Tracking ticks in West Virginia using man’s best friend

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by Daniel J. Cameron, MD, MPH

Researchers have conducted numerous animal sentinel studies to monitor the occurrence and spread of Lyme disease. “These studies primarily focused on ticks and associated pathogens collected from domestic dogs because of their ability to produce antibodies to *B. burgdorferi*, attainable travel history information, and frequency of outdoor exposure,” says Hendricks.

Hendricks’ team looked at confirmed Lyme disease cases and ticks submitted by 62 veterinarian practices to the West Virginia State Health Department between 2014-2016. They found, 1,305 *Ixodes Scapularis* ticks were removed from dogs, compared with 363 from cats.

The authors concluded that only dogs were effective sentinel populations for monitoring risks of human exposure to Lyme disease.

West Virginia can no longer consider itself a low incidence state, the authors point out. “States which have high incidence status have had ≥10 confirmed cases of Lyme disease per 100,000 persons for the last three reporting years (CDC, 2017),” writes Hendricks. “In 2017, West Virginia met this criterion based on 2014 to 2016 human surveillance data.”

Tracking ticks in West Virginia using man’s best friend is more important than ever now that West Virginia has lost its status as a low incidence state.

Related Articles:

- How to test for Lyme disease using a tick
- Cats carry all types of ticks and tick-borne diseases
- The risk of a tick bite for pet owners
- Using dogs to map Lyme disease

References:

1. Hendricks B, Mark-Carew M, Conley J. Evaluating the utility of companion animal tick