

Testimony of Kaitlyn Goode, Data Visualization Specialist on Behalf of Zachary Adams, Ph.D., Executive Director, Center for Rural Pennsylvania
Tick-Borne Diseases in Pennsylvania
House Republican Policy Committee Hearing: "Ticked Off: Increasing Pennsylvanians' Awareness of Tick-Borne Diseases"
Adams County Penn State Extension, 670 Old Harrisburg Road, Gettysburg, PA 17325 — Wednesday, September 2, 2026, 10:00 a.m.

Thank you, Chairman Rowe and members of the Policy Committee, for the opportunity to provide testimony on behalf of the Center for Rural Pennsylvania regarding the rise of tick-borne diseases in Pennsylvania. And thank you, Representative Wallen for hosting this morning's discussion.

The Center is a bipartisan, bicameral legislative research agency of the General Assembly. The Center's legislative mandates include two broad charges: 1) conducting and sponsoring applied policy research to benefit our rural communities; and 2) maintaining a comprehensive collection of data to assist policymakers in meeting the needs of rural Pennsylvania. Our role is to provide the research and information needed to support informed legislative decision-making.

In July 2026, the Center created a report for Chairman Rowe and the Policy Committee entitled *Lyme Disease in Pennsylvania*, a data brief examining the rise of Lyme disease across the Commonwealth, differences between rural and urban Pennsylvania, geographic hotspots, and the demographic characteristics of reported cases. The following testimony summarizes the key findings of that report.

Reported Lyme Disease Cases Continue to Rise

Lyme disease is a bacterial infection transmitted through the bite of an infected deer tick (*Ixodes scapularis*), commonly known as a blacklegged tick. Deer ticks are widespread throughout the Commonwealth and have been identified in every county. Reported Lyme disease cases in Pennsylvania have increased more than sevenfold between 2000 and 2024, rising from 2,315 cases in 2000 to 16,624 cases in 2024. Preliminary surveillance data indicate that Pennsylvania reported 18,748 cases in 2025 and approximately 8,000 cases through July 2026.

Some of this increase reflects a 2022 change to the national surveillance case definition, which allowed high-incidence states, including Pennsylvania, to report laboratory-confirmed cases without requiring accompanying clinical information. The COVID-19 pandemic also disrupted disease surveillance and reporting in 2020 and 2021, resulting in fewer reported cases than would otherwise have been expected in those years.

Rural Pennsylvania Bears a Disproportionate Burden

In 2024, rural Pennsylvania reported 6,497 Lyme disease cases with an incidence rate of 193 cases per 100,000 residents, compared with 10,123 cases and an incidence rate of 105 cases per 100,000 residents in urban Pennsylvania. Although rural Pennsylvania reports fewer total cases than urban Pennsylvania, it has consistently experienced a higher incidence rate, which may be partially attributable to rural Pennsylvania's smaller population.

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Geographic Hotspots Have Remained Consistent Over Time

The geographic distribution of Lyme disease cases in Pennsylvania has remained relatively consistent over time, with higher case counts concentrated in the southwestern and southeastern regions of the state. In 2024, Allegheny County reported the highest number of cases statewide (2,628), with an incidence rate of 214 cases per 100,000 residents, and the Southwest region reported the highest number of cases among Pennsylvania's regions (6,437).

When measured by incidence rate rather than raw case counts, a different pattern emerges. From 2015 to 2019, all 13 counties with the highest incidence rates were rural and concentrated in the northwestern part of the state, led by Jefferson (460 cases per 100,000) and Clarion (447 cases per 100,000) counties. That same geographic pattern persisted from 2022 to 2024, even as the statewide average annual incidence rate rose from 80 to 107 cases per 100,000 residents.

Pennsylvania Remains Among the Nation's Highest-Incidence States

Lyme disease is most common in the Northeast, Mid-Atlantic, and portions of the Upper Midwest. Between 2010 and 2023, Pennsylvania consistently ranked among the top 10 states for Lyme disease incidence rates. In 2023, Pennsylvania ranked 6th in the nation, with an incidence rate of 128 cases per 100,000 residents, compared with a national incidence rate of 26.7 cases per 100,000 residents.

Demographic Patterns

Lyme disease affects Pennsylvanians across all ages and both sexes, though reported cases vary by demographic characteristics. Over the past 20-plus years, males have accounted for 57 percent of reported Lyme disease cases in Pennsylvania, compared with 43 percent among females. Adults ages 55 and older account for a substantial share of reported cases in both rural (44 percent) and urban (36 percent) Pennsylvania.

Conclusion

Lyme disease remains one of the most commonly reported vector-borne diseases in Pennsylvania, and the Commonwealth has consistently ranked among the states with the highest incidence rates in the nation. Rural Pennsylvania continues to experience a disproportionately high incidence rate relative to its population, and geographic hotspots in places like the northwestern, southwestern, and southeastern regions of the state have remained persistent over time. Continued surveillance of reported cases will remain important for monitoring disease trends and informing public health efforts across the Commonwealth. Thank you for the opportunity to share this data, and I am happy to answer any questions the Committee may have.