



**Canadian Tick-
Borne Diseases
Summit: What We
Heard Report**

February 2, 2026

BACKGROUND

The Canadian Institutes of Health Research (CIHR), under the scientific leadership of the Institute of Infection and Immunity, and the Institute of Musculoskeletal Health and Arthritis (IMHA) in partnership with the Public Health Agency of Canada (PHAC), awarded \$4M in funding to the Canadian Lyme Disease Research Network (CLyDRN) in September 2018, and an additional \$1M (extension funding) in July 2023. Over the years, the network evolved and TickNet Canada was formed in 2023. TickNet Canada is an interdisciplinary national research network of scientists, policymakers, health care providers, and citizens established to produce scientific and living evidence to guide policies and programs to mitigate the emerging threat of tick-borne diseases driven by climate change, affecting the health of all Canadians. To help build engagement and networking within and across disciplines and to facilitate collaborations and partnerships, TickNet Canada held three (3) scientific symposia: 2023 (Toronto, ON), 2024 (Nanaimo, BC), and 2026 (Gatineau, QC). In association with the final symposium in Gatineau, a Summit was held with federal and provincial government representatives, scientists, healthcare/public health/allied health professionals and patient partners to help identify future research priorities for addressing tick-borne diseases in Canada.

INTRODUCTION

The Canadian Tick-borne Diseases Summit was held on February 2, 2026, at the Canadian Museum of History (Gatineau, QC); attended by 43 individuals from 24 institutions (see Table 1).

Agriculture and Agri-Food Canada: Dr. Shaun Dergousoff	Dalhousie University: Dr. Elizabeth Stringer	Public Health Agency of Canada: Drs. Catherine Bouchard, Annie-Claude Bourgeois, Nick Ogden & Kerry Robinson
Association of Medical Microbiology and Infectious Disease Canada: Riccarda Galioto & Dr. Yves Longtin	Environment and Climate Change Canada: Dr. Jennifer Provencher	Queen's University: Dr. Rob Colautti
BC Centre for Disease Control / University of British Columbia: Dr. Erin Fraser, Stefan Iwasawa, Dr. Muhammad Morshed & Dr. Anya Smith	International Development Research Centre: Natacha Lecours & Dr. David O'Brien	SickKids Hospital: Dr. Kescha Kazmi
Canadian Animal Health Surveillance System / Animal Health Canada: Dr. Marianne Parent	Johns Hopkins University: Dr. John Aucott	University of Manitoba: Dr. Kateryn Rochon
Canadian Food Inspection Agency: Dr. Jasmine Dhillon	Lakehead University: Dr. Clara Juando-Prats	Université de Montréal: Drs. Cécile Aenishaenslin, Tiff-Annie Kenney, Patrick Leighton & Jean-Philippe Rocheleau
Children's Hospital of Eastern Ontario: Drs. Jason Brophy & Stephanie Zahradnik	NHS Scotland, Scottish Microbiology Reference Laboratory: Dr. Sally Mavin	University of Ottawa: Dr. Manisha Kulkarni
Canadian Institutes of Health Research: Drs. Joseph Cavallari, Charu Kaushic, Stephanie Robertson & Rae Yeung	Ontario Ministry of Health: Dr. Kieran Moore	University of Saskatchewan: Dr. Maarten Voordouw
CLyDRN Patient Partners: Cynthia Caron Thorburn, Dena Palamedes, Tamara Rader & Pamela Scott-Crace	Ottawa Public Health: Drs. Emil Prikryl & Jacqueline Willmore	University of Toronto: Dr. Janet Parsons

Table 1: Summit Attendees

The focus of the Summit was three-fold:

- A panel discussion on the current horizon of what are the future priorities for addressing tick-borne diseases in Canada, the role of various organizations in contributing to these priorities, and the role of the research community in advancing the identified priorities.
- An overview of the history of the CLyDRN and TickNet Canada (“Network”), high-level outcomes of the Network (e.g., achievements of pillars & committees), and highlights from the Network’s impact evaluation.
- A round table discussion with three (3) break-out groups: Clinical-Biomedical; Population & Public Health-Health Systems & Policy; Ecological, Climate Change & One Health. Each group reviewed the priorities identified during the panel discussion and discussed how the research community could advance these priority areas within their assigned domain.

HIGHLIGHTS

The panel, moderated by Dr. Kieran Moore, included four panelists: Drs. Charu Kaushic, Yves Longtin, Nick Ogden, and Kerry Robinson. The panel discussion focused on future high-level and specific priorities related to policy, program development and implementation, or other actions relevant to addressing tick-borne diseases in Canada, which could be advanced through research initiatives. Some of the priorities identified included: modernizing and strengthening tick-borne diseases surveillance; strengthening partnerships and One Health collaborations; understanding emerging and climate change-driven risks; translating emerging evidence into audience-specific education, awareness, surveillance, guidelines, and policy; and development of guidelines, best practices, and practical tools for front-line clinicians (e.g., primary care, emergency medicine, paediatrics, infectious diseases, microbiology) for tick exposure management, diagnosis and treatment of tick-borne diseases and management of post-infectious syndromes.

A comprehensive evaluation of the CLyDRN’s activities since its inception and evolution into TickNet Canada (2018-2025) was completed by Shift HEALTH in the Fall 2025. The evaluation was guided by a tailored framework, structured around four (4) key enablers: research and training, knowledge mobilization, collaboration, and patient engagement. As part of the summit, an overview of the evaluation report was presented, highlighting key contributions of the Network to the tick-borne disease research ecosystem, providing insights to shape future priorities and initiatives. See Appendix A for a summary of the report.

As a result of the break-out group discussion, a word cloud image of the summary themes was created (see Figure 1).

WHERE TO GO NEXT

Tick-borne disease research in Canada is urgently needed due to the increasing risk of tick-borne illnesses which can lead to serious health complications for Canadians. The number and geographical distribution of tick species and the incidence of tick-borne diseases have increased dramatically across Canada over the past 15 years, driven by ongoing climate change. Sustained research in this area is essential to develop effective strategies, improve diagnostics and treatments, and enhance public education and awareness. Federal and provincial/territorial funding agencies are encouraged to continue to support research in this crucial area for the health of Canadians, with the priorities identified during the 2026 Canadian Tick-Borne Disease Summit providing a strategic focus to shape future initiatives at all levels of government.



APPENDIX A

Summary of Network Impact Evaluation Report

Research and Training: CLyDRN has elevated the profile, productivity and potential of Canada's TBD research community by strengthening national coordination, enhancing surveillance and training the next gen of TBD researchers



Advance TBD Knowledge Base

CLyDRN has advanced **TBD research in Canada**, generating critical insights in epidemiology, risk factors, diagnosis, and clinical outcomes – yielding over 146 publications and \$17M in funding.



Build National Sources of TBD Data

As an example, CLyDRN supported development of TickTOOL, a national tick prevention resource that guides Canadians on **practical ways to prevent and manage tick bites**, while collecting region-specific real world data on tick bites to inform evidence-based prevention strategies.



Train the Next-Gen of Experts

CLyDRN played a pivotal role in **strengthening Canada's research capacity in TBDs** by offering **comprehensive training, mentorship, networking and leadership opportunities** to students and early career researchers.



Expand Surveillance & Applied Research

As CLyDRN's flagship initiative, Canadian Lyme Sentinel Network (CaLSeN) **unified jurisdictions to implement standardized tick surveillance** in all 10 provinces across Canada, producing timely, high-quality data through expanded sentinel sites and coordinated national efforts.

Knowledge Mobilization: CLyDRN transformed research into action by connecting diverse stakeholders, amplifying public awareness of the growing TBD threat, and informing evidence-based public health decisions.



Raise Public Awareness

CLyDRN members significantly elevated public awareness of the rising threat of TBDs at the local, national and international levels – contributing to **~275 interviews / articles** and organizing **~53 online webinars**.



Convene Diverse Stakeholders

As a key case study, CLyDRN's annual symposium, TickNet Canada Scientific Symposium, provided a platform for TBD knowledge exchange, **uniting trainees, patient partners, research staff, scientists and public health professionals** from across 5 countries, **~67 institutions** and **>75 research areas**.



Inform Public Health Policies & Support Evidence Informed Care

The TBD research conducted by CLyDRN members has directly shaped evidence-based public health guidelines and policy. The network's tick surveillance data underpins **annual risk maps** produced by public health organizations, while their research has been integrated into **clinical practice guidelines** ([Center for Effective Practice in Ontario](#)) and recognized in the **Government of Canada's Climate Change Action Plan**.

Collaboration: CLyDRN has united >400 stakeholders across sectors, disciplines and regions to advance a pan-Canadian, One Health approach to TBD research



Establish TBD Research Community

Since 2018, CLyDRN has brought together >300 members across numerous disciplines, sectors, and geographies to form an inclusive, coordinated TBD research community focused on driving patient-centered, intervention-driven innovations.



Build Connections Across Disciplines

CLyDRN brought together microbiologists, social scientists, clinicians, and other experts, advancing a transdisciplinary research approach that integrates human, animal and environmental research alongside lived experience to deepen understanding of TBDs.



Foster Cross-Sector Partnerships

Through initiatives like CaLSeN and The Healthy Cities Projects, CLyDRN united federal and provincial health authorities, genomic researchers, veterinarians, environmental agencies, and community partners, breaking down silos in TBD surveillance, risk mapping, and emerging disease response across Canada.



Connect Regions & Key Communities

CLyDRN has built a network that spans the country and reaches key populations—such as Indigenous communities—at high risk of TBD so that TBD research is coordinated and informed by experts wherever they reside.

Patient Engagement: CLyDRN set a new standard for patient engagement in TBD research by embedding PWLE voices in governance, research and other network activities



Engage Patients in NET Governance

CLyDRN integrated PWLE voices throughout network governance, granting them decision-making authority and oversight roles on the executive committee, establishing a meaningful model of patient engagement rarely seen elsewhere.



Empower PWLE as Research Partners

CLyDRN redefined the TBD research paradigm to yield more impactful research outcomes by engaging patient partners as co-researchers and positioning lived experience as essential data to guide research direction.



Measure & Report on PE Transparently

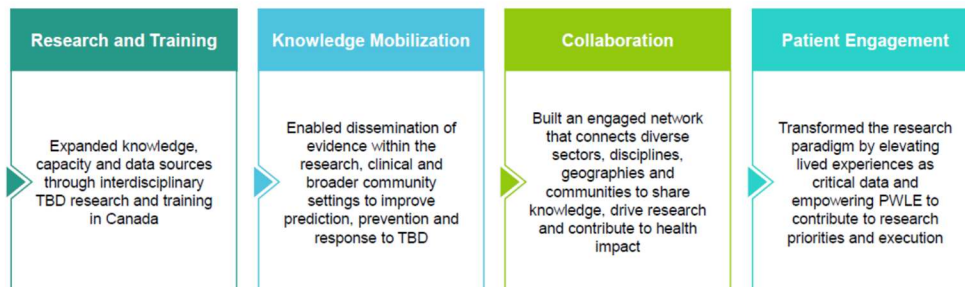
PWLE led implementation of the GRIPP2-SF checklist, helping CLyDRN initiate a clear, structured and transparent process for researchers to report on patient and public involvement in their work.



Foster Trust and Inclusion

CLyDRN provided the environment for strong relationships to be built between researchers and PWLE, transforming a historically distrustful space into one of open collaboration.

CLyDRN has expanded the TBD knowledge base, established an integrated interdisciplinary network and enabled meaningful engagement with PWLE, raising the profile and impact of TBD research in Canada



Summary of Break-out Group Discussions

1) Surveillance & Data Modernization

- **Integration & interoperability:** integrate/align surveillance systems; use existing data better.
- **Standards & quality:** standardization, consistent reporting, data quality.
- **Timeliness & responsiveness:** faster detection and action.
- **Gaps & expansion:** identify/prioritize gaps; expand surveillance (ticks, environments, regions).
- **Transparency & sharing:** better data sharing across partners; community-informed/community-led inputs.

Representative items:

Better integration and use of existing data; Data quality, timeliness, and standardization; Standardization and consistency of reporting; Improved timeliness and responsiveness; Identifying and addressing gaps; Expanded surveillance; Better data sharing and transparency; Community-led surveillance.

2) Communication, Education & Behaviour Change

- **Public education & outreach:** clear messaging about risks and prevention.
- **Risk perception & context:** the challenge of misperception/misinformation; importance of context; targeted messaging.
- **Knowledge-to-action:** behaviour change and “how to”.
- **Evaluation:** measure the effectiveness of awareness/communications.

Representative items:

Public education and awareness; Improving clarity/accessibility of public health communication; Misunderstanding/misperception of risks; Importance of context; Reduce misinformation; Knowledge-to-action behaviour change; Targeted messaging; Evaluation of awareness and communication strategies; Education and outreach gaps.

3) Collaboration, Governance & One Health

- **Cross-sector collaboration:** human, animal, environmental; breaking silos.
- **Roles, mandates & governance:** clarity of responsibilities; decision structures.
- **Sustained coordination:** shared goals, ongoing channels, joint action, outbreak coordination.
- **System-level infrastructure:** interoperability and coordinated platforms.

Representative items:

Cross-sector collaboration and communication; One Health/cross-sector collaboration; Clear roles and responsibilities; Governance and decision-making structures; Data sharing and interoperability; Coordinated and joint action across partners; Better coordination for emergency/outbreak response; Reducing silos and increasing integration.

4) Diagnostics & Laboratory Strengthening

- **Tools & performance:** improve diagnostic tools; accuracy/validation; access and availability.
- **Standards & use:** standardized protocols and interpretation; clinician education on limitations.
- **Vaccine uncertainty:** feasibility questions.

Representative items:

Improving diagnostic tools and technologies; Increasing accessibility and availability of testing; Standardizing diagnostic protocols and interpretation; Educating clinicians about diagnostic use/limitations; Research needs on diagnostic accuracy/performance; Laboratory testing capacity and barriers; Questions around vaccine feasibility.

5) Clinical Guidance & Long-Term Care

- **Guidelines & consistency:** fill gaps; standardize clinical practice.
- **Pathways:** clearer diagnostics-to-treatment pathways; referral and follow-up.

- **Post-infection care:** chronic/post-treatment Lyme disease and long-term management.
- **Best-practice dissemination:** provider-facing clinical guidance.

Representative items:

Inconsistent or missing clinical guidelines; Need for evidence-based treatment guidance; Need for clearer diagnostics-to-treatment pathways; Support for post-infection/chronic management; Clinical best-practice dissemination for providers; Research on post-treatment Lyme disease and long-term outcomes.

6) Prevention, Policy & Community Programs

- **Prevention strategies:** public education; setting-specific guidance; environmental/engineering controls.
- **Policy & regulation:** regulatory measures to support prevention.
- **High-risk contexts:** transmission pathways, exposure routes, high-risk settings/populations.
- **Community engagement:** community-based outreach and prevention programs.

Representative items:

Public education and clear communication about risk and prevention; Environmental and engineering controls; Policy and regulatory measures; Setting-specific guidelines; Cross-sector collaboration for prevention; Transmission pathways and exposure routes; Identification of high-risk settings and populations; Community-based outreach and engagement.