



LEPTOSPIROSIS in Arizona:

Keep dogs, staff, and owners disease-free



Leptospirosis, a zoonotic disease of worldwide significance, is on the rise in dogs in Arizona. It is caused by spirochetes that are spread through the urine of infected animals (rodents, dogs, wildlife, livestock) and can be found in urine-contaminated soil and water. Dogs exposed to the bacteria are highly susceptible to infection; some cases are asymptomatic, while others develop a range of symptoms, including fever, lethargy, inappetence, conjunctivitis, vomiting, and diarrhea. Severe illness, such as kidney failure, can also occur. *Leptospira* bacteria can be shed intermittently in the urine of infected dogs including those that are asymptomatic, and can be spread from dog to dog, and occasionally from dogs to people.

DIAGNOSIS & TREATMENT

CLINICAL SIGNS

- Mild disease can include: fever, lethargy, anorexia, conjunctivitis, vomiting, and diarrhea
- Severe disease can include: renal failure, liver damage/jaundice, pulmonary complications
- Clinical pathology: thrombocytopenia, leukocytosis, and elevated renal values or liver values

DIAGNOSIS

- Screening tests: IDEXX SNAP test and ELISA
- Confirmatory tests: PCR of the blood or urine, and serologic testing with MAT
- Serologic testing should ideally be performed on two samples collected 1-2 weeks apart to look for a 4-fold increase in antibody titer

TREATMENT

- Supportive care and antibiotics
- Antibiotics can help decrease urinary shedding of the bacteria
- Most dogs recover from illness, but the disease is sometimes fatal.
- Consider treating other dogs in the household for potential asymptomatic infections



GUIDANCE TO SHARE WITH DOG OWNERS

- Leptospirosis can be spread from dogs to people, and they should visit their doctor if they become sick
- Give clear instructions to the owners for continuing the full course of antibiotics at home
- Explain that the bacteria may be present in the urine for up to a few months after infection and how to protect themselves from exposure
- Recommend that owners avoid taking their dog to dog parks, daycare, or boarding facilities until 6 weeks after the dog has finished antibiotics
- If the owner cannot keep their dog at home, the boarding facility or daycare should be notified that the dog has recently been diagnosed with leptospirosis
- Encourage vaccination against leptospirosis for all dogs (the vaccine does not have a higher likelihood of causing vaccine reactions than any other vaccine)
- Exercise standard precautions in dogs with a history of serious vaccine reactions or in which vaccination is contraindicated

Have you recently suspected or diagnosed a dog with leptospirosis?

Here are some important precautionary and preventive steps that can be taken to protect veterinary staff, other patients, and owners

INFECTION CONTROL AT THE CLINIC

- Avoid contact with urine from infected dogs
- Wear protective equipment such as gloves, face shield or mask, and gown when caring for ill dogs or cleaning up their urine or other body fluids
- Wash hands with soap and water after interacting with patients or cleaning up their urine/body fluids
- House infected dogs away from high-traffic areas and minimize the dog's movement around the hospital
- Walk infected animals in a designated and easy to clean area away from other dogs
- Use 1:10 (1 part bleach and 9 parts water) solution to clean areas where infected dogs are housed, where they have urinated or other areas contaminated by body fluids
- Normal laundering of urine-contaminated bedding and towels will inactivate the bacteria
- Avoid aerosolization of bacteria through activities such as pressure washing runs where dogs are housed
- Pregnant or immunocompromised individuals should avoid contact with potentially infected dogs and their urine
- Notify public health if staff that have been caring for infected dogs develop signs of illness
- Start infection control procedures for any dog suspected of having leptospirosis (while awaiting laboratory confirmation)



For more information visit www.cdc.gov/leptospirosis. To report canine cases, please contact the Arizona Department of Agriculture at 602-542-4293. To report human illness please contact your local health agency.