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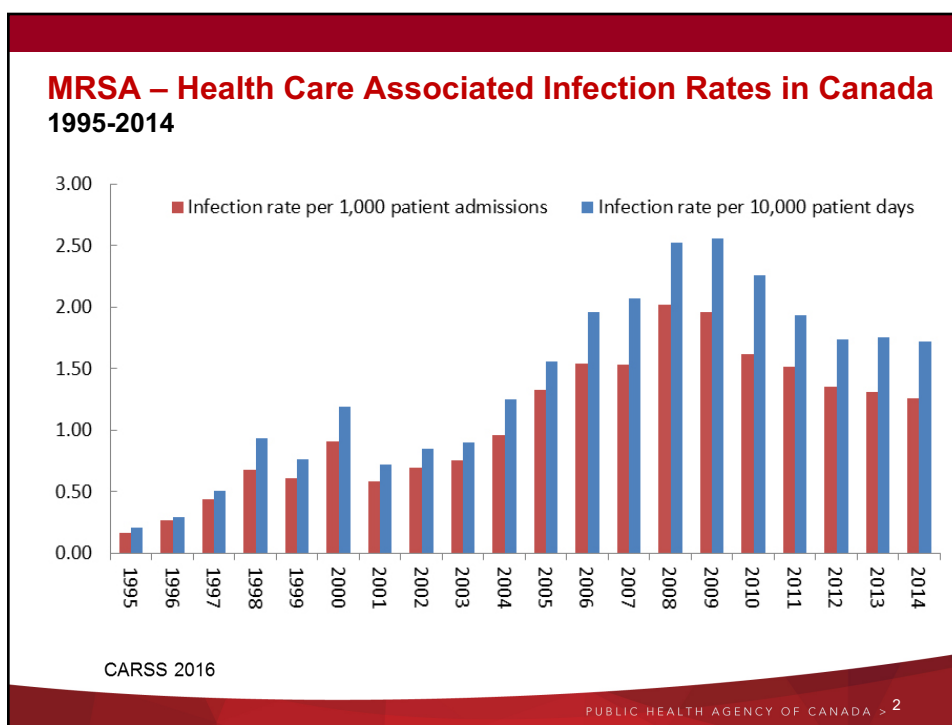
**Keynote Address:**  
**Canada's Approach to Antimicrobial Resistance**

**Dr. Siddika Mithani, President – Public Health Agency of Canada**

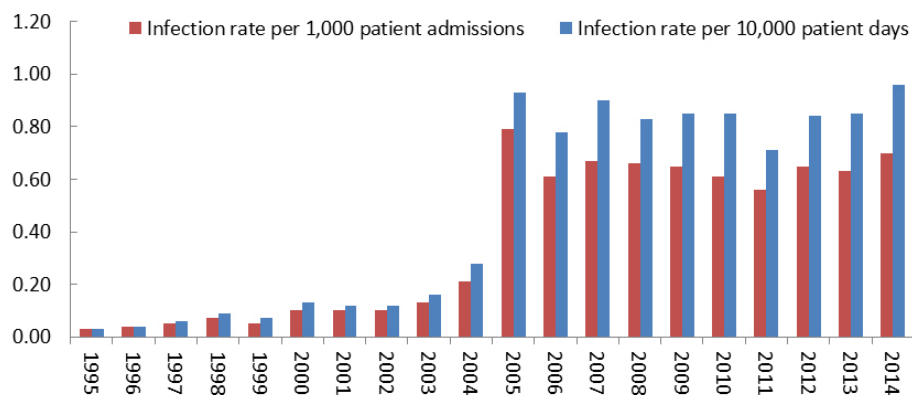
September 14, 2017  
 Public Health Agency of Canada

PROTECTING AND EMPOWERING CANADIANS  
 TO IMPROVE THEIR HEALTH





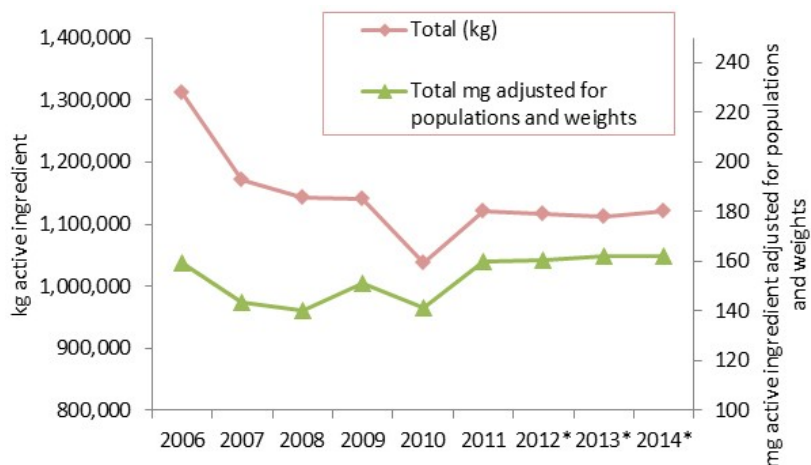
## MRSA – Community Associated Infection Rates in Canada 1995-2014



CARSS 2016

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## Medically important antimicrobials – Animal Use

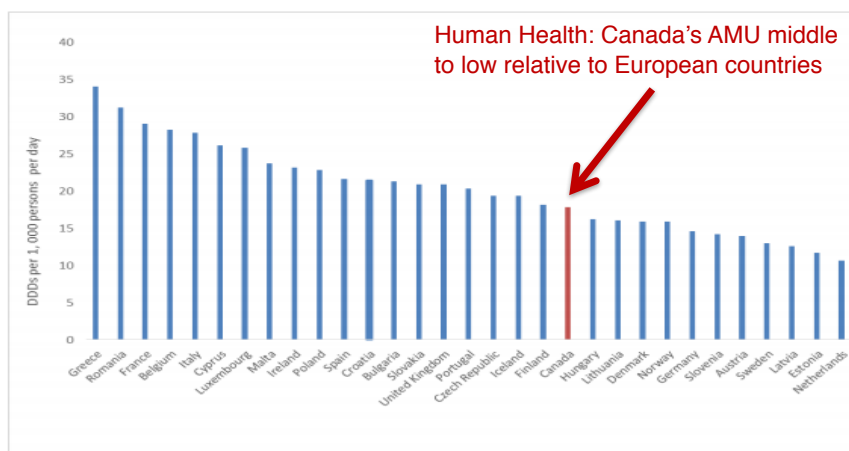


Medically important antimicrobials, measured as kg active ingredient and mg active ingredient, adjusted for populations and weights, 2006-2014 – CARSS 2016

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## How does Canada compare internationally?

Outpatient antimicrobial use (defined daily dosage (DDD) per 1,000 persons per day) reported in Canada and in 30 European countries

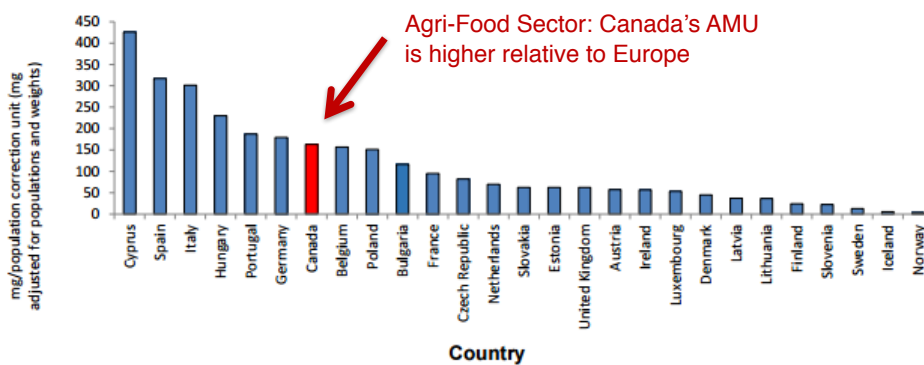


Canadian Antimicrobial Resistance Surveillance System Report 2016

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## How does Canada compare internationally?

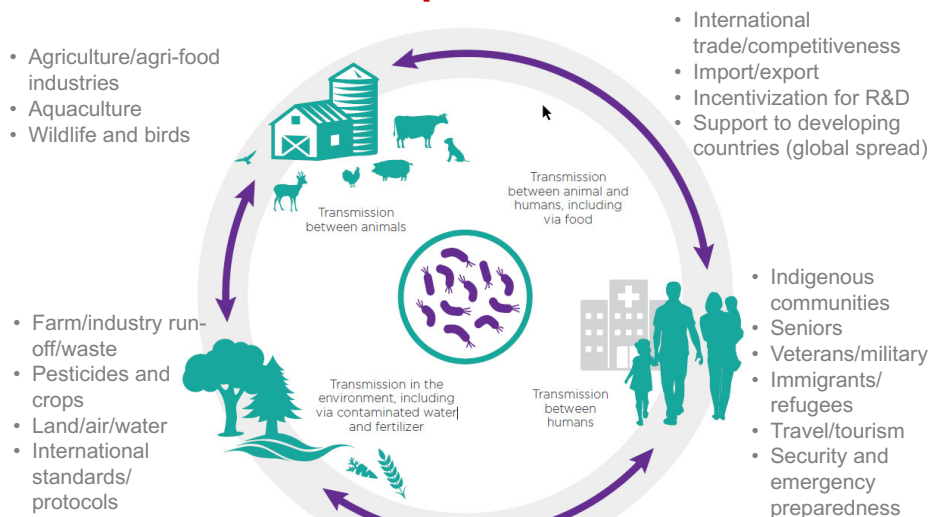
Antimicrobial sales for animals (quantity adjusted by populations and weights) for Canada (2014) and countries participating in the European Surveillance of Veterinary Antimicrobial Consumption Network (2013)



Canadian Antimicrobial Resistance Surveillance System Report 2016

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## AMR Affects Multiple Sectors/Interests



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## PAN-CANADIAN FRAMEWORK ON ANTIMICROBIAL RESISTANCE AND ANTIMICROBIAL USE

### SURVEILLANCE

### INFECTION PREVENTION AND CONTROL

### STEWARDSHIP

### RESEARCH AND INNOVATION

### OUTCOMES

Strong, integrated surveillance systems are needed to provide a comprehensive picture of AMR and AMU in Canada.

To contain the spread of resistant organisms and reduce AMR and AMU, standardized infection prevention and control approaches, programs and policies must be in place.

Programs and policies that highlight education, awareness raising as well as professional and regulatory oversight will be required to reduce inappropriate prescribing, dispensing and use of antimicrobials in humans and animals and to conserve the effectiveness of new and existing antimicrobials.

Responses to AMR must be evidence-based and will require increased knowledge, innovative tools and collaborative approaches to better understand resistance and the development of new treatments and strategies.

### OPPORTUNITIES FOR ACTION

- Engage with stakeholders to ensure coordination at all levels to move towards robust and comprehensive surveillance systems with defined objectives and the required capacity for AMR and AMU data collection.
- Establish coordinated platforms and mechanisms to link AMR and AMU data, in particular from human health, animal health and agriculture sectors.
- Enhance coordinated technical guidance for data collection, collation and comparison, including developing standardized definitions of AMR and priority microorganisms in humans and animals.

- Engage all levels of government and stakeholders to take action within their realm of responsibility:
  - Deliver communication, education/training programs and tools on evidence-based IPC practices and strategies for all stakeholders and professionals in human and animal health.
  - Facilitate and promote the application and oversight of IPC best practices, including immunization, through policy/guidelines development, standard-setting and knowledge translation.
- Work with communities and stakeholders to build capacity and reduce inequalities in delivering comprehensive and effective IPC programs in the human and animal health sectors.
- Invest in IPC research to expand knowledge about and improve the effectiveness and sustainability of IPC practices across human and animal health.

- Support the development of a pan-Canadian antimicrobial stewardship network to provide ongoing leadership and coordinated action across human and animal health sectors, while respecting the roles and responsibilities of each level of government.
- Implement a robust system for collecting AMU data to support continuous improvement of stewardship across the human and animal health sectors.
- Develop governance tools, such as regulations and organizational accreditation requirements as well as consistent standards for prescribing, dispensing and distributing of medically important antimicrobials for medical and veterinary use, while respecting the roles and responsibilities of each level of government.
- Build knowledge about antimicrobial stewardship through enhanced and coordinated educational curricula for prescribers (including continuing education opportunities), dispensers and end users of antimicrobials as well as public awareness programs and activities, which highlight the impact of AMR and AMU.

- Support a cross-sectoral, multidisciplinary research network to facilitate antimicrobial discovery, best practices, behavioural research and economic and production impacts across sectors and jurisdictions.
- Explore mechanisms to develop the capacity and appropriate infrastructure required to further support the development of human and veterinary medicines and alternative tools.
- Establish a fast-tracked cost effective process for licensing antimicrobial drugs, alternatives to antimicrobials and new diagnostic tools in Canada to incentivize pharmaceutical investment without compromising safety, efficacy and quality.