



## Panel Presentation

## Key Takeaways

## What We Heard

**“Tick bite prevention methods are out there, both for you and your pets.”**

—Jacqueline Badcock

### **“Building the capacity of the health care system to better address climate-driven infectious diseases in Canada”**

“It’s imperative that frontline clinicians recognize Lyme disease and treat it appropriately.” —Todd Hatchette

#### **Speakers**

**Dr. Jacqueline Badcock**, New Brunswick Department of Health;

**Dr. Todd Hatchette**, Nova Scotia Health Authority

- The health care system faces increased demands in diagnosing and treating climate-driven vector-borne diseases, most of all **Lyme disease**. With increased tick populations in Canada, we need to ensure we can identify ticks quickly, recognize Lyme symptoms, and offer **early treatment**.
- When a patient presents with a blacklegged (*I. scapularis*) tick bite, providers only have 72 hours to start antibiotic treatment for Lyme. Timing matters—early identification is key to avoiding complications.
- This panel highlighted **two projects** helping the health care system treat tick-borne infections. One brings together human and veterinary diagnostic labs to identify *I. scapularis* ticks more quickly. The other, a toolkit, communicates clear criteria to help providers and patients manage early Lyme.

#### **Jacqueline Badcock**

### **“Climate-driven tick-borne diseases: Building capacity of the New Brunswick health sector”**

- To improve tick surveillance and reduce the turnaround time for identification, the Province of New Brunswick recently created a new diagnostic service for ticks.
- Through this project, human and veterinary diagnostic labs are collaborating to offer province-wide coverage for reliable identification of attached ticks. Labs are trained to identify the species, stage of infection, degree of engorgement, and length of attachment time.
- Quicker identification allows providers to treat tick bites early using antibiotics. Early treatment can only happen when clinical practice guidelines are met: the tick is identified as *I. scapularis*; it is attached for 36 hours or more; the bite happens in an endemic area of the province; and treatment begins within 72 hours.
- Together with partners at the University of New Brunswick, the project is also gathering local ecological data on tick populations, mostly in southern areas of the province.



## What We Heard

### Spotlight on One Health: Tick identification in New Brunswick

- An approach to policy and practice, **One Health** recognizes human health as being closely linked to animal and ecological health. One Health brings together disciplines working locally, nationally and globally.
- New Brunswick's tick identification project is a good example of One Health. Researchers built on existing work by public health and a local veterinary lab to identify rabies. With the current project, hospital and veterinary labs are working together to address a risk affecting people, pets and livestock—tick exposures increasing the risk of vector-borne disease.

### Todd Hachette

#### “Development of early Lyme disease management toolkit”

- The Centre for Effective Practice coordinated two versions of a toolkit for managing early Lyme disease in Nova Scotia. One is for primary health care providers, and the other is for patients and caregivers.
- The toolkit explains how to identify and manage early, localized Lyme infection. With early treatment, fewer patients experience persistent symptoms and need longer courses of antibiotics.
- Transparency, broad engagement and clear content were key to developing the toolkit. The Clinical Working Group had members from primary care, public health, infectious disease, emergency medicine, pathology and nursing, along with a patient with lived experience.
- To date, the toolkit has had over 9,000 downloads. Over 90% of surveyed providers agreed or strongly agreed it is a valuable resource.