, and veterinary medical staff don personal protective equipment. Cat parents are strongly recommended to contact their personal physicians if their cat is suspected or known to be living with

tularemia.

## **The take-away message about tularemia in cats...**

Tularemia is a potentially life-threatening bacterial infection caused by *Francisella tularensis*. It is also a disease that can be readily transmitted to people. Early diagnosis and treatment are vital to maximizing the likelihood of a positive outcome.

To find a board-certified veterinary internal medicine specialist, please visit the American College of Veterinary Internal Medicine.

Wishing you wet-nosed kisses,

CriticalCareDVM