Lyme disease

Lyme disease is a tick-borne zoonotic disease caused by the spirochete *Borrelia burgdorferi*. The first manifestation in about 60% of patients appears as a red macule or papule (bull's eye) that expands slowly in an annular manner, sometimes with multiple similar lesions. This distinctive skin lesion is called erythema migrans. The incubation period for Lyme disease ranges from three to 32 days after tick exposure; however, the early stages of the illness may be asymptomatic, and the patient may later develop systemic symptoms and rheumatologic, neurologic or cardiac involvement in varying combinations over a period of months to years.

Currently, increasing recognition of the disease is redefining enzootic areas for *B. burgdorferi*; Lyme disease cases have been reported in 47 states, and in Ontario and British Columbia, Canada. Elsewhere, related borrelioses have been found in Europe, the former Soviet Union, China and Japan.

In 1997–1998, a tick identification and *Borrelia* isolation study was conducted by the Centers for Disease Control and Prevention and the Oregon Department of Human Services in Deschutes, Josephine and Jackson counties. No ticks from Deschutes County were identified as carrying *Borrelia* in this study. The organism was isolated in 3.5% of *Ixodes pacificus* ticks tested.

During 2007, 27 cases were reported in Oregon, a 20-year high. The median age was 41 years. Eighteen cases (66%) were female. Unlike prior years where case counts were highest in the summer months, cases in 2007 occurred year-round with a peak of five in May.
Lyme disease by year: Oregon, 1988–2007

Lyme disease by onset month: Oregon, 2007

2007 Oregon Communicable Disease Summary

![Graph showing the incidence of Lyme disease by age and sex for Oregon, 1998–2007. The x-axis represents age groups (0–4, 5–9, 10–19, 20–29, 30–39, 40–49, 50–59, 60–69, 70–79, 80–85+) and the y-axis represents cases per 100,000 population. The graph shows data for both male and female populations.]


![Graph showing the incidence of Lyme disease in Oregon compared to nationwide data, 1988–2007. The x-axis represents years from 1988 to 2007 and the y-axis represents cases per 100,000 population. The graph compares data for Oregon and the U.S. separately.]

*Not necessarily county of acquisition