

# Purpose

- To provide an update on the development of the pan-Canadian AMR Action Plan
- To highlight key findings from the Council of Canadian Academies (CCA) report on the socio-economic burden of AMR

## Background

- Antimicrobial resistance (AMR) has been identified as an increasingly serious threat to global public health and the international community recognizes the need for a high level of collaboration between countries
- Many existing antimicrobials are becoming less effective (animal and human health) and there are few new drugs in the pipeline.
   Inappropriate use of these medicines has compounded the problem
- AMR is a complex issue that requires coordinated actions among multiple private and public partners across the environment, animal health and human health sectors
- Canada is committed to addressing AMR domestically and internationally and to contributing to ongoing, multi-sectoral efforts to combat AMR globally

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## Canadian initiatives on AMR

Released a Federal Framework for Action (October 2014)



Released the Federal Action Plan (March 2015)



Released the *Pan-Canadian Framework* (September 2017)



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#### Pan Canadian Action Plan

- Endorsed by F/P/T Ministers of health and agriculture, the <u>pan-Canadian Framework on</u> <u>AMR/AMU</u> sets the policy foundation for collaborative efforts to address AMR in Canada
- The development of a pan-Canadian Action Plan on AMR/AMU was a specific commitment in the Framework
- The Action Plan will help operationalise the Framework, and support a coordinated, pan-Canadian response to AMR

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## **Action Plan Development Process**

- 4 Task Groups have been working to identify and recommend concrete actions to close gaps in the following areas:
  - Surveillance
  - Stewardship
  - Research and innovation
  - Infection prevention and control
- Each Task Group is composed of human and animal health and agriculture representatives
- Task Groups took into consideration information from the framework development, stakeholder engagements, international documents and other sources.
- The actions recommended by the task groups are grounded in One Health concepts

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## Multi-Sectoral Stakeholder Meetings

- Face to face meetings took place in Ottawa with key stakeholders and task group members:
  - Surveillance January 22-23, 2019
  - Research and innovation March 22, 2019
  - Stewardship April 2-3, 2019
  - Infection prevention and control April 17, 2019
- Meetings brought together select stakeholders from human health and animal health/agri-food sectors

#### Pan-Canadian Action Plan: Vision and Goals

#### Our Vision:

 The health of humans, animals and the environment is protected through decisive actions to prevent the spread of drug resistant pathogens and preserve the effectiveness of antimicrobials now and into the future.

#### Our Goals:

- Limit the emergence and spread of drug resistant pathogens
- Preserve the effectiveness of antimicrobials
- Innovate to discover new antimicrobials, alternatives, vaccines, diagnostics, methods and tools to combat AMR

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# Pan-Canadian Action Plan: Guiding Principles

#### Guiding principles

- Integrated approach
- Collaboration
- Sustainability
- Information sharing
- Flexibility
- Global cooperation
- Measuring success

#### Pan-Canadian Action Plan: Objectives

- Reduce the need for antimicrobials by preventing infections
- Strengthen surveillance systems for AMR and AMU to provide reliable and timely data to drive action and determine best practices
- · Canadians are well-informed stewards of antimicrobials
- Antimicrobial stewardship becomes the norm in human and animal health systems
- Intensify research efforts and stimulate innovation to develop new antimicrobials, alternatives, vaccines and diagnostics
- Establish a governance mechanism that results in a nationally coordinated and effective response
- Enhance Canada's role internationally in order to prevent and control the emergence and spread of antibiotic resistance
- Measure impact monitor and report on Canada's progress in addressing AMR

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#### Pan-Canadian Action Plan: Priority Actions

- A total of 93 recommended actions were identified across four pillars:
  - o Infection Prevention and Control
  - o Surveillance
  - Stewardship
  - o Research and Innovation
- Consulted with expert Task Groups and the FPT AMR Steering Committee on a draft Action Plan. Key feedback included:
  - o To better reflect the urgency of AMR and need for action
  - o To remove duplication and provide a more concise list of priority actions
  - o To clarify the intended impact of priority actions
  - o To improve coherency and consistency in the overall storyline

#### Priority Actions in Animal Health / Agri-food

- Leadership and collaboration FPT stakeholder collaboration (producers, academia and government) through pan-Canadian governance mechanisms.
- Expand programs and standards e.g. Strengthen and support current on-farm food safety program; support and expand on biosecurity initiatives; identify initiatives that can increase vaccination rates.
- Improve stewardship and biosecurity through data e.g., monitoring prescribing, dispensing and use patterns in antimicrobials; genomics and bioinformatics tools; setting measurable goals.
- Education and training and public awareness support the development of continuing education AMR specific programs; develop harmonized curricula on AMR and material for public education campaigns.
- Mobilize data e.g., strengthening AMR/AMU surveillance; minimum data sets; capturing indications; establishing baselines.
- Improve stewardship and information sharing monitor prescribing, dispensing and
  use patterns of antimicrobials; application of genomics and bioinformatics tools; identify
  performance measurements; creating information sharing platforms for codes of practice;
  support the development of stewardship tools.

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## Priority Actions in Human Health

- · Promote the uptake of vaccinations and continue action on vaccine hesitancy.
- Regularly update and disseminate evidence-based national IPC guidelines in the human health sector
- Strengthen One Health AMR and AMU surveillance and monitoring efforts using innovative data collection methods
- Raise public awareness and understanding of the risks of AMR and the appropriate use of antimicrobials
- Raise public awareness on how to prevent infections
- Establish core AMS practice competencies and integrate them into existing programs, continuing professional development programs and university curricula
- Expand research in AMR microbiology and infectious disease (i.e., pure and applied sciences; preclinical drug development and development/improvement of antimicrobials, antimicrobial alternatives, vaccines and diagnostics; and Clinical/ field trials of antimicrobials, antimicrobial alternatives, vaccines and diagnostics)
- · Identify and implement a sustainable model for One Health AMR governance
- Develop Canada's AMR and AMU targets and indicators with our partners

#### Integrating Findings from the CCA Report

 The Council of Canadian Academies (CCA) assembled an expert panel to answer the question:

"What is the socio-economic impact of antimicrobial resistance (AMR) for Canadians and the Canadian Healthcare System?"

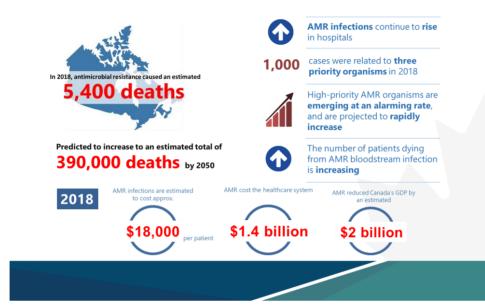
- · Focus of the report:
  - Provides a comprehensive look at the socio-economic impact of AMR on the Canadian economy
  - Examines the economic burden of AMR on the animal farming and trade industry
  - o Aims to supports evidence-informed policy decisions to address AMR

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#### CCA Report - Key Context

- Antimicrobials underpin modern medicine. If antimicrobial resistance rates continue to increase, common infections will become more difficult to treat.
- If infections cannot be treated or prevented, many standard medical interventions, such as organ transplants, chemotherapy, surgery for joint replacements or caesarean deliveries will become too risky to be made widely available.
- AMR is a global problem that can lead to less travel and tourism.

#### CCA Report – Key Figures



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# **Next Steps**

## Pending confirmation with the FPT AMR Steering Committee:

January 2020

- The Government of Canada will launch targeted consultations on the Action Plan with governments and stakeholders
  - Is this the right AMR Action Plan for Canada?
  - Do we have the right priority actions?
  - Where can partners align their activities to support priority actions?

#### February-May 2020

 AMR governance tables will be involved in reviewing the results of the engagement, and endorsing the pan-Canadian Action Plan.