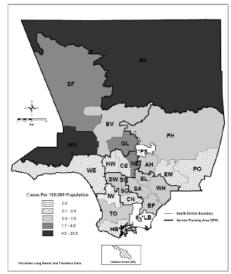


## COUNTY OF LOS ANGELES-DEPARTMENT OF PUBLIC HEALTH VETERINARY PUBLIC HEALTH-RABIES CONTROL PROGRAM Tel. 877-747-2234 Fax 562-401-7112 lapublichealth.org/vet

## Veterinarian's Brief: Valley Fever in Animals in Los Angeles County

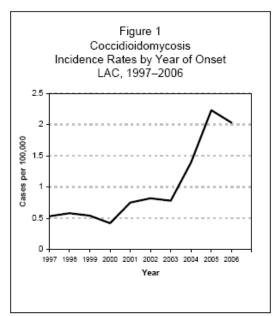
Over the past few years, the number of reported human cases of coccidioidomycosis, or Valley Fever, has been increasing in Los Angeles County (see chart at right) as it has throughout the southwestern United States. The Antelope Valley and the western San Fernando Valley have had a higher reported incidence of human cases than other areas of L.A. County (see map below).

Public Health has been tracking these cases, studying risk factors for infection, and conducting outreach to local physicians about the increase. For more information see the Coccidiodomycosis section of the Acute Communicable Disease Control Annual Morbidity Report 2005, available at: lapublichealth.org/acd/reports.htm.



Human Coccidioidomycosis Rates by Health District, L. A. County, 2005. From Los Angeles County Public Health Acute Communicable Disease Control

Annual Morbidity Report 2005



Incidence of Human Coccidioidomycosis,

Los Angeles County, 1997-2006

From Los Angeles County Public Health
Acute Communicable Disease Control

Although *Coccidioides immitis* can infect over 70 species (including cats, horses and llamas), dogs are the most susceptible. In dogs, coccidioidomycosis may result in a range of clinical signs, from no symptoms, to severe lung, bone, skin, eye, and brain lesions. The most common clinical signs in dogs are fever, lethargy, and a cough (either dry or moist). The infection is not considered contagious from person-to-person, or from dog-to-person.

To supplement the tracking of human cases of Valley Fever, Veterinary Public Health recently requested that veterinarians in the Antelope Valley report their cases. To date, twelve infected Los Angeles County animals have been reported, with cases spanning from September 2005 to May 2007. Of the twelve animals, 11 were dogs (two in one location) and one was a cat. One dog died. Eleven cases were likely to have been locally infected, while one case was likely an imported case. Two cases are based in the western San Fernando Valley (see map below). L.A. County veterinarians also reported an additional eight cases in dogs in which the dogs' primary residence was in Kern County.

Diagnosis in animals is not always clear-cut. Reporting veterinarians relied on a combination of findings: positive serology, consistent clinical signs, and improvement on anti-fungals. A bronchointerstitial lung pattern and enlarged thoracic perihilar lymph nodes were seen radiographically in at least three cases. Two dogs with bone lesions had non-specific osteomyelitis found on bone biopsy; one dog with a tibial lesion improved dramatically on treatment. Coccidioides spherules were seen in a thoracic lymph node from the dog that died.

Serologic testing was performed in all cases. In 14 cases both IgM and IgG titers were reported, and in six cases a combined titer was reported. IgM titers were all negative despite other evidence of active disease. In five cases follow-up titers were drawn. Seroconversion was documented in three of these cases, with two dogs converting from zero to positive, and a third converting from positive to negative after 6 months of treatment.

We ask all veterinarians in L.A. County to report their cases to assist us in tracking this fungus, and to contact us with any questions.

## References

• Greene, Craig. Infectious Diseases of the Dog and Cat-Third Edition.
Saunders/Elsevier 2006.

