

# *Connections in Practice: Applying a One Health Approach*

**National Farmed Animal Health and Welfare Council Forum**

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PROTECTING CANADIANS FROM ILLNESS



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## Overview

- The Public Health Agency, Farmed Animals and Public Health
- Tackling Public Health Issues: The Public Health Network and One Health
- Connections in Practice: Applying a One Health Approach – Case Studies

## Farmed Animals and Public Health

- Exposure to diseases through animals
- High risk of zoonoses from livelihoods and diet
- Foodborne diseases, animal hormones, antimicrobial resistance



## Zoonoses: The Public Health Agency's role

- Public Health is committed to **engaging partners** to monitor, prevent, control and respond to zoonoses events
- The Agency conducts a number of **surveillance activities that involve the agro-environment or livestock** and/or are linked to surveillance activities designed to control disease in livestock
- The Agency is involved in a number of **prospective initiatives** with relevance to **surveillance in farmed animals**
- The Agency is involved in a number of **prospective initiatives** with relevance to **surveillance in wildlife**

# Everything is Connected: Public Health, Animal Health, Rural Health and the Environment

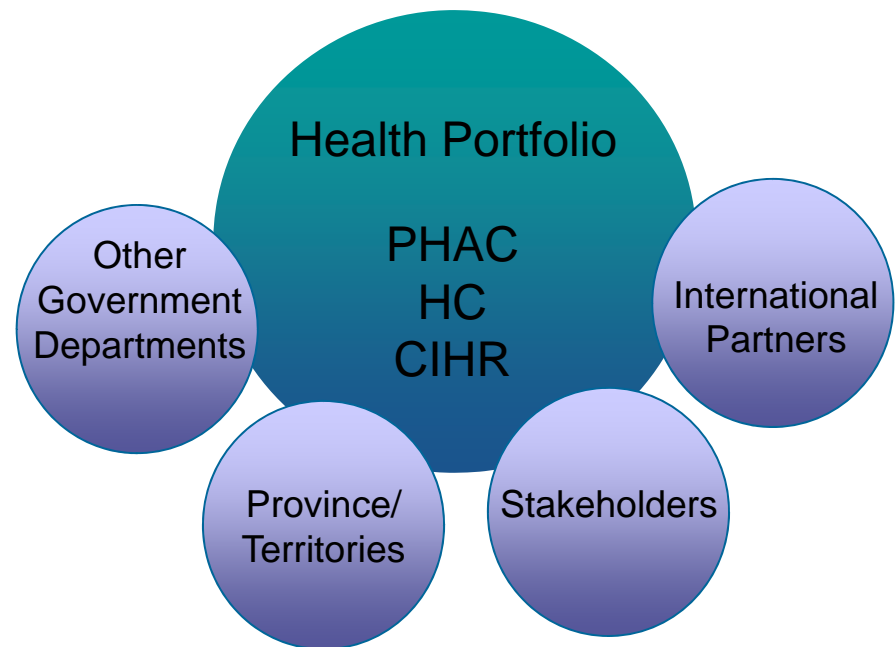
**Outside of zoonotic infectious diseases, the rural environment poses unique health challenges:**

- Access to services
- Social determinants of health – differences by region in personal incomes, educational attainment and unemployment rates
- Occupational health and safety
- Elevated prevalence of smoking and obesity
- Different regions, different sectors = different challenges

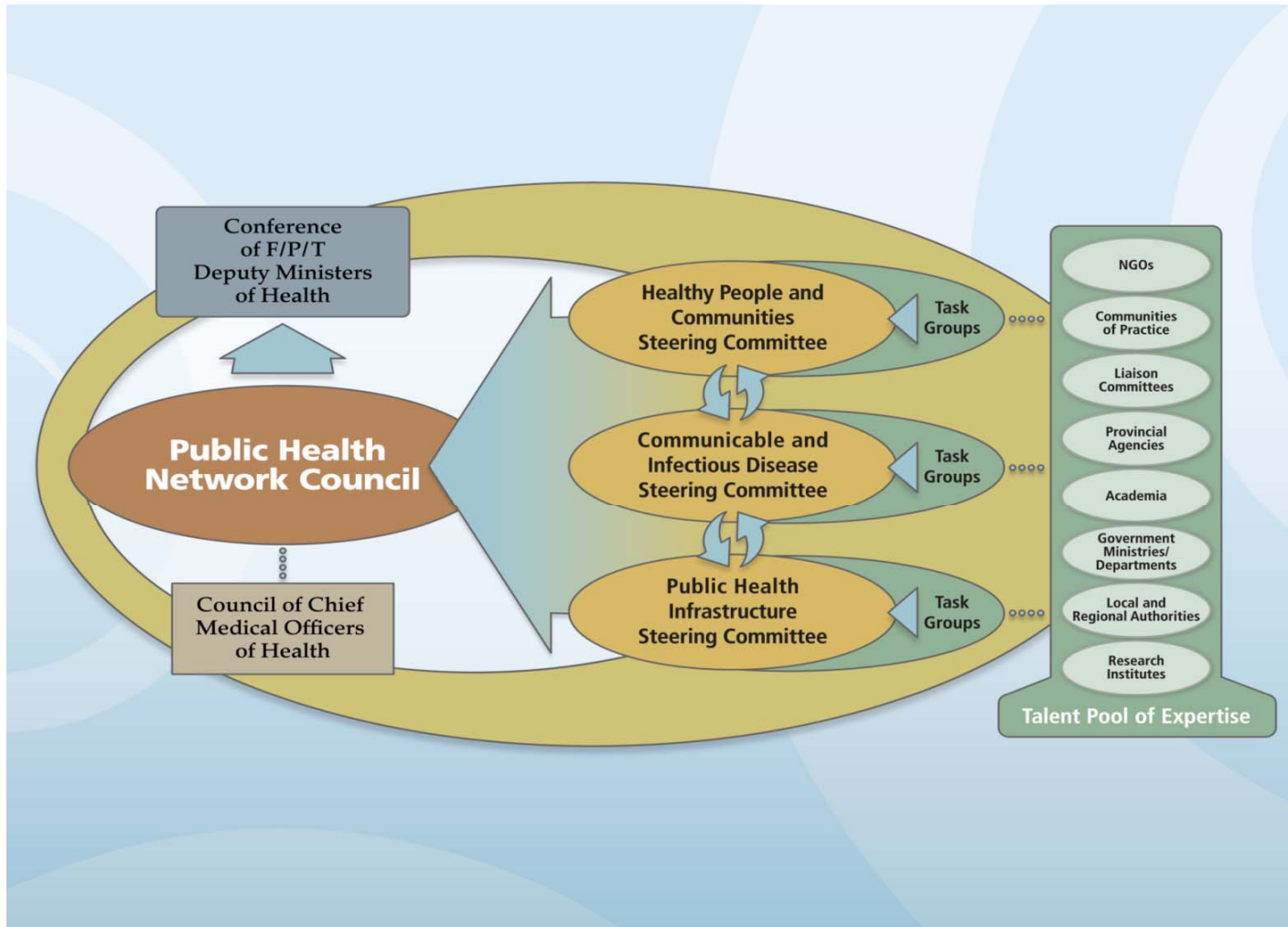


## The Public Health Agency of Canada (PHAC)

- Like NFAHWC – The Agency is evidence-based, seeking integrated, coordinated approaches to these public health challenges
- Recognized need to be working in interest of public good, regardless of borders or jurisdictions
- Embracing basic notion that public health is all about the *power of the collective*



# Tackling Public Health Issues: the Public Health Network

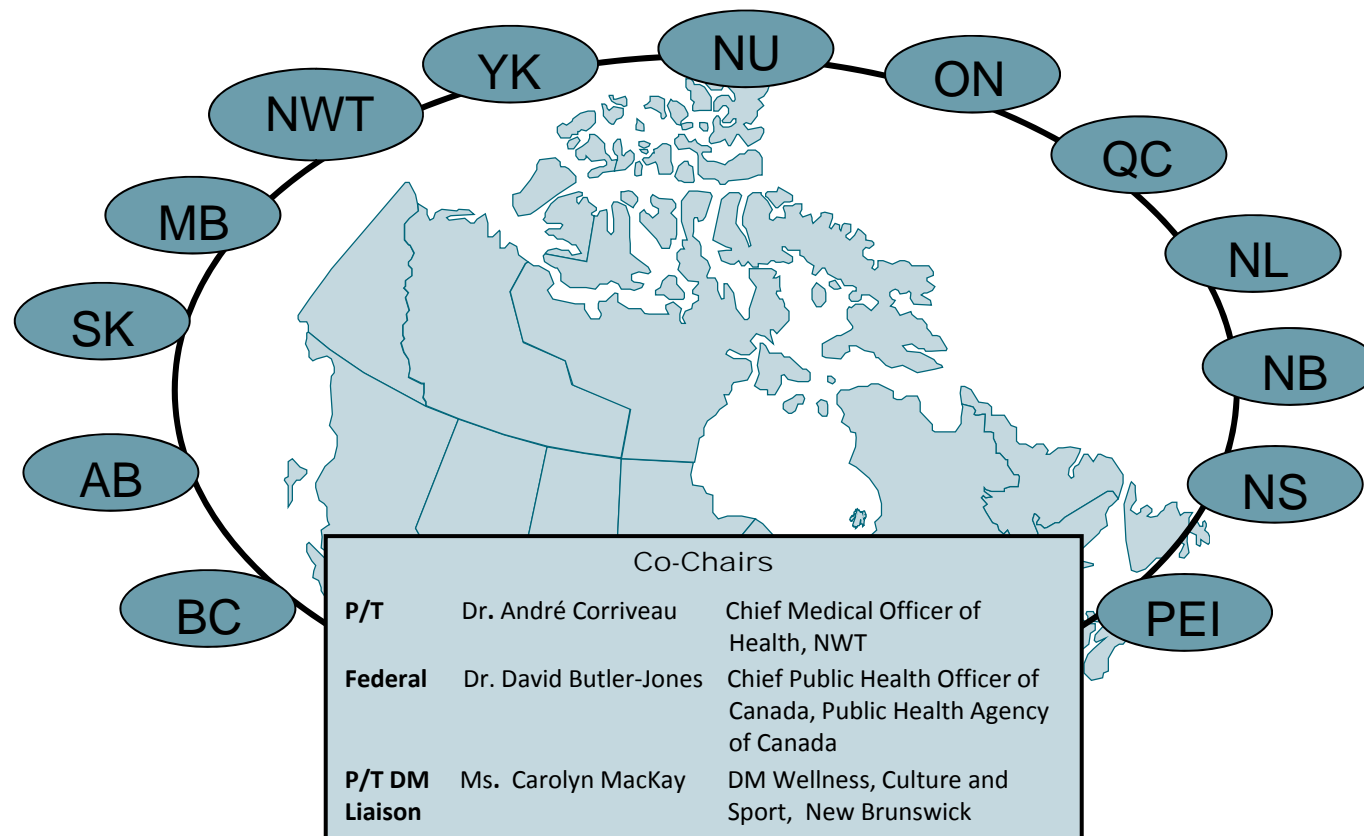


## Consists of:

- Public Health Network Council
- Council of Chief Medical Officers of Health
- 3 F/P/T Steering Committees
- Task Groups
- Talent Pool of Expertise

# Tackling Public Health Issues: The Public Health Network Council

- 17 member Council, including the CPHO, P/T MOHs and other senior government officials responsible for public health





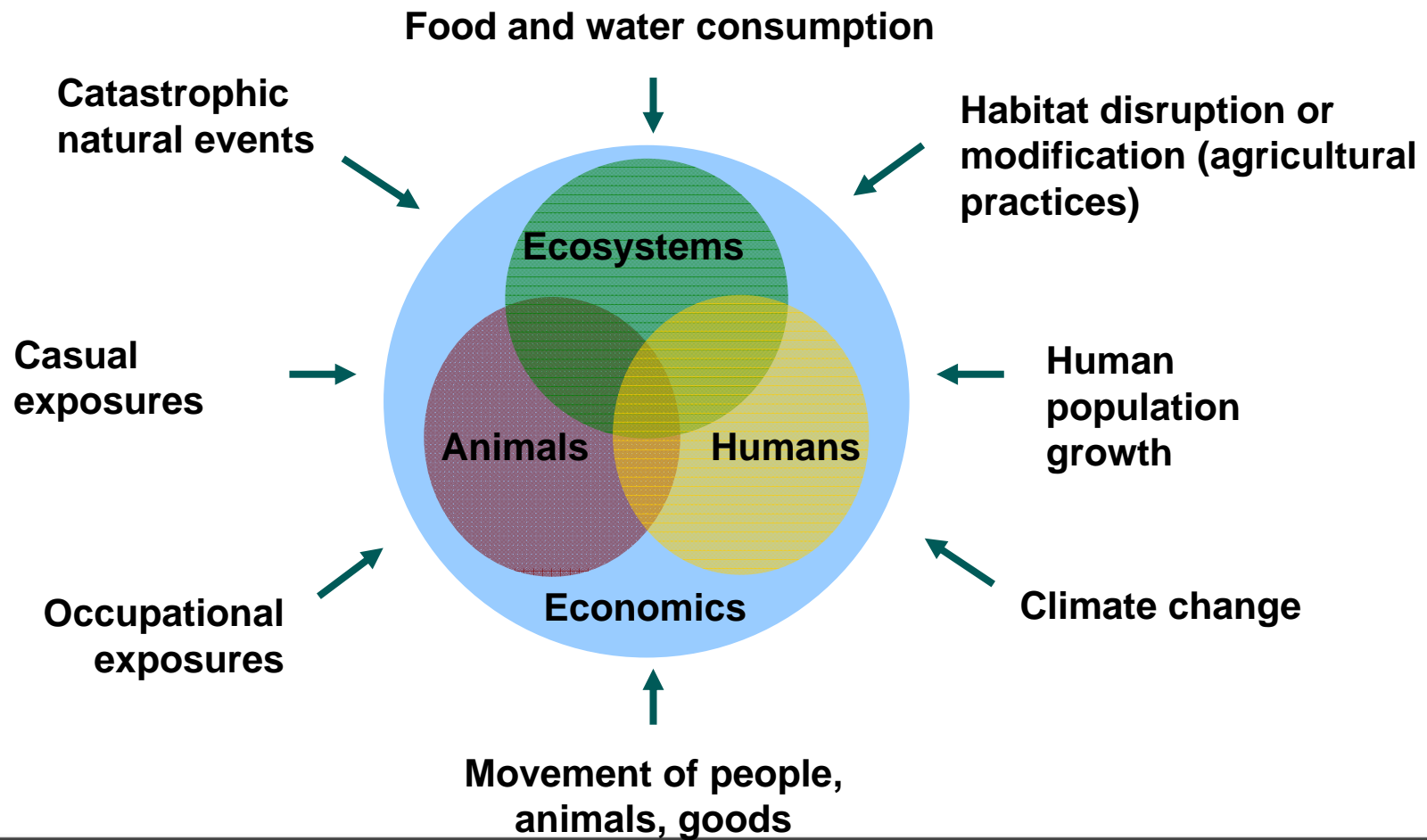
# The Importance of Connectivity: The Public Health Network in Action

- **Response to H1N1**
  - » E.g. Vaccine and antiviral purchase; Networks in place when outbreak struck; Guideline development; FPT communication network
- **Healthy Living Initiatives**
  - » E.g. Declaration by F/P/T Ministers on the importance of Prevention and Promotion; Childhood Obesity Framework; Commitment to sharing best practices on Healthy Living; Reported on findings of the national dialogue Our Health Our Future

## Tackling Public Health Issues: Are Infectious Disease Threats Increasing?

- Probably “yes”
- 35+ “new” diseases over the past 40 years
- Of all microbial species, we have characterized less than 1% and the unknown 99% represent constant source of new threats
- Organisms mutate in response to human tactics: drugs, vaccines, disinfectants ...

## Drivers of Emerging Public Health Threats



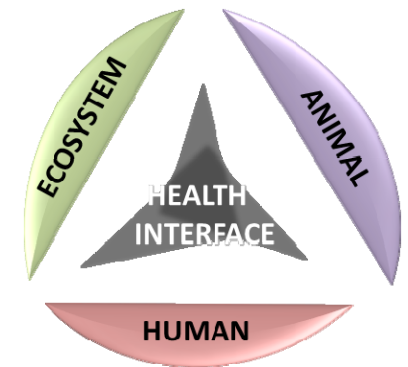
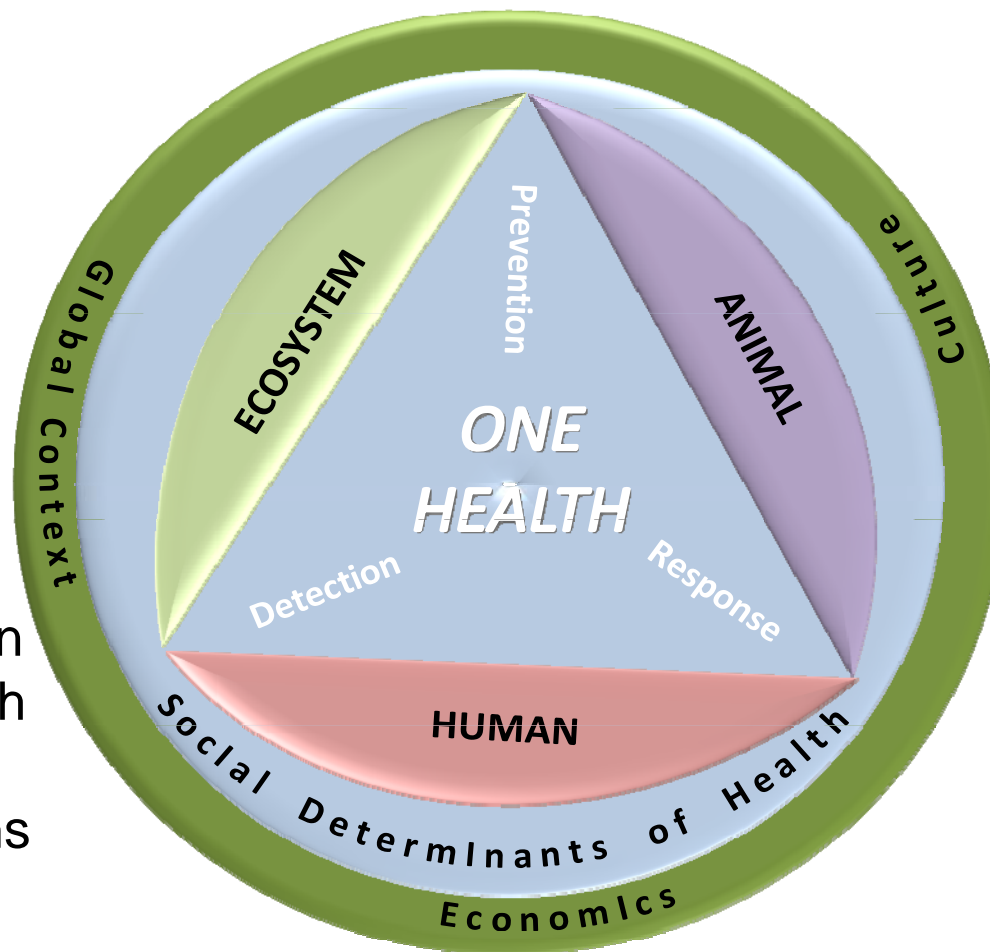
## Opportunities: One Health An Inter-Sectoral Approach

Key themes  
of One  
Health

- Prevention
- Detection
- Response

One Health  
functions within  
a context which  
includes:

- Global actions
- Economics
- Culture



One Health  
incorporates the  
Social Determinants  
of Health

## Case Study – One Health, Food Safety and AMR

**Purpose:** Demonstrate how federal science & policy regarding foodborne AMR could be better integrated & to identify strengths & weaknesses in the current GoC Science to Policy Integration (SPI) approach

**Objectives:** Contacts, Roles & Resp; Inventory of activities, instruments, & efforts; knowledge & SPI gaps

**Anticipated outcomes:**

Coordination; Science -> policy -> science; New projects created to address gaps or build upon current initiatives



## **Case Study – One Health, Food Safety and AMR (cont'd)**

- **Using a One Health approach:**
  - Created a network of federal contacts
  - Social network analysis
  - Catalogued activities, policy instruments, gaps, barriers & disconnects
  - Identified coordination, prioritization, & policy needs
- **Results:**
  - Improved understanding, new data sources, experts 'discovered'; new teams and training material

## Closing Thoughts

- Successfully addressing complex issues requires integration and comprehensiveness of a One Health approach
- Important to tap into an expand upon effective collectives such as NFAHWC that have already established more harmonized and integrated approaches within their area of concern (animal health and welfare)
- Innovation and collaboration will be required to establish and manage various perspectives, to mitigate risks in many sectors
- Movement towards being more **integrated and comprehensive**:
  - » Incorporating data from animal, human and ecosystem health domains
  - » Inclusion of companion animal and wildlife data into surveillance systems
  - » Better inclusion of ecosystem health information
  - » **Multi-partner governance** (e.g. PHN)

## Closing Thoughts

- From a public health perspective, **One Health is more than just zoonotic infectious diseases:**
  - » Future One Health activities may include the areas of research, education and communication
  - » Opportunity to improve professional competencies and education by integrating core curriculums from all human and animal health related disciplines
  - » **One Health approaches can be applied in practice**

*“When one tugs at a single thing in nature, one finds it attached to the rest of the world.” – John Muir*