Exchange of Expertise and Transfer of Knowledge – the Canadian Experience

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Second Global Conference of OIE Reference Laboratories and Collaborating Centres

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Canadian Food Inspection Agency - Overview

• Dedicated to safeguarding food, animals and plants, which enhances the health and well-being of Canada’s people, environment and economy

• As Canada’s largest science-based regulatory Agency, relies on sound science as the basis for its program design and regulatory decision-making
Science Branch Organizational Structure

Martine Dubuc
Vice-President

Sylvye Des Marchais
A/ED
Food Safety Science

Cameron Duff
A/ED
Plant Health Science

Primal Silva
ED
Animal Health Science

Catherine Hanson
Associate VP
Science and Business Integration

Keith Campbell
ED
Western Lab Network

Cyril Lutze-Wallace
A/ED
Ontario Lab Network

Sylvye Des Marchais
ED
Quebec Lab Network

Susan Shaw
ED
Atlantic Lab Network

Soren Alexandersen
Director
NCFAD

5 regional labs:
Burnaby
Sidney
Lethbridge
Calgary
Saskatoon

3 regional labs:
Carling (OLC)
Fallowfield (OLF)
Scarborough

2 regional labs:
Longueuil
St-Hyacinthe

3 regional labs:
Charlottetown
Dartmouth
St.John’s
Strategic Themes to Drive Agency Science

- Animal Health
  - Create capability to deal with future challenges (foresight & scanning)
  - Respond to changing demands through integrated science advice
  - Build new partnerships & strategic alliances domestically and internationally
  - Re-align and streamline CFIA science functions for improved delivery
  - Develop enabling framework (HR, IM/IT, lab infrastructure, financial)
  - Measure and demonstrate success
  - Effectively communicate science outcomes internally & externally

- Plant Health

- Food Safety
Information Exchange and Knowledge Transfer in Canada

Domestically, the network of CFIA animal health laboratories is linked within larger frameworks

- CAHSN links provincial laboratories and veterinary college laboratories
Canada’s OIE Reference Laboratories and Collaborating Centres

- CFIA Lethbridge Laboratory
- CFIA Ottawa Laboratory
- CFIA NCFAD Winnipeg
- CFIA Saskatoon Laboratory

- Trichinellosis (A. Gajadhar)
- Avian Influenza (J. Pasick)
- Classical Swine Fever (J. Pasick)
- Collaborating Centre for Food-borne Zoonotic Parasites (A. Gajadhar)

- BSE (Stefanie Czub)
- Anthrax (E.J. Golsteyn-Thomas)
- Brucellosis (K. Nielsen)
- Rabies (A. Wandeler)
- Chronic wasting disease and Scrapie (A. Balachandran)
- Infection with Mikrocytos mackini (J. Bower)
- Infectious Salmon Anemia (K. Kibenge)
- Salmonellosis (C. Poppe)

- E. Coli (J.M Fairbrother)
- Collaborating Centre for Wildlife Disease Surveillance and Monitoring, Epidemiology and management (T. Leighton)
- WCVN Saskatoon SK.
- DFO Nanaimo, BC
- AVC Charlottetown PEI
- PHAC Guelph Ont.
Recent CFIA-International Collaborative Projects

Twinning Program:
Avian Influenza and
NDV - Colombia
Exploring New Models - Network of Networks and Co-location

Objectives and Benefits:

- Build “adaptive capacity” to deal with increasingly complex problems
- Seek partnerships to leverage collective capabilities (expertise) and increase capacity
- Facilitated
  - Transfer of technologies, methodologies and proficiency assessments
  - Epidemiological support
  - Risk assessments
- Move toward a ‘One World – One Health’ approach
Co-location - National Centre for Foreign Animal Disease

- Co-located with the Public Health Agency of Canada’s National Microbiology Laboratory in Winnipeg, at the Canadian Science Centre for Human and Animal Health
- H1N1 (pigs and birds)
- Principles of preparedness, early detection, response and recovery
- Quick confirmation of disease
- Transfer of protocols and reagents to Canadian network laboratories and international partners within a few short weeks
Towards a Network of Networks

CAHSN

OIE Reference Labs and Collaborating Centres

CFIA international collaborative projects

The Future - Links to Public Health Networks

80+ International collaborations

Canadian Food Inspection Agency
Agence canadienne d'inspection des aliments
Network of Networks – The Future a “One Health Approach”
Future Challenges

- Preservation of technical expertise in existing disciplines in the face of demographic realities: increased retirements and the search for talent
- Proactively and effectively address emerging systemic risks and disease trends which are global in nature and thus require international solutions
- Increasing complexity of scientific issues
- The trend towards multidisciplinary science in emerging fields and the need for multidisciplinary approaches to solve complex problems
  - Veterinary
  - Entomology
  - Public Health
  - Environment
Opportunities

- Convergence and complexity are driving interdisciplinary cross-sectoral collaboration in support of building international networks of laboratories, competencies and scientific communities

- Growing understanding globally of the inter-relationships among policy priorities: health, security, environment and economic prosperity

- Further promote transfer of technologies, expertise and knowledge globally

- Twinning Laboratory Program
Exchange of Expertise and Transfer of Knowledge - The Canadian Experience

Thank You

Merci

Gracias