

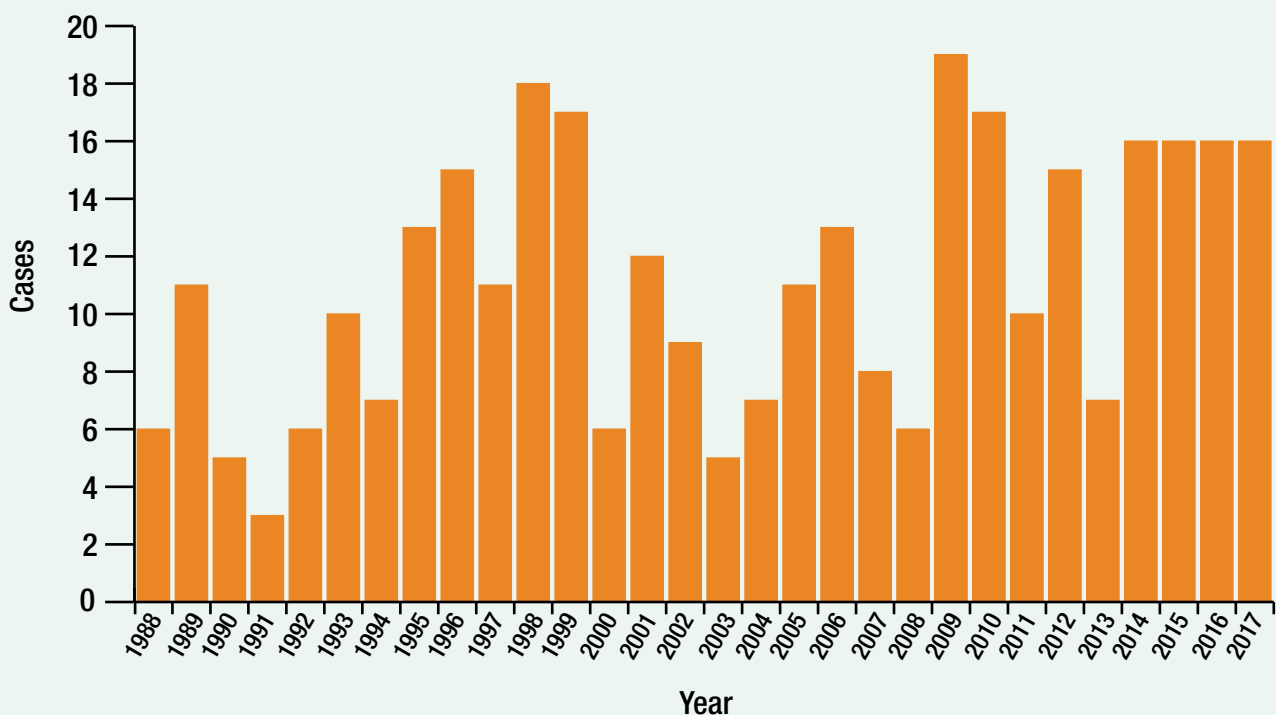
# Listeriosis

Listeriosis is a bacterial infection that may present as an influenza-like illness with high fever, headache and muscle aches; as a gastrointestinal illness; or as an invasive disease with sepsis or meningitis. In pregnant women, listeriosis may cause miscarriages or stillbirths. The case fatality rate of invasive listeriosis is as high as 30% in infants infected prenatally and in non-pregnant adults.

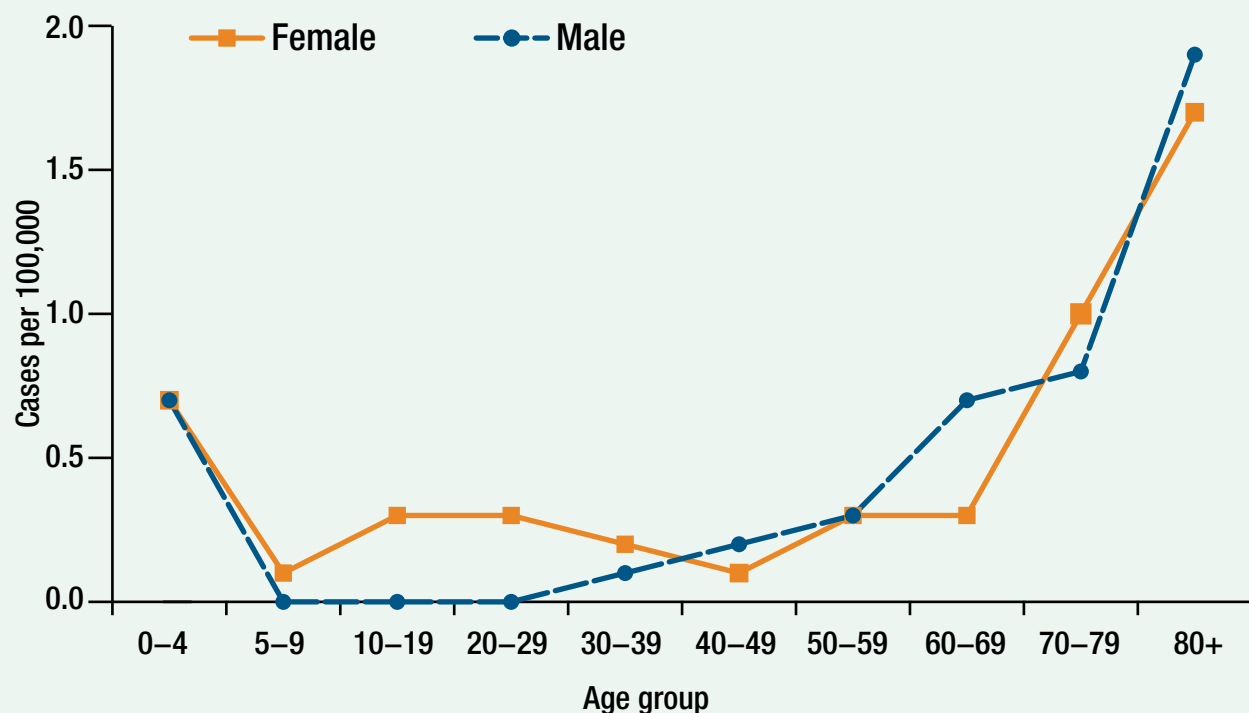
Most cases of listeriosis are “sporadic” rather than part of outbreaks. However, several large outbreaks have been associated with consumption of contaminated foods. It is important to track the incidence of this disease to identify such outbreaks, and to identify high-risk groups. The rate is higher among pregnant women, newborns, the elderly and immunocompromised persons. Cooking food properly is the most important means of prevention. When listeriosis is diagnosed, treatment with antibiotics should be instituted promptly.

In 2017, 16 cases were reported, the same as in 2015 and 2016. All but two cases were hospitalized; there were four deaths (25%). There were two pregnancy-associated cases, one of which was a mom-baby pair.

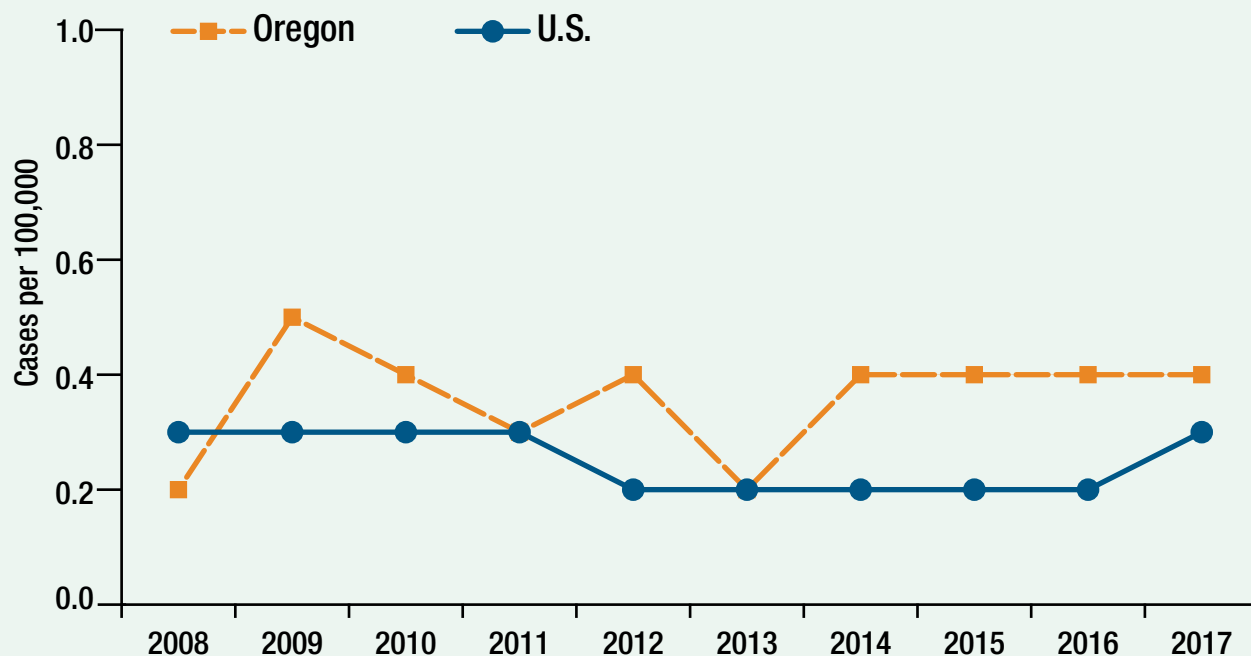
Listeriosis by year: Oregon, 1988–2017



### Incidence of listeriosis by age and sex: Oregon, 2008–2017

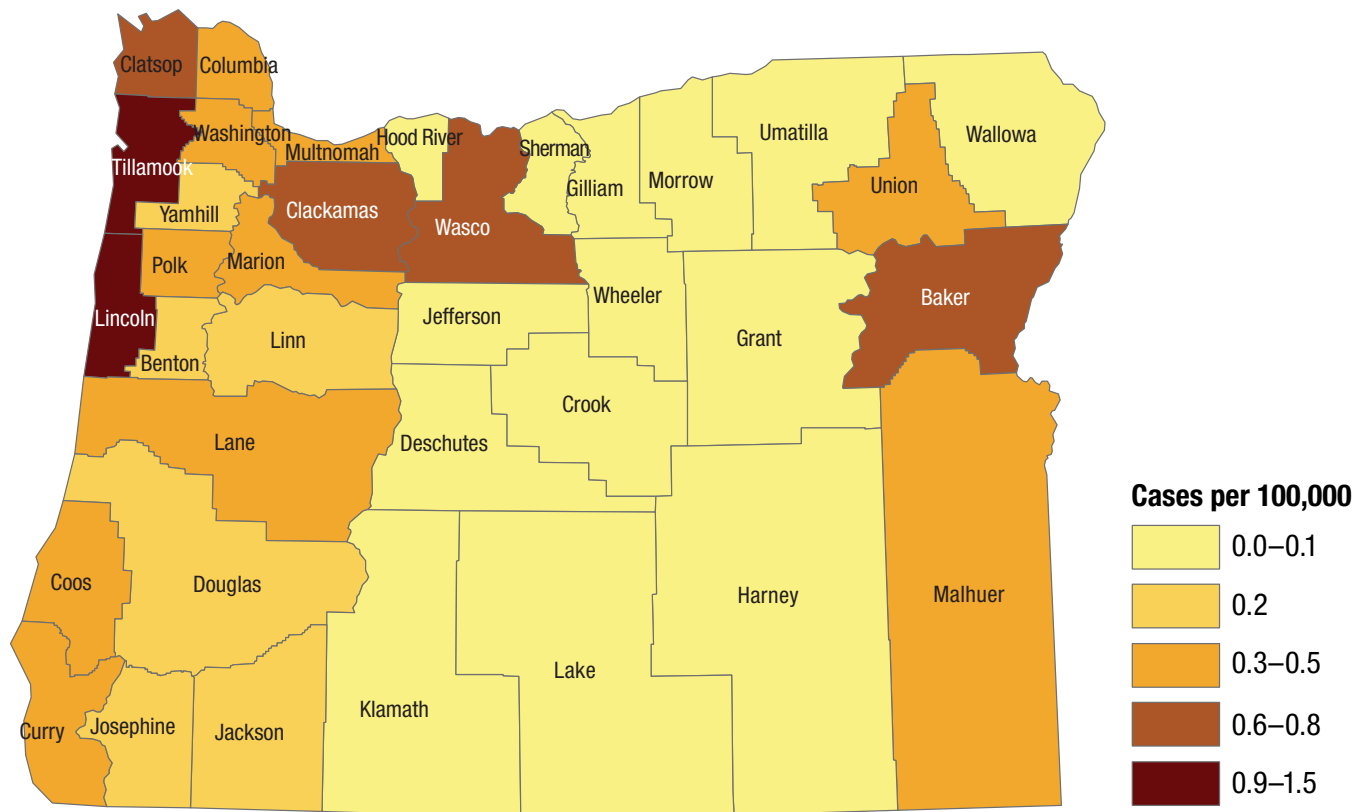


### Incidence of listeriosis: Oregon vs. nationwide, 2008–2017



Oregon	0.2	0.5	0.4	0.3	0.4	0.2	0.4	0.4	0.4	0.4
U.S.	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3

## Incidence of listeriosis by county of residence: Oregon, 2008–2017



### Prevention

- Practice safe food handling. Rinse raw produce thoroughly under running tap water; separate uncooked meats and poultry from vegetables, cooked foods and ready-to-eat foods; cook meat and poultry to the proper temperatures.
- Do not drink raw milk and do not eat foods that have unpasteurized milk in them.
- Higher-risk persons (pregnant women, immunocompromised and elderly):
  - › Avoid eating hot dogs, luncheon meats, cold cuts and other deli meats unless they are heated.
  - › Do not eat soft cheese such as feta, queso fresco, Brie or Camembert unless it is labeled as made with pasteurized milk.
  - › Do not eat refrigerated smoked seafood unless it is contained in a cooked dish such as a casserole.

# Lyme disease

Lyme disease is a tick-borne zoonotic disease caused by the spirochete *Borrelia burgdorferi*. The first manifestation in approximately 60% of patients appears as a red spot or bump that expands slowly with clearing in the middle, forming a ring or “target,” or a bull’s eye sometimes with multiple similar lesions. This distinctive skin lesion is called “erythema migrans.” In most cases, the tick must be attached for 36–48 hours or more before the Lyme disease bacterium can be transmitted. Most humans are infected through the bites of immature ticks called nymphs. Nymphs are tiny (less than 2 mm) and difficult to see, which is why they may be attached for many hours without being detected. Nymphs feed during the spring and summer months. The incubation period for Lyme disease (LD) ranges from three to 30 days after tick exposure; however, the early stages of the illness may be asymptomatic, and the patient may later develop systemic symptoms and joint, neurologic or cardiac problems in varying combinations during a period of months to years. Infections are treated with antibiotics.

Currently, increasing recognition of the disease is redefining areas where ticks may carry *B. burgdorferi*; Lyme disease cases have been reported in 47 states, and in Ontario and British Columbia, Canada. Related borrelioses have been found in Europe, the former Soviet Union, China and Japan. In 1997–1998, the CDC and the Oregon Public Health Division collected and identified ticks and tested them for *Borrelia burgdorferi* 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 2017, 89 cases of LD were reported in Oregon. The median age was 42 years of age. Sixty (67%) cases were female. The highest number of reported cases by residence (16) was in Clackamas County. Since 2015, we have identified an upward trend in the number of cases reported with LD. This could be related to greater local interaction with ticks in the environment as well as acquiring the infections from out-of-state areas where LD is more prevalent.