

Translating disease data into public policy and education: Dr. Todd Hatchette tracks Lyme disease across Nova Scotia

Dr. Todd Hatchette has received a grant from the Capital Health Research Fund to learn more about diseases that animals—from ticks to horses—can pass along to humans. He has a particular interest in Lyme disease, which may be on the rise in Nova Scotia as the population of disease-spreading ticks expands and spreads across the province.

“Although not all black-legged ticks carry the bacteria that causes Lyme disease, the range of these ticks has been reaching into more and more areas of Nova Scotia in recent years,” notes Dr. Hatchette, a medical microbiologist and infectious diseases physician at Capital Health and associate professor at Dalhousie Medical School. “What we don’t yet know is if rates of Lyme disease are following a similar trajectory.”

Dr. Hatchette and his team have analyzed close to 2,000 blood samples from people all across Nova Scotia, testing them for Lyme disease and comparing the geographic distribution of the disease to recent surveys of the expanding tick populations.

“We want a clear picture of the overall prevalence of Lyme disease across the province and where the disease is most concentrated,”

Dr. Hatchette says. “Then we can translate that knowledge into action, with an emphasis on the areas of highest risk.”

Dr. Hatchette collaborates with the Nova Scotia Department of Health and Wellness and the Public Health Agency of Canada, which means the results of his research can be translated into public education programs quickly.

In addition to educating people about how to protect themselves from tick bites and how to safely remove ticks that have latched on,

Dr. Hatchette and his colleagues are working to educate health professionals about how to recognize the early signs of Lyme disease.

“It’s important to identify Lyme disease, as it can be effectively treated with antibiotics,” explains Dr. Hatchette. “If it goes untreated, it can lead to serious, long-term problems with the joints and nervous system.” Apart from a distinctive circular rash, early symptoms of Lyme disease resemble the flu: fever, aches and chills.

“We want to make sure we aren’t mistaking Lyme disease for something else,” he says. “It can be serious, so we need to understand if and how it’s spreading in Nova Scotia and provide professionals and the public with the information they need.”

This research will:

- reveal where in Nova Scotia rates of Lyme disease are highest
- show the relationship between tick populations and rates of Lyme disease
- inform public health officials about what areas of the province require intensive public and professional education programs
- inform the public about their relative risk of contracting Lyme disease