Foresight for Canadian Animal Health

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Healthy Animals | Healthy Future 2025

From foresight to insight to action > applying foresight to Animal Health Emergency Management in Canada

- Shared Vision
- Framework
- Road Map
- Tools & Applications
Animal Disease in the 21st Century

What’s next?

We need a future-ready emergency management system
We can't solve problems by using the same kind of thinking we used when we created them.
What is Foresight?

A participative, systematic approach to creating shared long term vision to inform short-term decision-making processes.

(EU Foresight Network)
Using Foresight

How does Foresight work?

• systematic methods to help consider a range of plausible futures, not just one...
• think in new ways
• gain insight
• build understanding

Foresight does not predict

  – but it does help to identify plausible links between current events, actions or trends and potential long-term outcomes

Supports future-focused thinking to inform today’s decision-making
Focal Question:

- Looking out to 2025 and beyond:

How do we build a more effective, anticipatory and robust Animal Health Emergency Management (AHEM) system in Canada?
Fore-CAN: 2008-2011

Objectives:

1. Animal health community learns foresight methods—think at a “system” level, develop a shared vision;

2. Insight leads to action in aligning strategies;

2. Knowledge is transferred, planning “culture” is changed.
Fore-CAN Partners

Government

- Agriculture and Agri-Food Canada
- Canadian Food Inspection Agency
- Health Canada
- Public Health Agency of Canada

Vet Colleges

Canada’s Veterinary Colleges

Industry

- Dairy Farmers of Canada
- TDV Global Inc.
Fore-CAN Participants

The Fore-CAN initiative engaged a community of stakeholders from widely diverse backgrounds, including:

- Academics
- Consumers
- Cultural Groups
- Farmers
- Futurists
- Government representatives
- Industry representatives
- Legal experts
- Policy experts
- Scientists
- Students
- Wildlife experts

- 40 organizations
- Over 300 participants
Fore-CAN: Applying foresight

1. Scanning
2. Future Scenarios
3. System Mapping
4. Integration
5. Validation

Shared Vision
Animal health is recognized as a key pillar in the preservation and promotion of Canada’s health and economic prosperity.

In keeping with that perspective, Canada’s animal health emergency management system is anticipatory, adaptable and seamlessly integrated with human, economic and ecosystem health systems.
Supporting the Vision
The 5 Key Capability Areas in the System

1. Organization & Decision-Making
   • Collaborative
   • Multi-jurisdictional
   • Multi-disciplinary
   • Rapid
   • Rehearsed
   • Scalable

2. Science & Technology
   • Applied
   • Coordinated
   • Current
   • Expanded
   • Staffed

3. Expertise & Personnel
   • Certified
   • Educated
   • Exercised
   • Interoperable
   • Skilled
   • Surge-Capable

4. Policy, Law & Regulation
   • Best Practices
   • Consistent
   • Consultative
   • Engaged
   • Internationally
   • Relevant

5. Information & Data Sharing
   • Accessible
   • Consistent
   • Integrated
   • Modern
   • Trusted
Fore-CAN:
Integrated Animal Health Risk Management Framework.....
Fore-CAN: Roadmap to 2025

- Tool to help address future capability requirements at the system level
- Aligns key initiatives to capabilities
- Outcome-based (2015, 2020, 2025)
- Identifies gaps
- Stimulates innovation, collaboration
Fore-CAN Assessment Tool (FCAT)
Applied in a participative setting.....

LEVEL 1: Assessment of Four Health Dimensions

Drivers and Impacts

LEVEL 2: Assessment of Five Risk Management Action Areas

Where are we vulnerable?

LEVEL 3: Assessment of Five Capability Areas

Why are we vulnerable (gaps)?
Fore-CAN: Current Applications and Initiatives

1. Long Term Strategic Plan and Research Strategy, (CFIA)
2. National Farmed Animal Health and Welfare Council (Canada)
   - Surveillance
   - Anticipation and intelligence Initiative (with CFIA)
3. Science-Policy Interface on Emerging Infectious Disease (Canadian Federal Science Departments)
4. Global Foresight Hub (Global Forum on Agricultural Research)
   - GCARD 2012
5. Research Agenda for Global Strategic Alliances for the Coordination of Research on the Major Infectious Diseases of Animals and Zoonoses (EU STAR-IDAZ)
Fore-CAN: Insights on the future system design

- multi-disciplinary, multi-jurisdictional;
- intelligence analysis, anticipation and prevention;
- lessons-learned and renewal post-event;
- new skills (e.g. science-policy “integrators”);
- data and information sharing
Fore-CAN: Lessons learned about foresight

• helps build bridges, develop vision, assess issues
• supports “system thinking”;  
• informs strategic planning and change management;  
• must be linked to planning or policy agenda;  
• communication is critical;  
• senior management must champion.
Questions?
Fore-CAN: Integrated Animal Health Risk Management Framework.....

- Healthy Canadians
- Healthy Environment
- Economic Growth
- Prosperous Canada
Healthy Animals, Healthy Future
A Shared Vision for the AHEM System of 2025

- Healthy Canadians
- Healthy Environment

- Economic Growth
- Prosperous Canada
We can't solve problems by using the same kind of thinking we used when we created them.
Fore-CAN
Integrated Animal Health Risk Management Framework
Tomorrow?
Fore-CAN:
Shaping the shared vision....

.... and designing its foundation.
Fore-CAN:
Offering the right approach for a changing world
Fore-CAN: Tools to support “systems thinking”

Fore-CAN Assessment Tool (FCAT)

Helping the animal health community manage change, risk & uncertainty by applying systems thinking to assessment of issues
Fore-CAN Overview

1. Foresight Methods
   Learning & Community Building
2. Shared Vision
   Integrated Health Management System (complements “One Health”)
3. Framework & Roadmap
   Tools
4. Knowledge Transfer & Impact
   Practical Applications Communication
   Change thinking
   Change behaviour

Engagement of Fore-CAN Network

2008

2011
Fore-CAN: Scanning Exercise

Animal Health Emergency Management

Driving Forces

1. Scanning
2. Future Scenarios
3. System Mapping

Animal Health Emergency Management

Nature of Infectious Diseases
Pathogen Evolution
Production System Stresses
Leadership

Societal Values

Global Economics & Trade
Demographics & Food Demand
Stakeholder Influence
Media & Communications
Technology
Environmental Stresses
Fore-CAN: Future scenarios exercise
Fore-CAN: Systems Mapping Exercise

1. Scanning

2. Future Scenarios

3. System Mapping

Segment of the Preparedness Subsystem Map

- Develop emergency plans and protocols
- Employ early warning system
- Conduct research
- Multi-jurisdictional/stakeholder governance
- Deliver education and training

Identifies need for

Refines

Drives

Focuses

Defines

Provides data to

Creates science-based foundation for

Defines

Defines capabilities for
Fore-CAN:
Preliminary Impact Analysis

**Top Five Impacts**
1. Developing connections and networks
2. Integrate Stakeholders into Foresight
3. Develop and employ new methodologies and approaches
4. Seeding opportunity and innovation by creating strategic direction
5. Alignment of thinking across sectors

**Lowest Five Impacts (require further development)**
1. Prioritizing Resources
2. Focus on a clearly defined client
3. Media attraction and messaging
4. Direct links to senior policy-makers
5. Training and skills development