

Lyme Disease in the U.S.: Where is Risk Highest?

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Lyme disease is a critical public health problem in the United States. Over 30,000 cases are reported each year to the U.S. Centers for Disease Control and Prevention (CDC). Known to be transmitted by an infected tick bite, if left unrecognized or untreated, Lyme can lead to Lyme carditis, Lyme arthritis, and neurologic Lyme diseases. First identified in the mid-1970s, over 350,000 diagnosed cases from across the U.S. were reported to the CDC during 2009-2018, with the highest incidence occurring in the Northeast and upper Midwest (see Figures 1 and 2). Lyme disease incidence is thought to primarily follow the geographic distribution of human-biting ticks, in the wooded, grassy, and shaded outdoors, particularly where there are wildlife co-hosts such as deer. While the ten-year trend for the national incidence rate overall is relatively flat, rates in 75 counties have been trending downward (primarily in Wisconsin), while rates in 285 counties (primarily in the Northeast) have continued to trend upward. These trends suggest that Lyme disease prevention and control efforts have been effective in some geographies, but Lyme is still an increasing concern in others. Lyme disease prevention includes avoiding contact with ticks, self-monitoring for tick bites after exposure to environments where ticks are prevalent (e.g., after gardening or hiking), and seeking/following medical advice following the discovery of a suspected tick bite. Clear, concise, consistent, and ongoing public health messaging, in addition to accurate county and state level reporting and surveillance, are key to combatting Lyme disease.

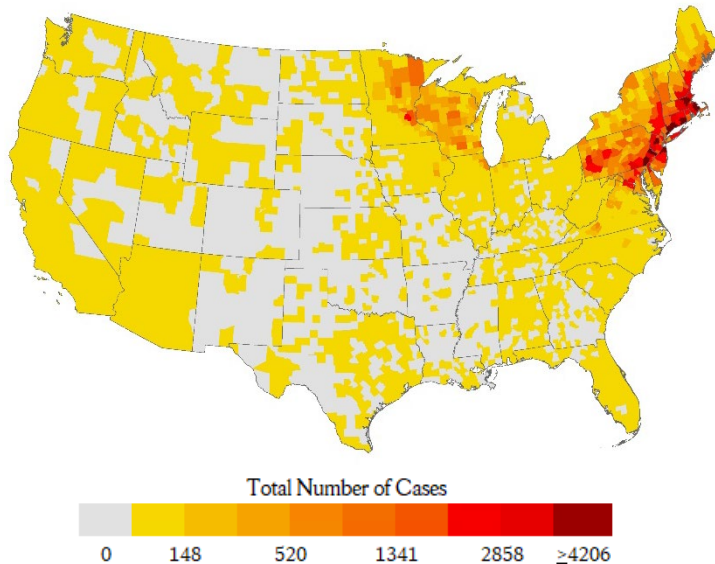


Figure 1: Total Lyme Disease Cases by County, 2009-2018

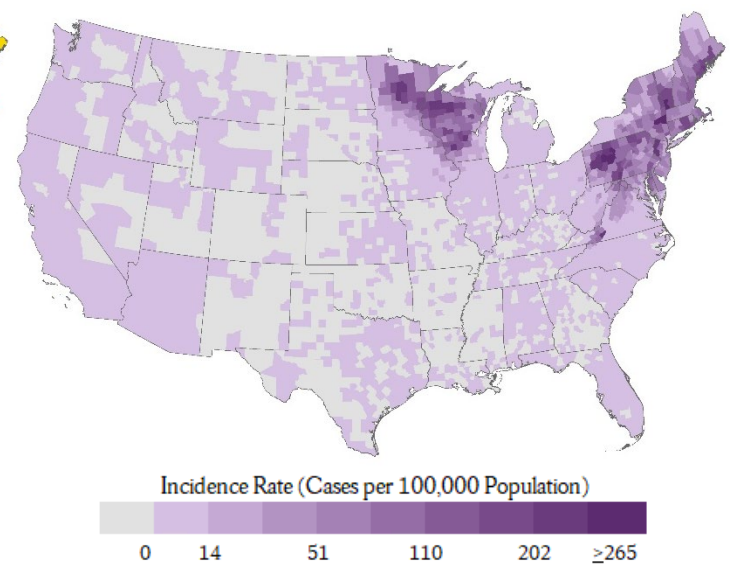


Figure 2: Average Lyme Disease Incidence Rate by County, 2009-2018

Data Sources: U.S. Centers for Disease Control and Prevention, [Lyme Disease Surveillance and Available Data](#).

Maps by Mary E. Helander

About the Author

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