LYME DISEASE TICKS ME OFF!
Lyme Disease Surveillance and Outreach
Eau Claire County, Wisconsin

THE PROBLEM
Using the Wisconsin Environmental Public Health Tracking portal, Eau Claire City-County Health Department staff identified an upward trend in Lyme disease cases. In 2014, they had 24 cases. By 2015, they saw 45 cases, then 54 cases in 2016. During a rural tick collection project in 2014, Eau Claire staff found the average infection rate among collected ticks was over 40%. However, staff noticed that community members seemed less concerned about Lyme disease in more urban, residential areas; people seemed to associate Lyme disease with woody, rural parts of the county. Staff wanted to broaden their surveillance efforts to include urban parks and conduct more in-depth outreach activities.

THE HEALTH DEPARTMENT’S SOLUTION
Eau Claire staff used a three-pronged approach to their project: tick drags, a community survey, and enhanced outreach. Staff and two University of Wisconsin–Eau Claire students conducted weekly tick drags—literally dragging white fabric over an area to catch ticks—in both rural and urban parks from July to October 2017 and again from April to July 2018. The staff microbiologist analyzed deer ticks for the bacterium that causes Lyme disease.

While the tick drags were happening, Eau Claire staff developed a survey to assess Lyme disease prevention attitudes and behaviors. They met with community partners to discuss the results of their tick drags and survey. Based on the discussion at those meetings, they developed prevention signage to be placed at 92 locations throughout local parks, trailheads, and nature preserves. In addition to attending four community events to promote the survey and Lyme disease prevention, staff also incorporated Lyme disease prevention information into curriculum for 260 elementary students and the parks and recreation department’s summer class participants. Staff shared Lyme disease prevention information with the community through a press release, two public service announcements, and seven media interviews.

THE PUBLIC HEALTH IMPACT
Of the 209 ticks collected, 33% were positive for the bacterium that causes Lyme disease. Staff learned urban parks were actually more likely than rural parks to have infected ticks. In the urban park, 40% of ticks were positive, compared to 30% in rural parks.

Over 500 residents responded to the community survey. They found that while people generally know about Lyme disease, they weren’t regularly practicing prevention behaviors (e.g., using repellent, tucking pants into socks) in their own yards. The findings from the tick drags and survey informed messaging used in this project and messaging staff will use in future seasons. The outreach efforts elevated the importance of tick prevention behaviors in woody areas, as well as in residents’ own yards.

To help other communities conduct similar projects, Eau Claire staff put all of their strategies, lessons learned, and materials into a Lyme Disease Toolkit.