

Animal Health Advisory: Leptospirosis Outbreak in Dogs Continues in Los Angeles County
9.23.2021

Dear colleagues,

In regards to the current canine leptospirosis outbreak in Los Angeles County, there are 107 confirmed cases, 16 suspected cases and 6 deaths reported. Of these cases, 95% (85/89) were reported to not be vaccinated against leptospirosis. The majority of cases continue to be associated with exposures at kennel or daycare facilities and the outbreak appears to be focused on the west side of Los Angeles as well as the San Fernando Valley. There are confirmed leptospirosis cases that have never been exposed at congregate facilities, and vaccination with the quadrivalent *Leptospira* vaccine continues to be the most effective tool against stopping this outbreak.

After consultation with a leptospirosis subject matter expert (Dr. Jane Sykes at UC Davis School of Veterinary Medicine), we have developed recommendation updates to address the common questions from both veterinarians and pet owners:

How should veterinarians report a case (suspect or confirmed) of leptospirosis to Veterinary Public Health?

Use the attached leptospirosis reporting form or visit this [link](#)

- Attach the relevant laboratory results or medical records
- Include details of possible exposure on the form (name of the daycare/boarding kennel/dog park the dog visited and relevant dates)
- Email the form and lab results to vet@ph.lacounty.gov or fax to 213-481-2375

Who is at risk for leptospirosis?

Although in this outbreak the majority of reported cases have attended dog daycare or boarding facilities, a number of reported canine leptospirosis cases have not attended such facilities and may have been exposed to leptospirosis at dog parks, in their own backyards, or on walks within their neighborhood. Prior to this outbreak, reported cases of leptospirosis in dogs in Los Angeles County were mostly due to wildlife exposures. Cases in this outbreak have ranged from mild to severe disease, with a number of cases requiring hospitalization and the death of 6 dogs. Approximately 95% of dogs in this outbreak were not vaccinated against leptospirosis prior to becoming ill. As such, the 4-serovar leptospirosis vaccine is recommended for dogs living in Los Angeles County.

Which serovar is the likely cause of this outbreak?

The *Leptospira* serovar Canicola is the likely cause of this outbreak. Dogs are the primary reservoir for the Canicola serovar, not wildlife or rats.¹ As a result, this outbreak is driven by dog-to-dog transmission of the bacteria in group settings such as boarding kennels or daycare facilities. It is important to remember that wildlife exposure in Los Angeles County is still

considered a risk factor for leptospirosis in dogs and that vaccination is the best way to protect dogs from this disease.

What is the recommended treatment for leptospirosis?

The recommended treatment for leptospirosis is doxycycline 5mg/kg PO q 12h for 14 days.² Treatment with amoxicillin/clavulanic acid is not advised as the bacteria may be more likely to persist in the kidneys and result in continued shedding of the bacteria in the urine.

When can a dog return to congregate facilities (daycare/boarding/dog parks, etc.) if they are diagnosed with leptospirosis?

Generally, after treatment with antibiotics (doxycycline), a dog is not likely to be shedding leptospirosis in their urine and is not considered contagious to others. We recommend that a dog may return to normal social activities after a full course of appropriate antibiotics has been administered and the dog is clinically recovered.

When should dogs be vaccinated against leptospirosis?

Dogs should be vaccinated against leptospirosis prior to visiting daycare/boarding kennels/dog parks and before interactions with other dogs or potential exposures to wildlife. In cases of dogs that have become ill and are recovering from leptospirosis infection, current research indicates that these dogs should be vaccinated when they are stable and recovered. These dogs should **not** wait one year after recovery before being vaccinated. Cross-protection against the various *Leptospira* serovars from natural infection is not well documented and vaccination continues to be the best tool to protect dogs from a new or recurrent leptospirosis infection.

What recommendations should I make to pet owners when their dog is diagnosed with leptospirosis?

Discussing the zoonotic potential of leptospirosis with both pet owners and veterinary staff members is essential to protecting human health. The most likely exposure for pet owners or veterinary staff is through direct contact with an infected dog's urine. Anyone caring for a pet diagnosed or suspected to have leptospirosis should use gloves when cleaning up urine, spray the area with a disinfectant, and wash their hands immediately after removing the gloves. One recent study in the US estimated that 2-10% of healthy dogs can be shedding *Leptospira* in their urine.³ Even when a dog is recovered from infection, it is always recommended to use gloves when cleaning up urine or urine-contaminated surfaces.

Please consider distributing this [fact sheet](#) about leptospirosis to pet owners or direct them to our website: <http://publichealth.lacounty.gov/vet/Leptospirosis2021.htm> for more information. Pet owners should consult with their physician for questions about leptospirosis or the need for testing in people. If you have questions about leptospirosis or wish to discuss or report a canine case, please call Veterinary Public Health at 213-288-7060 or email us at vet@ph.lacounty.gov.

The following is a message from Dr. Jane Sykes at UC Davis regarding a request for samples from patients that are strongly suspected to have leptospirosis:

We are studying the performance of different diagnostic tests for leptospirosis in dogs and are keen to understand what serovars infect dogs in the United States. We have a new culture medium that will help us to do this and need blood samples and urine samples from dogs that are strongly suspected to have leptospirosis and that have not received antibiotics. If you are interested in participating please reach out to me at jesykes@ucdavis.edu. We will send you transport media and instructions for sample collection. No additional samples are required beyond what normally would be collected for diagnosis of leptospirosis.

References

1. Lunn KF. Overview of Leptospirosis. The Merck Veterinary Manual. Available at: <https://www.merckvetmanual.com/generalizedconditions/leptospirosis/overview-of-leptospirosis>
2. Sykes JE et al. 2010 ACVIM Small Animal Consensus Statement on Leptospirosis: Diagnosis, Epidemiology, Treatment and Prevention. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3040842/pdf/jvim0025-0001.pdf>
3. Spangler et al. Leptospiral shedding and seropositivity in shelter dogs in the Cumberland Gap Region of Southeastern Appalachia. Available at: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0228038>

Sincerely,

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