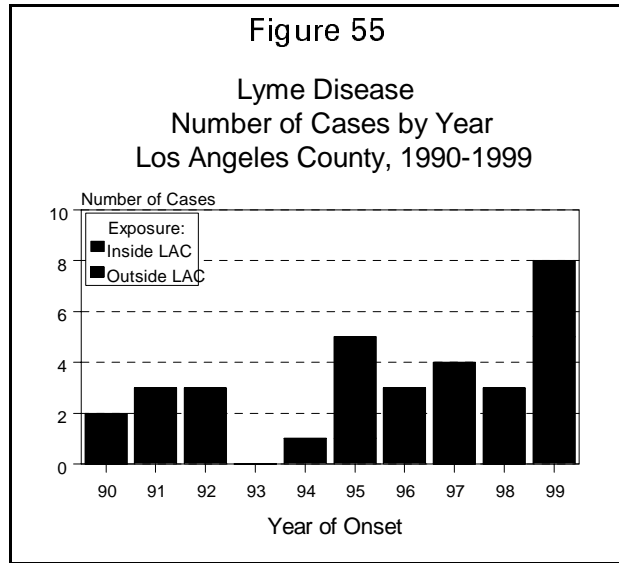


## LYME DISEASE

CRUDE DATA	
Number of Cases	8
Annual Incidence <sup>a</sup>	
LA County	0.09
California	0.42
United States	5.97
Age at Onset	
Mean	23
Median	10
Range	5-48 yrs
Case Fatality	
LA County	0.0%
United States	N/A

<sup>a</sup>Cases per 100,000 population.



### ETIOLOGY

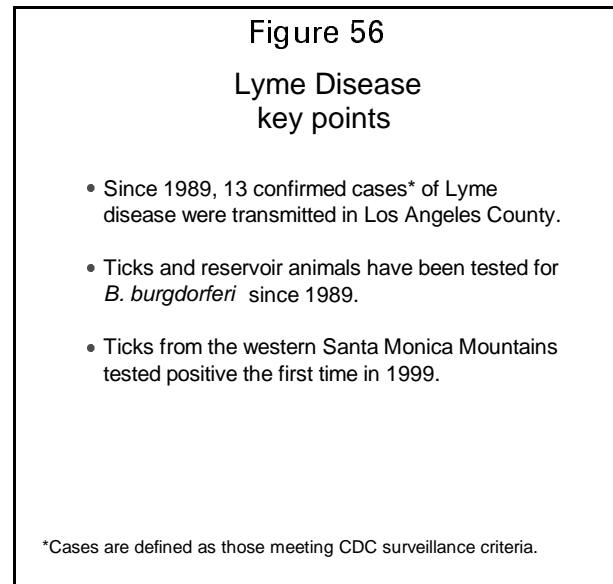
Lyme disease is caused by a bacteria, *Borrelia burgdorferi*, transmitted to humans by the bite of the western black-legged tick (*Ixodes pacificus*).

### DISEASE ABSTRACT

A distinctive rash (erythema migrans) is present in only 50 to 70% of patients, usually at the site of the tick bite. The diagnosis of Lyme disease may be difficult because early symptoms of fever, body aches, headaches, and fatigue can be caused by other diseases. Although laboratory tests are available, they are often not accurate or consistent.

Lyme disease may be cured by early diagnosis and treatment with antibiotics. Untreated disease causing long-term illness and complications is infrequently reported in LAC.

Lyme disease is reported infrequently in LAC. Since Lyme disease became reportable in 1989, 38 reported cases have met the CDC surveillance criteria. Thirteen cases (34%) were exposed to ticks inside LAC. Although



transmission of Lyme disease may occur in LAC, it is believed to be rare because the western black-legged tick is not the most commonly found tick in LAC, and only 1-2% of western black-legged ticks in California are infected with the bacterium that causes Lyme disease. The tick must also be attached for 24-48 hours for transmission to occur. Although DHS has been testing ticks and reservoir animals for the past ten years, 1999 was the first year for which ticks were confirmed to carry *B. burgdorferi* by culture.

In 1999, eight reported cases of Lyme disease met CDC surveillance criteria. Five of the eight cases were male. Three cases reported exposure outside LAC.

## **COMMENTS**

When a case of Lyme disease is reported to the DHS, an investigation is initiated by the Acute Communicable Disease Control Unit which includes collection of information from the physician and the patient. Vector Management staff determine the probable site of tick exposure and initiate field studies. The field studies include collection of ticks and samples from animals to test for Lyme disease.

Although Lyme disease occurs rarely in LAC, personal protective measures can be taken to prevent tick bites. These measures include using insect repellents containing DEET, wearing long pants and long-sleeved clothing, wearing light-colored clothing (so that ticks can be spotted more easily), and walking in the center of a trail to avoid overhanging grass or brush.