



Canadian Academy of Health Sciences
Académie canadienne des sciences de la santé

Antimicrobial Resistance/ Antimicrobial Use in Food- Producing Animals in Canada

Engagement Report

March 2025

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The Goal of This Report

This report provides a brief summary of the key actor engagement process undertaken as part of the Canadian Academy of Health Sciences (CAHS) Assessment on antimicrobial resistance (AMR) and antimicrobial use (AMU) in food-producing animals in Canada.

The key actor engagement process was based on experience from previous assessments conducted by CAHS, and implementation was modified for the current assessment as deemed necessary by the Chair and the Project Lead.

Information gleaned from this engagement process was used to frame and inform the overall assessment process, the academic evidence review, and the development of the final report. We greatly appreciate the input received from all key actors during this process.

In this report we describe:

- How key actors found out about the engagement process,
- Who participated, and
- The engagement platforms in which they could participate.

Why Engage Key Actors?

A key aspect of the CAHS Assessment on AMR/AMU was to engage various key actors about key issues pertaining to AMR/AMU in food-producing animals. Collecting information from key actors is a way to identify gaps in knowledge and practical challenges that may not be captured by academic evidence and international case studies.

Engaging with key actors in Canada's AMR/AMU landscape was especially important for this assessment as many of the key actors have adopted a proactive stance in tackling the issue of AMR, and have engaged with the federal government through a collaborative spirit to address the problem. As such, this engagement process offered an opportunity for key actors to bring their experiences and practical insights to bear on this assessment.

We wanted to hear perspectives from a range of key actors who had differing perspectives with AMR and AMU. Using many different platforms (described below), we spoke to individuals and organizations, including industry organizations, commodity groups, veterinary professionals, Federal-Provincial-Territorial (FPT) governments, and consumers. You can read more about this in the "Who Participated?" section.

How Did Key Actors Participate?

We invited participants to take part in a six-month engagement process in 2024, where they had the opportunity to participate in various ways. Information about the engagement was disseminated through multiple communication channels, including email, the CAHS website, word of mouth, and press releases. Information about the process and how to participate was emailed to more than 265 key informant organizations and individuals. More information about dissemination and recruitment for each specific platform is provided below.

Cross-Canadian engagement included:

- Canadian key informant interviews with individuals and organizations, including industry organizations, veterinary professionals, FPT governments, and consumers;
- Virtual engagement sessions (with a broader group of the same categories of participants as stated above);
- Consumers, primarily those who consume products derived from food-producing animals, but also those who do not.

A range of engagement platforms were offered in order to promote equitable and accessible participation that could reach diverse groups and generate both qualitative and quantitative insights into key issues experienced by different key actors. Each platform was offered in English and French. These platforms included:

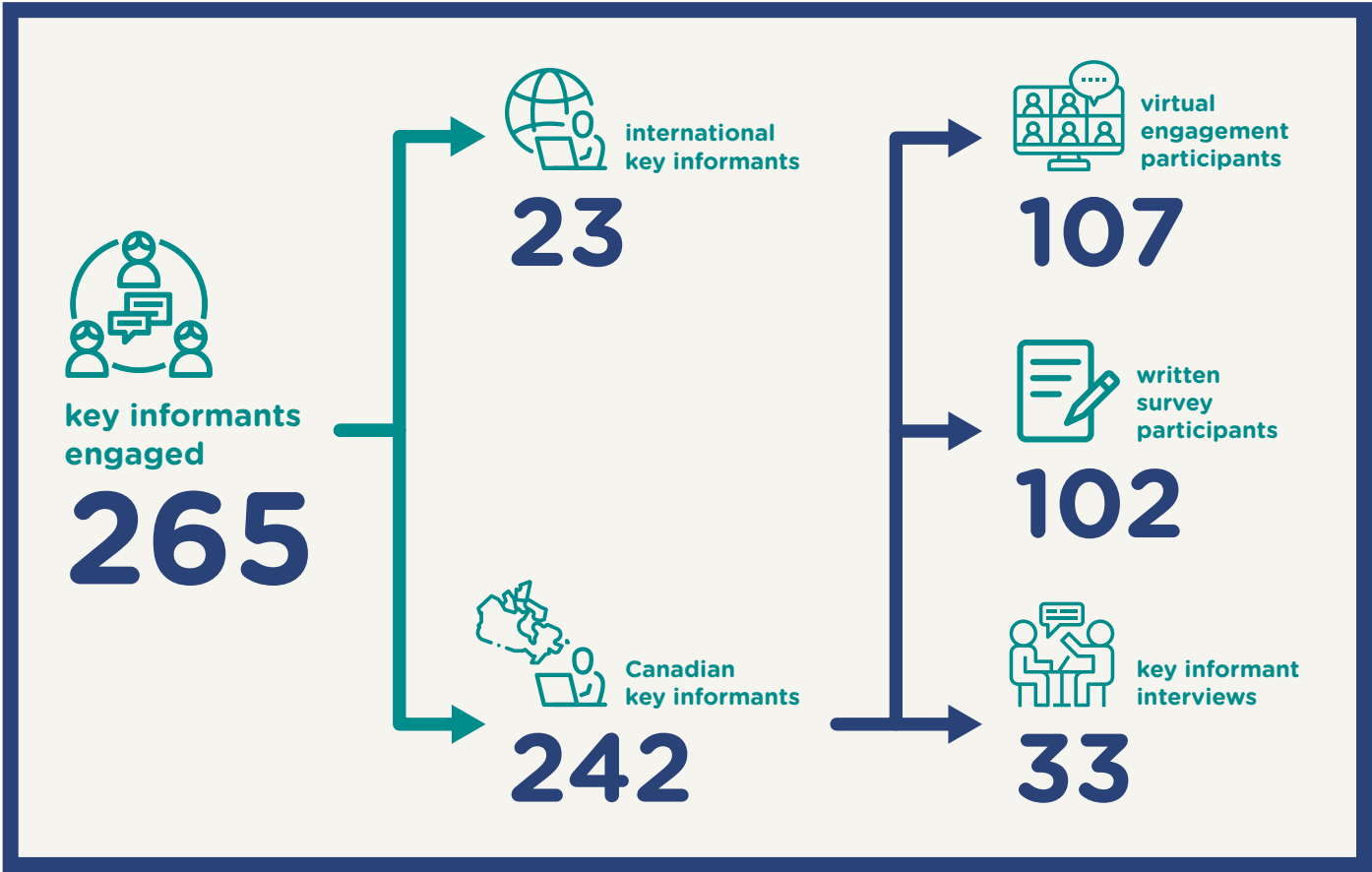
1. Cross-Canada virtual engagement sessions, run by CAHS
2. One-on-one or group interviews, conducted by ACER Consulting Ltd.
3. Focus groups (Canadian consumers only), conducted by Léger
4. Cross-Canada opinion surveys, administered by CAHS
5. Written policy documents, guidelines, and/or ongoing initiative submissions from organizations, collected by CAHS

Each of the key actor engagement platforms are described below. For many of the platforms, an internal summary report was created to inform the key findings.

The following cross-Canada engagement was conducted:

- 2 virtual engagement sessions, engaging a total of 107 participants
- 33 interviews with Canadian key informants
- 8 focus groups (conducted over 2 rounds) with 69 Canadian consumers
- 2 rounds of written surveys with a total of 102 survey participants
- 7 Written policy documents, guidelines, and/or ongoing initiative submissions from different organizations

A summary of the number of key informants engaged through various modalities for the assessment is also shown below.



Details on the methods and demographics for these rounds of engagement are discussed below.

Who Participated?

A breakdown of who participated is presented by demographic groups below, for each type of engagement.

Consumer Focus Groups

Eight focus groups were commissioned by CAHS and conducted by Léger in July (6 focus groups) and Sep 2024 (2 focus groups) with Canadian consumers. There were 8-10 participants in each focus group, totalling 69 consumers. Participants were selected to represent a mix of genders, age, income, education, and geographical representation across Canada.

Participation was limited mainly to those who consumed animal products (limiting vegetarian or vegan participants to a maximum of two per group) and possessed limited professional knowledge of food growth and production. Each focus group was also limited to a maximum of two members aged 55 and over to ensure accommodation of diverse age groups. The intention of the qualitative focus groups was to obtain detailed information on public perceptions from a wide range of participants.

The following describes the demographics of those involved in the Cross-Canadian virtual focus groups:

	Round 1 (April 2024)	Round 2 (July 2024)
Gender	<ul style="list-style-type: none"> Male (52%) Female (46%) Non-binary (2%) 	<ul style="list-style-type: none"> Male (41%) Female (59%)
Age	<ul style="list-style-type: none"> 18-34 - 20 (38%) 35-54 - 24 (46%) 55+ - 8 (15%) 	<ul style="list-style-type: none"> 18-34 - 7 (41%) 35-54 - 8 (47%) 55+ - 2 (12%)
Education	<ul style="list-style-type: none"> High school or less - 23 (44%) Bachelor's - 20 (38%) Postgrad or higher - 9 (17%) 	<ul style="list-style-type: none"> High school or less - 5 (29%) Bachelor's - 7 (41%) Postgrad or higher - 5 (29%)
Income	<ul style="list-style-type: none"> Less than \$60,000 - 17 (33%) \$60,000 to \$100,000 - 21 (40%) \$100,000 or over - 14 (27%) 	<ul style="list-style-type: none"> Less than \$60,000 - 6 (35%) \$60,000 to \$100,000 - 2 (12%) \$100,000 or over - 9 (53%)
Geographical distribution	<ul style="list-style-type: none"> British Columbia - 9 Ontario - 9 Atlantic Canada - 7 Prairies - 8 Québec - 9 and 10 	<ul style="list-style-type: none"> British Columbia - 1 Ontario - 2 Atlantic Canada - 2 Prairies - 2 Québec - 9 Territories - 1

Virtual Engagement Sessions

Two rounds of virtual engagement were conducted in May 2024 and Oct 2024, via Zoom. A total of 107 individuals participated. A facilitator (AMR/AMU Assessment Chair) hosted each live session and presented key content to participants, who then provided their input via the Zoom “Q&A” feature. A Francophone panel member addressed comments that were provided in French, and a French interpreter provided translation of the English content in real time. Participants represented multiple sectors, including educational institutions, federal and provincial governments, non-governmental organizations, professional organizations, and research centres.

The following represents the demographics of those involved in the Cross-Canadian virtual engagement sessions:

	Round 1 (May 2024)	Round 2 (Oct 2024)
Sectoral representation	<ul style="list-style-type: none"> Educational institution or training facility - 7 Government (federal) - 4 Government (provincial/territorial) - 7 Non-government organization (NGO) not listed here - 20 Other - 9 Professional association - 6 Research centre or network - 2 	<ul style="list-style-type: none"> Educational institution or training facility - 9 Government (federal) - 7 Government (provincial/territorial) - 3 Non-government organization (NGO) - 18 Other - 6 Professional association - 6 Research centre or network - 1
Geographical representation	<ul style="list-style-type: none"> Alberta - 8 British Columbia - 2 International - 4 Manitoba - 2 New Brunswick - 1 Newfoundland and Labrador - 1 Nova Scotia - 2 Ontario - 9 Other - 1 Pan-Canadian - 17 Prince Edward Island - 2 Québec - 5 Saskatchewan - 2 	<ul style="list-style-type: none"> Alberta - 7 British Columbia - 2 International - 2 Manitoba - 2 New Brunswick - 0 Newfoundland and Labrador - 0 Nova Scotia - 1 Ontario - 9 Other - 2 Pan-Canadian - 18 Prince Edward Island - 1 Québec - 6 Saskatchewan - 0

Commodity group representatives were self-identified as “non-government organizations (NGOs)” or “other” in the above classification.

Written Surveys

Two rounds of written surveys were conducted in May 2024 and Oct 2024. A total of 102 individuals responded to the surveys and provided input via the online survey software Alchemer or via a downloaded version submitted via email. The first round was conducted to gather input on key content areas for AMR/AMU. The second round of the survey was conducted to validate key findings.

The surveys were sent to professional associations, relevant FPT government departments, research centers and organizations, commodity groups and other industry groups, and private entities in the food-producing animal sectors. Participants represented a diverse range of positions and backgrounds, including professionals from the food production sector (e.g. program directors and organization owners/presidents), veterinarians, researchers, and policy analysts. The second survey was also shared with CAHS fellows.

Because survey questions differed, inclusion criteria for survey responses differed across survey rounds. Therefore, percentages (rather than numbers) are represented in the following demographics:

	Round 1 (May 2024)	Round 2 (Oct 2024)
Sectoral representation	<ul style="list-style-type: none"> Professional association (10%) Research centre or network (10%) Government (federal) (10%) Government (provincial/territorial) (40%) Industry group (10%) Private sector (20%) 	<ul style="list-style-type: none"> Professional association (6%) Educational institution or training facility (16%) Research centre or network (6%) Non-government organization (NGO) (6%) Government (federal) (14%) Government (provincial/territorial) (6%) Industry group (32%) Private sector (10%) Other (4%)
Geographical representation	<ul style="list-style-type: none"> Pan-Canadian (40%) International 10%) British Columbia (20%) Ontario (20%) Prince Edward Island (10%) 	<ul style="list-style-type: none"> Pan-Canadian (47%) International (8%) British Columbia (2%) Alberta (6%) Saskatchewan (2%) Manitoba (2%) Ontario (8%) Québec (10%) Prince Edward Island (6%) Nova Scotia (6%) New Brunswick (2%)

Interviews With Key Informants

ACER Consulting Ltd. was commissioned by CAHS to conduct interviews with Canadian key informants across commodity groups, food production sectors, FPT government agencies, veterinary organizations, and other professional sectors. A total of 33 interviews, some involving multiple interviewees, were conducted of approximately one hour in length each. Interviews were conducted in June-July 2024. English and French interview requests were accommodated.

The following is a breakdown of the Canadian key informants who participated in an interview, by sector and geographical location:

Canadian	Number of Canadian key informants represented
Sectoral representation	<ul style="list-style-type: none"> • National industry groups - 12 • Veterinary associations - 4 • Government (federal) - 6 • Government (provincial/territorial) - 7 • Other - 4
Geographical representation	<ul style="list-style-type: none"> • Pan-Canadian - 26 • British Columbia - 1 • Manitoba - 1 • Ontario - 1 • Québec - 1 • Nova Scotia - 1 • Prince Edward Island - 1 • Newfoundland and Labrador - 1

Twenty-three international key informants were also interviewed from across 8 jurisdictions: Australia, Denmark, the European Union, France, Germany, the Netherlands, the United Kingdom, and the United States. One to three key informants were selected from each jurisdiction. The jurisdictions were selected by the sponsor (n=4) and Expert Panel (n=4) for their jurisdictional relevance to Canada in terms of their approach to governance, and for their activities to address AMR/AMU in food-producing animals that would enable the expert panel to respond to the sponsors’ primary question. Interviews were conducted by Roxana Badiei, an independent contractor with CAHS.

Written Input

Written policy documents, guidelines, and/or ongoing initiative submissions were received from 7 organizations in response to the CAHS request for written input that accompanied each survey. Several respondents shared that they do not have policies, but rather public information and guidelines.

How We Used this Information

Findings from the engagement process were consolidated and presented to the Chair and Expert Panel. Upon completion of the engagement, the Expert Panel and individual task groups reviewed and identified key information to consolidate with findings from the research evidence. The goal was to determine areas of alignment, as well as deduce potential gaps and areas for further evidence review. In this way, key informants’ input from the engagement process ultimately informed our key findings.

Strengths and Limitations of this Process

Strengths. Strengths of the process included promotion of accessibility principles, attention to diversity and inclusion, offering of multiple dissemination and participation channels, and the duration of the engagement window. In particular, we attempted to reach a diverse group of key actors by offering multiple different opportunities for individuals to participate and by carefully considering the accessibility needs throughout the process.

Surveys and all documents disseminated as part of the engagement process were offered in both English and French. Simultaneous translation was offered in Zoom during virtual engagement sessions, and the Chair moderated the conversation in the Zoom Q&A despite a high volume of posts. A French co-moderator (Expert Panel member) was available to read out French comments and respond to any specific questions in French.

Limitations. While the overall duration of the engagement was 6 months, platforms were available on a rolling basis. Focus groups were conducted over 1-2 days. Surveys were conducted over a period of 3-4 weeks. Written documents were accepted during this window, but also throughout the entire project. Virtual engagement sessions were carried out over a period of 2 hours on two specific days. Interviews with key informants were conducted over 4-6 weeks. Nevertheless, the timing could have prevented some individuals from participating. Some participants expressed to CAHS that while they wished to participate through multiple platforms, they found the ongoing engagement to be time-consuming.

This process was not set up to be a research exercise, but rather a valuable opportunity to hear from a range of key actors. These perspectives helped to frame the evidence review process. The information collected during this engagement did not involve individual producers, but rather the commodity organizations that represent their interests.

Conclusion

The key informants provided important perspectives to complement the evidence from the literature review and international case studies. This added depth and nuance to the evidence review and key findings. We greatly appreciate the extraordinary efforts made by so many participants to contribute to this process.