

# Strengthening Governance of the Antimicrobial Resistance Response Across One Health In Canada

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VOLUME II:  
SUPPLEMENTAL DOCUMENTS

June 2021

# Volume II: Table of Contents

- ▶ **Section 1:** Summary of Findings from Consultation Series 1: Discussing Possible Functions of a Canadian One Health AMR Network [Page 3]
- ▶ **Section 2:** Discussion Document for Consultation Series 2: Network Structure [Page 16]
- ▶ **Section 3:** Summary of Findings from Consultation Series 2: Network Structure [Page 32]
- ▶ **Section 4:** Discussion Document for Consultation Series 3: Draft Findings and Proposed Models [Page 46]
- ▶ **Section 5:** Summary of Comparator Organizations [Page 69]

## Volume I: Final Report

Executive Summary.....	4
Chapter One: Introduction.....	8
Chapter Two: Analysis of the Current Situation.....	14
The One Health Antimicrobial Resistance Problem in Canada.....	15
The Current Level of Coordination and Collaboration.....	18
Federalism in Canada.....	24
The International Context.....	28
Chapter Three: Design Considerations for a Strengthened Pan-Canadian AMR Governance Structure.....	30
Recommended Core Functions & Design Principles.....	32
Conceptual Approaches to Inform Our Thinking.....	35
Chapter Four: Two Proposed Governance Models for One Health AMR Response in Canada.....	38
Our First Proposed Model – The AMR Network.....	40
Our Second Proposed Model – The AMR Centre.....	42
The Notion of a Hybrid Model.....	44
Comparison of Purpose, Core Functions & Structures of the Two Proposed Models.....	46
Chapter Five: Estimated Operational Budgets and Incremental Project Investment.....	56
Annual Operating Budget Summary.....	59
A Call for Incremental Investment in the One Health AMR Response.....	60
Notes & References.....	62
Appendices.....	71
Appendix A: The Steering Committee.....	71
Appendix B: Acknowledgements.....	73
Appendix C: Proposed Staffing & Operating Budgets.....	82
Appendix D: Baseline Survey Findings.....	88

# Section 1:

Summary of Findings from Consultation Series 1: Discussing  
Possible Functions of a Canadian One Health AMR Network



October 2020

## Discussing the Possible Functions of a Canadian One Health AMR Network



A Virtual Town Hall Series

Summary of Findings

AMRNETWORK.CA



# Virtual Town Hall: Series 1



## A Message from the Steering Committee

In our efforts to develop recommendations for a national One Health antimicrobial resistance (AMR) network, we invited hundreds of stakeholders to participate in a baseline survey, the responses to which indicated the key actors in AMR in Canada. Leveraging that information, we invited nearly 600 people to attend one of the 16 online town hall events that we scheduled over Zoom throughout August and September 2020.

These virtual town halls were structured in such a way that allowed us to hear the diverse voices of Canada's One Health ecosystem. Hosted by Project Director Maureen Perrin, we explained to the participants the scope of our project and highlighted some of the thinking that we had done to date, with a focus on possible network functions. From there, we split into small breakout groups and tasked our participants with assessing the usefulness of eight different functions.

We began this process with absolutely nothing set in stone. We recognized that even though our Steering Committee is a diverse team that represents One Health, it is only a small group and that we needed to consult a much broader constituency. We're grateful for your contributions, because we know that for any network to succeed, it has to reflect the values, priorities, and visions of the people who will ultimately become its members. So, thanks to everyone who helped us work toward this goal, especially during these challenging times. Thanks for attending these sessions and for voicing your opinions. The conversations that we had throughout the summer are going to play a key role in shaping this network proposal.

So, what's next? For now, it's back to the drawing board for us. We're going to apply your contributions to a series of network models to see which structures best fit the values of Canada's AMR community. You'll hear from us again sometime in the next few months as we embark on yet another broad consultation. We hope you'll join us again!

## Network Functions Consultations

We invited 578 stakeholders from across Canada's One Health spectrum to participate in a conversation about how a Canadian One Health network could advance the country's response to AMR. This first series of sessions focused primarily on the possible functions of this potential network, while also touching on the current landscape, our survey results, and more. The town halls were offered in both English and French, however, we only had registrants for English sessions.

## Who Attended the Town Halls

In total, 150 AMR stakeholders joined us for this first series of workshops. We had wide representation from the human health and animal and agri-food sectors, but fewer environment-based stakeholders attended. The graphs below indicate how our registrants identified their place on the One Health spectrum:



Furthermore, we had good geographic representation at these sessions, having consulted with stakeholders based all across Canada. That said, we had no territorial representation despite inviting stakeholders from those regions. As well, we had a small number of Indigenous stakeholders participate in these conversations.

### Project: AMR Network

This project is developing recommendations for a network model that will catalyze a national response directed at mitigating the threat of antimicrobial resistance (AMR) for all Canadians, by assembling, coordinating, and supporting action across Canada's One Health spectrum. This project is funded by the Public Health Agency of Canada (PHAC).

#### Project Chairs

Gerry Wright / McMaster University  
Andrew Morris / Sinai Health

#### Steering Committee

Ed Topp / Agriculture & Agri-Food Canada  
J. Scott Weese / University of Guelph  
Suzanne Hindmarch / U. of New Brunswick  
Sean Hillier / York University  
Herman Barkema / University of Calgary  
Caroline Quach-Thanh / U. of Montréal

#### Advisory Committee

Marie Archambault / U. of Montreal  
Madeleine Ashcroft / Cdn Nurses Association  
Megan Bergman / NFAHW Council  
Luc Boileau / INESSS  
Paul-Émile Cloutier / HealthCareCAN  
Eve Dubé / Nat. Institute of Public Health  
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Susan Fryters / Alberta Health Services  
Lianne Jeffs / Sinai Health  
Lynn Johnston / Dalhousie University  
David Patrick / University of BC  
Dani Peters / Magnet Strategy Group  
Chris Power / Cdn Patient Safety Institute  
Robert Strang / NS Health & Wellness  
Susan Sutherland / University of Toronto

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Rainer Engelhardt / Formerly of PHAC  
Jane Philpott / Queen's University

#### Project Team

Maureen Perrin / Project Director  
Ian Brunskill / Consultant  
Blake Dillon / Communications  
Deborah Somanader / Research Assistant

Learn more at  
[www.amrnetwork.ca](http://www.amrnetwork.ca)



# Functions Overview



Months of discussion with the project’s steering committee, advisory committee, and special advisors revealed a central theme in our network design process: form follows function. In other words, to determine possible model options for this network, we must first understand what the network will do. To determine that, leveraging the information provided by more than 200 AMR stakeholders via our baseline survey, the project team and steering committee worked together to develop a list of candidate functions. Over the past few months, we have taken that list out to the broader AMR community for consultation. The pages ahead summarize the input, observations, advice, and concerns of 150 stakeholders from across Canada. This report does not draw any conclusions; it simply presents what we heard.

## The Candidate Functions



**Convening**  
Bringing people and organizations in the system together to build communication links, share data and learning, collect early input, and identify collective priorities.



**Paymaster**  
Administer payments to organizations and track delivery of work.



**Undertaking Projects**  
Co-creating solutions by working with diverse partners on projects with common goals.



**Allocating Resources**  
On behalf of a funder, determining how funds are allocated to the AMR community.



**Aligning Advice**  
Connecting key stakeholders to align policy advocacy and advice on investments.



**Demonstrating Progress**  
Measure and report on the status and impact of AMR improvement in Canada.



**Brokering Knowledge**  
Collating, curating, and distributing new evidence, knowledge, and practices so that they can be scaled up and applied across sectors.



**Socializing**  
Raise broad understanding of AMR-related risks and solutions.

## Functions in the Bigger Picture

After several months of stakeholder identification, environmental scanning, and internal discussions about network objectives, our project team is excited to have finally taken our list of candidate network functions out for broad consultation. But this was merely the first step of our collaborative network modelling process. In fact, we will likely be undertaking additional consultations with the AMR community regarding network structure and/or priorities sometime in the not-too-distant future. However, it should be noted that our timelines have become somewhat unclear due to COVID-19. While we originally planned to publish our recommendations in November 2020, we understand that a big portion of our constituents will have busy schedules in the months ahead. As such, this process will now extend into 2021. We appreciate your patience as we embark on our next steps.

# General Observations



## Findings at a Glance

- While participants came to town halls with an understanding of the complexity of the AMR issue, they frequently noted surprise about the diversity of actors in Canada, what was already going on, and how little they knew about anything beyond their own One Health sector.
- While creating a shared language and understanding across the participants was challenging given their diversity of knowledge and experience, not to mention conducting these sessions over Zoom and not in person, things actually worked out well and we are comfortable in interpreting and using the findings.
- There was good One Health representation across the 16 sessions, but researchers and academics were overrepresented, and implementers were underrepresented. The nature of doing this over Zoom led some to wonder about who was invited and whether or not the right voices were being heard.
- As it has not yet been formally released, participants were unclear about who 'owns' the Pan-Canadian Action Plan (PCAP). There were similar questions about who will ultimately be accountable for its implementation.
- Some participants noted that the discussion of network functions should be informed by a broad set of principles (e.g. trust matters, a consultative/engaged approach will be used, the network will be evidence-based, and so on).
- All of the proposed functions were seen by at least some participants as valid and needing to be done by someone. Whether or not there is value for the network to do each function is the question.
- The proposed functions lend themselves to natural groupings with most participants linking convening, brokering knowledge, and aligning advice together while many others connected allocating resources and paymaster. Further, participants frequently noted that functions might best be introduced using a phased approach.
- Many participants identified the need for additional resources to tackle AMR writ large as the most critical issue, and some wanted to focus the conversation on this topic.
- The pandemic pervaded the conversations, with participants having a variety of views regarding the implications for the network — some positive (awareness of AMR and infectious diseases), some negative (network funding may have gone to the COVID-19 response).
- Participants identified several possible functions for the network that they felt were missing from the discussion. Some of these include: training, academic activities, advocating and lobbying for funding, knowledge translation leading to implementation, patient advocacy, data housing, incentivizing activity in the AMR sphere, optimizing existing antimicrobials, and discovering new antimicrobials.
- Participants discussed the functions from the perspective of both how they might contribute to achieving the goals of the action plan and how they, as individuals or organizations, would be incented to join the network. Similarly, there was some discussion about how the network will have to ensure that members receive value from their membership.
- Participants generally acknowledged that there is an unavoidable and inherent tension between the various interests of potential members of the network across the One Health continuum, as well as potential conflicts between the interests of members and the interests of funders. There was also concern that the existing work underway in Canada would not be recognized by the network and could result in duplication or conflict.
- There was heterogeneity in participant views as to the extent to which things must be aligned across the country.
- Some people voiced frustration over having already participated in brainstorming sessions like these in the past (for the PCAP or otherwise) without much to show for it.
- More than 90% of town hall attendees participated in a poll that asked them to consider each of the eight candidate functions as essential, potentially useful, or out of scope for the network. These results are captured under the "participants views" subheads throughout the pages ahead.

Convening

Bringing people and organizations in the system together to build communication links, share data and learning, collect early input, and identify collective priorities.



What we asked

Should the network bring together people and organizations to build communication links, share data and learning, collect input, and identify collective priorities by organizing and facilitating workshops, maintaining distribution lists, and connecting work occurring across the country?

The conversation dynamic

Participants generally saw convening as a foundational function, seeing it as necessary but not sufficient to the overall success of the network. The town hall itself served to reinforce in many participants' minds the surprisingly diverse nature of One Health and the complexity of the AMR issue. Further, many participants noted that convening is closely aligned with "brokering knowledge," another candidate function, and that such a tandem would offer high value for members.

How this function could address what participants perceive as current issues in the AMR sphere

- The AMR environment in Canada is currently highly siloed with gaps in knowledge of who is doing what and limited cross-discipline and cross-sector action.
- There is a broadly perceived desire to leverage existing knowledge and learn from broad experiences instead of re-inventing the wheel.
- It is currently difficult to find others working in the AMR sphere.
- There is limited continuity for AMR work over time or across geographies; bringing people together may help to resolve this.
- Not all of the important voices are well-represented at the table today (e.g. Indigenous communities, environmental scientists).

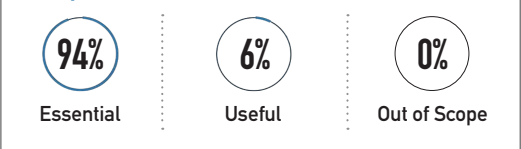
Some of the concerns related to this function

- Simply bringing people together to talk (without action) is not perceived as value added by some.
- Bringing people together doesn't necessarily mean they are engaged in the process.
- Some think that they are already effectively connecting, and are unable to do more.
- Convening across the diversity of One Health in Canada will be complex.

Potential implications of including this function in the overall design of the network

- Requires significant human resources and technology supports (must be well run to avoid people doing additional work off the sides of their desks and not advancing issues in a timely way).
- This function provides "the glue" for other functions, and creates a sense of belonging.
- Different network members have different levels of need regarding support, infrastructure, and resources and the network would need to be able respond accordingly.

Participants' Views



Mary Buhr  
Professor, Animal and Poultry Science, University of Saskatchewan

We need to bring together groups who are disparate right now, and we would need to be able to convene them into developing a common goal.



Administer payments to organizations and track delivery of work.

# Paymaster



**What we asked**

Should a key function of the network be to administer payments to organizations and track delivery of work? Note that this function is distinct from making resource allocation decisions.

**The conversation dynamic**

There was very limited interest in talking about this function compared to other functions. In fact, ‘paymaster’ was generally unsupported by town hall participants and fairly quickly dismissed by most; not many attendees were administrators and this tends to function in the background. People reacted to the jargon of the term.

**How this function could address what participants perceive as current issues in the AMR sphere**

- Some smaller organizations don’t have the infrastructure to manage complex grants or projects and could benefit from having a service provide this assistance, which may help to level the playing field with larger organizations who are able to do this themselves.

**Some of the concerns related to this function**

- Duplicates the function of existing groups, and often these groups are well resourced.
- Expensive and requires infrastructure and specialized people to maintain.

**Potential implications of including this function in the overall design of the network**

- Needed if the network is doing projects but should not be a standalone function.

**Participants’ Views**



Essential



Useful



Out of Scope

**Valerie Leung**  
Antimicrobial Stewardship Program (ASP) Lead, Public Health Ontario

*I’m least excited about ‘paymaster.’ Having worked previously for a national organization that had that function, I know it takes a lot of infrastructure to do that. It would be really big commitment.*

# Undertaking Projects

Co-creating solutions by working with diverse partners on projects with common goals.



**What we asked**

Should the network conduct projects itself, or should it leave the project delivery to members and partner organizations?

**The conversation dynamic**

This function generated a lot of discussion. It was often noted that tension could arise from having the network undertake projects that would put it in competition or conflict with existing organizations, so this conversation was more about coordinating projects than undertaking them. However, there was some talk about undertaking projects that other groups cannot, due to complexity or cross-sector reach. There was diversity in the scale and nature of the projects that participants envisioned. Some people focused on how other proposed functions could grow to fix certain issues without the network actually needing to undertake projects. Others noted a desire for this function, assuming it would result in increased funding for AMR work. While many people believe that this function could help with implementation of the Pan-Canadian Action Plan (PCAP), others worried that it could intrude upon existing programs. In general, the community felt that this function was certainly not out of scope for the network.

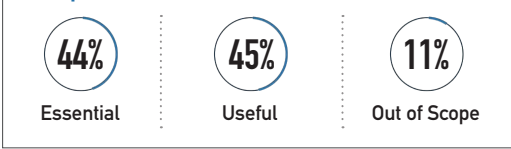
**How this function could address what participants perceive as current issues in the AMR sphere**

- There may be some instances in which the network might be one of the only viable entities to undertake certain projects, and that these would likely be projects at the intersection of different sectors or the various One Health domains.
- The capacity of the current AMR field to execute on the PCAP is not where it needs be, so additional project delivery capacity is needed.

**Some of the concerns related to this function**

- The network could compete, intrude upon, and duplicate work already underway by members.
- There is risk that the network could actually or be perceived as pushing projects from top-down without gaining necessary consensus amongst its diverse members.
- This function could raise conflicts of interest if the network were also to perform the ‘allocating resources’ function.
- Will the network be resourced to do their own projects in support of PCAP implementation?

**Participants’ Views**



**Potential implications of including this function in the overall design of the network**

- This function will require significant project delivery capacity to be built effectively.
- You build community by doing things together — having this function in the network design may accelerate the development of the network itself and avoid the “all-talk-no-action” risk.



**Bradley Langford**  
Pharmacist Consultant, Public Health Ontario

*Undertaking projects is something that is already done. I don't know if we need another group that's doing that. It's more, maybe, coordinating projects and identifying people who would be interested, but not actually undertaking them.*

On behalf of a funder, determining how funds are allocated to the AMR community.

# Allocating Resources



**What we asked**

Should the network make resource allocation decisions (i.e. decisions about how the pie is distributed, not about increasing the size of the pie)?

**The conversation dynamic**

There was less interest in talking about this function compared to other functions, but many wanted to increase total AMR funding. This was likely due to a high representation of researchers at these sessions. Overall, there was only limited support for including this function.

**How this function could address what participants perceive as current issues in the AMR sphere**

- Current allocators need more information to identify priority issues and their relative urgency, as well as to evaluate proposed solutions or projects.
- Existing funders take a patchwork approach to AMR, which makes it difficult to address big picture priorities — especially across One Health.
- It could leverage proven success via similar international models (e.g. CARB-X in the US, Wellcome Trust in UK) to make allocation decisions.
- Neither One Health nor AMR currently have a dedicated funding pool to ensure that these areas remain a research priority.

**Some of the concerns related to this function**

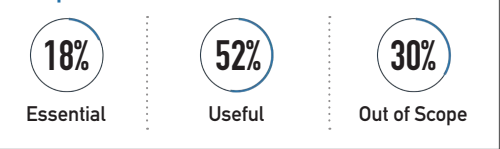
- A lot of work and requires a significant administrative infrastructure.
- Creates a conflict of interest. The network could separate allocators from those who undertake projects to overcome conflicts, but this risks the centralization of power.

- There is a risk of effort duplication since other funding bodies will continue to exist, and there is also a risk that having the network perform this function could create another layer of bureaucracy; some suggested that the network would be better off advocating for existing bodies to refine their processes instead of setting up its own processes.
- There were questions of whether or not the network would actually be more effective in allocation across disciplines and One Health than the current mechanisms are.
- It would require a considerable new investment pool.

**Potential implications of including this function in the overall design of the network**

- The decision to include this function or not is likely to influence the network's membership (who will join and be part of the network) as well as potential partnerships (who the network would engage with as external organizations).
- Difficult to perform a resource allocation function in a decentralized network structure.

**Participants' Views**



**Jessica Minion**  
Medical Microbiologist, Saskatchewan Health Authority

*While I love the idea of having a boutique granting agency for AMR, I think that the reality is it's not going to work well. I think that this network would be better served advocating granting agencies for AMR funding.*



# Aligning Advice

Connecting key stakeholders to align policy advocacy and advice on investments.



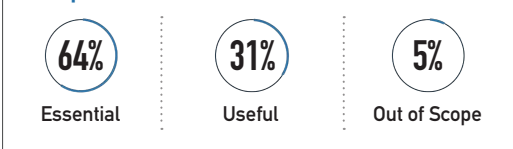
**What we asked**

Should the network be working with stakeholders to generate an increasingly unified voice to help policymakers and funders understand AMR issues and solutions?

**The conversation dynamic**

Town hall participants considered this function from two primary perspectives. For some, this function largely overlapped with the ‘brokering knowledge’ function in that they perceived that the primary audience for the aligned advice would be practitioners needing practice standards and guidelines; as such, their comments have been reflected in the ‘brokering knowledge’ section. Others considered aligning policy, investment, and other advice to regulatory, funding, and other bodies and their comments are reflected herein. We think that the “participants views” metrics for this function need to be interpreted with these two perspectives in mind — that difficulty distinguishing between the ‘aligning advice’ function and the much more supported ‘brokering knowledge’ function resulted in a skewing of overall endorsement of essentiality that may or may not be the case.

**Participants’ Views**



**How this function could address what participants perceive as current issues in the AMR sphere**

- Given the complexity of AMR, policymakers and funders often receive different messages, so alignment would help decision makers while also increasing the credibility of the overall AMR field.
- There are complex problems that go across sectors/domains, yet each sector currently promotes self-interests.
- Aligning government, academia, and the private sector could lead to progress in the response to AMR in a number of areas, ranging from policymaking to antimicrobial discovery and research prioritization.

**Some of the concerns related to this function**

- Developing common policy statements that “everyone” can sign onto will be difficult, considering the diversity of the network members.
- There is a risk that the network will strive for consistency in messaging in areas where there are legitimately distinct views driven by differing interests.
- Any consistent messaging that is developed may be in conflict with the strongly held positions of other members within the network.
- Others noted that policy advocacy is a long-term endeavour and questioned whether the network should instead focus on areas that give results more quickly.

**Potential implications of including this function in the overall design of the network**

- There will need to be clear structures and processes to determine which issues get tackled and what the aligned advice is.



**Sirine El Hamdaoui**  
Programs Officer, Quebec Cattle Producers

*I think there is room and need for this. It's not that we need to come together and have everybody agree on the exact same things, but if there is agreement that exists, it would be great to have a space to collect and collate it.*

Measure and report on the status and impact of AMR improvement In Canada.

# Demonstrating Progress



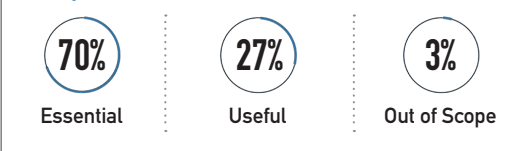
### What we asked

Should the network play a role in measuring and reporting on the status and impact of AMR improvement In Canada?

### The conversation dynamic

This was a complex topic for participants, with the conversation occurring along several dimensions. One was the purpose of the function (to be an honest broker, to drive action plan decisions, to provide a widely disseminated report card, etc.). Second was the level of granularity at which progress is measured (e.g. progress on the PCAP vs. progress at the project level). Finally, participants differed on the value of reporting without a defined implementation path, with some suggesting that it is futile to spend energy reporting if there is no clear authority figure to make changes and others thinking that disseminating reports can create the impetus for change. In general, participants felt that demonstrating progress is crucial, but there was significantly less consensus on the role that the network should play. Independent of whether the network takes on the function of demonstrating progress of AMR more broadly, participants agreed that it would be essential for the network to assess and report on the effectiveness and value of the network itself.

### Participants' Views



### How this function could address what participants perceive as current issues in the AMR sphere

- There is a very real need to pull the story together — to communicate what we've done and what we haven't done in an ongoing fashion.
- Creating shared evidence-based metrics helps to articulate priorities.
- Allows learning to be adapted, scaled, and replicated.

### Some of the concerns related to this function

- The authority of any organization to report on AMR in Canada is unclear.
- There is a perceived lack of mechanisms to respond to findings.
- Are the measurables clear? Right now, PCAP is merely a blueprint that remains unfinished. Impossible to predict how it will look down the road.
- Collecting and analyzing data is difficult and can take a long time.
- Major changes take time and some parts of the AMR response are slow, so it is challenging to have useful measures of change in the short-term.
- Several groups are already doing this in their own sectors.
- This opens the door to potential conflicts of interest, since the network would likely be reporting on its member organizations. It may also create potential challenges with governments and funders if performance measures do not reflect well on them.

### Potential implications of including this function in the overall design of the network

- Network neutrality is important for maintaining credibility and trust.
- Partnership with existing organizations may fulfill this function, but it may also be the government's responsibility.
- The work of developing and monitoring performance measures in and of itself will help develop the network and give it focus.

**Karin Schmid**  
Research and Production Manager, Alberta Beef Producers

*If this network is designed to fill governance gaps to support the implementation of the action plan, I don't see how it can do that without demonstrating progress on how we're achieving those recommendations in the action plan.*

# Brokering Knowledge

Collating, curating, and distributing new evidence, knowledge, and practices so that they can be scaled up and applied across sectors.



**What we asked**

Should the network organize knowledge and serve as a trusted source of aggregated information? While closely linked to ‘convening,’ this function goes deeper than bringing people together and extends that function to get knowledge to those who need it when they need it.

**The conversation dynamic**

This topic generated a lot of discussion. Participants noted that when considering this function, it was useful to consider the notion that there are very different audiences that require very different knowledge products, such as literature reviews, implementation toolkits, and evidence-based best practice guidelines. There was also talk about the role of knowledge brokering in moving toward implementation. Some participants noted that this is closely related to the idea of knowledge translation, and that a shared lexicon would be important if this function were to be adopted by the network. The participants also talked about the need for the network to create a “one-stop-shop” where comprehensive, up-to-date information related to AMR/AMU would be available online, along with information about the range of AMR-related initiatives underway across the country.

**How this function could address what participants perceive as current issues in the AMR sphere**

- Many participants felt that there is currently an abundance of info about AMR out there, but that it is not overly accessible or actionable, especially across sectors, disciplines, jurisdictions, and languages.
- Current data does not lend itself to cross-sector integration and analysis.
- Lack of existing knowledge brokering mechanisms prevent knowledge-to-action initiatives and slow the development of implementation tools.

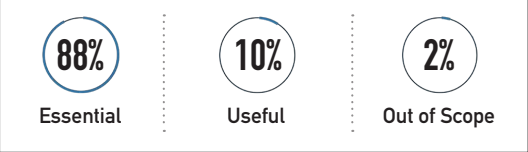
**Some of the concerns related to this function**

- Can the network collate knowledge from “everyone?” Would it be able to ensure that all the representative stakeholders are heard and are able to provide input?
- Figuring out who “everyone” is will be challenging. Who is the network to decide? Bias can creep into brokered knowledge. It can quickly become a too-many-cooks scenario.
- This info is very complex, so brokering in this area will be challenging.
- How would the network interact with international organizations active in this area?
- Would the network own and maintain the tools, or would a partner organization? Are there any intellectual property considerations?

**Potential implications of including this function in the overall design of the network**

- Requires staff with content knowledge and specialized skills, such as open data platform development and information management. In addition to appropriate technology supports, this function would require the network staff to have specialized knowledge mobilization skills — experts in plain-language writing or writing for different audiences.

**Participants’ Views**



**Marina Facci**  
Pharmacy Manager, Saskatchewan Health Authority

*Just looking at the COVID-19 experience, there is so much information coming in from everywhere. It would be nice to have one platform for information dissemination.*



Raise broad understanding of AMR risks and solutions.

# Socializing



### What we asked

Should the network be actively involved in public education and increasing the number of AMR advocates?

### The conversation dynamic

The rationale for socialization varied amongst participants. Some people made the assumption that increased public awareness would lead to increased attention from the government, and that this would lead to increased funding. Others focused on socializing to change behaviour at the individual and system level to reduce AMR/AMU. Participants frequently related to the public's experience during the COVID-19 pandemic, noting that people are more attuned to these issues than ever before but still may not connect COVID to AMR. There was a bit of concern regarding the name "socializing," as some suggested that socialization sounds forced while education is more open-ended.

### How this function could address what participants perceive as current issues in the AMR sphere

- There is not currently a coherent AMR narrative across One Health. Even attendees were surprised by the diversity of stakeholders required to communicate on this complex issue.
- Conflicting information from different sources can cause skepticism and distrust amongst the public. Participants noted that there are high levels of misinformation and a source of 'truth' would be important.
- While there are some sector-specific AMR campaigns, there is no One Health initiative in Canada today. The network could become an amplifier that keeps AMR top-of-mind.
- It could harmonize existing campaigns and programs.

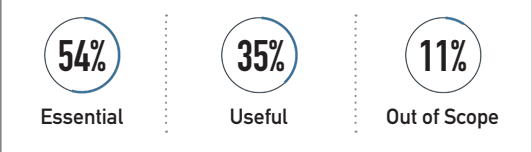
### Some of the concerns related to this function

- Can the network speak to all of its targeted audiences? Commonalities exist, but there are key differences in geographies, populations, jurisdictions, and sectors.
- There is lots of nuance about who the target audience is. There are already well-established human health campaigns, but certain settings — First Nations communities, correctional facilities, and congregate care placements, to name a few — may need specific messaging. It could also be useful to enhance the knowledge of people who are already involved in AMR. This all requires different socialization strategies.
- It's difficult to measure impact and it can be very expensive.
- Some participants noted that public education is a long-term endeavor, and, in order to be effective, it needs to be delivered by an organization recognized as a trusted source of expertise. This would imply that this should not be a function at the network's outset.

### Potential implications of including this function in the overall design of the network

- Need a focused, specialized team of experts capable of delivering at national, regional, and local levels.

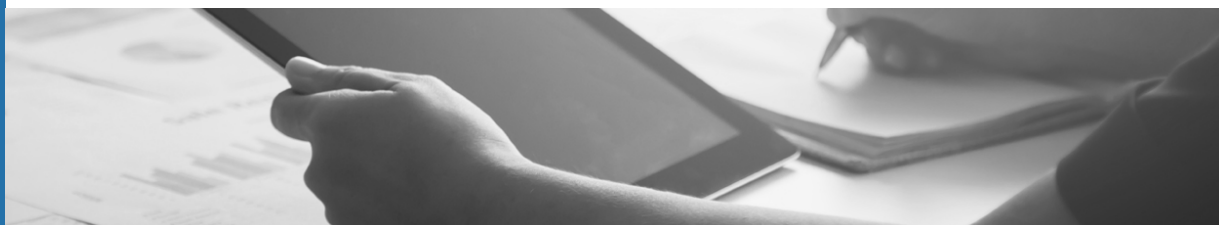
### Participants' Views



**Bastien Castagner**  
Associate Professor, Pharmacology & Therapeutics, McGill University

*Public education is extremely important and this function will be crucial in helping people understand these complex issues. I think it's particularly important in an era of disinformation.*

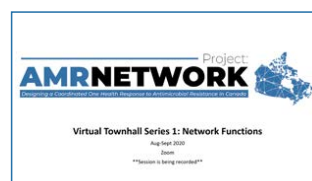
# Summary & Feedback



## Summary of Findings

These town hall events revealed to us a thematic divide in the eight functions that we put forth. The functions rooted in coordination — convening, brokering knowledge, aligning advice, and demonstrating progress — received largely positive feedback. The functions rooted in funding — allocating resources, paymaster, undertaking projects, and socializing — were generally more controversial. We know that different sets of functions will apply to different governance structures, but we will be keeping this split in mind as we press forward. It is also clear to us that, as expected, the eight candidate functions that we brought to these town hall events are by no means comprehensive. There was an abundance of commentary that fell outside the realm of any proposed function. Please know that this, too, will guide our next steps.

## Town Hall Slide Deck



Click the thumbnail to view slides.  
Note: Access requires Internet connection.

## Series 2 Consultations

We are planning to build upon certain format elements from the Series 1 town halls as we begin to construct the next set of consultations. Our logistical steps forward will be informed by our post-session feedback survey, which revealed a general effectiveness in our approach.

93%

Felt that we met our objectives

84%

Could see themselves in the network

95%

Are interested in returning for Series 2

*\*Figures reflective of a 30% response rate.*

## Have more to say?

If you didn't make it to a town hall session — or did, but have more to contribute — it's not too late to make suggestions or voice concerns. Connect with us online at [amrnetwork.ca/contact](https://amrnetwork.ca/contact) and we'll ensure any last-minute feedback is incorporated as we move forward.



## Workshop Feedback

We surveyed participants for feedback to help prepare for Series 2 consultations.

- "I thought it was really well run. The breakout groups worked really well."
- "To my mind, the presentation of the network was too detailed."
- "It was well done and organized; loved the discussion."
- "The breakouts were useful and should be maintained if possible."
- "The consultation was extremely well facilitated."
- "Provide some of the questions we are looking to address ahead of time."
- "It was very good considering it was all virtual."
- "Consider having more public representation."
- "I found the four sample discussion topics to be limiting."
- "I found the breakout groups too small and awkward."

12

## Project: **AMRNETWORK**

*Designing a Coordinated One Health Response to Antimicrobial Resistance in Canada*



**Series 2 Consultations:**  
**Network Structure**  
**Nov. / Dec. 2020**



### In This Discussion Document...

**Section 1:**  
Intro to the  
Document

**Section 2:**  
Model Options  
Overview

**Section 3:**  
The Problem and  
our Project

**Section 4:**  
The Notion of  
a Network

**Section 5:**  
The Models  
Explained



## Getting Started

This document is not so much about antimicrobial resistance (AMR) as it is about effective governance options that could be applied to the AMR problem in Canada. The Q&A below will help you get acclimatized to the topics covered in the pages ahead. Links are embedded within each response that will bring you to relevant sections in this document. Please also keep our [discussion questions](#) in mind as you read on — they will guide our upcoming consultation series.

### What is the problem that we are trying to solve?

We are trying to address the [lack of viable coordination mechanisms](#) in Canada to solve the issue of [AMR](#).

### What do I need to know about networks to contribute to the discussion?

Networks bring together groups of otherwise autonomous people and organizations to achieve a shared outcome. With that in mind, the role of governance in [network oversight](#) is to ensure that participants engage in collective and mutually supportive action.

### What models are being explored?

Close examination of our problem statement and our operating environment resulted in a closer look at two models in particular: a [distributed collaboration model](#) and a [lead-entity model](#). These different models reflect different [theories of change](#) that are applicable to AMR.

### How do the two models compare?

In areas such as [purpose](#), [functions](#), [staff](#), and [accountability](#), the two models do share some similarities. However, they are also inherently different, as outlined in this [comparison chart](#).

### How might each model be applied to solving AMR in Canada?

To illustrate how each model would function, we have tested the models using [two sample action items](#): developing new guidelines for hand hygiene in daycares and establishing a platform to widely share AMR-related data.

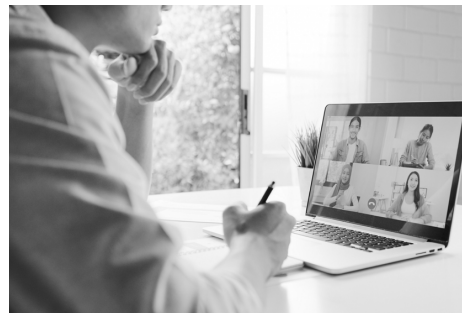
#### On behalf of the project's steering committee, thank you for reading and participating!

- |   |   |
|---|---|
| • Gerry Wright / McMaster University (co-chair) | • Suzanne Hindmarch / University of New Brunswick |
| • Andrew Morris / Sinai Health & UHN (co-chair) | • Sean Hillier / York University                  |
| • Ed Topp / Agriculture & Agri-Food Canada      | • Herman Barkema / University of Calgary          |
| • J. Scott Weese / University of Guelph         | • Caroline Quach-Thanh / University of Montréal   |

## 1. Guiding Our Conversation

Our intent with this document is to prompt critical thinking, so that you and your peers can suggest ways in which the model options discussed herein can be improved and further refined. We encourage you to attend our upcoming series of virtual consultations, where we will discuss two models in considerable detail. Session dates are as follows:

- Tuesday, November 24, 2020 at 9:00 a.m. EST
- Thursday, November 26, 2020 at 1:00 p.m. EST
- Monday, November 30, 2020 at 6:00 p.m. EST
- Wednesday, December 2, 2020 at 9:00 a.m. EST
- Friday, December 4, 2020 at 1:00 p.m. EST



We may add additional sessions in early-December if there is appetite from the stakeholder community. Registration is open at [amrnetwork.ca](https://amrnetwork.ca).

If you are unable to attend one of the sessions, we encourage you to submit written feedback to some or all of our discussion questions. Please send your responses to [feedback@amrnetwork.ca](mailto:feedback@amrnetwork.ca) by December 4, 2020 and we'll ensure that your comments are captured and considered as we move on to our next steps.

Thank you for reading this document and participating in this important work. We look forward to hearing your thoughts!

## Discussion Questions

The objective of this discussion paper is to briefly review the issues and challenges of antimicrobial resistance (AMR) and antimicrobial use (AMU) governance in Canada, describe two network model options and explain how they would work, and seek your input. As you read this discussion document, please consider the following questions:

1. How comfortable are you with each model option to help advance the AMR action plan? What are some specific points of interest or contention from your perspective?
2. In thinking about the implications for the network's likelihood of achieving success, is one model option better suited than the other to...
  - a. move the action plan forward efficiently, effectively, and nimbly?
  - b. earn trust and legitimacy, both from members and partners as well as externally?
  - c. engage stakeholders across One Health, across sectors, across regions, across languages, etc.?
  - d. bring together federal, provincial, and territorial government interests? What about non-government or private sector interests?
  - e. reduce duplication of effort and increase the value of contribution?
  - f. allow priorities to be determined in the short-, medium-, and long-term?
  - g. mitigate inequalities in access to healthcare in Canada (e.g. rural communities, Indigenous Peoples, people with low income)?
  - h. spur increased investments in AMR-related work?
  - i. fund network operating costs?
3. How should the Network Coordinating Council/Board members be appointed? Should a different process be used in the initial setup of the network vs. future appointments?
4. Should the network be accountable for (a) implementing the forthcoming Pan-Canadian Action Plan (PCAP) and/or (b) owning and updating it on a go-forward basis?
5. What additional wisdom or advice can you offer regarding AMR governance in Canada?

## 2. Comparing the Two Models

As a helpful guide, we have summarized some of the key features of the models we will be discussing throughout this document.

Feature	The Distributed Collaboration Model	The Lead-Entity Model
Purpose	To address coordination gaps in AMR governance in Canada	To address coordination gaps in AMR governance in Canada
Structure	Multiple approaches are possible, including a separate not-for-profit legal entity or members could provide structure (e.g. employ network staff)	Separate not-for-profit legal entity
Senior Governing Body	Network Coordinating Council, elected by membership	Board, appointed by F/P/T government
Members/Partners	Lots of members with signed agreements. Some partners, but desire is those engaged in AMR become members and ideally work in the network action groups	No membership, but lots of partners
How Priorities are Determined	Bottom-up process based on energy, interest, and values	Board-led process
Flexibility	Nimble	Structured
Design Balance	Prioritizes inclusive decision-making, internal legitimacy, and flexibility	Prioritizes administrative efficiency, external legitimacy, and stability
Accountability & Evaluation Mechanisms	External advisory board, periodic evaluations, audits, reviews, etc.	External advisory board, periodic evaluations, audits, reviews, etc.
Alignment With Functions	This model is ideal for 'convening' and 'brokering knowledge.' It supports 'aligning advice.' Network staff is unlikely to 'undertake projects,' since the members tend to carry out that work in this model	This model is ideal for 'undertaking projects' and 'allocating resources.' It supports 'brokering knowledge,' 'convening,' and serving as a 'paymaster'
Source of Funding for Network Operating Costs	F/P/T Governments	F/P/T Governments
Source of Funding for Projects	F/P/T Governments, private sector, philanthropy, funding agencies	F/P/T Governments, private sector, philanthropy, funding agencies
Staff	For 'convening' and 'brokering knowledge' functions, the staff would be slightly larger than the other model. For 'undertaking projects,' staff would be smaller, as most projects will be undertaken by action group members, rather than network staff	For 'convening' and 'brokering knowledge,' there is a small staff. It is more likely that the lead-entity organization will 'undertake projects' themselves, meaning a larger staff would be required for this function

### 3. The Problem

Antimicrobials, used to treat infections in humans and animals, are losing their effectiveness — and the implications are stark. In fact, the Review on Antimicrobial Resistance (AMR) suggests that AMR is likely to surpass cancer as the leading cause of death by 2050, claiming up to 10 million lives per year across the globe in the process.

In response to the growing threat, the World Health Organization (WHO) adopted the Global Action Plan on AMR in 2015. Since then, more than 115 countries have developed their own national action plans or frameworks on AMR. But many — including Canada — have been unable to secure funding, develop effective governance systems, or implement their plans in a meaningful way.

Given the size and scope of the issue, that’s not entirely surprising. Plus, now more than ever, AMR must compete for resources against more immediate health priorities, like COVID-19. However, the reality is AMR itself is an immediate health priority and addressing it would fundamentally enable our global health systems to more efficiently home in on emergent threats.

Because AMR is a One Health issue — in other words, it transcends human health and impacts our animal and environmental health systems, too — addressing AMR requires a level of cross-discipline coordination perhaps only paralleled by that of climate change. While great work is already underway in Canada, it is largely being performed in silos. Building bridges across disciplines, sectors, regions, and areas of expertise will be integral to achieving any degree of success against AMR.

In the sections that follow, we will explore different network models to do just that. Networks, as you’ll learn throughout the sections ahead, can be structured in different ways to solve different problems. This document will explore networks in a general sense, and then delve into two distinct model options — a distributed collaboration model and a lead-entity model. You will notice that both models contain many similar elements, but there are also some significant differences. We acknowledge that AMR is a large problem and that governance is just one piece of the puzzle, but we hope that this document and the discussion it subsequently generates can help you see how effective governance can lead to change in the bigger picture.

#### 3.1. The Project

Funded by the Public Health Agency of Canada (PHAC), this project is developing recommendations for a network model that will catalyze a national, One Health response directed at mitigating the threat of AMR for all Canadians.

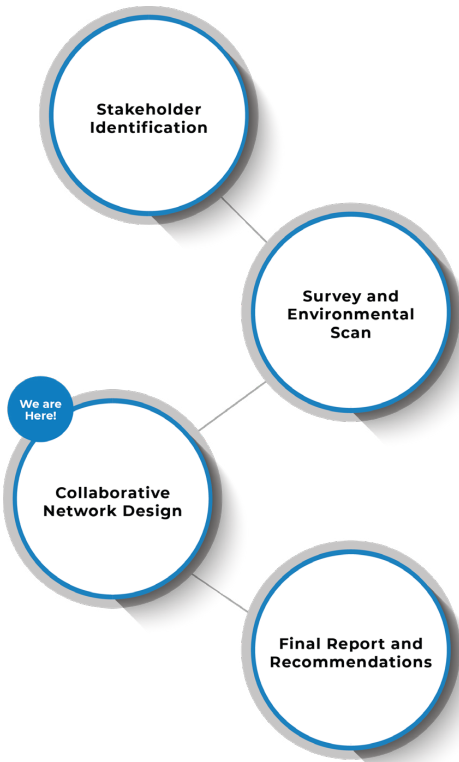
Project leadership consists of chairs, committee members, and special advisors who come from a diversity of backgrounds from all corners of the One Health spectrum. You can learn more about our team at [amrnetwork.ca/team](https://amrnetwork.ca/team).

After several months of stakeholder identification, environmental scanning, and internal discussions about network objectives, our project team is now working through a collaborative network modelling process. We spent Summer 2020 examining candidate network functions and have since turned our attention to network form. This document is designed to present ideas, foster discussion, and generate feedback from Canada’s diverse AMR stakeholder community.

Our goal is to propose a network model that can support implementing the Action Plan and demonstrate how such a network could provide value to the many different AMR stakeholders across Canada.

By Spring 2021, we will submit recommendations to PHAC and other funders that make a strong case for investing in a national, One Health network focused on mitigating AMR. Our proposal will consider implementation of the Pan-Canadian Action Plan (PCAP or “action plan”), a document that is being developed by PHAC to guide Canada’s AMR-related priorities.

Funding of the network is not guaranteed and is out of scope for our project. Once a funding decision is made, an implementation project team will need to form to bring the network to life.



### 3.2. The Coordination Challenge of AMR in Canada

While there is increasing recognition of the negative health and economic impacts of AMR in Canada, the issue currently falls outside the sole jurisdiction of any single existing oversight body. This gap has generated widespread recognition of the need to better coordinate. However, due to the complexity of the response required and the vast number and diversity of actors involved, this level of coordination is inherently challenging.

Appropriately addressing the threat of AMR in Canada will require a strategic, coordinated, and highly collaborative approach that encompasses all aspects of the One Health continuum, all levels of society and government, and all regions of the country.

There has already been a long history of Canadian AMR action across these different dimensions, and the current federal, provincial, and territorial (F/P/T) focus is on the development of the PCAP. However, even with its development underway, current F/P/T structures are not expected to provide sufficient coordination and oversight to fully implement and monitor the action plan. Implementing the action plan will require coordinated action across an ecosystem of autonomous organizations and experts — some with competing interests, and many with priorities that extend far beyond AMR.

In 2017, Canada responded to this increasingly complex situation by publishing *Tackling Antimicrobial Resistance and Antimicrobial Use: A Pan-Canadian Framework for Action*. Since then, Canada has continued to take steps toward improving the country's international standing in the response to AMR. According to the 2018 Joint External Evaluation of the International Health Regulations, Canada demonstrated several strengths in addressing AMR, particularly in the areas of surveillance, diagnostic capacity, and infection prevention and control. Furthermore, the Canadian Integrated Program for Antimicrobial Resistance Surveillance (CIPARS) is regarded as the global gold standard for AMR surveillance, as it combines data from human, animal, and food sources.

However, Canada still has to make considerable changes if it is to achieve mitigation of the issue. According to The Lancet, Canada is the only member of the G7 without a national-level government-approved action plan that contains operational strategies, monitoring arrangements, and, in some cases, funding.

While the action plan that is currently in development will set forth the steps to mitigating AMR in Canada, there are currently no governance mechanisms to guide its implementation.

**Right now, several barriers and problems exist that may reinforce the challenge of coordination. Some notable examples include:**

- Lack of large-scale action and implementation success has caused skepticism amongst the stakeholder community
- Limited AMR-specific funds, resources, and delivery capacity has caused frustration
- The AMR community is susceptible to being sidetracked by emergent issues, like COVID-19
- Achieving full representation — One Health, public and private organizations, F/P/T governments, equity-seeking groups, English and French stakeholders, etc. — is a massive undertaking
- Connecting Canada to international initiatives may be challenging in the AMR sphere
- AMR and One Health in Canada are complex ecosystems

### 3.3. How A Network Can Help

Through surveys and consultations conducted by our project team and other groups, Canada's AMR community has voiced a strong desire for a network to help coordinate the AMR ecosystem. Between stakeholder feedback and the priorities outlined in the PCAP draft, we know that such a network must:

- Support (or perhaps even spearhead) the implementation of the forthcoming action plan
- Leverage and scale up innovation and best practices across sectors, disciplines, and jurisdictions
- Identify and incentivize investment opportunities in AMR-specific research across sectors
- Facilitate connection and collaboration across disciplines, sectors, and jurisdictions
- Enable knowledge sharing to promote collective actions
- Lead and coordinate action in areas ranging from surveillance and stewardship to research and infection prevention and control

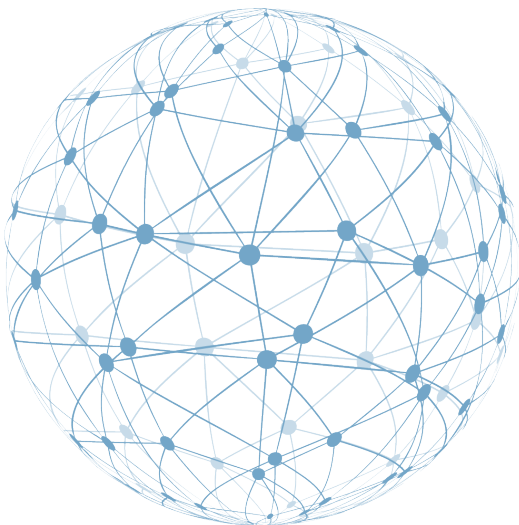
The Project Steering Committee has articulated the following purpose for a potential network: "To catalyze a national response directed at mitigating the threat of AMR for all Canadians, by assembling, coordinating, and supporting action across the One Health domain."



## 4. Considerations as We Design This Network

In order to make robust recommendations for AMR governance in Canada, we have closely examined a number of different elements that pertain to networks. The upcoming sections delve into some of those elements, including the notion of a network in general, how change can occur, how networks can interact with the notions of accountability and governance, and much more.

### 4.1. Thinking About the Notion of a Network



Networks bring together groups of autonomous people and organizations to achieve a shared outcome. These groups (network participants or members) typically have limited formal accountability for network-level goals. Unlike other types of organizations, networks have special characteristics that have implications for how they are governed and managed. Specifically, conformity to network rules and procedures is often voluntary. In other words, people join and participate at their own discretion.

With that in mind, the role of governance in network oversight is to ensure that participants engage in collective and mutually supportive action, that any potential conflict is addressed, and that resources are acquired and utilized efficiently and effectively.

In reviewing literature on network governance, we found numerous models for how networks can be designed. However, the models themselves tend to vary according to how they strike a balance along several dimensions:

- The need for administrative efficiency versus a need for inclusive decision-making
- The need for legitimacy of the network within its membership versus the need for the network to be seen as legitimate by partners and external stakeholders
- The need for flexibility versus the need for stability

While networks take on a wide range of shapes and designs, experts say nearly all models have a few common elements including “social interaction, relationships, connectedness, collaboration, collective action, trust, and cooperation” (Popp, MacKean, et al).

Furthermore, at their foundation, “networks consist of the structure of relationships between actors (individuals and organizations) and the meaning of those relationships. Trust is the lubricant that makes cooperation between these actors possible, and higher levels of trust are believed to lead to more effective collaboration” (Popp, MacKean, et al).

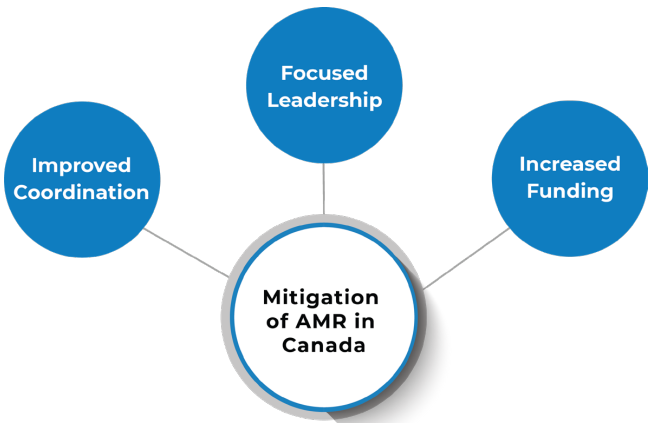
Organizations join or form networks for a variety of reasons, including the need to gain legitimacy, serve clients more effectively, attract more resources, and address complex problems, like AMR in Canada. But regardless of the specific reason, in a general sense, all network organizations are seeking to achieve some goal that they could not achieve independently.

The realms of AMR, AMU, and One Health require coordinated action across a complex ecosystem of autonomous actors and organizations based all around Canada. While some people and organizations may actually have competing interests and differing priorities within their individual mandates, they are all connected by a shared goal: mitigating AMR in Canada. A network can enhance this connection and lead to meaningful change.

4.2. How Change Occurs

In our consultations to date, we have heard many perspectives on how the network should be structured and governed in order to ensure effective implementation of the PCAP. While it is easy to get lost in the details of each individual proposal, there are common elements that connect each one. Informing these elements are the participants’ beliefs about how change in an area as complex as AMR could and should occur.

Some stakeholders view this as an issue of leadership — if there was a focused leader in charge of directing action, they argue, AMR work would be more efficient and effective, leading to timelier and potentially less expensive operations against AMR. Some view this as a coordination issue — that if we brought people together, then there would be more alignment and creative solutions available to reduce the development and spread of AMR in our communities. Meanwhile, others simply view this as a matter of funding — that if there is an increased investment in AMR, then there will be more research/innovation, and in turn new vaccines, antimicrobials, ideas, and guidelines that would lead to a decrease in AMR.



Whether change can be directed from a focused leader or is a function of a coalition of the willing, remains to be seen. In the sections ahead, we will address how each of the proposed options speaks to these various theories of change.

5. Two Possible Network Models

In considering possible network options, it is evident that many models could achieve the overall purpose previously outlined in this document. Close examination of our problem statement and our operating environment resulted in a closer look at two models in particular: the distributed collaboration model and the lead-entity model. The Project Team is not set on either of these models; they are being presented as options to generate conversation.

As you read on, you may find it helpful to think about **who makes decisions about what should be done** versus **who implements those decisions**. In lots of ways, the differences between the model options are about the latter, not the former.

The Distributed Collaboration Model	The Lead-Entity Model
Advocates of this model would argue that the problem is owned by everybody and is too complex to allow a single locus of control. They recognize that there is an engaged community and a lot of good work underway, and they want to build on that — not disrupt it. They feel that the best way to do that is to have a small coordinating body that can promote information sharing across the community, connect disparate groups, identify new opportunities and solicit interest to work on them, and nudge toward greater alignment across the community at large.	Advocates of this model would argue that strong leadership is needed to set a focus and to move the agenda forward. They want a new organization responsible for overseeing the implementation of the forthcoming action plan and assigning people to the tasks required to do so. While partners would be invited to contribute as desired, it is the new organization that would be held accountable.
Composition of a Network Model	
Purpose & Objectives	
Functions	
Form & Structure	
Governance	
Priorities	
Budget & Costing	

## 5.1. The Potential Functions of the Network

To achieve effective governance, the network must perform a core series of functions, and we’re still solidifying which functions deliver most value. Functions describe what actions the network will do to achieve its purpose. These actions are the backbone of the network and could apply to virtually any network model — including the two discussed in depth in this document. We have presented the following options as candidate functions for a national One Health AMR network:

- **Convening:** Bringing people and organizations in the system together to build communication links, share data and learning, collect early input, and identify collective priorities.
- **Paymaster:** Administering payments to organizations and tracking delivery of work.
- **Undertaking Projects:** Co-creating solutions by working with diverse partners on projects with common goals.
- **Allocating Resources:** On behalf of a funder, determining how funds are allocated to the AMR community.
- **Aligning Advice:** Connecting key stakeholders to align policy advocacy and advice on investments.
- **Demonstrating Progress:** Measuring and reporting on the status and impact of AMR improvement In Canada.

- **Brokering Knowledge:** Collating, curating, and distributing new evidence, knowledge, and practices so that they can be scaled up and applied across sectors.
- **Socializing:** Raising broad understanding of AMR-related risks and solutions.

In our efforts to determine which of these candidate functions offer the most value, we invited hundreds of stakeholders to participate in one of 16 online town hall events that we scheduled over Zoom throughout August and September of 2020. These virtual town halls were structured in such a way that allowed us to hear the diverse voices of Canada’s One Health ecosystem. Focusing on these functions, we split our participants into small breakout groups and tasked them with workshopping different network utilities.

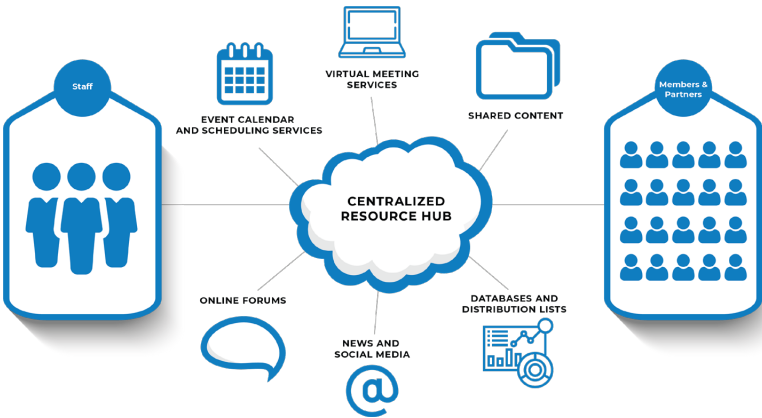
We captured the opinions, values, suggestions, and concerns of 150 different stakeholders from all across Canada in our “Summary of Findings” document, which can be read [here](#).



## 5.2. The Staff Component of the Network

Both of the models that we are discussing in this document are going to require a staff component. The roles and number of network staff will differ depending on the model itself, but there will be some commonalities. Here are some responsibilities that we expect to be present, regardless of structure:

- Provide administrative support for the different elements of the network
- Centralize resources for network members and partners to leverage
- Mediate potential conflicts and maintain neutrality across One Health
- Offer support and resources to members and partners in both English and French
- Ensure that any and all network activities respect the principles of equity, diversity, and inclusion



### 5.3. The Notion of Accountability & Governance

Another concept that is important when thinking about network design is accountability. Accountability addresses issues such as who is responsible for what, how to measure joint success, and how to attribute value to the contributions of the various network participants.

A national One Health AMR network is going to require a governance model that represents all sectors and jurisdictions and has the accountability mechanisms in place to enable effective implementation of the PCAP.

In the context of this network, accountability can be considered at several different levels. For example, the network could be:

- Responsible for the **proper use of the funds** that it has been given, and for reporting on how funds were used and what results were achieved
- Responsible for **enabling and ensuring the effective implementation** of the PCAP, including funding strategies, setting near-term priorities, measurement, monitoring, and reporting on the effectiveness of said implementation
- Responsible for the **outcomes of the PCAP**, including refreshing it over time to ensure that it continues to focus on high value and high impact areas of work

The first — and perhaps least controversial — level of accountability is to funders. Namely, being accountable for the delivery of results in accordance with funding agreements. Mechanisms that can be used to set expectations and demonstrate value for money include accountability agreements, annual reports, periodic evaluations, audits, and more. Our network must be able to support this level of accountability.

The next levels of accountability — to the goals outlined in the PCAP and for henceforth updating and owning the PCAP — are considerably more controversial than the first. We learned through our Series 1 Consultations that there is significant heterogeneity across the stakeholder community as to whether or not the third role is appropriate for the network to have.

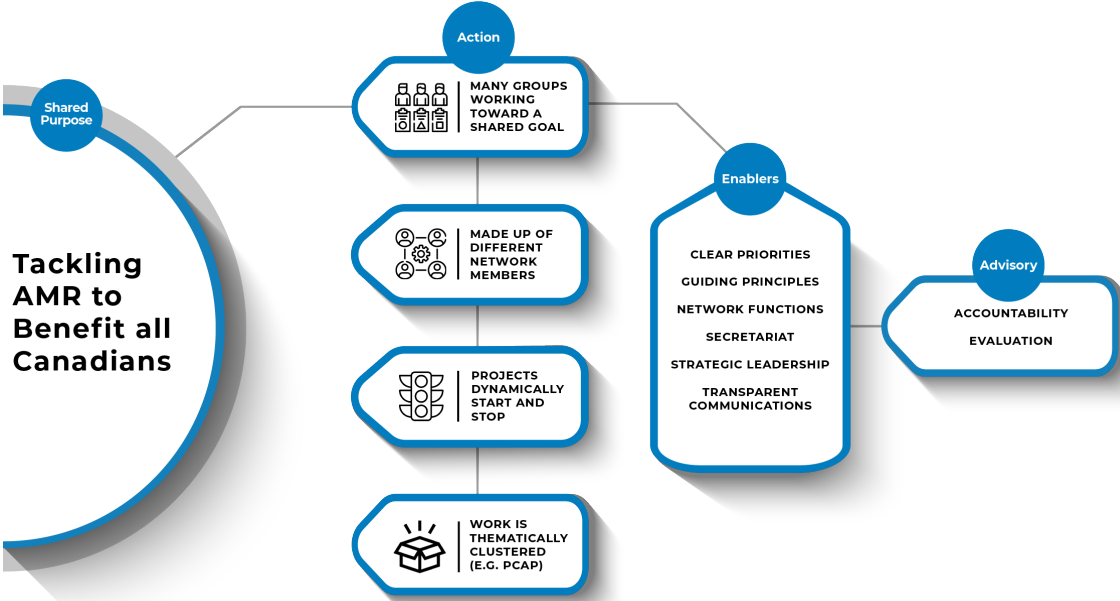
In addition, different model options lend themselves to different levels of accountability. These options are explored in more detail elsewhere in this document. Regardless of the model, the network’s senior governing body will likely be accountable for:

- Drafting priorities and preferred outcomes
- Ensuring steadfast commitment to One Health
- Working to ensure that AMR remains a key focus in Canada, regardless of emergent public health issues, like COVID-19
- Allocating resources on behalf of the network
- Measuring and demonstrating progress toward mitigating AMR in Canada
- Reporting to governments as required
- Adhering to legal and auditing reporting requirements in accordance with government guidelines
- Providing strategic advice to government officials
- Deliberating on AMR-related requests from government figures
- Fostering collaboration and cooperation amongst the key AMR stakeholders in Canada

The network can only be accountable for things within its control. For example, while we recognize the need for increased AMR-related funding, the network cannot be accountable for increasing the overall funding for AMR work in Canada. While it can advocate for more funds and work closely with potential funders, whether or not those funders decide to invest is within their own accountability — not the network’s. The governance challenge specific to funding that this project team has been asked to solve is not about the absolute amount of money invested; rather, it is about the model that determines how whatever funds that are available are distributed.

*“A national One Health **AMR network** is going to require a governance model that represents all sectors and jurisdictions and has the accountability mechanisms in place to enable **effective implementation of the Pan-Canadian Action Plan**.”*

## 5.4. Exploring the Distributed Collaboration Model



The distributed collaboration model is generally used to move forward large agendas like eliminating homelessness, tackling climate change, and addressing AMR. Embracing professional and organizational independence while still offering boundless potential for collaboration, this model puts the onus of action in the hands of its stakeholders. While there are different approaches to foster distributed collaboration, we have adopted and adapted one developed by the Centre for Social Innovation — the “constellation model.”

Collaborators are pulled together by a common desire, opportunity, or interest. Mitigating AMR, for example, might draw together environmental scientists, policymakers, manufacturers, researchers, food producers, veterinarians, pharmacists, dentists, social scientists, and physicians — people and groups that would otherwise, in all likelihood, not collaborate.

These unique cross-disciplinary collaborations are called action groups, which are struck when members of the network have the desire to take action on a specific idea. For example, farmers, environmental scientists, and engineering firms may form an action group to change current organic waste management practices in an effort to reduce the burden of AMR in manure before it is released into the environment. When priorities change or objectives are met, action groups are disbanded. Given the size and scope of this potential network, the distributed collaboration model could foster hundreds of different action groups in the first few years alone.

Since efforts and action are driven from the bottom-up in this model, there is a need for coordinating mechanisms to provide structure (and infrastructure):

- **A Network Coordinating Council (NCC)** helps establish strategic direction and ensure that all work being conducted by the action groups adheres to the network’s guiding principles. This mechanism guides action groups as needed, but it in no way manages or meddles in their work. The NCC is also responsible for drafting annual priorities, which are designed to help inform the creation and direction of new action groups. The NCC would likely be elected on a periodic basis (e.g. two years) by the network members. If there is appetite for this model, the specific terms of reference for the NCC will be completed later in the project and will consider factors such as sector and regional representation, skills and competencies, etc. The NCC is also accountable for funding agreements and navigating potential conflicts of interest. The primary objective of the NCC is network development and not issue area development. In other words, its focus is to achieve and maintain network health — not to solve AMR.
- **A secretariat** is the glue that holds the network together by providing support to both the NCC and the various action groups. The appropriately-sized team will ensure transparency and coordination and provide communications and administrative support for the different elements of the network — think contact information, distribution lists, annual reports, finances, project management,



meeting and event organization, and so on. This staff unit may also help establish new action groups or incubate existing action groups. As a centralized resource hub, through which members can access a variety of services, neutrality of the secretariat will be vital to maintaining an equitable balance of power. The people working for the network's secretariat will need to be highly skilled, have clearly defined roles, and embody collaborative leadership. Their purpose is to provide process support to network members, which means constantly balancing leading the process with responding to needs. Responsibilities might include facilitation, conflict mediation, project development, partnerships, and more. They will employ and maintain a robust suite of online tools that enable community building and support peer-to-peer dialogue and knowledge sharing. The staff could be deployed across Canada and would be able to work in both official languages. The secretariat will be led by somebody who excels at collaborative management, is comfortable with ambiguity, and brings a solid grasp of partnership development to the role. The key leadership responsibilities that will help achieve network goals include fostering the development and support of action groups, resolving conflicts of interest, and serving as the communications liaison between the network's various partners.

- **An external advisory group** and different evaluation mechanisms such as audits, evaluations, or reviews will ensure Canada is a world leader in solving AMR. The external advisory group would be "sector leaders" (primarily from outside of Canada) who meet quarterly to help the network identify issues and opportunities, provide feedback and advice, and ensure that the network is positioning Canada at the international AMR leadership forefront.

- **Members** of the network form the largest body of this model. Members will be asked to sign a membership agreement, which will document the network's guiding principles, its expectations of members, and other relevant information. There will almost certainly be different levels of membership — individuals versus organizations, for example — and there would absolutely need to be a minimum viable number and diversity of members in order to adequately represent the ecosystem and demonstrate external legitimacy. Finally, there would not be a membership fee.

While it is in no way top-down, it may be helpful to visualize this model's workflow as such. The NCC establishes a shared purpose, strategic priorities, and guiding principles and approves any action group proposed by the membership that is consistent with these components. The secretariat may also leverage these components to help create and support action groups. The action groups then undertake the work that supports the goals of the network.

However, unlike in top-down models, it is the members who drive the network — they get to carry out the work that is important to them, without instruction, interference, or approval from the network itself. Members of the distributed collaboration model are considerably more empowered than members of a more traditional top-down model.

### Rationale for the Distributed Collaboration Model

This model appeals to those who view the AMR ecosystem in Canada as sufficiently complex, both in terms of the diversity of stakeholders involved and the range of actions that are required to address the issue at hand. Acknowledging the immense amount of work that is already underway in Canada, this model would lend itself to a network that enables and empowers its members to work on the things that they value while also contributing to overarching network goals. In doing so, this model will enable new work that transcends disciplines, sectors, geographies, and cultures. This model argues that the problem of AMR is owned by everybody and that a single point of control is therefore unrealistic and potentially ineffective. To function optimally, a network leveraging the distributed collaboration model must have a clearly articulated goal, employ non-hierarchical oversight, encourage coordinated autonomy, achieve trust and legitimacy, and be nimble and flexible in the face of ever-shifting priorities.

In terms of how this model relates to the different levels of accountability outlined elsewhere in this document, this model lends itself well to being accountable for enabling and ensuring the effective implementation of the PCAP. However, given that it is the members who drive action, this model is not well suited to owning and updating the action plan itself. Both model options presented in this document should be accountable for properly using funds and reporting on said use appropriately.

### Achieving Network Goals

As noted, the crux of network activity is carried out by action groups in this model. These groups are created upon recognition from within the community of a need or opportunity that is matched with the energetic leadership to move a particular issue forward. In the case of AMR, the PCAP will likely be the foundation from which needs and opportunities are generated.

Over time, we anticipate that two types of action groups may emerge: member-driven action groups and network-driven groups. Member-driven groups allow for nimble action as priorities change over time.

For example, had this network existed as COVID-19 began to spread across Canada, an action group may have formed to explore upticks in resistant hospital-acquired infections during epidemics. This allows AMR to remain a priority for network members, regardless of extenuating circumstances. Network-driven action groups, on the other hand, allow for strategic development in priority areas. For example, the network coordinating council could establish categories that all action groups must fall under — infection prevention and control, surveillance, research and innovation, stewardship, etc. This creates a foundation upon which members can build. It also prevents members from straying too far from network goals. In either case, a lightweight governance model like this allows for considerable autonomy and decision-making to reside at the membership level.

## 5.5. Exploring the Lead-Entity Model

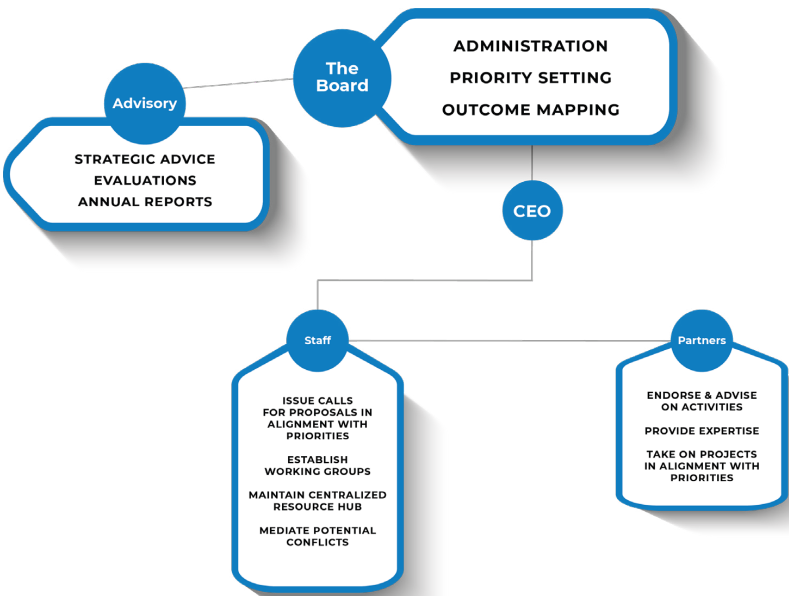
A lead-entity model is a common model used in many corporations and not-for-profit organizations. Under a lead-entity model, the network would be guided by an independent not-for-profit organization with the dedicated mandate of improving antimicrobial resistance (AMR) and antimicrobial use (AMU) in Canada across One Health. Ideally, this would enable knowledge sharing at a national scale, ultimately catalyzing coordinated and accelerated action across the country.

The operations of the lead-entity model would be funded by government, but the entity itself would not be a government agency. Instead, the legal entity would be established outside of the formal mandate of the federal government and be held financially accountable to each of the entities that fund it.

The lead-entity is governed by a **Board**, which holds the discretion to undertake activities according to the mandate of the entity. The Board would be appointed by federal, provincial, and territorial governments according to a Terms of Reference that outlines the required competencies and perspectives. For example, the Board could be comprised of a chair, four regional nominees, six nominees from the medical, scientific, technical, and business sectors across the various One Health domains, two nominees with relevant consumer experience, and so on.

The entity would seek to accelerate action on AMR for all Canadians by augmenting, building upon, and implementing the forthcoming action plan. It would be responsible for the translation, transfer, and sharing of knowledge in the strategic priority areas of the PCAP, which include stewardship, research and innovation, infection prevention and control, and surveillance.

The Board would be responsible for administering the entity, establishing its priorities, goals, and preferred outcomes, and ensuring that the action plan is implemented in such a way that captures the values of its diverse constituents. The board will engage directly with the AMR community by way of advisory committees that would be designed to accommodate the complexity of the AMR ecosystem in Canada through encompassing One Health, geography, language, and more. Through such broadly representative advisory structures, the Board will receive the input needed to inform its plans and decisions and ensure that it continues to be aligned with the AMR community.



Like any Board, a key function of this group would be to hire a **CEO** to oversee the day-to-day operations of the entity. The entity would be staffed to deliver against the strategic and operating plan established by the Board; **staff** could be deployed across Canada and would be able to work in both official languages.

Leadership in this model will be more akin to a typical CEO role — directing programs and services, ensuring deliverables, and being responsible for cultivating a results-driven organization.

As with the distributed collaboration model, the lead-entity would establish an external advisory function, conduct regular evaluations, and issue annual reports. External guidance, comprised of international experts, is particularly important in this model to ensure that the Board is both representative and collaborative. This is imperative, given the One Health composition of the Board.

### Rationale for the Lead-Entity Model

This model appeals to those who view the AMR ecosystem in Canada as one that requires a strong and focused leader to bring about change. Proponents of the Lead-Entity Model believe that a single organization with responsibility for driving AMR work forward will provide that necessary leadership. Through partnerships and involvement of

stakeholders in its work, the lead entity can engage broadly with the AMR community, and identify areas where it can move forward most quickly and effectively. With a single Board responsible for setting overall strategy and priorities, the lead entity will present a unified face to funders and can coordinate which organizations and/or individuals will join a project team. Where the distributed collaboration model relies on organic action, the lead-entity model is more directive. The entity sets its goals and pursues achievement.

In terms of how this model relates to the different levels of accountability outlined elsewhere in this document, this model lends itself well to being accountable for enabling and ensuring the effective implementation of the PCAP. For example, where the distributed collaboration model allows for action that may fall outside of immediate priorities, the lead-entity model stresses focus and only endorses action that will lead to achievement of its clearly marked goals. As well, this model would be accountable for refreshing and updating the Action Plan as outcomes are met and as priorities shift.

As noted in the previous section, both model options presented in this document should be accountable for properly using funds and reporting on said use appropriately.

### Achieving Network Goals

The detailed operations and tactical-level network activity will likely be carried out in a similar fashion as in the other model — what differs here is the mechanisms by which priorities are determined and how the project teams are established. In this model, the lead-entity ultimately determines which projects are undertaken and pulls together the project teams that do the work.

The lead-entity could structure its project teams to reflect its priorities — for example, building teams that specialize in the areas of infection prevention and control, surveillance, research and innovation, stewardship, etc. This ensures that the work efforts of the network are focused on identified priorities and may assist with closer alignment with the PCAP.

## 5.6. Working Through Some Examples

It might be helpful to work through a couple of examples, leveraging items laid out in the forthcoming PCAP. The point of these examples is not to say that what's below is the best or only way to approach the action plan item — it is simply to describe how it could be approached under the two models.



For the first example, imagine a scenario where there is a general consensus that an early priority is to focus on hand hygiene in daycares. Here's how things would move forward in each model.

**The Distributed Collaboration Model:** In this model, a couple of people — say, for example, from an Association of daycare operators, IPAC professionals in health organizations concerned about hand hygiene, and academics interested in the spread of innovation — are interested in the increasing the effectiveness of hand hygiene in daycares across Canada leveraging best practices from other areas. These people approach the secretariat to learn of others across the country who may be interested in joining this budding action group. Through outreach and collaboration enabled by the secretariat, a small group is established. They apply to the NCC for designation as a Network Action Group with a defined support envelope from the secretariat (in areas of project management, meeting administration, translation, evaluation support, funding to convene meetings, etc.). The group, using this support, creates a summary of best practices and develops a plan to spread them to other areas. From there, the group will identify change champions or impact enablers in the required areas to join the action group and help deploy new guidelines. In time, the secretariat leads an evaluation of the action, lessons learned are folded into the next tranche of spread, and the information

is leveraged in reports assessing the overall success of the PCAP. The participation of individuals in the action group is dynamic — evolving as the work and the location of the work changes.

**The Lead-Entity Model:** In this model, the lead entity undertakes a strategic planning exercise that identifies that, of the more-than-50 action items in the PCAP, infection prevention and control in non-healthcare settings should be an initial priority, and that within that broad plan action item, the initial focus should be on hand hygiene in daycares across Canada. The entity staff are directed to create a best practice guideline and implementation approach, which is then endorsed at a consensus meeting of relevant experts from across Canada. To guide the next stage, the lead entity establishes a working group, being careful to ensure the working group represents the full range of perspectives that might arise over the course of the project. A call for proposals is issued by the lead entity to identify a small number of pilot implementation regions supported by the staff from the lead entity. The implementation and subsequent evaluation of the work would proceed in a similar fashion to the other model.

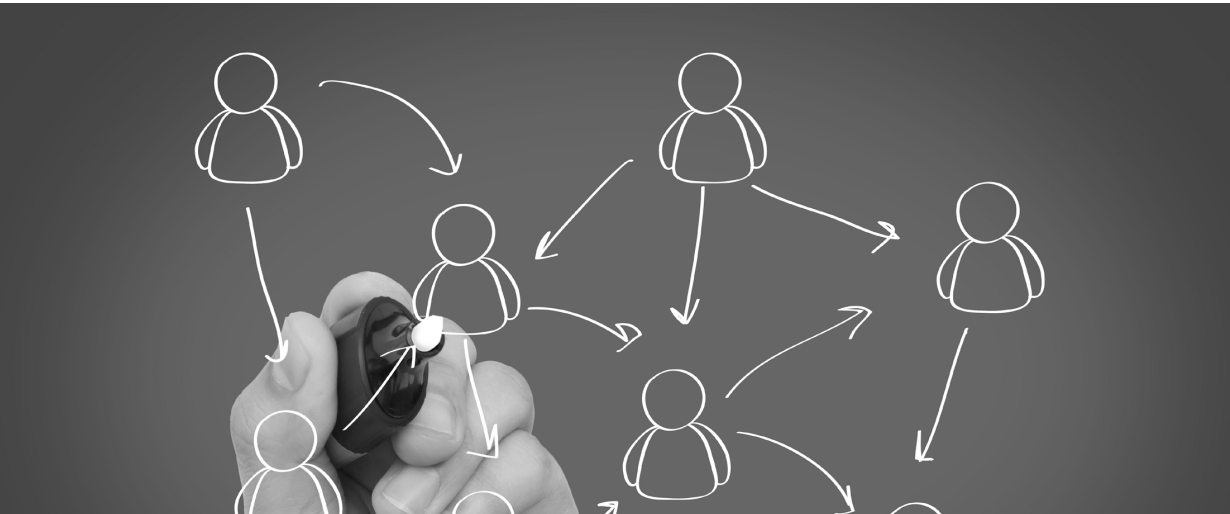
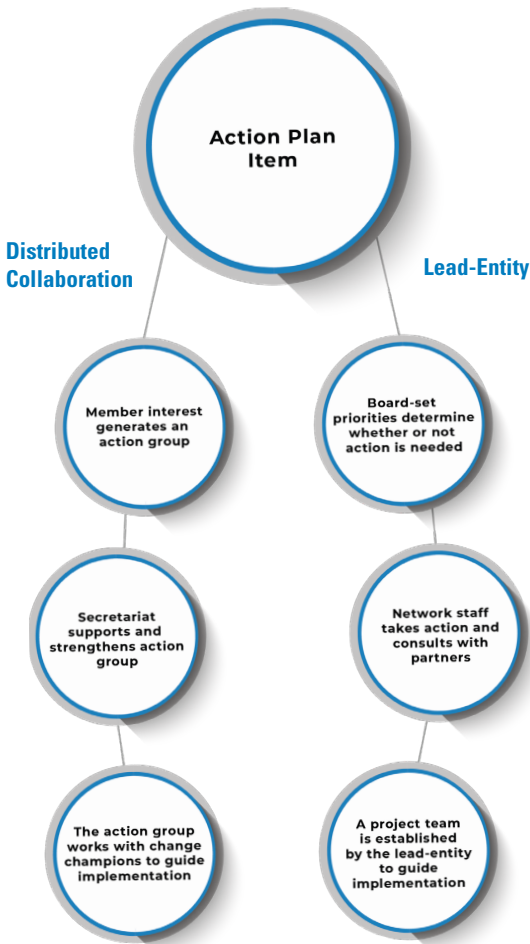


A second example relates to establishing a platform to share data widely in a way that can support effective decision-making and enhance surveillance systems of AMR and AMU.

**The Distributed Collaboration Model:** In this model, people — likely those who work with data infrastructures, those who set data standards, AMR surveillance specialists, information consumers, privacy experts, and key influencers — are intrigued by the action plan item, recognizing

that there are lots of existing data platforms, but there is a general lack of awareness across One Health regarding their contents and availability, making it difficult to both access the data and to understand true gaps. They approach the NCC to propose an Action Group that will establish an annotated catalogue of all data platforms across the One Health continuum, with descriptions of data sources and outputs, which terminology and nomenclature standards are applied, and a sense of the data quality and coverage. The administrators of the various data holdings are encouraged to join the Action Group. The Action Group is supported by the secretariat to maintain this catalogue and promote its use, while the Action Group advocates for broad use of this new resource. The Secretariat also flags cross-linkages with other work underway — like new innovative data collection projects, for example. A second action group might use the annotated catalogue to identify a specific gap that is not being met right now and create a proposal to funders to create a new data repository.

**The Lead-Entity Model:** In this model, the lead-entity determines that one of its roles will be to develop and operate a data infrastructure that can house AMR information from across One Health and hires a Chief Information Officer (CIO) to lead the initiative. As part of designing the new infrastructure, the CIO would need to propose the extent to which the infrastructure would simply fill gaps, or whether it would, over time, replace some of the disparate existing platforms. Funding for the infrastructure would flow to the lead entity.



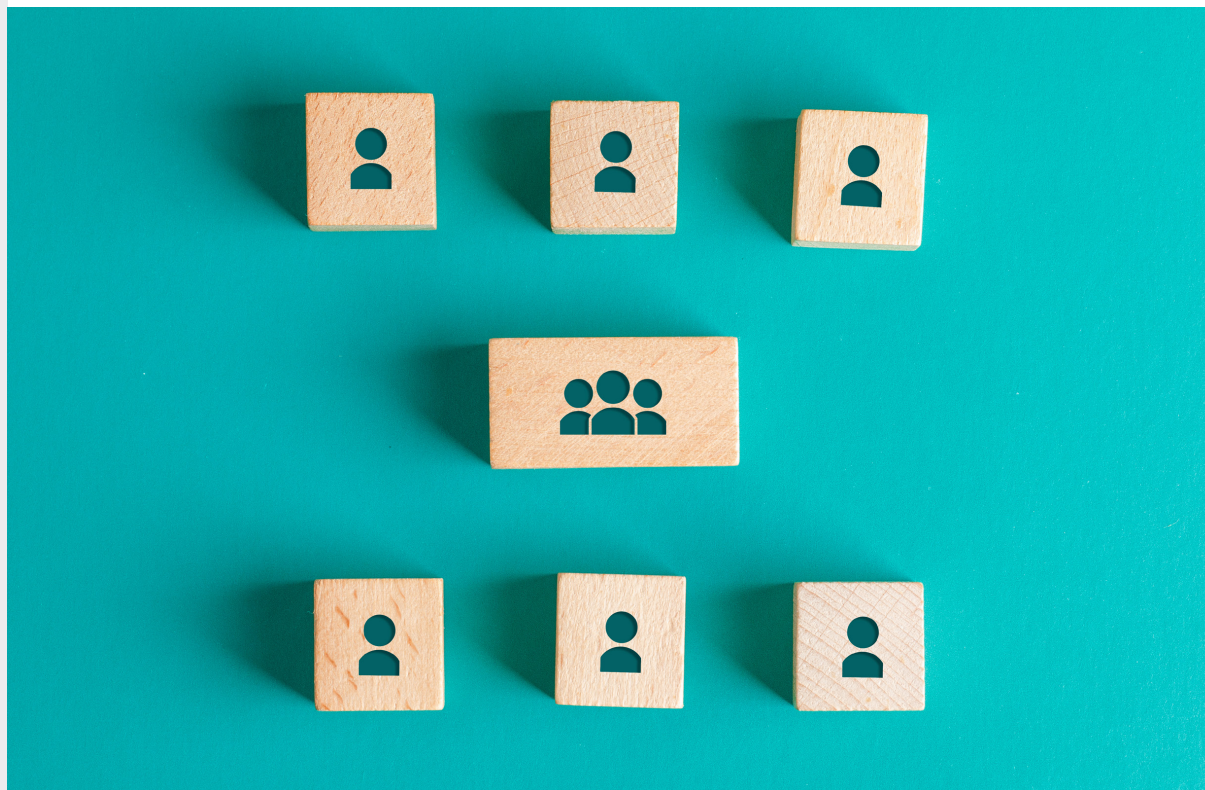
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Project:  
**AMRNETWORK**  
*Designing a Coordinated One Health Response to Antimicrobial Resistance in Canada*



## Network Model Options

*A Virtual Town Hall Series // Summary of Findings // Nov. & Dec. 2020*

### 1. Introduction

This project is conducting a series of broad consultations with stakeholders from across Canada and from across One Health. The purpose of these discussions is to explore the various aspects of how an antimicrobial resistance (AMR) network should be organized.

Our previous sessions focused on candidate network functions; this set of sessions focused on conversations specific to network structure, with a keen focus on two particular model options.

This ‘Summary of Findings’ document reports on what we heard throughout our Series 2 consultations. It is not intended to draw conclusions about which model is best. Instead, this report highlights the different nuances and implications of each model option in the words of our town hall participants. These nuances and implications have been distilled into 15 key findings, which comprise the majority of this document.

Like our Series 1 ‘Summary of Findings,’ the contents of this document will inform the development of the project’s final network recommendations, which will be submitted to the Public Health Agency of Canada (PHAC) and others by March 31, 2021.

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### Table of Contents

How the Consultations were Designed.....	2
Key Findings.....	3
• The network model itself is not the issue .....	3
• The participants brought different assumptions and world views to the conversation.....	3
• While there was a clarion call for “leadership,” participants held varying definitions of the term.....	4
• A key consideration for the network design will be how it supports the development of strong relationships.....	5
• For what and to whom the network is accountable is a complex and nuanced conversation with several interrelated ideas.....	5
• The network design needs to foster accountability to ensure network members follow through on their commitments.....	7
• Regarding stakeholder engagement, the majority of participants preferred inclusivity over efficiency.....	7
• The degree to which the distributed model has been used in Canada (and the success or lack thereof) is unclear.....	8
• There is a strong desire for clear implementable priorities, but the role of the network in establishing these priorities is less clear.....	8
• The notion of duplication, whether beneficial or wasteful, should inform the network design.....	9
• The quality, skills, and culture of the management and staff of the network will be critical to long-term success — perhaps even more so than the model.....	9
• We heard a number of suggestions regarding the criteria and process for appointments to the governing body.....	10
• There was general agreement on the characteristics of a high-performing network.....	11
• The network must be able to speak with common voice, but this will be challenging given the diversity of the AMR community.....	12
• Funding matters.....	12
Next Steps.....	13

## 2. How the Consultations Were Designed and Unfolded

Invitations were sent to approximately 600 stakeholders from all across Canada and all across One Health. More than 80 people participated in the live sessions and a small handful submitted written feedback.

In a discussion document distributed prior to the session, we proposed two models — one that embraces distributed collaboration and one that takes a more top-down approach. The two network model options discussed in our ‘Series 2 Town Hall’ sessions — the distributed collaboration model and the lead-entity model — are nuanced and complex. While they are similar in many ways, they are distinctly different in many others. We framed our discussions around these differences, asking participants to play on the extremes and to try to stay out of the middle, recognizing how challenging it might be to do so.

*The crux of our conversations in this consultation series centred around five questions:*

1. How comfortable are you with each model option to help advance the AMR action plan? What are some specific points of interest or contention from your perspective?
2. Is one model option better suited than the other to achieve success in a variety of different areas (legitimacy, flexibility, equitable access to healthcare, investments, etc.)?
3. How should the leadership members be appointed? And should a different process be used in the initial setup of the network vs. future appointments?
4. Should the network be accountable for implementing the forthcoming Pan-Canadian Action Plan (PCAP) and/or owning and updating it on a go-forward basis?
5. What additional wisdom or advice can you offer regarding AMR governance in Canada?

Presenting models that exist as polar opposites was useful for stimulating discussion, but not for decision-making. This was by design. Each model is fundamentally connected to a different theory of change, and these theories have implications on what the network does, how it operates, and what its priorities are. We found that participants tended to gravitate towards one model or the other based upon their sense of how change occurs in complex arenas, such as AMR.

The five key questions posed by session facilitators provided the framework for what, in many cases, were hour-long discussions. However, some people challenged phrasing and even suggested that the set of questions made some assumptions. While we have noted these comments for future reference, analysis of the qualitative data garnered from these consultations has shown us that the questions asked generated sufficient discussion.

Participants hailed from all regions of Canada except for the territories and represented a range of sectors and disciplines. The graphs below indicate how Series 2 participants identified their place on the One Health spectrum:



As expected in consultations of this nature, stakeholders came to the table with self-interests and personal opinions. We not only embraced this, but encouraged it. Oftentimes, these individual world views were in conflict with those of other participants, which led to lively discussion and helped push the conversations along. This also helped participants see things from new perspectives.

Many of the participants who staunchly preferred one model over the other conceded that the alternative could still be useful in the AMR space under certain circumstances. Meanwhile, many participants reflected that they arrived at the session biased toward one model but left intrigued by the other.

While absolutely supporting the notion of a network, participants acknowledged the degree of change that might result from the introduction of the network, regardless of the model chosen. As such, they called for a thoughtful process to ensure that current successes are protected and ideally enhanced.

Finally, several participants wondered — and some even voiced frustration — about when the PCAP might be published. Some took these conversations a step further and suggested that regardless of when the PCAP is released, additional work will be required to drill it down to a further level of detail.

## 3. Key Findings

We have synthesized our Series 2 consultations into 15 key findings and provided a summary of what we heard for each one. In no particular order, they are:

#1

### THE NETWORK MODEL ITSELF IS NOT THE ISSUE

While all participants were actively engaged in the conversation, there were some who observed that framing the question as “Model A vs. Model B” was, in some ways, misleading.

#### Participant Observations:

- The model itself is less important than the culture that surrounds it.
- Achieving buy-in is more important than solidifying the inner workings of the governance process.
- Either model (or potentially any model) would be a step in the right direction. It was argued that leadership is required, and it matters less what it looks like.
- What holds Canadian AMR stakeholders back has nothing to do with the model of governance, but with the degree to which stakeholders are honest and transparent with each other.
- Sectors have different and sometimes conflicting ideologies and agendas that won't be easily overcome by a new governance body, regardless of what it looks like.
- A phased approach might be optimal. Specifically, several participants were proponents of beginning with a lead-entity model to establish leadership, trust, and legitimacy, but gradually transitioning into a more distributed model over time.
- The different model options would potentially be beneficial in different ecosystems. For example, some suggested that the distributed model would function very well in the animal health realm but struggle to achieve success on the human health side. This notion led some to suggest hybridization, wherein a lead-entity approach is taken at the highest level of the network, but that oversight style varies within different sectors.



#2

### THE PARTICIPANTS BROUGHT DIFFERENT ASSUMPTIONS AND WORLD VIEWS TO THE CONVERSATION

Participants' perceptions about how change occurs — some leaning toward more directive approaches while others favoured participative grassroots approaches — often coloured their assessment of the strengths and weaknesses of the two models.

Many participants made assumptions about the level of power that the network will have, as well as the degree to which having certain powers is good or bad. For example, some stakeholders from the animal and agri-food sector assumed it could have regulatory power while some researchers assumed it would have granting or funding powers.

The term 'network' was also loaded for some participants. Some defined it as analogous to working groups that come together and provide advice or make decisions but don't necessarily 'do' anything, although these participants do recognize the importance of



influencing decisions through broad stakeholder input. However, other participants envisioned that the network would actually undertake projects. For them, ensuring that participants were equipped to act was important. These different interpretations or presuppositions of overall network function were present in all sessions.

For some, the idea of behavior change was missing from the conversation, and noted that behavior change is complex, requiring multiple approaches. In their view, whatever model is developed needs to be nimble, allowing bottom-up idea generation while also embracing a structure that can enable large system change.

Finally, participants noted that it will be important for the network to be able to accommodate projects at multiple levels of scale — those of national scale, as well as those that have a smaller scope focused on delivering value to a particular region, community, or area.

#3

### WHILE THERE WAS A CLARION CALL FOR “LEADERSHIP,” PARTICIPANTS HELD VARYING DEFINITIONS OF THE TERM

Throughout these consultations, the term ‘leadership’ was used extensively — indeed, the need for strong leadership in the AMR space in Canada was perhaps the one thing on which everyone agreed. However, it was also apparent that different people meant different things when they discussed ‘leadership.’

#### *Additional Observations:*

- We heard a clear desire for inclusive leadership that listens, consults, and coordinates interests within the AMR community. There was a general sense that either model could be adapted to deliver this type of leadership. While the distributed collaboration model is inherently stronger in this regard, the lead-entity model could leverage advisory groups and strong consultative practices to deliver inclusive leadership as well.
- Leadership is about charting a path forward that others will follow.
- Good leadership needs to come from all levels of the proposed network — the board, the management, and the staff. Poor leadership at any of these levels will erode trust and confidence in the network.



- Participants talked about three possible approaches to network leadership:
  1. One that is directive and authoritative, makes bold decisions, determines priorities, and drives people to act in the interests of the entire One Health spectrum instead of the interests of their own sector. The degree to which this leadership approach is feasible in the Canadian context, given the federated nature of the country, is unclear.
  2. One that sets out a clear focus and then lets people and organizations determine their own course of action to achieve the defined objective. Some people discussed the concept of nudging — instead of pushing people down a path unwillingly, leadership could take a more suggestive approach.
  3. One that assumes that improving access to information and increasing awareness alone is sufficient and would bring different groups together and give them the necessary tools and know-how to collaborate effectively.
- We heard that AMR leadership currently exists in silos, which is not overly helpful in a One Health context. As such, the ability for a single leader to achieve credibility across all sectors is going to be an immense challenge, and one of the network design considerations needs to be how to connect existing leaders from across the various silos.



- It was noted that the distributed collaboration model may be able to facilitate distribution of leadership, potentially to different locations with a particular focus. For example, agricultural issues might best be led out of a Veterinary University within a model of national networking.

#4

**A KEY CONSIDERATION FOR THE NETWORK DESIGN WILL BE HOW IT SUPPORTS THE DEVELOPMENT OF STRONG RELATIONSHIPS**

Trust, legitimacy, and representation were among the most important topics for a lot of participants, and many people argued that governance would not work without these aspects. Trust was described as intricately linked to the idea of relationships, and a key point in the design of the network will be how it supports the development of strong relationships.

*Additional Observations:*

- Different domains across One Health use different jargon, making it difficult to rapidly develop shared understandings.
- The network needs to be seen as legitimate both in the eyes of the members, and by external parties such as government or funders. It is often challenging to achieve both simultaneously.



- While the distributed model may inherently earn trust from stakeholders, having so many different voices can lead to a breakdown in external legitimacy. In any case, most participants agreed that there is a very delicate balance between earning trust from constituents and appearing legitimate in the eyes of external audiences.
- Building trust could be challenging in either model. Some participants noted that if people feel as if they don't belong or don't have a voice — a risk they associated with the lead-entity model — then trust-building could similarly falter.
- There are gaps in who is currently involved in AMR work in Canada, and it was suggested that all stakeholders should see themselves represented within the leadership and the mandates of the network, across sectors, regions, languages, and cultures.
- A frequently cited example of currently underrepresented groups include the First Nations, Métis, and Inuit populations.
- Regardless of whether this network is separate from or an extension of the government, buy-in at the provincial, territorial, and federal levels will be integral to establishing legitimacy. There were conflicting views about how governments would view the legitimacy of the different models. Some suggested that, when working with government, a single locus of control would likely garner more trust and legitimacy. Others wondered if groundswell from across the country would be more effective at gaining government support.

#5

**FOR WHAT AND TO WHOM THE NETWORK IS ACCOUNTABLE IS A COMPLEX AND NUANCED CONVERSATION WITH SEVERAL INTERRELATED IDEAS**

While all participants grasped the concept of accountability, we heard a range of interpretations regarding for what and to whom the network should be accountable. For example:

- There is a difference between *accountability of the network* and *accountability to the network*. We have included in this section findings related to the former, and in the next section we note findings related to the latter.
- Given that the conversation was about a network that will be comprised of multiple members, it was not always clear whether participants were speaking about accountability in terms of what the network staff does or what the members do.

- Participants frequently had challenges differentiating between how they thought the accountability should work in an ideal network versus how they thought it should be designed to work in the real world.
- Participants used the term “own the plan (PCAP)” as a proxy for accountability, but often meant quite different things as they used that term. Accountability can be thought of on three levels:
  1. Accountable for undertaking specific actions. Otherwise described as “doing the work.”
  2. Accountable for ensuring that work is underway in all areas of the plan without necessarily doing the work itself, while also measuring and reporting on the status of overall PCAP implementation. More simply, “overseeing and reporting on the action plan.”
  3. Accountable for refreshing the plan over time to ensure that it continues to focus on high-value and high-impact areas of work, “maintaining its relevance over time.”
- The network should be accountable for rolling out the forthcoming action plan — “if it’s not the network, then who?” was common rhetoric. The actions contained within the plan do not fall under the mandate of any single government agency or department, so overall fulfillment will likely never happen unless a specialized group is held accountable for it. This requires the network to have a very clear mandate, very clear reporting measures, and a very clear commitment to transparency. It was also suggested that the notion of implementation inherently requires power and authority, but there was uncertainty about where this power would come from.
- The network should not be accountable for ensuring implementation of the action plan, as a network is reliant on its members to carry out its actions and so it is difficult to hold the network itself accountable. Accountability needs to rest at the level the work is undertaken.
- The situation is nuanced — there are lots of things that could be done by the network and there are others that shouldn’t be. It was argued, however, that in these latter areas, the network could still try to spark action through influence.
- Plans such as the PCAP have major global implications, which in turn creates international accountabilities for the network. As such, its implementation is best left to the government.
- Regarding the model options, it was suggested that if the network were to be held accountable for implementation, the distributed collaboration model would be most effective at driving action, but that the lead-entity model would be more effective at holding stakeholders accountable.

*Participant observations related to ‘doing the work’ and ‘overseeing and reporting on the action plan:’*

- There was a strong desire for someone to take control and ‘make sure’ the plan happens. Participant views varied about whether this could or should be the network or whether this role is more properly placed with government.



*Participant observations related to ‘maintaining relevance’ of the plan over time:*

- As we have all witnessed during the COVID-19 experience, priorities can shift in an instant. As such, there was considerable discussion about what happens when the action plan inevitably becomes out-of-date. Four broad options were suggested:
  1. The network should regularly update the action plan, as government bureaucracy has been categorically slow in that regard. It was suggested that having a more dynamic document would likely result in more action. We also heard that any updating should be led by the people who understand AMR the best — not the government.

- 2. The network should eventually take the pen on future iterations of the action plan, but this current version should remain in government hands.
- 3. The network should make strong evidence-based recommendations for changes to the action plan to government, but leave the approval solely in the government's hands.
- 4. Refreshing the plan should be the sole responsibility of government. Three primary arguments were made for this position:
  - The plan is a public policy document and therefore within the purview of government alone.
  - Since the government started this plan, it should be the government that finishes it.
  - Transferring responsibility to the network could inadvertently enable the government to abdicate its responsibility in the AMR space.



The other notion that was reflected in this conversation was a recognition that network participants may well undertake AMR-related work that is not a current focus of the overall network, and the network will have extremely limited influence over this.

Some suggested that the models themselves provided sufficient accountability:

- In the distributed collaboration model, the increased number and diversity of network participants likely means that it would be more difficult to hold participants accountable; however, at the same time, participants in this model would only participate when they have aligned goals, so it is possible that accountability may be inherent.
- In the lead-entity model, accountability may be easier to achieve as the network will partner or engage with those whose interests are already aligned in relation to a given initiative. This, however, will likely come at the cost of inclusivity.

#6  
**THE NETWORK DESIGN NEEDS TO FOSTER ACCOUNTABILITY TO ENSURE NETWORK MEMBERS FOLLOW THROUGH ON THEIR COMMITMENTS**

There was a strong sense that network participants — whether that means individuals or organizations (or both) — must be accountable to the network. This means that the network must have mechanisms in place to focus the efforts of its members, to elicit firm commitments, and to ensure that commitments are upheld. This responds to the expressed fear that, without accountability mechanisms in place, network initiatives will risk appearing voluntary or becoming side-of-the-desk tasks.

However, we also heard questions about the degree to which strong control mechanisms will be feasible in the Canadian AMR context, given the large and diverse ecosystem comprised of members that have varying (and sometimes conflicting) accountabilities. It was also noted that, for many potential members, AMR is a peripheral focus and not part of their day-to-day responsibilities, which could impact levels of commitment.

We heard that the Canadian context is different than some other countries, where a centralized dictate from government can be enforced.

#7  
**REGARDING STAKEHOLDER ENGAGEMENT, THE MAJORITY OF PARTICIPANTS PREFERRED INCLUSIVITY OVER EFFICIENCY**

It was noted throughout these consultations that effective engagement of stakeholder groups across the full spectrum of the network will be vital to gaining input into ideas, to getting volunteers for action, and to fostering an environment of learning and collaboration.

That said, there was an overwhelming sentiment amongst participants that it is time for action and that the network needs to expedite — but not force — relationship-building so that stakeholders can begin working together.

Participants largely agreed that any network model would improve the current state of engagement across the AMR community, recognizing that each model would apply different approaches to stakeholder engagement. Doing this in an inclusive way was seen as innately easier in the distributed collaboration model, so much of the conversations focused instead on how to do this using a lead-entity model.

Additional Observations:

- There is a need for a range of perspectives and a diversity of considerations.
  - Given the sheer magnitude of voices involved in the AMR conversation, some groups currently feel drowned out or excluded. It was therefore suggested that the network could play an equity-balancing role, ensuring that all voices are heard.
- Government is a special case.
  - Governments will play a significant role in network success, and there was unanimous agreement on the need to engage all levels of government, and the various departments within each level.
  - A lead-entity approach was argued to be more applicable here — an oversight body that can engage government using one voice.
  - A federally sponsored network may have little influence over provincial or territorial governments and may need to rely on the federal government to bring them to the table. At the same time, FPT relationships are complex and the network cannot be expected to resolve long-standing issues — instead, the network should recognize the reality of the situation and focus on AMR.
- Considerations for each model:
  - The distributed collaboration model was generally viewed as more respectful and inclusive, and having better trust-building and inviting attributes, which it was argued could foster a reciprocal culture of engagement and participation.
  - The lead-entity model is less broad-based and is subject to the risk of having imbalanced engagement. For example, academics may be heavily involved while practitioners are not. This could result in a network that is skewed in one direction and not representative of the activities and priorities that exist across the entire

community. Participants mentioned possible ways to overcome this, which included having multiple advisory committees comprised of a diversity of representatives, or leveraging ‘champions’ at the grassroots level to increase collaboration and engagement.

- At the end of the day, we heard that engagement in either model will be hard work and will likely require considerable resources.



THE DEGREE TO WHICH THE DISTRIBUTED MODEL HAS BEEN USED IN CANADA (AND THE SUCCESS OR LACK THEREOF) IS UNCLEAR

Both models received considerable attention, but we heard a range of views specific to the distributed collaboration model.

Additional Observations:

- There is a history of launching distributed/collaborative networks within the One Health domains both in Canada and internationally and it was argued that some have had limited success.
- The reasons for any lack of success may relate more to a lack of proper resourcing of the secretariat or coordination function more than to the notion of a distributed network.
- The animal and agri-food sectors have been successfully using a distributed model for quite some time, and lessons from these sectors could be applicable to the other One Health domains and in developing a broader One Health network.



THERE IS A STRONG DESIRE FOR CLEAR IMPLEMENTABLE PRIORITIES, BUT THE ROLE OF THE NETWORK IN ESTABLISHING THESE PRIORITIES IS LESS CLEAR

It is important to distinguish between identifying possible priority actions and selecting priority actions. We heard a clear sense that the network should play a strong role in identifying priorities but there was less consensus on whether the job of making the final decision about whether something is an actual priority is an appropriate role for the network.

A key challenge for this network is the breadth of perspectives across One Health and the resulting complexity of identifying, synthesizing, and setting priorities.

Additional Observations:

- Participants generally agreed that the distributed model would be better for identifying priorities, but the lead-entity would be better at setting them.
- There was some resistance to placing so much responsibility in the hands of a small group of people in the lead-entity model, but also a concern that the distributed collaboration model may be rudderless with too many conflicting voices involved. Despite this, it was noted that teamwork typically produces stronger results.
- We heard that representing One Health will be challenging with a high risk of appearing biased; anybody appointed to work on priorities would come to the table with the “human nature” to look out for their own region, sector, interests, and peers. This led to some discussion about how — especially in the lead-entity model — priorities should be identified and set.
- It was noted that it will be important for the network to be nimble and flexible with priorities, so that it can respond to changing circumstances and situations — for example, COVID-19.
- Both the identification and setting of priorities should be informed by the global picture. This could also enable the network to be Canada’s conduit to international priority discussions.
- Irrespective of the model, the network should develop a thorough understanding of the work that is already underway in Canada before it even begins considering priorities.
- The network needs to be alert to the risk of mission capture, where priorities are determined by large funders or the availability of resources rather than evidence and information.

#10

THE NOTION OF DUPLICATION, WHETHER BENEFICIAL OR WASTEFUL, SHOULD INFORM THE NETWORK DESIGN

While there was an overall consensus amongst participants that the network should aim to reduce duplication in the AMR space, participants differed on both the best way to reduce duplication and, in many cases, the areas of duplication that should be focused upon.

Meanwhile, others noted that having some duplication may in fact be a good thing, in that it allows innovation to occur while respecting the diverse realities that exist across One Health and across Canada.

Additional Observations:

- The areas of duplication that participants focused on included the number of organizations whose work touches on the same part of AMR, the potential for multiple and potentially conflicting approaches, the fact that AMR is frequently not the primary business for these organizations, and inconsistencies between geographies and disciplines.
- The concept of reducing duplication led many to value the lead-entity model, assuming it would be more effective in standardizing approaches to AMR. Others gave thought to designing the staff/secretariat function of a more distributed network to ensure it would be equipped to reduce duplicative practices across the country.
- We also heard concerns that duplication could actually be increased by establishing another entity to work in the AMR arena. It was argued that there are already a plethora of government and non-governmental organizations working around AMR and the network itself could duplicate work that is already happening.
- There were questions about the degree to which existing duplication impedes progress, and how well does any proposed organizational design realistically reduce non-useful duplication? Investing in reducing redundancy may not be a useful allocation of resources.

#11

THE QUALITY, SKILLS, AND CULTURE OF THE MANAGEMENT AND STAFF OF THE NETWORK WILL BE CRITICAL TO LONG-TERM SUCCESS — PERHAPS EVEN MORE SO THAN THE MODEL

The staff, including management, will play a key role as the glue that holds otherwise disparate groups together across the network.

Additional Observations:

- Participants placed high value in transparency and collaboration; it was said that whoever sits in these positions should be capable of inspiring others to participate in the network.
- The staff of the network must strike a balance between scientific credibility and administrative expertise.



- Success in either model is highly dependent on the skills and aptitude of whomever is named to the senior executive role. This individual will need to be a very experienced leader that has a strong, facilitative, collaborative, inclusive, and respectful approach to management – not somebody who’s authoritarian, narrow-minded, or unwilling to innovate.
- Having somebody in leadership who has demonstrated the ability to work across One Health and to gain the trust of different types of stakeholders was considered to be an asset. It was cautioned that it may be difficult for a leader with an animal health background to gain the respect of people on the human health side of things, and vice versa.
- Recruitment of such a leader may prove to be challenging, with participants suggesting that it may be difficult to find qualified people who are interested in becoming the face of the network.
- Staff roles such as ‘collaboration officers’ may be a productive way to manage relations between such diverse intellectual and cultural communities.
- To be effective, the staff function must be properly resourced. It was also recommended that the leadership and staff of the network should be physically distributed — using satellite offices, for example — to enhance accessibility for stakeholders across the country.
- The majority of participants argued for a primarily representative board, suggesting that the network needs a large governing body that consists of members from the different One Health domains, members from different sectors, and members from different regions, all while being mindful of equity, diversity, and inclusion.
- Fewer — but vocal — participants argued that it is important that the governors bring certain skill sets to the table, noting that merit-based appointments would enable that.
- Generally, participants gravitated toward processes that were more inclusive, arguing that this is likely to lead to more meaningful engagement.
- Four possible processes were identified:
  1. Invitation: Inviting people who have demonstrated excellence or leadership in a particular field.
  2. Nomination: Having members recommend their peers.
  3. Application: Standard job posting, advertised online.
  4. Election: Stakeholders announce their candidacy and members vote.
- We also heard the suggestion that, since healthcare is essentially provincially directed in Canada, governors representing this sector should be identified through provincial/territorial means.

#12

WE HEARD A NUMBER OF SUGGESTIONS REGARDING THE CRITERIA AND PROCESS FOR APPOINTMENTS TO THE GOVERNING BODY

Regardless of the model, there will be a governing body for the network — a board, a coordinating council, a steering committee — and this governing body may have sub-committees or advisory bodies to inform it. There was extensive discussion about the mechanics of appointments to this governing body, with the distinction made between processes to identify potential governors and processes to decide who should be appointed.

Participant observations related to identifying potential governors:

- There was considerable discussion surrounding the criteria for appointments to the governing body.

Participant observations related to deciding who should be appointed:

- Whoever funds the network would likely have the most say in who is appointed to these positions.
- The network should elect the board — “the network knows what the network needs.”
- The network should be seen as independent from government, because there is currently a lack of trust in government to appoint the best people. It is also incredibly important to not have politics drive appointment decisions.
- Appointments could perhaps come from a number of different places — some from funders, some from government, and some from the community.
- Bottom-up processes where network members contribute to decision-making would be much more palatable for stakeholders, even if it is government or funders who make the final appointment decisions.



### Other Observations:

- There was considerable discussion about whether or not appointments should have a different process at the network's outset. It was suggested that a robust, representative steering committee — similar to the one steering this network recommendations project — could be struck to oversee the early years.
- The concept of turnover for governors was also discussed, with participants noting that having the same leadership in place too long can lead to complacency, but having it change over too frequently can result in disorganization.
- Participants noted that the board structure — for example, establishing advisory and sub-committees — could be designed in ways that address some of the representation concerns and to ensure that the Board is hearing not just from a few individuals, but from the various different forces that are at work in AMR in Canada.
- Another suggestion was to apply a co-chair model that captures representation from the human, animal, and environmental health domains.

#13

### THERE WAS GENERAL AGREEMENT ON THE CHARACTERISTICS OF A HIGH- PERFORMING NETWORK

We heard a desire for the network to be efficient, effective, responsive, and nimble, all while acting with a sense of urgency and transparently managing conflicts of interest.

### Project Team Observations & Participant Suggestions:

- The term efficiency was used to describe two areas:
  1. Efficiency of collaboration: Connecting stakeholders, fostering partnerships, and coordinating work
  2. Efficiency of implementation: Making things happen, driving change, and measuring progress
- Participants commented that the AMR community is not currently efficient in either respect, and that a network could be just the thing to remedy that. It was argued that it is realistically going to require hundreds of members to drive change at a meaningful scale, but that working with such a massive and diverse group may inherently have adverse effects on efficiency. In this respect, there was some preference toward the lead-entity model — “it seems more about getting business done.”
- The distributed collaboration model may create imbalance with over-engagement in some areas of the action plan and zero or little engagement in others, which, in turn, hurts efficiency.
- Some feared that the bureaucracy of a new entity could lead to inefficiency, and that it may use up precious AMR resources on administration instead of implementation.
- Regarding effectiveness, participants weighed breadth versus depth. It was argued that it is less important to have a little bit of impact in a lot of places than it is to have a lot of impact in a few key areas.
- To maximize both efficiency and effectiveness, it was suggested that the network's first order of business should be to recognize the work that is already happening so that it can identify gaps and then develop plans to help fill those gaps.
- Some focused on measuring effectiveness and efficiency over time, noting that the network may be far more effective in the long-term than it is in the short-term (or vice versa).
- Participants also held strong and disparate opinions about which model would be most responsive and nimble.
- While people largely argued that speed is important, they acknowledged that there is considerable tension between being quick and making mistakes, which would ultimately hinder speed in the long run.
- There was also discussion about whether or not being faster in some areas than others is a good thing. On the one hand, it was argued that moving things along with momentum is how progress is achieved. However, on the other hand, it was argued

that leaving certain areas behind may only serve to sow more disconnect in the country, thereby undermining the entire point of this network. Participants noted that this is where nimbleness should come in — that the network should be able to pivot to meet the emerging needs of the different groups it represents.

- Some feared that the establishment of a new entity may inadvertently disrupt existing work, hurting momentum in the short-term. It was also suggested that a new entity could cause work to stop or slow to a crawl while stakeholders await direction from the top. With that in mind, it was noted that the distributed model may be better suited to hit the ground running.
- There was an overwhelming sense of disappointment regarding the level of urgency that exists in the AMR space today. Many voiced frustrations over years of talking with little to show for it. As a result, some participants were less fussed about what the model might look like, as long as it was capable of showing urgency.
- We heard that conflict of interest is critically important — how it’s managed, how it’s recognized, how it’s declared, and what processes are in place to help avoid the conflict or the perception of conflict. Conflict of interest should be thought about in the broadest terms across all sectors including non-industry and government participants.
- Conflict of interest consideration may inform membership. One intriguing example was the question of having international members on working groups, which could prevent the necessary level of transparency and raise concerns about trade considerations.

#14

THE NETWORK MUST BE ABLE TO SPEAK WITH COMMON VOICE, BUT THIS WILL BE CHALLENGING GIVEN THE DIVERSITY OF THE AMR COMMUNITY

Participants identified Canada’s lack of a common and prominent voice as the reason that the country struggles to be seen as a leader in AMR response internationally. Further, participants suggested that the existing independent and distributed nature of the community has thus far failed to spur the federal government into taking meaningful action. As such, it was argued that having all sectors, all One Health domains, and all regions focusing on the same priorities will improve external legitimacy, accelerate progress, and overall network organization.

While both models are likely to struggle in this regard, generally there was more wariness regarding the distributed model — “you could end up with too many voices singing, and not necessarily from the same song sheet.” It was argued that this could result in confusion at the policy level, throughout the general public, and even across One Health.

An alternative view was that concentrated leadership will not have as much of a voice as a distributed model.

#15

FUNDING MATTERS

Because coordination, stakeholder engagement, and implementation all require a lot of time, energy, and resources, participants were quick to argue that long-term funding will be key to the long-term success of the network.

Project Team Observations & Participant Suggestions:

- Getting funding was perceived to be easier for the lead-entity model because it is more closely aligned with the federal and international levels. However, some participants suggested that the distributed collaboration model has potentially more funding at its disposal because of its vast number of potential collaborators.
- It was recommended that, should the network employ a distributed model, its member organizations should seek funding for work — not the network itself.
- Some worried about AMR being the government’s flavour of the day — that elections or public pressure could change government focus and thereby change funding allocated to this network. There was also discussion about whether one government may prefer to fund a lead-entity model while the next may prefer a distributed model.
- It was suggested that whichever model enables broad representation and participation will likely attract the most funds.
- Some participants wondered whether the operating cost of the network would be a key factor in choosing a network design.
- We heard a perception that a lead-entity model may be more likely to ensure provincial/territorial funding than a distributed model.
- Participants suggested that it would be important to know if the choice of the model would influence industry investment.

## 4. Thank You!

Thank you to everybody who participated in these consultations or provided written feedback. Your input, questions, and concerns have strengthened our understanding of the landscape and values of the Canadian One Health ecosystem.

The input garnered from this series of consultations, coupled with what we garnered from our ‘Series 1’ sessions, will inform the development of the recommendations that we ultimately put forth.

For more information, please visit [amrnetwork.ca](http://amrnetwork.ca).



### Have more to say?

If you didn't make it to a town hall session — or did, but have more to contribute — it's not too late to make suggestions or voice concerns. Connect with us online at [amrnetwork.ca/contact](http://amrnetwork.ca/contact) and we'll ensure any additional feedback is incorporated as we move forward.

## Workshop Feedback

Many people who participated in our Series 2 consultations provided feedback following the discussions. Here is some of what we heard:

- “Good, free flowing discussion. The facilitator did a good job trying to stimulate the conversation or refocus it back on providing thoughts on the models presented.”
- “While there was some good info circulated on the two models, it was not clear why these two were chosen or what other options were considered.”
- “It is a good start, but there is so much complexity to this that to say it is sufficiently done would be an overstatement.”
- “The intro and discussion were clear and focused. I felt it was an effective use of time.”
- “The documentation provided before the meeting was very good. Facilitation was smooth and effective.”
- “The session was well organized and facilitated. Instructions were clear and timing was good.”
- “A few more minutes reviewing the models at the outset would have been helpful.”
- “The introduction to the model options was done very quickly and included a lot of information presented in a fast manner.”
- “Having small group discussions was key to the success of this session. If we had instead had these conversations as a larger group, we would not have heard everyone. This gave everyone the chance to speak up.”

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Project:  
**AMRNETWORK**  
*Designing a Coordinated One Health Response to Antimicrobial Resistance in Canada*



## Series 3: Final Consultation Draft Findings & Proposed Models

## Strengthening the Governance of AMR Response Across One Health in Canada

March 2021



## Table of Contents

AN INTRODUCTION TO THE DOCUMENT.....	2
KEY FACTORS & CONSIDERATIONS.....	3
Sense of Urgency.....	3
Current Siloes.....	3
The Federated Nature of Canada.....	3
Values & Behaviours.....	4
TWO PROPOSED MODEL OPTIONS.....	5
Purpose Statements.....	5
Views on how change could best occur.....	6
Creating connections and fostering knowledge sharing.....	6
Accelerating action and making meaningful impact.....	7
Board of Directors.....	8
Subcommittees & Advisory Committees.....	8
Staff.....	9
Accountability to Funders.....	10
Membership.....	10
Benefits.....	11
Cost of Operating the Models.....	11
PROVIDING FEEDBACK.....	13
APPENDICES.....	14
Process & Scope.....	14
AMR Network Illustration.....	15
AMR Centre Illustration.....	16
Action Group Lifecycle.....	17
Org Structure & Staffing.....	18
Lessons Learned.....	20
Organizational Values.....	21
Membership Agreement.....	22

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## An Introduction to the Document

Today, many individuals and organizations across the One Health<sup>1</sup> antimicrobial resistance (AMR)<sup>2</sup> space in Canada are active contributors in efforts to mitigate AMR — and it is critical that they continue to be so in the future. While the breath of work is positive, there is also widespread recognition that the lack of integration and coordination of activities raises the health risks posed by antimicrobial resistance. In response, the Public Health Agency of Canada (PHAC) tasked our project to propose how governance in this complex arena can be strengthened in Canada. In the following pages, we propose two such models — the product of more than a year of consultation with stakeholders representing the breadth of One Health AMR in Canada.

Respecting the complex environment, the two proposed models take different approaches to providing leadership to those seeking to advance the AMR agenda — in one case, establishing a robust network whose work is facilitated by a small coordination unit, and, in the other, creating what we have called the AMR Centre to lead work in particular areas.

Both models ensure alignment with Canada’s framework for AMR response<sup>3</sup> and recognize the ongoing responsibilities that governments have to design and monitor the impact of the forthcoming Pan-Canadian Action Plan (PCAP).<sup>4</sup>

To inform our forthcoming Model Options Report, which will present the two models at a sufficient level of detail to allow the government and/or other funders to move forward with implementation planning, we are now seeking broad input on the feasibility and credibility of the two proposed models. As you read on, please ask yourself the following questions:

1. Does our assessment of the “Key Factors and Considerations” in Canada reflect how you see things?
2. Is each model option feasible and credible, and could either (or both) improve the AMR response in Canada?

Through written and verbal forums, you will have opportunities to answer these questions and ask questions of your own. Your feedback will inform the recommendations that we ultimately submit to PHAC. Please see Page 13 for details on how to submit feedback.

### What is governance?

Governance is a challenging concept, so we found it helpful to keep several complementary definitions in mind as we designed these models:



Governance is about how decisions are made — the structures, processes, and protocols that ensure accountability, transparency, responsiveness, stability, equity, and inclusiveness.



Governance determines who has a voice in making decisions, how decisions are made, and who is accountable.



Governance is “the sum of the many ways individuals and institutions, public and private, manage their common affairs. It is a continuing process through which conflicting or diverse interests may be accommodated and cooperative action may be taken. It includes formal institutions and regimes empowered to enforce compliance, as well as informal arrangements that people and institutions either have agreed to or perceive to be in their interest.”<sup>5</sup>

1 One Health refers to the interconnection between people, animals, plants, and their shared environment.

2 In the context of this document, AMR is used as a sweeping term that encompasses antimicrobial stewardship (AMS) and antimicrobial use (AMU).

3 Tackling Antimicrobial Resistance and Antimicrobial Use: A Pan-Canadian Framework for Action (<https://www.canada.ca>)

4 A Pan-Canadian Action Plan for AMR is being developed by PHAC to operationalize the Framework.

5 Definition according to the Global Development Research Centre’s “Report of the Commission on Global Governance.”

## Key Factors & Considerations

Over the course of this project, we have refined our understanding of some of the important factors that need to be considered in the design of any model

### **The sense of urgency underpinning calls for increased coordination and leadership within One Health AMR across Canada**

Canada's AMR community agrees that creating meaningful change requires action across a complex ecosystem of organizations and experts, some with competing interests, and many with priorities stretching far beyond AMR. They overwhelmingly agreed that there is a strong need for enhanced governance and expressed a clear willingness to participate. Virtually nobody that we consulted with suggested this notion was a bad idea — some identified nuances about how it should be done, but nobody outright resisted the notion.

While participants came to our consultations with an understanding of the complexity of the AMR issue, they frequently expressed surprise about the diversity of actors in Canada and how little they knew about the goings-on in sectors beyond their own. Most participants had preferences for how this could be addressed but noted a clear willingness to compromise if it meant meaningful action and faster mitigation of AMR. In other words, people are less concerned with how things play out, as long as they do indeed play out. They noted that “perfect is the enemy of good” — that something is better than nothing, as long as it progresses the national response.

### **COVID-19: Building on Lessons Learned for the AMR Response**

The COVID-19 pandemic caught the world by surprise, taking a social and economic toll of devastating proportions. Individuals, organizations, and policymakers across the world have become acutely aware of the consequences of infectious diseases for which we have no treatment. Canada must leverage the awareness and the massive investment that COVID-19 generated to accelerate our AMR response. Whether in the areas of sharing of information on treatment and prevention, enabling rapid actions to develop, license, and distribute vaccines, or establishing new coordination mechanisms, the current pandemic offers lessons that can be applied to the AMR space.

### **The currently siloed nature of the One Health AMR response in Canada**

As noted in the current draft of the PCAP, AMR is a complex issue, and addressing it is beyond the capability and responsibility of any one government, agency, or organization. The human health, animal health, and agriculture and agri-food sectors are already engaged in numerous activities to address AMR and many are achieving good results in their specific areas of responsibility. Indeed, our survey and research confirmed that there is already a significant amount of AMR-related activity occurring — advocacy, awareness, coordination, education, funding, guidelines and best practices, knowledge translation, leadership, legislation, policy development, regulation, reporting, research, standards and tools, surveillance, training, and more. However, given that silos exist both between and within the human, animal and environmental domains, there are missed opportunities for cross-sectoral collaboration, coordination, and leveraging of scarce resources.

### **The federated nature of the government in Canada**

Governments across Canada have identified AMR as a priority. Provinces and territories are undertaking multiple initiatives to combat AMR, including surveillance, human and animal health professional awareness raising and to reduce antibiotic use, and immunization programs to prevent and control infections and the spread of infectious diseases.

The federal government has published a national framework and is working with the provinces and territories to finalize an initial version of the PCAP. The PCAP is a public policy document and therefore it is the responsibility of federal government to maintain the plan, and to evaluate and report on its success. As a living document, the PCAP will likely change over time — and evolve in scope to incorporate environmental needs and other emergent priorities.

Given the federated nature of Canada, decision-making may reside with multiple levels of government, with jurisdictions having unique priorities and needs. Any new governance mechanisms that are proposed will have to work within these structures and respect their constitutional rights and responsibilities.

4

Implementing either of the proposed governance model options will involve creating some type of new organization. This organization should only be held accountable for the responsibilities that it agrees to undertake — which, as described above, is not likely to include the entirety of the actions within the PCAP. The Framework and PCAP will serve as touchstones to ensure that the AMR mitigation efforts in Canada are aligned. Given this, any new governance mechanism will need to be strategically aligned with the action plan, and other key policy and guidance documents.

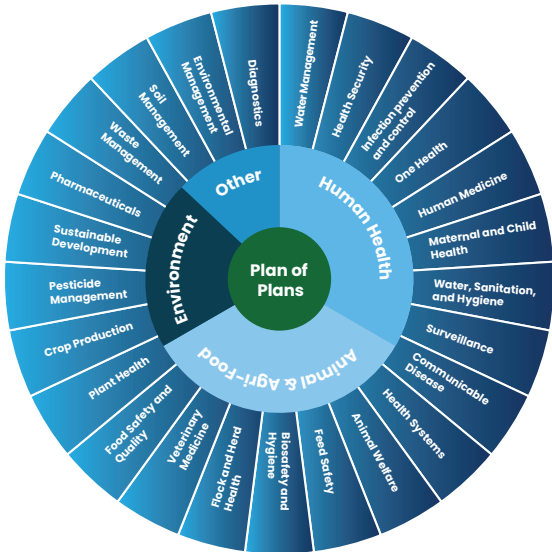
**The importance of certain values and behaviours in any governance model**

We heard throughout our consultations that, to be credible in Canada, any proposed coordination mechanism must be designed to:


- Be equitable and inclusive, linguistically, geographically, and culturally representative, and conscious and respectful of the ongoing work happening across the range of sectors that span One Health AMR
- Foster trust and legitimacy through clear and transparent communications
- Foster the use of current evidence in decision-making
- Enable real and perceived conflicts of interest to be transparently identified and managed
- Demonstrate accountability through stakeholder engagement, regular public reporting, ongoing program evaluations, and transparent financial management.


**A ‘Plan of Plans’**


Because AMR is a multisectoral issue, the PCAP will link to several different existing and still-to-emerge plans and strategies. As such, it can be viewed as a ‘plan of plans.’<sup>6</sup>





**Improved Governance  
Would Have A Series Of  
Early Benefits**


- 

Meaningful action and faster mitigation of AMR
- 

Enables Canada to better meet international AMR commitments
- 

Improves connectedness and trust across One Health AMR in Canada
- 

Less duplication of effort across regions and sectors
- 

Increases intersectoral and cross disciplinary collaboration
- 

Innovative approaches to identifying and solving problems

6 Diagram adapted from the World Health Organization’s “Turning Plans into Actions for Antimicrobial Resistance (AMR)”

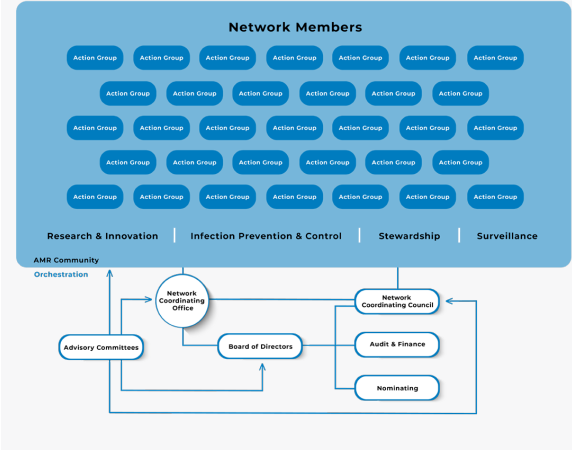
## Two Proposed Model Options

Synthesizing the learnings from our stakeholder consultations,<sup>7</sup> a broad environmental scan, and best practices in governance design, we have developed two model options that will deliver strengthened governance, albeit in two different ways. While both models ensure that there is coordinated, measurable work underway to mitigate AMR, a fundamental difference is who makes decisions about what should be done, and who implements those decisions. We present the two models by highlighting the similarities and then positioning differences side-by-side.

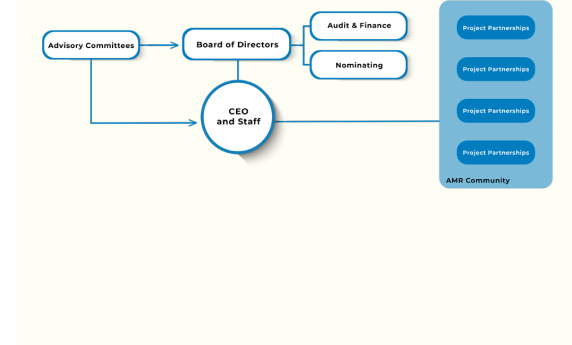
MODEL 1: A CANADIAN AMR NETWORK

MODEL 2: A CANADIAN AMR CENTRE

This bottom-up model prioritizes inclusivity to foster and harness distributed action across a broad membership.



This top-down model focuses on select priority areas with a staff infrastructure to deliver on projects.



These are complex models,<sup>8</sup> and the following pages present them at a conceptual level, recognizing that additional details will need to be worked out during implementation.

### PURPOSE STATEMENTS

A purpose statement captures the ‘why’ that unites individuals and organizations from multiple sectors to work toward a shared goal. It is what the organization is bringing people together to respond to; everything else flows from this North Star. The differing statements between the two models represent the differing ways each one will achieve its goals.

AMR Network

Assembling an active community and supporting action across One Health to mitigate AMR in Canada.

AMR Centre

Leading efforts by setting clear priorities and coordinating a One Health AMR response to across Canada.

7 Visit [www.amrnetwork.ca](http://www.amrnetwork.ca) to view our “Summary of Findings” documents to see how these proposals evolved using input provided by stakeholders.

8 See larger illustrations in the appendices (Appendix 2 & Appendix 3).



6

Two Proposed Model Options

THE TWO MODELS RESPOND TO TWO DIFFERENT VIEWS OF HOW CHANGE COULD BEST OCCUR

Stakeholders in our consultations saw systemic change in the AMR response occurring in different ways, informed by their experiences, beliefs, and values. In distilling the different perspectives about how change happens, we identified two main views on how to frame the problem and respond with potential solutions.

AMR Network	AMR Centre
This model responds to the view that the problem is too complex to allow a single locus of control and that what is needed is a small coordinating body that can promote information sharing across the community, connect disparate groups, identify new opportunities and solicit interest to work on them, and pursue greater alignment across the community at large.	This model responds to the view that strong leadership is needed to set a focus for the work and to move the agenda forward, and that what is needed is a new organization responsible for directly leading AMR efforts, with the staffing level that enables it to succeed.

KEY FUNCTION 1: HOW THE TWO MODELS CREATE CONNECTIONS AND FOSTER KNOWLEDGE SHARING WITHIN THE COMMUNITY

Regardless of the model, mitigating AMR requires people working together, and working together requires trust and effective relationships. This starts with an ability to connect individuals and organizations from across sectors, disciplines, and regions who would otherwise have difficulty collaborating, let alone finding each other in the first place.

**Create Connections:** To improve reach and impact across the complex and currently siloed One Health AMR landscape, either model must incent collaboration and provide the tools and capabilities to make this easy. Technology, like online forums and contact lists, will enable this, as will staff, who will play an essential role in brokering connections, facilitating conversations and sparking the sharing of ideas.

**Foster Knowledge Sharing:** Addressing AMR in a One Health context is knowledge-intensive with information constantly evolving as new research is released, emerging threats are identified, and timely solutions are discovered. A key role for any model will be to give those across the AMR community the ability to easily share, update, and iterate on collective knowledge and generate the best possible evidence to inform action.

Responding to these needs, both models include staff and technology that will:

- Provide a centralized, curated knowledge repository with resources to ensure AMR stakeholders and decision-makers have access to current evidence through dynamic tools that make information accessible and actionable
- Maintain a database of Canadian resources and distribution lists to help build linkages between those working in AMR response
- Provide facilitated interactions and offer ways for people and organizations to speak directly to other community members through online and in-person forums
- Hold virtual or in-person conferences

Neither model will include large-scale public advocacy campaigning, although general public awareness resources will be available, and projects may include awareness within their project delivery mandates and subsequent knowledge translation.

AMR Network	AMR Centre
Because the Network is driven by Action Groups (continue reading to learn more), creating community and connection across One Health AMR is a key enabler of this model.	A sense of community is a by-product of this model — not a primary purpose. While the Centre will share knowledge resources and collaboration tools across the AMR community, its primary purpose is to work closely with partners to undertake projects specific to its mandate. It is not designed to bring all groups together; instead, it is designed to provide focus.

KEY FUNCTION 2: HOW THE TWO MODELS ACCELERATE ACTION AND MAKE MEANINGFUL IMPACT

The raison d'être of our project is to propose governance mechanisms that accelerate decisive actions to mitigate AMR. Both models are designed to increase the considerable work that is already under way across the community by coordinating implementation, stimulating innovation, and scaling efforts while valuing and leveraging current work and existing organizations. They also both contain mechanisms structured to deliver on elements of the Framework and the forthcoming PCAP's priority actions, and to provide reports and updates to government to inform monitoring, evaluation, and updating of the Plan.

AMR Network

What makes this model unique is that the agenda is driven by those on the ground. In other words, it not only embraces expert knowledge, it empowers it.

In this model, work is carried out by "Action Groups," which are collaboratives comprised of different network members whose aligned self-interests lead to collective impact. Participation in action groups is voluntary and driven only by self-interest; members who join or form action groups will have a strong desire to accomplish a defined goal. Action Groups are led by the network members. Staff from the Network Coordination Office (NCO) may provide project management and facilitation supports if requested by the Action Group.

While these groups may occasionally emerge at the behest of network leadership in alignment with the annual plan, they will most often form organically amongst network members — as such, AMR priorities are in large part in the hands of membership. However, these groups will be vetted by the Network Coordinating Council (NCC) before they achieve formal designation as a Network Action Group.<sup>9</sup>

AMR Centre

In identifying what work will occur, this model provides a focus by selecting priority areas identified within a multi-year strategic plan.

In this model, saying 'yes' to a priority area means saying 'no' to areas that are not selected.

Because the Centre will assume responsibility for undertaking projects, staff will work on a variety of implementation, innovation, and scaling efforts in-house, while also contracting work out to leverage the unique capacities and capabilities of leading experts and institutions.

The Centre will forge strategic partnerships with leaders across One Health AMR in Canada who provide expertise and participate in advisory and project working group activities. These partnerships are selective, intentional, and focused opportunities to amplify, accelerate, and catalyze change across One Health AMR.

— Strategic Planning Process in the AMR Centre —

Best practice is that management consults broadly to develop a strategic plan, which is then approved by the board. This process will make detailed considerations regarding what is required to support the evolving Framework and the PCAP. Plans like this are generally updated every 2-5 years; however, emerging threats such as COVID-19 may call for ad hoc updates. In any case, this plan will enable the board to set clear and focused priorities which the staff will execute. A CEO will oversee the day-to-day operations of the organization, while also directing programs, projects, and services that work toward executing the strategic plan.

9 Learn more about 'the lifecycle of an Action Group' in the appendices (Appendix 4).

8

Two Proposed Model Options

STRUCTURAL ELEMENT – BOARD OF DIRECTORS

In both of the proposed models, a purpose-built organization will be established to hold funds, manage assets, and hire staff. This organization will require a Board of Directors to undertake all fiduciary responsibilities, including strategy development, appointment of the CEO, accountability and performance management, monitoring and financial management, and risk oversight. In our environmental scan of comparator organizations for the AMR Centre,<sup>10</sup> we found that the average number of Directors was 13, that most directors were appointed by government and the directors represented a broad range of skills and knowledge.

We propose that in both models there will be a skills-based Board of Directors with 11 (including the chair) volunteer directors. To ensure the Board has legitimacy in the eyes of funders and the AMR community, the Board as a whole will have scientific knowledge and expertise on AMR across One Health, as well as governance expertise and knowledge of key subject areas including legal, financial management, technology, and public policy domains and be representative of Canada from an equity, diversity, and inclusion perspective, including geography and language. The Board will meet at least six times per year, with meetings open to the public.

AMR Network	AMR Centre
The Board will be elected by members who have been actively involved in the work of the network in the previous year. <sup>11</sup>	The Board will be appointed by Canada’s 10 provinces, three territories, and the federal government, acting collectively. In this model, a key role of the Board is to approve a multi-year strategic plan with defined priorities.

STRUCTURAL ELEMENT – BOARD SUBCOMMITTEES AND ADVISORY COMMITTEES

Several standing Advisory Committees will be established to provide advice and recommendations. Appointed by the Board of Directors, these committees will combine expertise in AMR and the specific focus of the Advisory Committee. They will have the power to advise and influence but are not decision-making bodies. Initially, four specialized Advisory Committees will be struck:

- An Equity, Diversity, and Inclusion Advisory Committee will provide expert advice about functionality and activities using an EDI lens
- An Economics Advisory Committee will consider the various economic implications of the AMR work that is underway
- An International Advisory Committee will inform what lessons from other jurisdictions could be applied in Canada, including international trends, developments, and potential collaborations
- In the Centre model, a Canadian Scientific & Industry Advisory Committee will provide advice and recommendations on projects, opportunities, and priorities across One Health.
- In the Network model, a Broader Alignment Advisory Committee, comprised of representatives of governments from across Canada, will promote alignment with the Framework, PCAP, and public policy.

We propose that, in both models, the Board of Directors will have at least two standing committees — an Audit & Finance Committee and a Board Nominating Committee — whose membership will be appointed by the Board. Each of these subcommittees will be chaired by a member of the Board.

In the AMR Network model, there will be a third standing committee, a Network Coordinating Council (NCC), whose role will be to foster a vibrant ecosystem by providing a clear vision and annual priorities to guide the work of the network.

The NCC will have the mandate to approve, guide, and inform Action Groups, and to approve requests from the Action Groups for Network Coordination Office resources (within a Board-approved budget and considering other limits).

The NCC will have 12 members appointed by the Board and that are broadly representative of the AMR field and seen as credible experts by their peers.

10 See details from our environmental scan in the appendices (Appendix 6).

11 Members can be either individual or organizational. Individual members who were actively involved in the previous year will have 1 vote each. Organizational members will have 1 vote for each individual in their organization who was actively involved in the previous year, and each vote shall be cast by that individual.

STRUCTURAL ELEMENT – BOARD SUBCOMMITTEES AND ADVISORY COMMITTEES [CONTINUED]

Board Subcommittees	AMR Network	AMR Centre
AUDIT & FINANCE	✓	✓
BOARD NOMINATING	✓	✓
NETWORK COORDINATING COUNCIL	✓	
Advisory Committees		
EQUITY, DIVERSITY, AND INCLUSION	✓	✓
ECONOMICS	✓	✓
CANADIAN SCIENCE AND INDUSTRY		✓
INTERNATIONAL	✓	✓
BROADER ALIGNMENT	✓	

STRUCTURAL ELEMENT – STAFF

The staff are more than just numbers and roles: they embody and shape the organization culture. To be successful in this arena, they must be able to work across One Health to gain the trust of different types of stakeholders while balancing organization values.<sup>12</sup> While both proposed models include the establishment of a new organization and the appointment of staff led by a CEO accountable to the Board of Directors, the responsibilities of the staff within that organization is one of the largest areas of difference between the models. In our environmental scan of comparator organizations, the staff complement of the various organizations varied widely.<sup>13</sup> For the purpose of developing the models and the budget, we have estimated the staff size and a likely organizational structure. The final configuration will be refined during the implementation process and reviewed as experience is gained over time.

AMR Network	AMR Centre
<p>In this model, the members of the Action Groups are enabled and empowered to complete the AMR project work. A small staff within a Network Coordinating Office (NCO) will perform secretariat functions for the membership — providing project management support for the Action Groups, facilitating meetings, curating and distributing content across the community, monitoring and reporting on activities, resolving conflicts, and enabling the free flow of information. Led by a strong, facilitative, collaborative, and inclusive CEO that can balance scientific credibility and administrative expertise, the staff role, in this context, is best described as the ‘glue’ — it exists to help network members connect and communicate.</p> <p>A total of 32 FTEs will be based out of a single office, along with remote work options. The NCO will provide service in both of Canada’s official languages.</p>	<p>This model responds to the view that strong leadership is needed to set a focus for the work and to move the agenda forward, and that what is needed is a new organization responsible for directly leading AMR efforts, with the staffing level that enables it to succeed. The Centre will be a driving force in moving the needle on AMR in Canada, and, as such, a large staff is required. Led by a highly credible CEO, 39 FTEs will lead the delivery of AMR activities. In addition to this core operational staffing team, the Centre would hire or contract project managers and project staff as appropriate using project funds. Staff will be based out of two offices located in different regions of the country. Some staff will have remote work options to ensure the Centre has representation in every region of the country. The Centre will provide service in both of Canada’s official languages. The Centre’s staff will work on a variety of implementation, innovation, and scaling efforts in-house, while also contracting work out to leverage unique capacities and capabilities.</p>

12 See sample values in the appendices (Appendix 7).

13 See details from our environmental scan in the appendices (Appendix 6)

### Staff & Knowledge Sharing

As noted earlier in this section, staff will play a vital role in advancing Canada’s response to AMR. In the Network, that means providing project management resources and facilitating connections. In the Centre, that means taking on specialized projects. Similarly, staff in both models will play a vital role in knowledge sharing. This diagram depicts how that might look, and what tools they might leverage.

The diagram illustrates a 'CENTRALIZED RESOURCE HUB' represented by a cloud icon. It is connected to two main groups: 'Staff' (represented by three person icons) on the left and 'Members & Partners' (represented by a group of person icons) on the right. Radiating from the central hub are eight icons representing various tools and services: 'EVENT CALENDAR AND SCHEDULING SERVICES' (calendar icon), 'VIRTUAL MEETING SERVICES' (laptop icon), 'SHARED CONTENT' (folder icon), 'DATABASES AND DISTRIBUTION LISTS' (database icon), 'NEWS AND SOCIAL MEDIA' (@ symbol icon), 'ONLINE FORUMS' (speech bubble icon), and two unlabeled icons (a magnifying glass and a bar chart). All connections are shown as lines radiating from the central cloud.

ACCOUNTABILITY TO THE FUNDERS

The Board of Directors (whether of the Network or of the Centre) will be accountable to the funders, whether government or outside of government, for the proper use of the funds that it has been given, and for reporting on how funds were used and what results were achieved. Accountability mechanisms that will be used to set expectations and demonstrate value for money will include accountability agreements, publicly available annual reports (including audited financial statements), and periodic evaluations.

MEMBERSHIP

The two models take fundamentally different approaches to engaging with those active in One Health AMR in Canada.

AMR Network	AMR Centre
<p>Membership in the AMR Network will be open to individuals and organizations (including government, and other networks/ associations) who are working to mitigate AMR in Canada, who are Canadian or are based in Canada, and who commit to actively contribute to the network.</p> <p>A broad-based network recognizes that not everybody’s specific interests are going to be exactly aligned all the time. What all members will have in common is a desire to slow or to address the threat of AMR. The network will convene members who share this vision, allowing them to work together on areas of shared interest, while respecting that in other areas they may have differing or competing interests.</p> <p>Members will be required to sign a ‘Membership Agreement’ that outlines the reciprocity between members and the network.<sup>13</sup></p>	<p>The AMR Centre does not operate on a membership model — instead, it delivers results through a combination of its own staff, equipment, and infrastructure; strategic partnerships; and contracts with leading experts and institutions.</p>

13 See appendices for details on the ‘Membership Agreement’ (Appendix 8).



SOME KEY BENEFITS OF EACH MODEL

Successful governance of Canada’s response to AMR will establish agreements on how best to address gaps, leverage existing assets and abilities, improve information sharing, increase efficiencies and effectiveness, promote greater standardization, increase adaptability to meet needs, contribute to public health decision-making and action, and improve practice, policy, and control measures. In addition, there will be a number of benefits that are unique to each model — we’ve chosen to highlight a select few for each.

AMR Network	AMR Centre
<ul style="list-style-type: none"><li>• Gives the experts control — it’s the members, not the oversight body, who make decisions and drive action</li><li>• Connects individuals and organizations from across sectors, disciplines, and regions who would otherwise have difficulty collaborating</li><li>• Enables a high degree of nimbleness and flexibility, allowing members to pursue interesting opportunities as they emerge, while ensuring the Action Groups have the facilitation and project management resources needed to succeed</li><li>• Results in reduced duplication thanks to increased connection, trust, and cooperation between members</li></ul>	<ul style="list-style-type: none"><li>• A classic top-down and purpose-built organization — a familiar and easily understood model</li><li>• Focuses on taking decisive action to make meaningful impact in a select number of priority areas and drives change in those areas through its own staff, equipment, and infrastructure, through strong partnerships, and through contracts with leading experts and institutions</li><li>• Uniquely positioned to become the focal point for AMR activity in Canada through regular initiation of large projects with pan-Canadian mandates that focus on a select number of priority areas and drive change in those areas</li><li>• Offers a vehicle through which PHAC could generate an overall annual summary of the status of AMR mitigation in Canada. Should the Centre undertake accountability for national reporting, it would need to be specifically resourced to perform this function. Current cost estimates only forecast resourcing for reporting of Centre projects.</li></ul>

ESTIMATED COST OF OPERATING THE MODELS

For the purpose of developing the models, we have estimated a budget for each. A challenge in presenting budget estimates is that the costs of the governance mechanisms themselves represent a sliver of the investment that needs to be made in AMR mitigation in Canada. It is also important to note that the two models vary in the degree to which the Network Coordinating Office and the AMR Centre expend project funding directly — for example, hiring staff to undertake projects instead of flowing funds out to others to undertake projects.

AMR Network	AMR Centre
<p>The budget for the Network will include funding to be flowed to the Action Groups for the delivery of AMR projects. Because the annual priorities for the Network will be determined by the Network Coordinating Council and the Board, and the specific AMR initiatives will be determined by the members through Action Groups, determination of a budget for AMR projects and programs to be delivered through the network is beyond the scope of this project. For modeling purposes, we have budgeted a capability to support up to 50 Network Action Groups to deliver projects of different sizes.</p>	<p>The budget for the Centre will include funding for the direct delivery of AMR projects. Determination of the strategic priorities and the AMR projects and programs to be delivered is beyond the scope of this project. The staffing model and operating budget presented here are designed around critical organizational staffing roles and infrastructure costs. Additional project managers and project staff will be hired by the Centre using project/program funding to deliver on the identified priorities. For modeling purposes, we have budgeted a capability to support up to 100 additional project delivery staff.</p>

## 12 Two Proposed Model Options

### ESTIMATED COST OF OPERATING THE MODELS [CONTINUED]

Salaries <sup>14</sup>	AMR Network	AMR Centre
OFFICE OF THE CEO	\$654,000	\$960,000
KNOWLEDGE MOBILIZATION TEAM	1,097,000	1,591,000
AMR PROGRAM AND SERVICES TEAM	845,000	1,446,000
CORPORATE SERVICES TEAM	516,000	1,210,000
INFORMATION TECHNOLOGY TEAM	567,000	574,000
<b>SUBTOTAL</b>	<b>\$3,679,000</b>	<b>\$5,781,000</b>
<b>Operations</b>		
TECHNOLOGY	\$537,000	\$822,000
BUILDING OCCUPANCY <sup>15</sup>	294,000	1,426,000
INSURANCE, PROFESSIONAL SERVICES, AND SUPPLIES	262,000	449,000
TRAVEL & COMMITTEES	546,000	440,000
<b>SUBTOTAL</b>	<b>\$1,639,000</b>	<b>\$3,137,000</b>
<b>Total Operating Budget</b>	<b>\$5,318,000</b>	<b>\$8,918,000</b>

<sup>14</sup> See appendices for details on organization structure and staffing (Appendix 5).

<sup>15</sup> Building occupancy in the Centre model includes space for up to 100 additional project delivery staff.

## Providing Feedback



This document presented two potential model options designed to strengthen Canada's response to AMR. While these models are the product of more than a year of consultation with stakeholders representing the breadth of One Health and AMR in Canada, we are seeking continued input into their feasibility and credibility.

A reminder that the Public Health Agency of Canada has asked for multiple model options. Therefore, this is not a choosing exercise — we are seeking input on both models.

To submit feedback, please fill out our online form at [amrnetwork.ca/modelsfeedback](https://amrnetwork.ca/modelsfeedback). There, we will ask the following:

1. Does our assessment of the “Key Factors & Considerations” reflect how you see things?
2. Please provide any comments on the feasibility and credibility — and/or take this opportunity to suggest necessary clarifications — on:
  - a. The AMR Network
  - b. The AMR Centre

### VIRTUAL CONSULTATION DATES

In addition to accepting written feedback, we are holding a final round of virtual town halls over Zoom throughout early-April. We encourage everyone to attend one of the following five sessions:

- Tuesday, **April 6**, 2021 @ 1:00 PM EDT
- Tuesday, **April 6**, 2021 @ 6:00 PM EDT
- Thursday, **April 8**, 2021 @ 9:00 AM EDT
- Thursday, **April 8**, 2021 @ 1:00 PM EDT
- Monday, **April 12**, 2021 @ 1:00 PM EDT

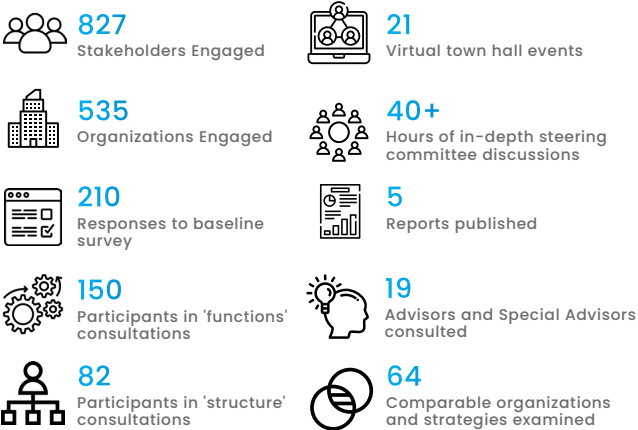
Please register in advance at [amrnetwork.ca/registration](https://amrnetwork.ca/registration).

# Appendix 1: How We Got Here

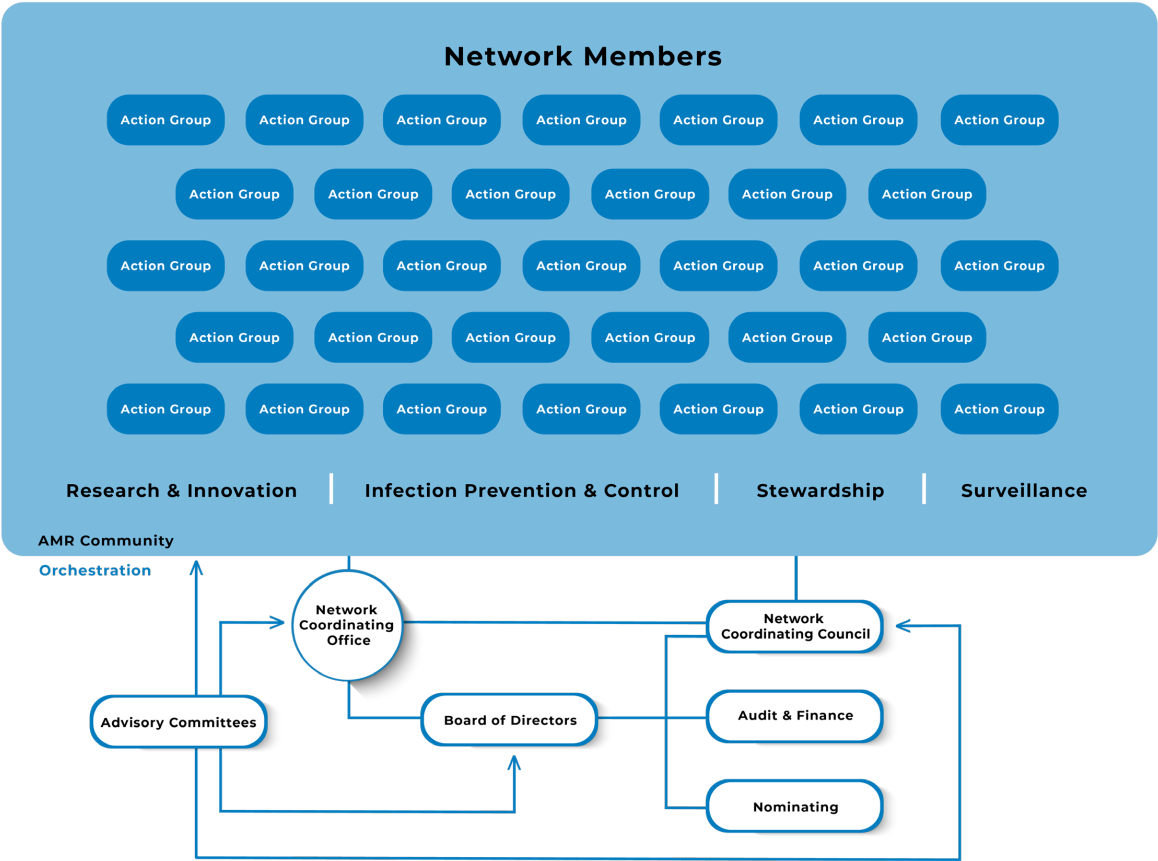
This report is the product of more than a year of consultation with a diverse set of stakeholders that represent the breadth of the individuals and organizations involved in AMR in Canada to develop governance recommendations.

We began our engagement process with a baseline survey, the results of which helped us grasp the AMR environment in Canada. From there, we consulted broadly with hundreds of stakeholders about functions and structure. These conversations, coupled with survey responses, research, and expert advice have informed the development of this document.

## By the Numbers

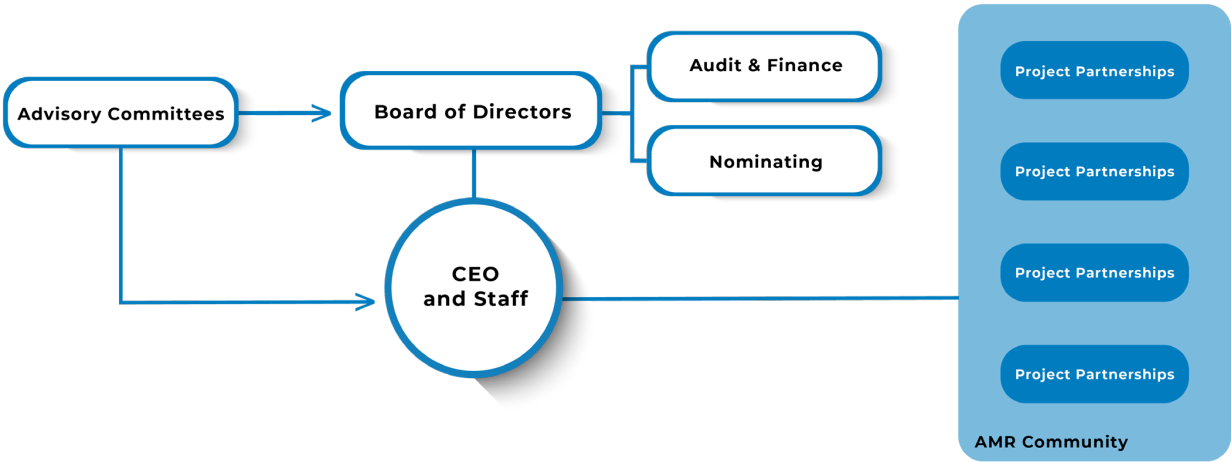


Appendix 2: AMR Network Model

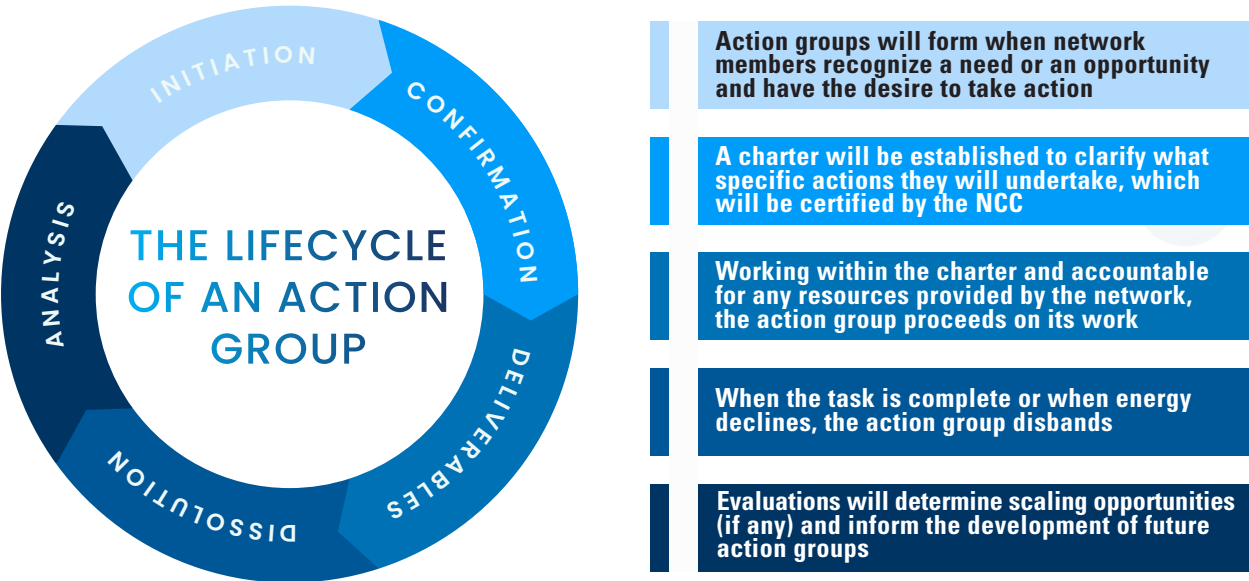




# Appendix 3: AMR Centre Model



# Appendix 4: Action Group Lifecycle



## Action Group-Related Responsibilities

- **Starting an Action Group:** Members
- **Approving an Action Group:** Network Coordinating Council
- **Funding an Action Group:** Network Coordinating Council
- **Project Management Support:** Network Coordinating Office
- **Measuring and Reporting:** Network Coordinating Office
- **Scaling, if Applicable:** Members
- **Ending an Action Group:** Action Group

## Appendix 5: Org Structure & Staffing

For the purpose of developing the models and the budget, we have estimated the staff size and a likely organizational structure. The final configuration will be refined during the implementation process and reviewed as experience is gained over time.

	AMR NETWORK	AMR CENTRE
OFFICE OF THE CEO	<ul style="list-style-type: none"><li>Chief Executive Officer (1)</li><li>NCC, Advisory, and Board Liaison (1)</li><li>Indigenous &amp; EDI Lead (1)</li><li>Executive Assistant (1)</li><li><b>Total = 4</b></li></ul>	<ul style="list-style-type: none"><li>Chief Executive Officer (1)</li><li>Advisory &amp; Board Liaison (1)</li><li>Indigenous &amp; EDI Lead (1)</li><li>Executive Assistant (1)</li><li>Corporate Counsel (0.5)</li><li><b>Total = 4.5</b></li></ul>
KNOWLEDGE MOBILIZATION TEAM <ul style="list-style-type: none"><li>The Knowledge Mobilization Team helps with “linking the thinking.” In other words, it curates and distributes content, and monitors and reports on Network/Centre activities. The Communications staff support organizational communication requirements (e.g., annual reports, public website, social media).</li></ul>	<ul style="list-style-type: none"><li>Team Lead (1)</li><li>Creating Connections* (4)</li><li>Fostering Knowledge Sharing (5)</li><li>Communications (1)</li><li>Administrative Assistant (1)</li><li><b>Total = 12</b></li></ul> <p>*These roles include sector liaisons who connect and align existing and emerging AMR work across One Health, as well as grant writers who support members with an inventory of funding opportunities and provide support for grant applications.</p>	<ul style="list-style-type: none"><li>Team Lead (1)</li><li>Creating Connections * (3)</li><li>Fostering Knowledge Sharing (5)</li><li>Communications (3)</li><li>Administrative Assistant (1)</li><li><b>Total = 13</b></li></ul> <p>*These roles include stakeholder engagement staff to consult on the development and implementation of Centre project work.</p>
AMR PROGRAM AND SERVICES TEAM <ul style="list-style-type: none"><li>In the Network model, this team facilitates the incubation, creation, and operation of Action Groups. A team of Project Managers and Liaisons support the Action Groups to successfully set-up, track and deliver on their projects and provide facilitation support where required.</li><li>In the Centre, this team supports the development of the Centre’s strategy and provides leadership for priority programs and projects. Additional project-based staff will be added to this team from project funding to deliver on the priority programs and projects.</li></ul>	<ul style="list-style-type: none"><li>Team Lead (1)</li><li>Project Managers &amp; Liaisons (5)</li><li>Administrative Assistant (1)</li><li><b>Total = 7</b></li></ul>	<ul style="list-style-type: none"><li>Team Lead (1)</li><li>Project Managers &amp; Support (2.5)</li><li>Strategy Development &amp; Oversight (3)</li><li>Administrative Assistants (1)</li><li><b>Total = 7.5</b></li></ul> <p>+ Additional project managers and project staff hired from project funding as required</p>

Appendix 5 [Continued]

	AMR NETWORK	AMR CENTRE
<p>CORPORATE SERVICES TEAM</p> <ul style="list-style-type: none"><li>In the Network model, the Corporate Services Team provides essential back-office and support services.</li><li>In the Centre, the Corporate Services Team provides essential back-office and support services. Human Resource services have been scaled to support the larger project-based staff that will be hired by the Centre.</li></ul>	<ul style="list-style-type: none"><li>Team Lead (1)</li><li>Finance Staff (3)</li><li>Human Resources &amp; Payroll (1)</li><li>Admin &amp; Reception (1)</li><li><b>Total = 6</b></li></ul>	<ul style="list-style-type: none"><li>Team Lead (1)</li><li>Finance Staff (4)</li><li>Human Resources &amp; Payroll (3)</li><li>Procurement Support (1)</li><li>Admin &amp; Reception (1)</li><li><b>Total = 10</b></li></ul>
<p>INFORMATION TECHNOLOGY TEAM</p> <ul style="list-style-type: none"><li>In the Network model, the Information Technology Team maintains the Network's essential collaboration systems.</li><li>In the Centre, the Information Technology Team maintains the Network's essential collaboration systems. The size of this group may increase with project related staff where the Centre is undertaking IT-related AMR programs or projects.</li></ul>	<ul style="list-style-type: none"><li>Chief Technology Officer (CTO) (1)</li><li>Cyber Security &amp; Change Lead (1)</li><li>Network Administrator (1)</li><li><b>Total = 3</b></li></ul>	<ul style="list-style-type: none"><li>Chief Technology Officer (CTO) (1)</li><li>Cyber Security &amp; Change Lead (1)</li><li>Network Administrators (2)</li><li><b>Total = 4</b></li></ul>
<p>TOTAL FULL-TIME EQUIVALENT STAFF</p>	<p>32</p>	<p>39</p>

Appendix 6: Lessons Learned

We looked at a series of exemplar organizations as reference points:

- The Canadian Institute for Health Information
- The Mental Health Commission of Canada
- The Canadian Animal Health Surveillance System
- The Canadian Patient Safety Institute
- The Canadian Agency for Drugs and Technology in Health
- The Canadian HIV Trials Network
- Canada Health Infoway
- The Canadian Partnership Against Cancer
- The Joint Programming Initiative on AMR

Through this process, we were able to develop an understanding of typical staff size or board membership. The below graphs represent publicly available data from these organizations. A more fulsome reference document, containing 64 relevant case studies, can be read at [amrnetwork.ca](http://amrnetwork.ca).

NUMBER OF DIRECTORS ON THE BOARD



NUMBER OF STAFF MEMBERS



We looked for organizations in Canada that have a similar structure to the proposed AMR Centre model to understand the design of their Board of Directors and found several examples in the human health domain. We found that the membership of the Board varied:

- Two federal appointees, five provincial/territorial appointees, and four-six independent directors
- A chair of the board, four regional nominees, six nominees from the medical, scientific, technical, business and public health sectors, two nominees with relevant consumer experience
- An independent chair; a regional distribution of jurisdictional federal, provincial, and territorial representatives; and a number of non-jurisdictional representatives from health systems, academia, and the general public
- One director or designate from Health Canada, one director or designate from Statistics Canada, five directors nominated by the provincial governments; five directors nominated by a non-governmental provincial individual or organization; and one director nominated either by the territorial governments or by a non-governmental territorial individual or organization; two directors at large who are nominated by a non-governmental individual or organization; and one director at large, independent of government or non-government organizations, who will act as the chair

There was less variability in who appointed the members of the Board:

- In several cases, appointments were made by the Deputy Ministers of Health for the participating federal, provincial, and territorial governments
- In one case, the provincial and territorial Ministers of Health for the participating governments appointed the Board.
- In another case, the board members are federal Governor-in-Council appointments, made on the recommendation of the federal Minister of Health after the Minister has consulted with the Board



## Appendix 7: Potential Organizational Values

The draft PCAP has identified a set of guiding principles that capture well the types of values that the organization will need to embody in order to be successful. The following text has been extracted from the current draft and is subject to change.

**A One Health approach:** Adopting an integrated approach recognizes the interconnectedness of humans, animals, and the environment, and the need for coordinated actions by all implicated actors.

**Moving toward Truth and Reconciliation:** We will continue our efforts to renew the nation-to-nation, Inuit-Crown, and government-to-government relationships with First Nations, Inuit, and Métis peoples to reduce the development, spread and impact of AMR and to promote the appropriate use of antimicrobial drugs.

**Sustainability and Collaboration:** Implementing the Action Plan requires sustained engagement and collaborative actions by all jurisdictions, sectors, partners, and the public to effect real change and reduce the emergence and spread of AMR.

**Flexibility:** Implementing the Action Plan requires a flexible and tailored approach that is adaptable and recognizes that the challenges posed by AMR and AMU and capacities to respond to it, vary across governments and sectors.

**Information Sharing:** A concerted response demands that information and best practices be shared and leveraged across jurisdictions and sectors.

**Applying a Health Equity Lens to Programs:** All people—regardless of their sex, gender, race, income, education, sexual orientation, geographic location, age, or culture—have equitable access to appropriate healthcare services.

**Developing Culturally Safe Programs and Policies:** To reflect and meet the needs of Canada's diverse population, programs and policies will respect cultural realities and practices, while promoting the safety of individuals and communities.

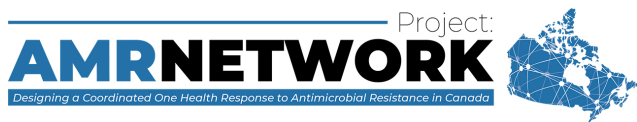
**Global Cooperation:** Canada's response to AMR is inextricably linked to global efforts and solutions. It is important for Canada to continue to contribute to global efforts and to align with international efforts to better position and leverage domestic actions that maximize contributions and benefits to Canada in the global context.

## Appendix 8: Membership Agreement

*The following are some of the elements that may be included in a Membership Agreement.*

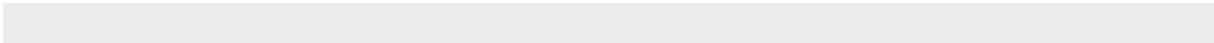
**Members must agree to:**

- Participate in network activities on a regular basis
- Contribute to the knowledge base, within the limits of intellectual property
- Work respectfully and collaboratively with network members
- Participate in good faith toward decision-making and conflict resolution, recognizing that members need not agree on all issues
- Not take a position regarding issues on behalf of the Network, without the consent of the Board
- Action Groups will clarify in advance, on a project-by-project basis, how they would like to advocate with one another



Reference Document

Examining a long list of organizations whose objectives, successes, governance model, leadership, membership, and more could inform our network design process



.....

Funded by the Public Health Agency of Canada, this time-limited project is conducting broad consultations with Canadian stakeholders who work across One Health to design model options for a national antimicrobial resistance network.

Part of this process involves scanning Canada and the world for relevant case studies, from which we can glean a series of insights that are perhaps applicable to our network design. This document does just that, presenting information about a long list of selected networks, organizations, and strategies.

This scan is a high-level overview, serving as a reference document. It is based on publicly available information, generally gathered from the organization's own website or public-facing documentation (e.g. annual reports). It is not intended to be a systematic or fully comprehensive review.

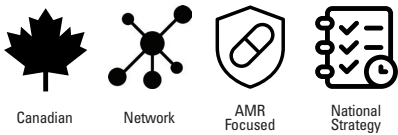
Overall, we identified and examined 62 relevant networks, organizations, and strategies from which we could draw lessons to develop the governance options and recommendations for a pan-Canadian One Health AMR network.

The organizations, entities, and strategies included on this list were identified using Internet searches and suggestions from our stakeholders, committee members, and consultation participants. We intentionally scanned a broad range of organizations to increase the likelihood of discoveries relevant to our network design process.

We focused on four key areas:

- Large, primarily government-funded Canadian organizations
- Small and mid-sized Canadian organizations
- Non-Canadian networks and organizations
- National and multi-national AMR strategies

Legend:



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## TABLE OF CONTENTS

### Section 1: Large, Primarily Government-Funded Canadian Organizations

Canada Health Infoway.....	3
Canadian Blood Services.....	4
Canadian Institute For Advanced Research.....	5
Canadian Institute For Health Information.....	6
Canadian Partnership Against Cancer.....	7
Canadian Patient Safety Institute.....	8
Genome Canada.....	9
Mental Health Commission Canada.....	10

### Section 2: Smaller and Mid-Sized Canadian Organizations

AMR-One Health Consortium.....	11
Beef Cattle Research Council.....	12
Canadian Agency For Drug Technologies In Health.....	13
Canadian Animal Health Surveillance System.....	14
Canadian Antimicrobial Resistance Surveillance System.....	15
Canadian Centre On Substance Abuse And Addiction.....	16
Canadian Environmental Network.....	17
Canadian Federation Of Agriculture.....	18
Canadian Foundation For Healthcare Improvement.....	19
Canadian Health Services And Policy Research Alliance.....	20
Canadian Integrated Program For Antimicrobial Resistance Surveillance.....	21
Canadian Mountain Network.....	22
Canadian Nosocomial Infection Surveillance Program.....	23
Canadian Poultry Research Council.....	24
Canadian Urban Environmental Health Research Consortium.....	25
Canadian Wildlife Health Cooperative.....	26
Choosing Wisely Canada.....	27
Canadian HIV Trials Network.....	28
Climate Action Network Canada.....	29
Do Bugs Need Drugs?.....	30
Health Data Research Network.....	31
Health Promotion Canada.....	32
HealthCareCAN.....	33

Infection Prevention And Control Canada.....	34
National Collaborating Centre For Healthy Public Policy.....	35
National Farm Animal Care Council.....	36
National Farmed Animal Health And Welfare Council.....	37
National Zero Waste Council.....	38
Ontario Nonprofit Network.....	39
Pan-Canadian Joint Consortium For School Health.....	40
Sustain Ontario.....	41
Sustainable Development Solutions Canada.....	42
Swine Innovation Porc.....	43
Toronto Alliance To End Homelessness.....	44

### Section 3: Non-Canadian Organizations and Networks

AMRIndustryAlliance.....	45
AMR Insights EU.....	46
CARB-X.....	47
EcohealthAlliance.....	48
Global Network For Anti-Microbial Resistance And Infection Prevention.....	49
Global One Health Network.....	50
Joint Programming Initiative On Antimicrobial Resistance.....	51
Netherlands Centre For One Health.....	52
One Health Commission (US).....	53
One Health European Joint Programme.....	54

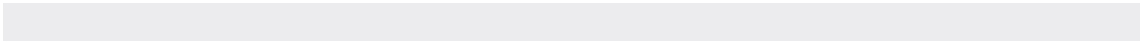
### Section 4: National and Multi-National AMR Strategies

A National Action Plan To Contain Antimicrobial Resistance In China.....	55
Australia's National Antimicrobial Resistance Strategy: 2020 And Beyond.....	56
European One Health Action Plan On AMR.....	57
Global Action Plan.....	58
Ireland National AMR Action Plan.....	59
Netherlands AMR Action Plan.....	60
New Zealand AMR Action Plan.....	61
UK AMR National Action Plan.....	62
U.S. National Action Plan For Combating Antibiotic-Resistant Bacteria.....	63

Section 1



CANADA HEALTH  
INFOWAY



Background Information	Governance & Management
<p>Established in 2001, Infoway helps to improve the health of Canadians by working with partners to accelerate the development, adoption, and effective use of digital health solutions across Canada. Digital health helps Canadians access better quality care more efficiently, through solutions and services such as electronic medical records, telehomecare, virtual visits and patient portals.</p> <p>Partners include Canadians, Vendors, Clinicians and the Healthcare Community, IT Professionals, HealthCare Organizations and Associations, Academia/Researchers, Jurisdictions.</p> <p>Funded by Health Canada.</p> <p>Key functions are to:</p> <ul style="list-style-type: none"><li>• Provide safer access to medications, starting with Prescribe IT, Canada's e-prescribing practice</li><li>• Provide Canadians and their providers with access to personal health information and digital health services.</li></ul> <p>Infoway is spearheading the replacement of fax- and paper-based systems with interoperable digital health solutions and driving change across Canada's health care systems by focusing on large, multi-jurisdictional or pan-Canadian projects.</p> <p>Infoway will provide safer access to medications through PrescribeIT, Canada's e-prescribing service.</p> <p>Infoway will also launch ACCESS Health, a new program to connect Canadians and their providers to the health ecosystem.</p> <p>Infoway plans to spend between \$100-125 million to achieve its business goals for 2019-2020.</p> <p>In 2020, their Revenue &amp; Expenses were approximately \$84,000.</p>	<p>The deputy ministers of health for Canada's 10 provinces, three territories and the federal government make up the Members of the Corporation. There are 14 members in total.</p> <p>The Board includes two federal appointees, five provincial/territorial appointees, and four-six independent directors. There are 11 Board of Directors.</p> <p>Infoway is accountable to its Board of Directors as well as to its Corporation Members. Infoway is led by a team of seasoned professionals who are specialists in their respective fields, including health care, administration, information technology and privacy. There are six on the leadership team.</p> <p>Also have Board Committees i.e. Finance and Audit, Governance and nominating, Compensation and Human Resources.</p>

Primary source: [infoway-inforoute.ca/en](http://infoway-inforoute.ca/en)

*This information is near-verbatim from the source above.  
We did not conduct a thorough validation or assessment process.*



Section 1



CANADIAN BLOOD  
SERVICES



Background Information	Governance & Management
<p>Established in 1998 to provide lifesaving products and services in transfusion and transplantation for Canadian patients, and to safeguard Canada's systems of life essentials in blood, plasma, stem cells, and organs and tissues.</p> <p>Functions: To safeguard the quality of related products and services; to engage with donors and health-care partners; and to continuously improve systems and processes.</p> <p>Sample initiatives undertaken:</p> <ul style="list-style-type: none"><li>• Pathogen inactivation: A promising tool to make blood transfusion even safer</li><li>• Collaborating on access to organs and tissues: Working with partners to enhance information-sharing and system performance</li></ul> <p>They have a working capital of \$225.1 million. They receive most of their funding from corporate members, the provincial and territorial ministers of health across Canada, except for Quebec.</p> <p>Revenue 2019-2020 Fiscal year was \$1.23 million, expenses \$1.26 million.</p>	<p>An independent, not-for-profit organization that operates at arm's length from government.</p> <p>The Executive management team is accountable to the Board of directors and responsible for ensuring they operate within the policy and strategy framework approved by the board. Executive management team consists of 10 senior members.</p> <p>The board is responsible for the organization's governance, overall affairs, strategic plan, budget and reporting on Canadian Blood Services' performance to the corporate members (the provincial and territorial ministers of health across Canada, with the exception of Quebec). Board of directors consists of 13 appointed by the provincial and territorial ministers of health.</p> <p>The National Liaison Committee helps ensure interested Canadians contribute to decision-making on issues affecting the blood system. The National Liaison Committee is intended to identify issues, and offer ideas, opinions, and concerns from across Canada.</p>

Primary source: [blood.ca](https://blood.ca)

*This information is near-verbatim from the source above.  
We did not conduct a thorough validation or assessment process.*

Section 1



CANADIAN INSTITUTE FOR  
ADVANCED RESEARCH



Background Information

Established in 1982, is a Canadian-based global research organization that convenes extraordinary minds to address the most important questions facing science and humanity.

Supporting, long-term interdisciplinary collaboration, CIFAR provides researchers with an unparalleled environment of trust, transparency and knowledge sharing. Their time-tested model inspires new directions of inquiry, accelerates discovery and yields breakthroughs across borders and academic disciplines. Through knowledge mobilization, the Institute is a catalyst for change in industry, government, and society. CIFAR's community of fellows includes 20 Nobel laureates and more than 400 researchers from 22 countries.

CIFAR's research programs address critical questions across four interdisciplinary theme areas: Life & Health, Individuals & Society, Information & Matter and Earth & Space. In 2017, the Government of Canada appointed CIFAR to develop and lead the Pan-Canadian Artificial Intelligence Strategy, the world's first national AI strategy.

CIFAR is supported by the governments of Canada, Alberta, Ontario, and Quebec as well as international partner organizations, individuals, foundations, and corporations. Accepts donations.

Revenue 2019: \$46 million

Governance & Management

Board of directors: 23 members. Executive team: 7 members, led by Alan Bernstein, President & Chief Executive Officer who reports to the Board and is responsible for developing and leading the Institute in an overall strategic direction. Reporting to the President is the executive team. Has viceregal patrons and directors emeriti.

The Council of Advisors: 28 members assists the Board of Directors and the President & Chief Executive Officer by providing advice and counsel as requested. It is composed of engaged alumni of the Board of Directors, of the Research Council, or past participants in research programs.

The Research Council: 18 members is made up of eminent scholars from a wide range of disciplines. The Research Council is responsible for advising the President & Chief Executive Officer on formulating, developing and establishing high quality advanced research programs, and on the disposition of programs when their work is deemed complete.

Has honorary appointments.

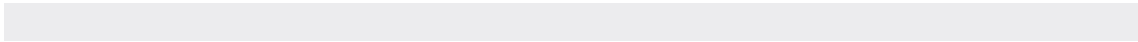
Primary source: [cifar.ca](https://www.cifar.ca)

*This information is near-verbatim from the source above. We did not conduct a thorough validation or assessment process.*

Section 1



CANADIAN INSTITUTE FOR  
HEALTH INFORMATION



Background Information	Governance & Management
<p>Established in 1994, to provide comparable and actionable data and information that are used to accelerate improvements in health care, health system performance and population health across Canada. Their stakeholders use their broad range of health system databases, measurements, and standards, together with CIHI evidence-based reports and analyses, in their decision-making processes. They protect the privacy of Canadians by ensuring the confidentiality and integrity of the health care information they provide.</p> <p>Key Functions:</p> <ul style="list-style-type: none"><li>Identifying health information needs and priorities</li><li>Coordinating and promoting standards and data quality</li><li>Developing and managing health system databases and registries</li><li>Developing comparable measures of health system performance</li><li>Conducting analyses in population health and health services</li><li>Building capacity and conducting education sessions.</li></ul> <p>Sample initiatives:</p> <ul style="list-style-type: none"><li>Supporting the provinces and territories with COVID-19 modelling. Their modelling expertise helped governments, health authorities and hospitals take action to slow the spread of COVID-19 and to prepare health systems.</li><li>In 2018, they hosted the Privacy and Health Data Access Symposium, followed by a series of pan-Canadian stakeholder consultations. In response, they developed the Health Data and Information Governance and Capability Framework and companion toolkits to allow organizations to better govern their data and information</li></ul> <p>Funded by fed gov, prov/territ gov. Total revenue \$115 million reported in 2019-2020.</p>	<p>Independent, not-for-profit organization</p> <p>Board of Directors: 14 members Board Committees: 16 members Senior management: Approx. 30 members</p> <p>Board of Directors:</p> <ul style="list-style-type: none"><li>Provides the strategic leadership necessary to establish and review CIHI's mission, vision, mandate and corporate goals and objectives. The Board focuses on policy direction, with a clear distinction from the internal management role of the president and CEO.</li><li>Links federal, provincial, and territorial governments with non-governmental health groups.</li></ul>

Primary source: [cihi.ca/en](https://cihi.ca/en)

*This information is near-verbatim from the source above.  
We did not conduct a thorough validation or assessment process.*

Section 1



## CANADIAN PARTNERSHIP AGAINST CANCER



### Background Information

### Governance & Management

Established in 2006 to accelerate action on cancer control for all Canadians.

A not-for-profit Corporation.

To address:

- Growing burden of cancer, high impact of cancer mortality, increased costs and the impact of new drugs and technologies,
- Uneven uptake of knowledge and innovation, limited sharing of tools and resources and lack of collaboration among cancer organizations and areas of the country, duplication of efforts across the system

The Partnership's Board of Directors is responsible for the overall governance of the organization including strategic leadership and direction, monitoring and assessing performance, financial oversight, and oversight of management. The Board meets four times per year and has the following sub-committees: Executive, Performance, Finance & Audit, Human Capital and Governance & Nominating.

Has a partnership network- consisting of cancer agencies, health system leaders, and experts, and people affected by cancer. Pan-Canadian in scope.

Management structure: 4 divisions reporting to the Chief Executive Officer, each headed by a Vice President: Cancer Control, Strategic Partnerships, Finance and Corporate Services, and Cancer Systems, Performance and Innovation.

Four key functions:

- Convene: bringing together people and organizations to establish and advance priorities for collective action
- Integrate: creating solutions with partners to meet shared goals
- Catalyze: investing in, managing and assessing large projects to support successful implementation and sustained effort
- Broker: responding quickly to new evidence

Structure consists of:

- Board of Directors
- Executive Team
- Advisory Structures
- Patient Advisors
- Aboriginal Advisors

Sample accomplishments:

- Canadians now have improved access to proven ways to prevent cancer
- More people are being screened appropriately and cancer is found earlier, when treatment can make a difference

More than 97 permanent staff and 31 fixed-term staff, as of March 31, 2020.

2019/20 revenue of \$43 million; Net Assets \$14 million.

Funded primarily by the federal government through Health Canada. Funding during the Partnership's first mandate (2007-12) totalled \$250 million; funding for the Partnership's second mandate, from 2012-17, totals \$241 million. In March 2016, the federal government announced ongoing funding for the Partnership.

Primary source: [partnershipagainstcancer.ca](https://partnershipagainstcancer.ca)

*This information is near-verbatim from the source above.  
We did not conduct a thorough validation or assessment process.*

Section 1



CANADIAN PATIENT  
SAFETY INSTITUTE



Background Information	Governance & Management
<p>Established in 2003. As a leader in patient safety, CPSI has developed world-class programs to help individuals and organizations ensure that patients are not harmed during care. They seek to:</p> <ul style="list-style-type: none"><li>Inspire and advance a culture committed to sustained improvement for safer healthcare.</li><li>Lead system strategies to ensure safe healthcare by demonstrating what works and strengthening commitment.</li></ul> <p>Functions:</p> <ul style="list-style-type: none"><li>Demonstrate what works: represents resolve to work with committed partners to implement targeted patient safety improvement initiatives (push strategy).</li><li>Strengthen commitment: represents commitment to and demand for proven patient safety practices to foster improvement (pull strategy)</li></ul> <p>As the designated WHO Collaborating Centre for Patient Safety and Patient Engagement, the Canadian Patient Safety Institute offers its expertise to Canadian and global organizations to improve how they engage patients in their efforts.</p> <p>Sample initiatives:</p> <ul style="list-style-type: none"><li>SHIFT to Safety is a major shift to empower you with the tools and information you need to keep patients safe, whether you are a member of the public, a practitioner, or a leader.</li><li>Global Patient Safety Alerts are a way to share information from around the world. Organizations dedicated to quality care share knowledge, evidence, and analysis to help everyone improve patient safety.</li></ul> <p>100 member (national) organizations includes: Health Canada (federal representative), all provincial and territorial governments.</p> <p>Funded by Health Canada. Expenses approx.. \$2.6 million</p>	<p>Not-for-profit organization.</p> <p>Co-chairs, Board of Directors, Finance, Investment &amp; Audit committee, Strategy Working group (consisting of patient partners).</p> <p>Canadian Patient Safety Institute and the Canadian Foundation for Healthcare Improvement (CFHI) are jointly pursuing an amalgamation that will create a single quality and safety organization with an expanded capacity to improve healthcare for everyone in Canada.</p> <p>2 co-chairs, 11 board of directors, 1 person on finance &amp; investment &amp; audit, 2 people on strategy working group (patient partners).</p> <p>Approx. 38 staff.</p>

Primary source: [patientsafetyinstitute.ca](https://patientsafetyinstitute.ca)

*This information is near-verbatim from the source above.  
We did not conduct a thorough validation or assessment process.*

Section 1



GENOME CANADA



Background Information

Established in 2000 to act as a catalyst for developing and applying genomics and genomic-based technologies to create economic and social benefits for Canadians, Genome Canada strives to:

- Connect ideas and people across public and private sectors to find new uses for genomics
- Invest in large-scale science and technology to fuel innovation
- Translate discoveries into solutions across key sectors of national importance, including health, agriculture and agri-food, forestry, fisheries and aquaculture, the environment, energy and mining.

In April 2020, Genome Canada launched the Canadian COVID-19 Genomics Network (CanCOGeN). The mission of CanCOGeN is to establish a coordinated pan-Canadian, cross-agency network for large-scale SARS-CoV-2 and human host sequencing to track viral origin, spread and evolution, characterize the role of human genetics in COVID-19 disease and to inform time-sensitive critical decision making relevant to health authorities across Canada during the pandemic. The network will further contribute to building national capacity to address future outbreaks and pandemics.

Genome Canada has invested \$3.9 billion in genomics research and applications since creation in 2000. The federal government has provided \$1.6 billion, including investment income from this funding. The remaining \$2.3 billion has come from national and international partners, including provincial governments, and private- and public-sector partners. Genome Canada's investments support large-scale science, access to leading-edge technology, translation, and the operations of Genome Canada and the six regional Genome Centres.

Genome Canada project leaders managed \$183.4 million in funding in 2019-20, with \$65.8 million from Genome Canada and \$117.6 million from co-funders (provincial governments, universities, the private sector, etc.).

Funded 455 projects in 7 sectors (health, agriculture and agri-food, forestry, fisheries and aquaculture, environment, energy and mining) in 2019-2020. Funded by the Government of Canada. Received a funding renewal of \$100.5 million for budget 2019.

Governance & Management

Not-for-profit.

Governed by a board of directors of up to 16 people comprising individuals drawn from the academic, private and public sectors. These individuals bring unique skills and experiences as well as strong interests and insights to successfully fulfil Genome Canada's strategic plan. Furthermore, the presidents of five federal research funding agencies are nonvoting, ex officio advisors to the board of directors. The science and industry advisory committee is a permanent committee of Genome Canada's board of directors.

New directors are appointed for two-year terms renewable up to a maximum of six years.

The Board has five standing committees: Executive Committee; Audit and Investment Committee; Programs Committee; Governance, Election and Compensation Committee; and Communications and Outreach Committee. As well, a Science and Industry Advisory Committee provides strategic advice to the Board on emerging issues to help the corporation achieve objectives.

The Science and Industry Advisory Committee (SIAC) is a permanent committee of Genome Canada's Board of Directors. The Committee is tasked with providing advice and recommendations to the Board on:

- Emerging scientific research opportunities and challenges and potential areas for investment in genomics and Genomics in Society, including GE3LS research in Canada
- International trends, developments and potential national and international collaborations
- Areas of strategic social and economic importance to Canada
- Application of the outcomes of genomics research including commercialization, knowledge transfer, policy development, and social and economic benefits.

5 members on management team.

Primary source: [genomecanada.ca/en](http://genomecanada.ca/en)

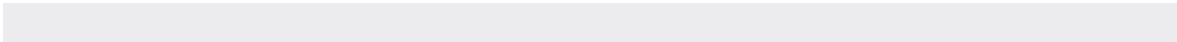
*This information is near-verbatim from the source above. We did not conduct a thorough validation or assessment process.*



Section 1



MENTAL HEALTH  
COMMISSION CANADA



Background Information	Governance & Management
<p>Established in 2007. Leads the development and dissemination of innovative programs and tools to support the mental health and wellness of Canadians. Through its unique mandate from the Government of Canada, the MHCC supports federal, provincial, and territorial governments as well as organizations in the implementation of sound public policy.</p> <p>Key Functions:</p> <ul style="list-style-type: none"><li>• Convene stakeholders, develop, and influence public policy</li><li>• Encourage actions that advance the commission</li><li>• Knowledge Mobilization</li></ul> <p>Sample initiatives:</p> <ul style="list-style-type: none"><li>• Roots of Hope: community suicide prevention program has grown to encompass eight communities, with many others eager to sign on in phase two.</li><li>• Stepped Care 2.0: an e-mental health project championed by the MHCC that has reduced wait times in Newfoundland and Labrador by 68% and served as the framework for the federal government's Wellness Together Canada portal.</li></ul> <p>Two networks: Hallway Group and MHCC Youth Council. The Hallway Group is a group of individuals, all of whom are people with lived experience (PWLE) with a mental illness either personally or through a loved one. Their role is to provide expert advice on specific initiatives, projects, and key priority areas through the much-needed critical lens of PWLE.</p> <p>MHCC Youth Council Members seek to advocate on behalf of young people with mental health problems or illnesses and represent the voice of young people at MHCC and public events to promote recovery and inspire others.</p> <p>Revenue: \$23 million. Funding from Government of Canada.</p>	<p>14 Board members, 4 Executive Leadership Team, 6 Directors.</p> <p>Board of Directors oversees the strategic direction by establishing the organization's vision and mission. Their leadership and expertise guides the MHCC in efforts to raise awareness, and catalyze collaborative solutions to mental health system challenges.</p> <p>Executive Leadership Team operationalizes the strategic objectives &amp; work to define the key priorities that underpin the achievement of the goals set out by the Board.</p> <p>Directors enact the priorities in order to build capacity, promote and advance the Strategy and mobilize knowledge.</p>

Primary source: [Mental Health Commission of Canada 2017-2022 Strategic Plan](#)

*This information is near-verbatim from the source above.  
We did not conduct a thorough validation or assessment process.*

## Section 2



## AMR-ONE HEALTH CONSORTIUM



### Background Information

The AMR – One Health Consortium works collaboratively with Canadian and international partners to develop comprehensive solutions to contain AMR using a One Health approach for the benefit of humans, animals, and the environment.

Their research focuses on treatment optimization, AMR surveillance, and prevention of transmission. These projects span across 3 thematic areas:

- Innovation and Commercialization
- Education and Societal Impact
- Policy, Economics and Sustainability

The Consortium includes 27 projects led by researchers across a wide range of disciplines, including veterinary medicine, epidemiology, public health, microbiology, genomics, virology, human medicine, law, public policy, economics, sociology, and anthropology. The research projects within each area are aimed at addressing the following issues: Treatment Optimization, Surveillance, Prevention of Transmission

11 Partnering Institutions (ex. U. of Calgary and U. of Alberta)

Leverage sources of funding from: CIHR, NSERC, MIF.

The Consortium received \$15.569 million in total project funds from various federal, provincial and private sources to be spent over 5 years. \$6.315 million was awarded through the Major Innovation Fund from the Ministry of Economy, Jobs, and Innovation, and \$9.254 million was leveraged through matching funds. Funders include Government of Canada, University of Calgary. Matching sources of funding by: National, Provincial, Academic Institutions, Industry Partners, and Other (china Graduate scholarship).

### Governance & Management

The AMR – One Health Consortium is managed through One Health at UCalgary. The Consortium features a nimble governance structure, enabling it to make timely and relevant decisions to meet its goals and priorities: Scientific Director, Investigators, Project Management Team, Collaborators, Executive Committee, Scientific Advisory Council, Trainees and Fellows, Project Team Members.

Work Package Leads, Principal Investigators, and Co-Investigators are researchers who are leading one or more projects within the Consortium and/or coordinating project efforts within Work Packages

14 members on executive committee, 6 on management team, 5 on scientific advisory committee.

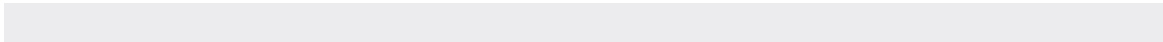
Primary source: [research.ucalgary.ca/amr](https://research.ucalgary.ca/amr)

*This information is near-verbatim from the source above.  
We did not conduct a thorough validation or assessment process.*

Section 2



BEEF CATTLE  
RESEARCH COUNCIL



Background Information	Governance & Management
<p>Established in 2001, is Canada's national industry-led funding agency for beef, cattle and forage research. The BCRC's mandate is to determine research and development priorities for the Canadian beef cattle industry and to administer Canadian Beef Cattle Check-Off funds allocated to research.</p> <p>Objectives</p> <ul style="list-style-type: none"><li>• Continue to enhance the safety and quality of Canadian beef</li><li>• Ensure the integrity and high standards of animal health in the Canadian herd</li><li>• Improve and ensure the dissemination of knowledge throughout the industry</li><li>• Ensure that scientific principals and risk assessment are utilized in developing good production practices, industry and government policy and standards</li><li>• Support innovative projects designed to improve industry competitiveness</li><li>• Enhance international acceptance of Canadian beef quality and safety standards</li></ul> <p>Having recognized the need to review the beef research situation in Canada and develop a framework to coordinate beef research priorities, funding and technology transfer nationally, the Beef Cattle Research Council (BCRC) and the national Beef Value Chain Roundtable (BVCRT) initiated a comprehensive process in 2008 to develop a national beef research strategy. The inaugural National Beef Research Strategy was released in 2012. It was successful in improving collaboration among funding bodies and improved efficiencies in funding research of priority to the industry.</p> <p>With industry funding (collected through the Canadian Beef Cattle Check-Off), the BCRC leverages funding from Agriculture and Agri-Food Canada (AAFC) through the Sustainable Beef and Forage Science Cluster.</p>	<p>Executive and team — 9 members</p> <p>The Beef Cattle Research Council (BCRC) currently has 14 members, which represent each of the provincial organizations of beef producers that allocate part of the Canadian Beef Cattle Check-Off to research. The number of members from each province is proportional to the amount of provincial allocation to research. Members of the BCRC are representatives of provincial organizations and are appointed by them. As members of the provincial organization, they must be beef producers, and therefore pay the Canadian Beef Cattle Check-Off on all of their cattle that are sold.</p> <p>The BCRC operates as a division of the Canadian Cattlemen's Association (CCA).</p>

Primary source: [beefresearch.ca](http://beefresearch.ca)

*This information is near-verbatim from the source above.  
We did not conduct a thorough validation or assessment process.*

Section 2



CANADIAN AGENCY FOR DRUG  
TECHNOLOGIES IN HEALTH



Background Information

Established in 1989 to provide health care decision-makers with objective evidence to help make informed decisions about the optimal use of health technologies, including drugs; diagnostic tests; medical, dental, and surgical devices and procedures. In addition to evidence, they also provide advice, recommendations, and tools. They are committed to cultivating an environment of evidence generation and adoption across Canada.

Strategic Goals and Objectives

- Close the Gap Between Evidence, Policy, and Practice
- Adopt a Life-Cycle Approach to Health Technology Assessment
- Anticipate Health System and Technology Trends
- Develop Agile Management Strategies

Accomplishments:

522 Drug and Device reviews completed in 2020. 63 Reimbursement Recommendations issued. 111 Knowledge Events which led to 80% of participants reporting an increase in knowledge about the topic. 5 million Report downloads and 1 million website visits. 78 Impact stories for 2019-2020 fiscal year.

CADTH implemented the CADTH Patient and Community Advisory Committee and continued its clinician engagement strategy to increase clinician awareness of CADTH, enhance clinician engagement, and influence clinical practice.

\$36 million in Revenue and Expenses in 2019-2020 Fiscal year.

Governance & Management

Independent, not-for-profit organization.

The 13-member CADTH Board of Directors is composed of an independent chair; a regional distribution of jurisdictional federal, provincial, and territorial representatives; and a number of non-jurisdictional representatives from health systems, academia, and the general public. The Board has overall responsibility for administering the affairs of the Corporation and providing the strategic direction to guide CADTH's success as the Canadian "go-to" provider of evidence and advice on the use of drugs and other health technologies.

Directors are elected by the Members of the Corporation, who are the Deputy Ministers of Health for participating federal, provincial, and territorial governments.

Three individuals on Executive team. Staff consists of implementation support and knowledge mobilization team, pan-Canadian collaborative team, and advisory bodies, liaison officers.

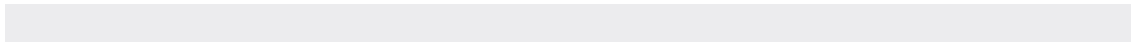
Primary source: [cadth.ca/about-cadth](https://cadth.ca/about-cadth)

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We did not conduct a thorough validation or assessment process.*

Section 2



CANADIAN ANIMAL HEALTH  
SURVEILLANCE SYSTEM

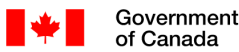


Background Information	Governance & Management
<p>Established in 2015. It is an initiative of the National Farmed Animal Health and Welfare Council (NFAHWC), with broad based collaborative support of industry and governments. It has been designed to fill the need for strengthened animal health surveillance in Canada, as identified in the NFAHWC's report, "Surveillance in a Time of Transition in Farmed Animal Health".</p> <p>CAHSS is a network of animal health surveillance networks, with no control from government or any one group. Individual network groups are self-organizing and self-governing; linked through CAHSS by shared purpose and principles.</p> <p>A shared national vision leading to effective, responsive, integrated animal health surveillance in Canada</p> <p>Sector Networks: Poultry, Swine, Equine, Dairy Cattle, Aquatic, Beef/Cattle, Wildlife. Cross Sector groups include: Antimicrobial Use surveillance network.</p> <p>In 2018-2019, the Network participated in several discussions with partners to enhance awareness on activities and undertakings in the areas of antimicrobial use, resistance and surveillance. For example with the Veterinary Drugs Directorate of Health Canada to discuss the development of an application that will facilitate reporting of national antimicrobial sales and distribution data from pharmaceutical manufactures, compounding pharmacists and importers which will allow for the speciation of annual sales data.</p> <p>Membership in CAHSS grew this year (2018-2019) to 240 CAHSS members (181 owning members and 59 associate members) representing 94 different organizations.</p> <p>Network leads serve without compensation, but reasonable expenses (approved by the Coordinator and the NFAWH Executive Director) will be reimbursed.</p>	<p>CAHSS is a division of the National Farmed Animal Health and Welfare (NFAHW) Council.</p> <p>CAHSS utilizes a "Lead Agency" model of governance. In this case, CAHSS falls under the legal authority of the National Farmed Animal Health and Welfare Council (NFAHWC) Corporation.</p> <p>Network Members, Species Specific Network Members (These are comprised of individuals and organizations working with various animal populations (dairy, beef, poultry, equine, swine, aquatic, wildlife, etc.),</p> <p>Community of Practice Members – These are comprised of organizations representing surveillance oversight, best practice, innovation, and emerging trends.</p> <p>Each Species-Specific CAHSS network will appoint a Network Lead and/or Co-lead. The Leads and Co-Leads will be responsible for leading meetings and reporting to CAHSS on the surveillance activities and practices of their respective network. They will work with the Coordinator to develop best surveillance practices within their network and will support the learning and growth of other networks.</p> <p>Steering Group: comprised of 10 members, Members are appointed equally between the Species-Specific Network Members and the Community of Practice Members.</p>

Primary source: [cahss.ca](http://cahss.ca)

*This information is near-verbatim from the source above.  
We did not conduct a thorough validation or assessment process.*

Section 2



CANADIAN ANTIMICROBIAL  
RESISTANCE SURVEILLANCE SYSTEM



Background Information	Governance & Management
<p>Established in 2015, is Canada’s national system for reporting on antimicrobial resistance (AMR) and antimicrobial use (AMU). CARSS synthesizes and integrates epidemiological and laboratory information from Public Health Agency of Canada (PHAC) surveillance programs across the human and agricultural sectors to provide high quality national data on AMR and AMU.</p> <p>New surveillance initiatives: The national surveillance of healthcare-associated infections has expanded to represent nearly one-third of all acute care hospital beds in Canada.</p> <ul style="list-style-type: none"><li>Point prevalence data from two surveys in community hospital and long-term care facilities benchmarked the burden of antimicrobial-resistant organisms (ARO) and AMU in these facility types.</li><li>AMR in the community sector has been examined through a pilot project using electronic medical records covering 75,000 patients to look at patterns of resistance in urinary tract infections and how they are treated.</li></ul> <p>Collaborations with: CNISP, CIPARS, GASP Canada, eSTREP, NML</p> <p>PHAC is now examining ways to expand CARSS to include data on AMR and AMU from community health settings.</p>	<p>Coordinated by the Public Health Agency of Canada (PHAC).</p>

Primary source: [Canadian Antimicrobial Resistance Surveillance System Report \(2020, Public Health Agency of Canada\)](#)

*This information is near-verbatim from the source above.  
We did not conduct a thorough validation or assessment process.*



Section 2



CANADIAN CENTRE ON SUBSTANCE  
ABUSE AND ADDICTION



Background Information

Established in 1988. Provides guidance to decision-makers through harnessing the power of research, collecting, and organizing knowledge, and bringing together diverse perspectives.

Four strategic directions guide the Centre's activities:

- Creating and sustaining partnerships to mobilize individual and collective efforts
- Fostering a knowledge exchange environment where evidence and research guide policy and practice
- Developing evidence-informed actions to enhance effectiveness in the field
- Fostering organizational excellence and innovation

CCSA reports to Parliament through the Minister of Health.

Functions:

- Advancing knowledge by synthesizing research
- Driving collaborations efforts across Canada
- Bridging the gap between what we know and what we don't

CCSA's Issues of Substance conference is one of the biggest addiction-focused events in Canada. Every two years, it provides the opportunity for Canadian substance use stakeholders to share experiences and bring new evidence to light.

2019-2020: \$12 million in revenue and expenses. Health Canada provided \$9 million in revenue.

Governance & Management

A volunteer Board of Directors composed of 13 members. 8 people on Senior leadership team. 5 governor-in-council appointees. 8 members at large.

The Governor in Council appoints the Chair and up to four additional board members may be appointed. These appointments come on the recommendation of the Minister of Health after the Minister has consulted with the Board.

The Senior Leadership Team is responsible for ensuring achievement of strategic goals. The Board of Directors is responsible for governing CCSA.

The CCSA Board Alumni serves in a consulting capacity to the current CCSA Board of Directors. When called upon, members of the alumni can provide expertise, support and advice. The role of the Board Alumni also includes serving as ambassadors and advocates for CCSA.

Primary source: [ccsa.ca](https://ccsa.ca)

*This information is near-verbatim from the source above.  
We did not conduct a thorough validation or assessment process.*

Section 2



CANADIAN ENVIRONMENTAL  
NETWORK



Background Information

Established in 1977, facilitates cooperation and networking among non-profit, non-governmental environmental organizations across Canada and internationally.

The Canadian Environmental Network (RCEN) supports ENGOs by providing them with valuable networking, communications and resource-sharing services. Via listserv, conference calls and meetings, the members share vital information, best practices and strategies, and act collectively to promote sustainability in Canadian public policy.

As a non-partisan, member-based organization consisting of a multitude of primarily small, community-based grass root ENGOs, RCEN is equipped to play an important role in unifying the environmental community around the SDG's and the 2030 Agenda.

Funding Source not available.

Governance & Management

Non-profit, independent, non-partisan organisation

The RCEN voting membership is comprised of environmental organizations from across Canada. Members meet every year during an Annual General Assembly to elect the Board of Directors, which is composed entirely of voting member representatives. As the organization is largely volunteer based, the Board members, Caucus members and volunteers carry out activities in support of the network.

RCEN Board and Staff. 5 members on Board, and 2 staff (organizational developments manager and project coordinator).

Primary source: [rcen.ca/en](https://rcen.ca/en)

*This information is near-verbatim from the source above.  
We did not conduct a thorough validation or assessment process.*

Section 2



CANADIAN FEDERATION  
OF AGRICULTURE



Background Information

Governance & Management

Established in 1935, their mission is to promote the interests of Canadian agriculture producers, through leadership at the national level, and to ensure the continued development of a trusted, sustainable, and vibrant agriculture sector in Canada. Their vision is to be the national voice of Canadian producers — committed to enabling their success, which will benefit Canada and the world.

Board of Directors — 30 members  
Staff — 8 people

Membership roster includes wide range of producer organizations. Their principal members are:

- Provincial general farm organizations: representing the interests of that province's agriculture whose membership is open to all farmers in that province, either directly or through other organizations
- National or interprovincial Commodity Organizations: representing a major proportion of that commodity in a region or across Canada
- National or interprovincial producer-owned and controlled cooperatives: those who demonstrate substantial involvement of producers; membership is subject to CFA board approval.

In addition, CFA partners with a vast number of other industry associations, think tanks, academic groups, and private companies on projects that touch many different aspects of the agricultural sector.

Members- 12 general farm and commodity organizations

1 corporate partner and 10 corporate leaders/event sponsors

A farmer-funded, national umbrella organization comprising of provincial general farm organizations and national and interprovincial commodity groups. They represent producers of all commodities, who operate farms of all sizes. Through members, they represent approximately 200,000 Canadian farm families from coast to coast.

Primary source: [cfa-fca.ca/about-us](https://cfa-fca.ca/about-us)

*This information is near-verbatim from the source above.  
We did not conduct a thorough validation or assessment process.*

## Section 2



## CANADIAN FOUNDATION FOR HEALTHCARE IMPROVEMENT



### Background Information

Established in 1996, CFHI works with partners to accelerate the identification, spread and scale of proven healthcare innovations that sustain improvement in patient experience, health, work life of providers and value-for-money.

Aim to be an indispensable partner in shaping better healthcare for everyone in Canada. Work towards lasting improvement in patient experience, health, work life of healthcare providers and value for money.

Strategic Pillars:

- Find and promote innovators and innovations
- Drive rapid adoption of proven innovations
- Enable improvement- oriented systems
- Shape the future of healthcare through knowledge sharing & enhancing relationships

Where there are solutions that are not yet being widely used, they lead partnerships that help spread and scale proven innovations, such as:

- Paramedics and Palliative Care: A collaboration with the Canadian Partnership Against Cancer training paramedics to provide urgent palliative care at home
- INSPIRED COPD collaborative: as part of CFHI's INSPIRED COPD Scale Collaborative, six teams were supported to scale their existing INSPIRED-like programs to reach even more providers, organizations and patients within their jurisdictions.

Funded by Health Canada. In 2019-2020 Revenue \$17M.

### Governance & Management

An independent, not-for-profit organization

Amalgamated Board with Canadian Patient Safety Institute (CPSI). Finance, Investment & Audit Committee, Strategy Working Group (consisting of patient partners).

The senior management team provides leadership to the organization and contributes to CFHI's ongoing success.

Senior Leadership team consists of 8 Program Directors, 5 other staff, 13 Board of directors, 1 person on Finance, Audit Cttee, 2 on Strategy Working Group.

Primary source: [cfhi-fcass.ca](http://cfhi-fcass.ca)

*This information is near-verbatim from the source above.  
We did not conduct a thorough validation or assessment process.*

Section 2



CANADIAN HEALTH SERVICES AND  
POLICY RESEARCH ALLIANCE



Background Information

Established in 2014 to foster collaboration, coordination and strategic investment amongst Health Services and Policy Research (HSPR) organizations in Canada to accelerate scientific innovation and discovery, optimize the impact of research on health and health system outcomes, and strengthen Canada's HSPR enterprise.

Provides a collective voice for HSPR in Canada, fostering the pursuit of collaborative action, investment and impact in areas identified as pan-Canadian priorities of common interest that are better accomplished as a collective than in isolation.

The alliance will also advance the implementation of the pan-Canadian Vision and Strategy for HSPR; report back to the HSPR community, stakeholders and the public on the level, nature and impact of HSPR investment in Canada; and collaborate on targeted high-priority initiatives of mutual interest.

Members include federal and provincial health research funding organizations, national and provincial HSPR data centers, health charities, national healthcare foundations, provincial health quality councils, university-based HSPR institutes, and health policy and delivery organizations.

Sample initiative:  
Making an impact: a shared framework for assessing the impact of health services and policy research on decision-making prepared by Impact Analysis Group 27 organizations involved in funding health services and policy research collaborated to create an asset map of the collective investments over a 5 year period (2007-2012), by location, type of investment and content area.

Budget not available.

Governance & Management

Is not an independent funding body but rather an alliance of existing organizations with separate and autonomous organizational mandates that are united through a shared vision and commitment to work together to support an innovative, high-performing and high impact HSPR enterprise.

- Working Groups:
- Training Modernization
  - Impact Analysis Group
  - Learning Health Systems

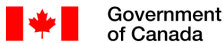
The executive committee organizes expert working groups as needed to address key priorities as they arise and is accountable to the membership of the alliance.

The executive committee includes two co-chairs who are responsible for leading the development of meeting agendas, chairing the meetings, and ensuring action items are communicated following meetings and actioned in a timely manner.

Primary source: [chspra.ca](https://chspra.ca)

*This information is near-verbatim from the source above.  
We did not conduct a thorough validation or assessment process.*

Section 2



CANADIAN INTEGRATED PROGRAM FOR  
ANTIMICROBIAL RESISTANCE SURVEILLANCE



Background Information

Governance & Management

Established in 2007. Known as CIPARS. Monitors trends in antimicrobial use and antimicrobial resistance in selected bacterial organisms from human, animal and food sources across Canada. The program is based on several representative and methodologically unified surveillance components which can be linked to examine the relationship between antimicrobials used in food-animals and humans and the associated health impacts.

This information supports:

- The creation of evidence-based policies to control antimicrobial use in hospital, community, and agricultural settings and thus prolong the effectiveness of these drugs, and
- The identification of appropriate measures to contain the emergence and spread of resistant bacteria between animals, food, and people in Canada.

In 2018, working with stakeholders, they launched two sentinel farm surveillance projects in feedlot and dairy cattle.

CIPARS is analyzing data from the new Veterinary Antimicrobial Surveillance Reporting (VASR) system which is generated under new regulatory authority requiring manufacturers, importers and compounders to report the quantity of medically important antimicrobials sold in Canada.

CIPARS is coordinated by the Public Health Agency of Canada (PHAC) but is based on collaborations with governments (health and agriculture, federal, provincial, local), private industry (veterinarians, livestock producers, and abattoirs), and academia.

Primary source: [canada.ca/en/public-health/services/surveillance/canadian-integrated-program-antimicrobial-resistance-surveillance-cipars](https://canada.ca/en/public-health/services/surveillance/canadian-integrated-program-antimicrobial-resistance-surveillance-cipars)

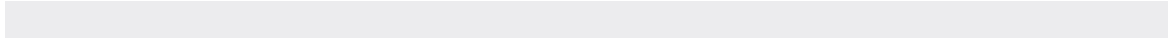
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Section 2



CANADIAN  
MOUNTAIN NETWORK



Background Information

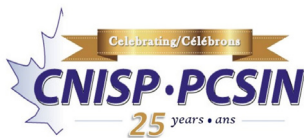
Governance & Management

<p>Established in 2019 to support the resilience and health of Canada's mountain peoples and places through research partnerships based on Indigenous and Western ways of knowing that inform decision-making and action.</p> <p>Other functions:</p> <ul style="list-style-type: none"><li>• To enhance the understanding of the impacts of rapid environmental, economic, and social change on the resilience of mountain systems.</li><li>• Decision making and actions at multiple levels are informed by both Indigenous and Western ways of knowing.</li><li>• To enhanced funding for mountain systems research by improving public and policymaker understanding and appreciation of the importance of mountain systems.</li><li>• Supporting a community of mountain systems researchers, to co-design and co-deliver projects with knowledge users. Build innovative models for partnerships.</li></ul> <p>Approx. 20 members (institutions receiving CMN research and programs funding). Members from across Canada except for Ontario and Manitoba. Supported by Canada's research granting agencies through a five-year, \$18.3 million grant from the Networks of Centres of Excellence program. Combined with contributions from diverse partner organizations, this funding represents a once-in-a-generation opportunity to position Canada as a global leader in mountain systems research at a time when Canada's mountain systems are undergoing rapid and uncertain change.</p> <p>The Network has provided the opportunity for Indigenous organizations to directly apply for research funding alongside academics. Such projects received 32% of funding through the first call for proposals and respectful Indigenous partnerships and Indigenous leadership were at the core of several other funded projects administered by academic institutions. Several research projects underway.</p> <p>In 2019- \$104,000 both revenue and expenses</p>	<p>Not-for-profit corporation.</p> <p>As the Corporation's ultimate decision-making body, the Board of Directors ensures the success of the organization by directing its affairs for the benefit of its members and ensuring legal and regulatory compliance.</p> <p>Governance standing committee: The Committee will advise and oversee the overall health of the board and the committees to ensure compliance to current policies and practices and to provide insight on emerging issues.</p> <p>The Research Management Committee provides oversight of the Network Research Strategy and supports the development of CMN's research projects and programs by working collaboratively with Network Staff to provide advice and make relevant recommendations to the Board of Directors.</p> <p>The Indigenous Circle of Advisors will bring Indigenous perspectives and experiences to inform the Network's decision-making to ensure credible and durable partnerships with Indigenous communities. While Indigenous individuals will be represented throughout the Network's management and governance structures, the Circle will be unique in ensuring a majority of members offer significant Indigenous-living experience. This is expected to elevate the perspectives of Indigenous Peoples within the Network and ensure its activities serve their needs and interests.</p>
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Primary source: [canadianmountainnetwork.ca](https://canadianmountainnetwork.ca)

*This information is near-verbatim from the source above.  
We did not conduct a thorough validation or assessment process.*

## Section 2



## CANADIAN NOSOCOMIAL INFECTION SURVEILLANCE PROGRAM



### Background Information

Established in 1995. Collects national epidemiologic and laboratory (molecular and resistance) data on:

- Various healthcare-associated infections (HAI)
- Antimicrobial resistant organisms (ARO)
- Hospital-level antimicrobial utilization

The goal of CNISP is to help facilitate the prevention, control and reduction of HAIs and AROs in Canadian acute care hospitals through active surveillance and reporting. Data and specimens collected annually by CNISP produce national infection rates, identify organism strain types, monitor antimicrobial resistance and antibiotic usage patterns which all help to reduce the impact of HAIs and antimicrobial resistance in hospitals, which in turn impacts the community.

At present, 78 sentinel hospitals from 10 provinces and 1 territory participate in the CNISP network.

### Governance & Management

Partnership between:

- The Public Health Agency of Canada's Centre for Communicable Diseases and Infection Control (CCDIC) and the National Microbiology Laboratory (NML)
- The Association of Medical Microbiology and Infectious Disease (AMMI) Canada &
- Sentinel hospitals across Canada

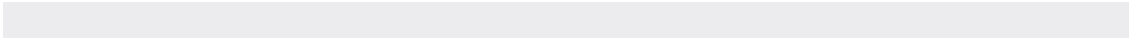
Primary source: [canada.ca/en/public-health/services/surveillance.html#a6](https://canada.ca/en/public-health/services/surveillance.html#a6)

*This information is near-verbatim from the source above.  
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Section 2



CANADIAN POULTRY  
RESEARCH COUNCIL



Background Information	Governance & Management
<p>Established in 2001. An industry-led organization with a mandate to support poultry research in Canada.</p> <p>The majority of CPRC’s support for research is directed towards five main priority areas:</p> <ul style="list-style-type: none"><li>• Avian Gut Microbiology</li><li>• Environment</li><li>• Food Safety &amp; Poultry Health</li><li>• Novel Feedstuffs</li><li>• Poultry Welfare &amp; Behaviour</li></ul> <p>Revenue in 2018 approx. \$290K.</p> <p>Committed more than \$2.7 million to poultry research funding over last decade.</p> <p>Federal government invested up to \$8.24 million to the Canadian Poultry Research Council under the Canadian Agricultural Partnership, AgriScience Program Clusters (year unknown). This funding, which is in addition to an investment of \$3.78 million from industry, will be used to develop new products and processes to address threats to the poultry value chain and improve poultry health and welfare.</p>	<p>5 board members &amp; 3 staff.</p> <p>The CPRC Board of Directors meets several times per year, in person and by conference call, to discuss existing and emerging issues relating to poultry research in Canada. Board meetings are also attended by staff representatives from each of the member organizations. This structure facilitates efficient communication between CPRC and its membership. Operational and financial decisions are subject to CPRC Board approval by majority vote. When required, consultations are first held between CPRC and its members to ensure that CPRC activities are within its mandate and performed in the best interests of the Canadian poultry sector as a whole.</p> <p>Executive Committee made up of the Chair, Vice-Chair and one other director to provide support and oversight for CPRC’s Executive Director.</p> <p>CPRC is staffed by a full-time Executive Director (ED) and Research Administrator. CPRC office support is provided through an agreement with CFC, which oversees management of CPRC’s accounting system, IT support and provides office space for staff. CPRC members contribute to maintaining staff capacity.</p> <p>The CPRC members are:</p> <ul style="list-style-type: none"><li>• Canadian Hatching Egg Producers</li><li>• Canadian Poultry and Egg Processors Council</li><li>• Chicken Farmers of Canada</li><li>• Egg Farmers of Canada</li><li>• Turkey Farmers of Canada</li></ul>

Primary source: [cp-rc.ca](http://cp-rc.ca)

*This information is near-verbatim from the source above.  
We did not conduct a thorough validation or assessment process.*

Section 2



CANADIAN URBAN ENVIRONMENTAL  
HEALTH RESEARCH CONSORTIUM



Background Information	Governance & Management
<p>Established after 2015. Seeks to increase scientific understanding of the interactions among the physical features of the urban environment and health. This understanding will lead to cost-effective actions that promote healthy childhood development and aging, reduce the burden of chronic disease, and minimize the impact of changing environments.</p> <p>CANUE members are actively involved in research projects that develop and make use of data in innovative ways, from taking advantage of the latest spatial analysis technologies to investigating the effects of urban characteristics on the health of Canadians of all ages.</p> <p>CANUE is a consortium made up of voluntary members from the multi-disciplinary fields of environmental health research, health policy, and urban design and planning.</p> <p>Approx. 250 members.</p>	<p>CANUE uses a consensus-based decision model, with the Directors having ultimate responsibility for choosing the activities and approving budget allocations to meet goals and objectives. Team leaders integrate input from the membership at large into coherent and scientifically sound actions, in collaboration with the Directors and the CANUE Advisory Panel.</p> <p>Their leadership and direction comes from a number of interactive teams and an advisory panel.</p> <p>12 directors, 4 advisors, 3 specialists, 6 data teams, and 6 expert teams.</p>

Primary source: [canue.ca](http://canue.ca)

*This information is near-verbatim from the source above.  
We did not conduct a thorough validation or assessment process.*

Section 2



CANADIAN WILDLIFE HEALTH  
COOPERATIVE



Background Information

Governance & Management

Established in 1992. A collection of highly qualified people within a cross-Canada network of partners and collaborators dedicated to wildlife health. The CWHC is dedicated to generating knowledge needed to assess and manage wildlife health and working with others to ensure that knowledge gets put to use in a timely fashion.

Executive Committee: 15 members  
Management Committee: 11 members

Associates in each province.

Governance mechanism/approach not available.

At the core of the CWHC is a partnership linking Canada's five veterinary colleges and the British Columbia Animal Health Centre. Branching from that core is a network that stretches into the public and private sectors that allows us to access critical expertise needed to detect and assess wildlife health issues and make sure results find their way to people who need to make decisions on wildlife management, wildlife use, public health and agriculture. Regional centres in each province.

The partnership includes all provincial and territorial governments, representing Fish & Wildlife, Environment, Agriculture and Health. Additional partners: the University of Saskatchewan, the University of Guelph, the University of Montreal, the University of Prince Edward Island, the University of Calgary, as well as the Canadian Wildlife Federation.

Fed gov sponsors ex. Environment Canada, CFIA etc.; Prov Government sponsors, nongovernment sponsors, university sponsors, partners and collaborators ex. Fisheries and Oceans Canada.

2019-2020 Revenue = \$1.9 million  
Expenses = \$1.6 million

Primary source: [cwhc-rcsf.ca](http://cwhc-rcsf.ca)

*This information is near-verbatim from the source above.  
We did not conduct a thorough validation or assessment process.*

Section 2



CHOOSING WISELY  
CANADA



Background Information

Established in 2014, it is the national voice for reducing unnecessary tests and treatments in health care. Inspires and engages health care professionals to take leadership in reducing unnecessary tests, treatments and procedures, and enables them with simple tools and resources that make it easier to choose wisely. It does so by partnering with professional societies representing different clinical specialties (e.g., cardiology, family medicine, nursing) to come up with lists of “Things Clinicians and Patients Should Question.” These lists of recommendations identify tests and treatments commonly used in each specialty that are not supported by evidence and could expose patients to harm.

Choosing Wisely Canada also partners with a wide range of medical associations, health system as well as patient organizations to help put these recommendations into practice.

It is part of a global movement that began in the United States in 2012, which now spans 20 countries across 5 continents.

There are close to 350 documented quality improvement projects across the country that are building capacity for the spread and scale of Choosing Wisely. These efforts are underway in hospitals, long-term care homes, and primary care clinics. Many of these innovative projects, including their evidence-based tools and methods, have been packaged into easy-to-follow toolkits that are broadly circulated in order to encourage widespread adoption. This has allowed Choosing Wisely Canada to foster a network for those looking to implement campaign recommendations into practice.

Financial Supporters: Choosing Wisely Canada is organized by the Canadian Medical Association, the University of Toronto, and St. Michael’s Hospital (Toronto). It receives funding from the Canadian Medical Association, along with grants from federal, provincial and territorial ministries of health.

Governance & Management

- Core Staff:
- Chair
  - Campaign Director
  - KT Lead
  - Communications Specialist
  - Project management staff (approx. 5)
  - 8 Clinical Leads
  - 2 Patient and Public Advisors

- Campaign Partners:
- Professional Societies (approx. 80)
  - Medical Associations (approx. 15)
  - Health System Organizations (approx. 8)
  - Patient Organizations (approx. 10)

Primary source: [choosingwiselycanada.org](http://choosingwiselycanada.org)

*This information is near-verbatim from the source above.  
We did not conduct a thorough validation or assessment process.*



Section 2



Background Information

Established in 1990, the Canadian HIV Trials Network (CTN) facilitates and supports high-quality, community-collaborative, investigator-driven HIV clinical trials and innovative non-interventional research. Their work provides mentorship and training while sharing resources and expertise.

- Generates knowledge on the prevention, treatment, and management of HIV, hepatitis C (HCV), and other sexually transmitted and blood-borne infections (STBBIs), and to developing a cure for HIV through conducting scientifically sound clinical trials, research, and other interventions.
- Maximizes the impact of research to improve the health of Canadians. They accomplish this by applying knowledge gained through research into clinical and non-clinical practice, and making information more accessible to the community.

Functions:

- Facilitates and supports high-quality, community-collaborative, investigator-driven HIV clinical trials and innovative non-interventional research.
- Provides mentorship and training while sharing resources and expertise.

Approx. 60 organizational partners both domestically and internationally. Key partner types: research (both domestic and internationally). Industry, & Non-Governmental Organization Collaborators. Number of Research Investigators approx.140

Impact: 300 Studies Reviewed, 20,000 participants since 1990, 140 investigators, 100 postdoctoral fellows

\$4.56 million annual budget. Sponsors: CIHR, UBC Providence Health Care.

Governance & Management

- Steering Committee: 24 members.
- Community Advisory Committee: 10 members.
- Data Safety & Monitoring Committee: 5 members.
- Scientific Review Committee: 13 members.
- Funding Committee: 6 members.
- External Advisory Committee: 5 members.

The core teams are responsible for managing the flow of concept development to protocols, supervising ongoing studies and mentoring junior investigators. In addition to reaching out to colleagues and sites across Canada, all four Cores are committed to working in partnership with individuals and clinical trial networks globally.

Core teams focus the expertise of clinical investigators, research coordinators, CTN support staff, and members of the HIV community, on generating study protocols that address the most urgent clinical questions of the day. Together, these teams function as a catalyst of scientific activity in their area.

Primary source: [hivnet.ubc.ca](http://hivnet.ubc.ca)

*This information is near-verbatim from the source above.  
We did not conduct a thorough validation or assessment process.*

Section 2



CLIMATE ACTION  
NETWORK CANADA



Background Information

Governance & Management

Established in 1989, it is a coalition of more than 100 organizations across the country. Seeks to combat climate change, particularly by building social consensus for the implementation of comprehensive climate change action plans by all levels of government, based on the best available science, with specific policies, targets, timetables and reporting, and to work with Canada's governments, First Nations, Inuit and Métis, private sector, labour, and civil society for the effective implementation of these plans.

14 Board of Directors representing 14 different environmental organizations.  
6 Staff Members.

Governance mechanism/approach not available.

- Coalition of 110 organizations. CAN-Rac's activities fall under three pillars:
- 1. Nurturing and providing services to a network of members
  - 2. Policy development and advocacy with federal, provincial and municipal governments
  - 3. Building and maintaining Canadian civil society's capacity to engage in the international sphere of climate action

CAN-Rac is an active member of Climate Action Network-International, a world-wide network of more than 1,100 non-governmental organizations in more than 120 countries.

About 130 member organizations.

Over the past few years, CAN-Rac has helped convene a diverse network of civil society groups that have helped to develop, inform, and drive implementation of a wide array of the more than 50 distinct climate policies embedded within Canada's current climate plan, the Pan-Canadian Framework on Climate Change and Clean Growth (PCF). They celebrated a key victory in this campaign with the government's 2019 election promise to legislate Canada's long-term targets and interim 5-year carbon budget.

Revenue 2018-2019: \$490,076. Sources of funding include: ECHO Foundation, Environment and Climate Change Canada, Environmental Defence, European Climate Foundation, Ivey foundation, LUSH Charity pot, SISU Institute, TIDES foundation, United Church of Canada, United Nations Association in Canada, and individual donors.

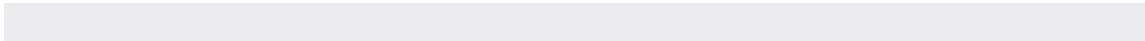
Primary source: [climateactionnetwork.ca](http://climateactionnetwork.ca)

*This information is near-verbatim from the source above.  
We did not conduct a thorough validation or assessment process.*

Section 2



DO BUGS NEED  
DRUGS?



Background Information

Launched in 1998. A community education program about handwashing and responsible use of antibiotics. Materials are available for healthcare professionals and the public that explain why antibiotic resistance is an issue, and steps to prevent antibiotic resistance from developing.

The Do Bugs Need Drugs? program started as a small six-month pilot in Grande Prairie, Alberta, Canada in 1998-99. Currently it is a provincial program in Alberta and British Columbia. Components of the program are used elsewhere in Canada, the United States and abroad.

Programs are available for physicians, pharmacists, nurses, teachers, schools, daycare centers, preschools, early childhood educators, occupational health nurses, human resources personnel, older adults, parents, children and the general public.

Bugs & Drugs® is the recommended reference for treatment of infectious diseases and appropriate antimicrobial use. It is peer-reviewed, evidence-based, and frequently updated. The Bugs & Drugs antimicrobial prescribing resource is available as an app for Apple or android mobile devices; content is developed, maintained and owned by AHS Pharmacy Services

Bugs & Drugs® is supported by the Do Bugs Need Drugs? ® community-education program, and is funded by the Health Ministries of the provinces of Alberta and British Columbia.

Governance & Management

Founder, 8 members part of the team for each of the Alberta and British Columbia programs.

In Alberta DBND is part of AHS Population Public and Aboriginal Health, Communicable Disease Control. In British Columbia, DBND operates out of the British Columbia Centre for Disease Control, an agency of the Provincial Health Services Authority.

Primary source: [dobugsneeddrugs.org](http://dobugsneeddrugs.org)

*This information is near-verbatim from the source above.  
We did not conduct a thorough validation or assessment process.*

Section 2



HEALTH DATA RESEARCH  
NETWORK



Background Information

Established in 2020. Connects individuals and organizations across the country to share expertise, identify opportunities for collaboration, and foster innovation in ways that respect public expectations and Indigenous data sovereignty.

Seeks to improve health and well-being by making data accessible to researchers, institutions and government agencies across Canada for research that will foster improved health outcomes for all Canadians.

Member organizations (17)- HDRN Canada Organizations are those that were co-applicants to the CIHR application to develop the SPOR Canadian Data Platform (SPOR CDP) and are actively engaged in the governance and operations of HDRN Canada.

The SPOR Canadian Data Platform (SPOR CDP) is the first initiative of HDRN Canada. It is funded by the Canadian Institutes of Health Research – Canada’s national health research funder – and contributions from provincial, territorial and pan-Canadian organizations. SPOR CDP infrastructure supports improved access to data, automation of data analysis, and ongoing engagement with the public, patients, and Indigenous communities.

Governance & Management

Non-profit corporation.

The Health Data Research Network’s Board of Directors provides responsible and effective governance over the organization’s activities and affairs. Four members.

Directors represent a variety of backgrounds, including clinicians, researchers, patients and decision-makers. They bring a diversity of views and perspectives informed by their unique experiences within the healthcare system, including by gender, by age and by region of residence, within rural and urban settings.

Directors are elected at the Annual General Meeting (AGM) and serve for a term of three years. The Interim Advisory Board was established in January 2019.

10 members on executive team.

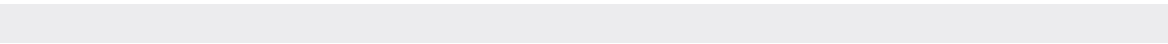
Primary source: [hdrn.ca](https://hdrn.ca)

*This information is near-verbatim from the source above.  
We did not conduct a thorough validation or assessment process.*

Section 2



HEALTH PROMOTION  
CANADA



Background Information

Governance & Management

Established in 2005. Aims to be nationally and internationally recognized as the main source for supportive resources and to find a community of health promoters from every province and territory, sharing tools, resources and strategies for progressive health promotion practice.

National Executive Group: 14 members with representatives from each province.

HPC’s vision is to connect health promoters from every province and territory in Canada, sharing tools, resources and strategies to practice health promotion effectively, ethically and comprehensively. HPC aims to be recognized in Canada as the go-to national association to enhance the capacity of Canadian health promoters that ultimately will promote health and health equity among communities empowering people to achieve their full life potential.

- HPC seeks to advance the practice of health promotion by supporting and uniting:
- Students
  - Researchers
  - Practitioners
  - Employers

Has Provincial chapters.

Sample initiative: Development and validation of a set of Health Promoter Competencies; the creation of an online toolkit to support application of the competencies; and, the creation of a network of health promoters to foster communication regarding the competencies, the toolkit and other issues of interest to health promoters. The results of this project will aid competency-based workforce development for health promoters assisting three target audiences: health promoters, those that hire and manage them, as well as academic institutions that provide health promotion education programs and continuing education.

Budget not available.

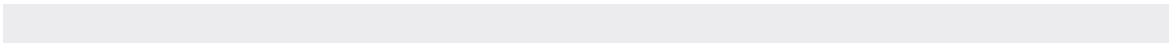
Primary source: [healthpromotioncanada.ca](http://healthpromotioncanada.ca)

*This information is near-verbatim from the source above.  
We did not conduct a thorough validation or assessment process.*

Section 2



HEALTHCARECAN



Background Information	Governance & Management
<p>The national voice of action for health organizations and hospitals across Canada. They advocate in support of health research and innovation; to enhance access to high-quality health services for Canadians; and empower health professionals through best-in-class learning programs.</p> <p>HealthCareCAN continues to play a leadership role in promoting Antimicrobial Stewardship (AMS) programming and advocating for increased resources to move the needle on AMS in Canada. Developed a 10-point roadmap for improving AMS in Canada.</p> <p>40+ members, 12 affiliate members, 1 associate member, and a limited number of honorary life members.</p> <p>2019 Revenue and Expenses approx. \$3.3 million.</p>	<p>Board of Directors: 8 Members</p> <p>Executive committee: 4 Members</p> <p>Governance mechanism/approach not available.</p>

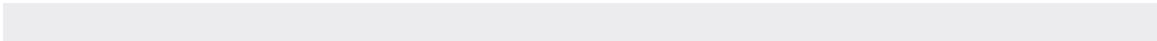
Primary source: [HealthCareCAN 2019-2021 Strategic Plan](#)

*This information is near-verbatim from the source above.  
We did not conduct a thorough validation or assessment process.*

Section 2



INFECTION PREVENTION AND  
CONTROL CANADA



Background Information	Governance & Management
<p>Incorporated in 1976. IPAC is a not-for-profit voluntary association for those who are professionally or occupationally interested in the prevention and control of infections in all settings. Their mandate is to provide education, communication, networking, and advocacy on behalf of all members.</p> <p>IPAC Canada represents 1,500 members from across the continuum of care, both national and international. They have 20 chapters across Canada. While a significant number of their members are from acute care settings, a growing segment is long-term care. Long-term care members utilize IPAC resources to ensure the health and safety of their residents.</p> <p>Services and access provided to members:</p> <ul style="list-style-type: none"><li>• Education: Current evidence and research; guidelines, best practice tools; continuing education, distance education, certification opportunity, local chapter education; national conferences; free webinars</li><li>• Communication – Website; quarterly journal, monthly e-news, e-blasts</li><li>• Networking – Local chapter; in-person or electronic meetings; sharing, information gathering, interest groups, communication with local and national peers; mentor program; IPAC Chat</li><li>• Advocacy – Local, Provincial and Federal representation; increasing the profile of members; a voice in national and global issues</li></ul> <p>Other services provided:</p> <p>Audit Tools – 50+ healthcare settings (for members only)</p> <p>Audit Tool App – Free to members</p> <p>Hand Hygiene Module and Toolkits</p> <p>Routine Practices E-Learning Tool</p> <p>Sample initiative from 2017: Working with CNISP and CIHI to develop a national repository for data collection, analysis and benchmarking.</p> <p>In 2019 approx. \$1million in revenue and expenses.</p>	<p>11 on the Board in 2018, including 5 Executive Officers, and 6 Directors. .</p> <p>Board reports to the Members.</p> <p>Executive Director reports to the Board.</p> <p>2 Interest Groups</p> <p>Conference Planning Committee</p> <p>Internal and External Committees</p> <p>11 Other Staff</p>

Primary source: [ipac-canada.org](http://ipac-canada.org)

*This information is near-verbatim from the source above.  
We did not conduct a thorough validation or assessment process.*



## Section 2



### NATIONAL COLLABORATING CENTRE FOR HEALTHY PUBLIC POLICY



#### Background Information

Established in 2005. One of Canada's six National Collaborating Centres for Public Health, or NCCs. The NCCs were created in 2005-2006 in order to help to bridge research with action.

Each NCC is based at a different host institution and each has a specific topic, but all share the same mandate to synthesize and share knowledge in collaboration with frontline practitioners, policy makers, researchers, and others to improve public health policies and practices in Canada.

Other key goals include:

- creating and supporting networks
- identifying knowledge gaps
- promoting research

Their mandate is to increase the expertise of public health actors across Canada in healthy public policy through the development, sharing and use of knowledge. At the NCCHPP, their interest is in Healthy Public Policy, which they understand to mean public policy that potentially enhances populations' health by having a positive impact on the social, economic, and environmental determinants of health.

Financed by the Public Health Agency of Canada.

#### Governance & Management

Advisory council and scientific advisors.

The mandate of the advisory council is to guide and support the Centre's management in its choices of strategic orientations and in the development of the Centre's program of activities.

13 staff, 11 on advisory council.

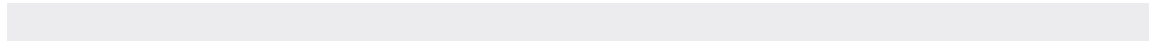
Primary source: [ncchpp.ca/en](http://ncchpp.ca/en)

*This information is near-verbatim from the source above.  
We did not conduct a thorough validation or assessment process.*

Section 2



NATIONAL FARM ANIMAL  
CARE COUNCIL



Background Information	Governance & Management
<p>Established in 2005. Brings together diverse stakeholders to:</p> <ul style="list-style-type: none"><li>• Develop Codes of Practice for the care and handling of farm animals</li><li>• Create a process for the development of animal care assessment programs</li><li>• Provide a forum for open dialogue on farm animal welfare</li></ul> <p>NFACC is based on a foundation of trust, communication and respect. It is a member-driven organization</p> <p>28 partners, including provincial ministries of agriculture, and research community with representative currently from University of Guelph.</p> <p>Sample initiative:</p> <p>The 'Market Relevant Codes and Communications Leadership' project led to development of five new Codes of Practice. These Codes are now part of a family of twelve Codes developed through NFACC's collaborative, multi-stakeholder, and consensus-based process. Codes are seen as 'change management tools' that enable us to collectively identify what's possible, how it is possible, and often under what timelines.</p> <p>Only organization in the world that brings together animal welfare groups, enforcement, government and farmers under a collective decision-making model for advancing farm animal welfare.</p>	<p>NFACC members and partners meets 2-3 times a year.</p> <p>The Executive meets more frequently with monthly teleconferences.</p> <p>The Executive includes:</p> <ul style="list-style-type: none"><li>• NFACC's Chair</li><li>• National Commodity Associations – 2</li><li>• National Meat/Poultry Processor Associations – 1</li><li>• National Animal Welfare Associations – 1</li><li>• National Retail, Restaurant and Food Service Associations– 1</li><li>• National Veterinary Association – 1</li><li>• Provincial Farm Animal Care Councils – 1</li><li>• Federal Government – ex officio non-voting – 1</li><li>• Research Community – ex officio non-voting - 1</li><li>• NFACC General Manager</li></ul> <p>NFACC functions on a consensus-based model of decision making. As such, all partners of the Council have an obligation to support the decisions and positions of NFACC.</p>

Primary source: [nfacc.ca](https://nfacc.ca)

*This information is near-verbatim from the source above.  
We did not conduct a thorough validation or assessment process.*

Section 2



NATIONAL FARMED ANIMAL HEALTH  
AND WELFARE COUNCIL



Background Information

Established in 2010. The council brings together industry, F/P/T partners to provide collaborative guidance on a cohesive, functional, and responsive farmed animal health and welfare system in Canada. Be it animal welfare, emerging diseases, animal health surveillance, antimicrobial use and resistance or One health and One welfare concepts, they work in partnership to elevate farmed animal health and welfare and accelerate results.

Developed the National Farmed Animal Health and Welfare Strategy in collaboration with the Joint Working Group with participants from the Council of Chief Veterinary Officers, the Canadian Food Inspection Agency, the farmed animal industry, and the Canadian Animal Health Coalition.

Membership: Council members are designated by stakeholders and include federal, provincial and industry/non-government members from both animal health and welfare and public health sectors. All issues are considered in a One Health context.

Approx. \$350,000 in revenue in 2019-2020.

Governance & Management

The Council identifies work areas annually which are important to the animal health and welfare system and contribute to the priorities of the FPT Regulatory ADM of Agriculture Committee. The work areas are developed by working groups which may be enhanced with the addition of external representation which technical or policy expertise. The Council is engaged by the working group during development and has final approval of the document and recommendations.

Structure: an organizational model that incorporates the following distinct divisions:

- National Farm Animal Care Council
- Canadian Animal Health Surveillance System

Staff made up of Executive director and Executive Assistant, Coordinator. 18 council board members

Membership consists of 26 council supports (ex. Associations and governments, PHAC etc.) & F/P/T government representatives.

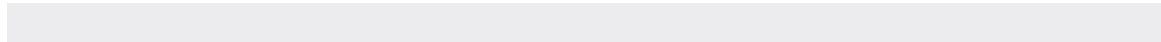
Primary source: [ahwcouncil.ca](http://ahwcouncil.ca)

*This information is near-verbatim from the source above.  
We did not conduct a thorough validation or assessment process.*

Section 2



NATIONAL ZERO  
WASTE COUNCIL



Background Information	Governance & Management
<p>Established in 2013. Leading Canada’s transition to a circular economy.</p> <p>Guiding Principles</p> <ul style="list-style-type: none"><li>• Commit to collaboratively working with business, government and community partners to develop new solutions</li><li>• Adopt a waste prevention and reduction framework that positions Canadian cities and businesses to compete globally</li><li>• Align with global and international initiatives</li><li>• Promote the economic, social, and environmental benefits associated with the conservation of resources</li><li>• Consider local and global consequence and long-term impacts</li></ul> <p>Founded by Metro Vancouver in collaboration with the Federation of Canadian Municipalities in 2013, the Council has united, among others, six of Canada’s largest metropolitan regions – Metro Vancouver, Toronto, Montreal, Halifax, Calgary and Edmonton – with key business and government leaders, academia and non-profit organizations in a call for national action and systems change to address waste generation.</p> <p>Approx. 30 member organizations.</p> <p>The National Zero Waste Council initiated the Love Food Hate Waste Canada campaign as a key deliverable of its strategy to reduce food waste across Canada. Love Food Hate Waste (LFHW) Canada is a multi-year, collaborative campaign bringing together governments, retailers and others to help consumers rethink their relationship with food. The campaign, launched in 2018, by the Council in collaboration with its campaign partners provides consumers across Canada tips and ideas to effectively prevent food waste. The Zero Waste Conference is presented by Metro Vancouver and the National Zero Waste Council, offering participants a curated program of local and global thought leaders who share their insights and inspirations about circular economy success stories and waste prevention innovations.</p>	<p>Governed by a Management Board, with staff and administrative support provided by a Secretariat. The Council uses member-led working groups to collaboratively advance projects in support of its vision and mission.</p> <p>Chair and vice chair plus 27 members on Board.</p> <p>Executive leadership responsible for the Council’s strategic development, business planning and operations.</p>

Primary source: [nzw.ca](https://nzw.ca)

*This information is near-verbatim from the source above.  
We did not conduct a thorough validation or assessment process.*

## Section 2



## ONTARIO NONPROFIT NETWORK



### Background Information

Established in 2007. Activates a provincial network to develop and analyze policy, and work on strategic issues through working groups, sector engagement and government relations. They operate as a network and actively support the development of regional nonprofit networks.

They are the independent network for the 58,000 nonprofits in Ontario, focused on policy, advocacy, and services to strengthen Ontario's nonprofit sector as a key pillar of society and the economy. They focus on public policy, legislation and systems issues to influence change at the broader level.

Their funding comes from several sources:

- Members: Ontario nonprofits that pay membership fees based on the size of their organization
- Partners; project grants and support from private and public charitable foundations and companies
- The provincial and federal governments

They have diverse sources of funding; they are not not dependent on any one source. They're proud that over half of their funding is self-generated earned income, ensuring independence and financial sustainability.

Revenue approx. \$1.2million

### Governance & Management

Distributive Collaboration Model.

Board of Directors: 8 members. The ONN Board is the governing body that supports ONN through communications and strategic leadership. Members of the Board are stewards of the public benefit sector and the work that is being undertaken in relation to the sector. Board Members are not representative of their organization's or sub-sector's particular interests.

The Policy Committee brings their expertise and experience in public policy and provides valuable feedback on the development of policy priorities set out by the ONN staff team. 17 members.

ONN convenes working groups in formal and informal capacities to help shape policy and address issues relevant to Ontario's nonprofit sector. They engage with hundreds of volunteers and representatives from other nonprofits in this work as needs arise and for specific policy objectives or opportunities. They have made some of their finest volunteers lifetime members.

Have Advisory committees.

12 members on staff.

Primary source: [theonnn.ca](http://theonnn.ca)

*This information is near-verbatim from the source above.  
We did not conduct a thorough validation or assessment process.*

Section 2



PAN-CANADIAN JOINT CONSORTIUM  
FOR SCHOOL HEALTH



Background Information

Established in 2005, A membership of government departments or ministries. The Department of Education and the Department of Health in each of the provinces and territories with the exception of Quebec form this membership. Working closely with the members in a funding and supportive role is the Public Health Agency of Canada as the federal collaborator.

Since 2005, these 25 ministries/departments and agency have represented a common voice in Canada on the promotion of a comprehensive approach to wellness and success of all students.

The broad direction for JCSH may be outlined in three areas:

- Strengthen cooperation among ministries, agencies, departments, and others in support of healthy schools
- Build the capacity of the health and education sectors to work together more effectively and efficiently
- Promote understanding of, and support for, the concept and benefits of comprehensive school health

Funding for the JCSH operations and the cost of the Secretariat will be shared among the federal and the provincial/territorial jurisdictions:

- Public Health Agency of Canada will contribute \$250,000 annually
- Provinces and territories will match this contribution annually.

Revenue: \$500,000.

Governance & Management

The JCSH is governed by two Deputy Ministers’ committees – the Advisory Committee of Deputy Ministers of Education (ACDME) and the Conference of Deputy Ministers of Health (CDMH).

The JCSH Management Committee is composed of Assistant Deputy Ministers and other senior officials representing the Education and Health Departments in each member province and territory. The Management Committee provides the main forum for executive level discussion and decisions affecting the work of the JCSH.

Each province and territory has named a School Health Coordinator. The JCSH School Health Coordinators’ Committee serves as a pan-Canadian forum to advance comprehensive school health initiatives across Canada, and to support collaboration and alignment between health and education sectors in the promotion of health through the school setting.

The Public Health Agency of Canada acts as the lead contact for the federal government.

Primary source: [jcs-hcces.ca](http://jcs-hcces.ca)

*This information is near-verbatim from the source above.  
We did not conduct a thorough validation or assessment process.*

Section 2



SUSTAIN ONTARIO



Background Information

Governance & Management

Established in 2009 to strengthen the healthy food and farming sector. They work to:

- Mobilize knowledge. Provide opportunities for Members to share their experiences, knowledge, and ideas to support their mission
- Turn policy into action. By convening Members, they bridge differences, share diverse viewpoints, and collaborate. With this a credible province-wide base of support, they turn policy ideas into concrete action, through research, writing, strategy development, and effective advocacy
- Engage the sector. They seek areas of mutual benefit and opportunities for collaboration across the whole sector

Membership is open to food and/or farming non-profit organizations and businesses that are owned by Ontarians or that have substantial activity in Ontario.

~100 members and associate members.

Sample initiatives/activities: Community Growing Network – An Ontario-wide network bringing together a variety of community gardens, urban agriculture projects, and organizations. The network comes together to share resources, discuss new ideas and strategize for the future of growing in Ontario.

Engagement of stakeholders in development and discussion of Ontario Food and Nutrition Strategy. The strategy was developed in collaboration with many experts and stakeholders representing agriculture, food, health, First Nations, Inuit and Métis communities and organizations, from sectors spanning not-for-profit, public health, academia and government. Consultations, discussions, face-to-face meetings and outreach initiatives were among the many formats used to collaborate across Ontario

Funded by member contributions. 2018 Expenses were \$123,000.

Members drive the work by sharing their ideas, perspectives, and energy to advance mission.

Board of directors set strategic direction and program priorities, and to guide and support the Executive Director and staff of the organization.

Networks coalesce around interest in common area of food and farming. Serve primarily as hubs for information sharing.

Working groups are self-organizing teams led by interested and engaged leaders. STAFF implement the strategic directions informed by the Membership and set by the Board of Directors.

Primary source: [sustainontario.com/about](https://sustainontario.com/about)

*This information is near-verbatim from the source above.  
We did not conduct a thorough validation or assessment process.*



Section 2



SUSTAINABLE DEVELOPMENT  
SOLUTIONS CANADA



Background Information

Governance & Management

Established in 2018 to build an on-going pan-Canadian network of post-secondary institutions, civil society, and others, to facilitate learning and accelerate problem solving for sustainable development.

Leadership Council has 6 members representing various environmental organizations.

Functions:

- Link Canadian experts on a universal agenda for sustainable development
- Organize national/sub-national sustainable development meetings bringing together key actors to identify and promote regional solutions initiatives
- Foster debate on sustainable development within Canadian academia and society
- Conduct action-oriented research
- Develop and continually improve educational programming for sustainable development

30+ network partners.

Sample initiatives/activities: Held during the start of the COVID-19 pandemic, Together[Ensemble was Canada’s first online all-of-society conference devoted to tracking progress on the Sustainable Development Goals (SDGs). The event brought together an impressive mix of over 100 speakers in more than two dozen sessions for an audience of 1,400 attendees.

SDG Toolkit: A practical guide to the United Nations Sustainable Development Goals in post-secondary institutions. Colleges and Institutes Canada with the support of Employment and Social Development Canada are assessing the level of awareness and integration of the United Nations’ 2030 Agenda and Sustainable Development Goals (SDGs) in their member institutions.

The Government provided \$49.4 million over 13 years, starting in 2018–19, to establish a Sustainable Development Goals Unit, and fund monitoring and reporting activities by Statistics Canada.

Primary source: [uwaterloo.ca/sustainable-development-solutions-network-canada/about](http://uwaterloo.ca/sustainable-development-solutions-network-canada/about)

*This information is near-verbatim from the source above.  
We did not conduct a thorough validation or assessment process.*

Section 2



SWINE INNOVATION  
PORC



Background Information

Established in 2010. A non-profit corporation committed to facilitating research in the Canadian swine sector. Their main objective is to enhance the profitability and sustainability of the pork industry by supporting the development of the most innovative technologies that will benefit the pork value chain.

Their main roles:

- Determine national research priorities
- Develop multi-institutional and multi-disciplinary R&D programs
- Act as a coordinator for the research community and industry partners
- Deliver timely and effective knowledge transfer programs
- Encourage the development of highly qualified professionals as well as research skills
- Leverage producer dollars

Since 2010, Swine Innovation Porc has supported 34 projects through two research programs.

Swine Innovation Porc is funded by the federal government (Agriculture and Agri-Food Canada), eight provincial pork organizations as well as multiple private partners within the pork industry.

100+ financial partners.

\$18.5 million Swine Cluster 3 National Research program is the centrepiece of their R&D activities.

Governance & Management

Board, Management Team, Advisory Board

Swine Innovation Porc's Board of Directors consists of 10 representatives from the following organizations/entities:

- Alberta Pork
- Les Éleveurs de porcs du Québec
- Manitoba Pork
- Ontario Pork
- PEI Pork & Pork NB Pork
- Sask Pork
- Ontario Pork Sector
- Quebec Pork Sector
- Pork Value Chain

The Science Advisory Body (SAB) is a committee that evaluates the scientific integrity of all research proposals submitted to Swine Innovation. Members of the SAB are recognized professionals who are well-known in their fields and they represent a diverse range of expertise within swine research. This committee reviews research proposals, offers scientific expertise, gives technical advice and ultimately provides the Board of Directors with their recommendations. 7 members.

4 members on management team.

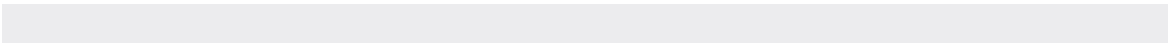
Primary source: [swineinnovationporc.ca](http://swineinnovationporc.ca)

*This information is near-verbatim from the source above.  
We did not conduct a thorough validation or assessment process.*

Section 2



TORONTO ALLIANCE TO  
END HOMELESSNESS



Background Information

Established in 2014. A community-based collective impact initiative that recognizes the critical importance of working in a new way towards a common vision of zero chronic and episodic homelessness in Toronto. TAEH seeks to mobilize the collective impact necessary to effect change in Toronto to achieve and maintain zero homelessness. They believe homelessness is not acceptable and that it can and should end.

Since beginning to meet in late 2014, the TAEH is evolving from a grassroots network of organizations in the sector into a strategic leadership team mobilizing the city to end chronic and episodic homelessness by 2025.

We work to engage individuals and organizations that represent a broad segment of society and include people with lived experience of homelessness (PWLE), service delivery agencies, research and policy organizations, consumer driven organizations, businesses, associations and advocacy groups and community organizations.

The Alliance is supported by the Zukerman family foundation and Ontario Trillium foundation.

Governance & Management

Their new governance model retains the structure and flexibility of the constellation model recommended in June 2016, and also respects the tenants of the collective impact framework (common agenda and shared metrics) that has come to guide TAEH's development. Importantly, it allows different levels of engagement in the TAEH and their campaign to end chronic and episodic homelessness in Toronto.

- Governance Components:
- Community Partner & Individual Support: These are the foundation of the TAEH. They are organizations and individuals that make up the eco-system of TAEH's collective impact initiative to end homelessness in Toronto.
  - Working Groups: These are essential to the TAEH Theory of Change and take on strategic priorities and challenges of the TAEH.
  - The Steering Committee: Focuses and guides the TAEH.
  - PWLE: People with lived experience are an essential part of the work to end homelessness. They work with and strive to learn from people with lived experience on a continuous basis.
  - The Champions Table: To start in 2018, will promote and champion the TAEH across Toronto's diverse communities.
  - The Secretariat: Supports all roles in the TAEH governance structure. Together with the Steering Committee and the Champions' table it makes up the backbone team of the TAEH.
  - Toronto Housing and Homelessness Service Planning Forum: This is co-chaired by the Shelter, Support and Housing Administration (SSHA) of the City of Toronto and the TAEH. It meets quarterly as a collaborative forum and is open to everyone, not just TAEH partners and supporters.

Primary source: [taeh.ca](http://taeh.ca)

*This information is near-verbatim from the source above.  
We did not conduct a thorough validation or assessment process.*

Section 3



AMR INDUSTRY  
ALLIANCE



Background Information

Established in 2017, is one of the largest private sector coalitions set up to provide sustainable solutions to curb antimicrobial resistance, with over 100 biotech, diagnostics, generics and research-based pharmaceutical companies and associations joining forces.

AMR Industry Alliance measures and drives the life-sciences industry progress to curb antimicrobial resistance in four different areas:

- Research & Science
- Appropriate Use
- Access
- Manufacturing

Contribute sustainable solutions to curb antimicrobial resistance by creating a broad industry momentum and facilitating collaboration between the public and private sectors. The Alliance increases accountability and facilitates progress by breaking down the traditional silos across the life-science industry and sharing information.

Approx. 100 partners in North America and the world

Overall, in 2018 a total of 56 Alliance members invested more than US\$1.6B into the development of AMR-relevant products to tackle AMR, including 24 antibiotics and antifungals, 11 vaccines, 16 diagnostic platforms or assays, 10 non-traditional approaches, and 1 other AMR-relevant product. This is a subset of the overall Alliance and private-sector investment in AMR-relevant R&D. Since the public sector invests approximately US\$500M per year in AMR-relevant R&D, the life sciences industry remains by far the dominant funder of AMR-relevant R&D.

Funding budget not available, launched by International Federation of Pharmaceutical Manufacturers & Associations.

Governance & Management

Working Groups dedicated to the 4 action areas: Research & Science, Access, Appropriate Use and Manufacturing

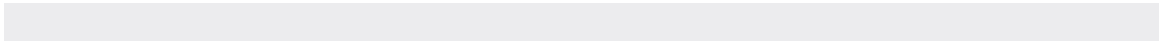
Secretariat: IFPMA serves as the secretariat of the AMR Industry Alliance with the responsibility of implementing the activities endorsed by the Board.

Representatives from Industry, Research based pharmaceuticals, biotechnology, generics companies, diagnostics. 16 members in total.

Primary source: [amrindustryalliance.org](http://amrindustryalliance.org)

*This information is near-verbatim from the source above.  
We did not conduct a thorough validation or assessment process.*

Section 3



Background Information	Governance & Management
<p>Established in 2017, AMR Insights is a network-based organization interacting with professionals around the globe: in Human and Veterinary Health, Agrifood and Environment. Professionals in private companies, academia, authorities and NGO's.</p> <p>AMR Insights informs, educates and connects relevant professionals around the globe with the aim to curb Antimicrobial resistance:</p> <ul style="list-style-type: none"><li>• Informing: Information platform &amp; E-newsletter</li><li>• Educating: Masterclass AMR &amp; Seminars on AMR</li><li>• Connecting: International Matchmaking Symposia &amp; Innovation Missions</li><li>• Focal areas target different professionals</li></ul> <p>AMR Insights distinguishes 6 Focal Areas:</p> <ul style="list-style-type: none"><li>• Healthy Patients</li><li>• Effective Surveillance</li><li>• Healthy Animals</li><li>• Secure Food</li><li>• Clean Environment</li><li>• Smart Innovation</li></ul> <p>AMR Insights offers targeted, up-to-date information, training courses as well as knowledge exchange and partnering opportunities during AMR Insights' own international symposiums and innovation missions. AMR Insights is developing into the most active source of information, expertise and inspiration in combating AMR within and outside the Netherlands</p> <p>The AMR Insights Ambassador Network is a growing, distinctive group of professionals who stand out for their commitment, willingness to cooperate and open attitude to combat Antimicrobial resistance (AMR). ~200 members</p>	<p>Maarten van Dongen is founder and driving force behind AMR Insights.</p> <p>AMR Insights is a network-based organization interacting with professionals around the globe: in Human and Veterinary Health, Agrifood and Environment, Professionals in private companies, academia, authorities, and NGOs.</p> <p>AMR Insights targets 6 different focal areas. Within each focal area, professionals are dealing with AMR in a multitude of ways but with the same overall goal. This overall goal is expressed in the name of the focal area.</p>

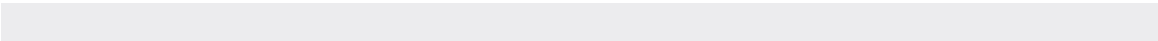
Primary source: [amr-insights.eu](https://amr-insights.eu)

*This information is near-verbatim from the source above.  
We did not conduct a thorough validation or assessment process.*

Section 3



CARB-X



Background Information

Governance & Management

<p>Established in 2016, it is a Global non-profit partnership dedicated to accelerating antibacterial research to tackle the global rising threat of drug-resistant bacteria.</p> <p>Mission: Accelerate a diverse portfolio of innovative antibacterial products towards clinical development and regulatory approval with funding, expert support and cross-project initiatives. They focus on the dangerous bacteria identified by the WHO and CDC priority lists.</p> <p>Their pipeline strategy is to fund and support projects with diverse approaches and mechanisms of action. “The more shots on goal we have, the more likely we are to deliver new treatments and approaches for drug-resistant bacteria.” The projects in the Powered by CARB-X portfolio are in the early stages of research, and there is always a high risk of failure. But if successful, these projects, hold exciting potential in the fight against the deadliest bacteria. If even one succeeds, it will be tremendous progress. CARB-X is funded by the United States Department of Health and Human Services, the Wellcome Trust in the United Kingdom, Germany’s Federal Ministry of Education and Research, the UK Government’s Department of Health and Social Care, through its Global Antimicrobial Resistance Innovation Fund, the Bill &amp; Melinda Gates Foundation, , and the National Institute of Allergy and Infectious Diseases (NIAID), part of the National Institutes of Health (NIH).</p> <p>CARB-X is investing up to US\$480 million from 2016-2022 to accelerate the development of innovative antibiotics and other therapeutics, vaccines, and rapid diagnostics to address drug-resistant bacteria. CARB-X is led by Boston University and is headquartered in the Boston University School of Law.</p> <p>Since launch, \$241 million invested, 1100+ application received from around the world, 67 projects in 10 countries funded so far, 45 active projects in the pipeline, 19 milestone progression options grants, 7 graduates (1 with regulatory approval to date).</p>	<p>CARB-X is governed by the Joint Oversight Committee (JOC), which acts as the board of directors with full oversight for CARB-X, ensuring the highest scientific and ethical standards. The JOC is made up of representatives of CARB-X’s funding organizations and management team.</p> <p>The JOC makes research investment decisions based on recommendations from the Advisory Board which reviews applications for funding selected through a global competitive process.</p> <p>Members of the JOC and the Advisory Board complete a conflict-of-interest process and are excluded in participating in any decision in which they may have a conflict.</p> <p>Joint Executive Team: 5 members Joint Oversight Committee: 14 members</p>
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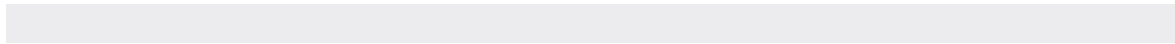
Primary source: [carb-x.org](http://carb-x.org)

*This information is near-verbatim from the source above.  
We did not conduct a thorough validation or assessment process.*

Section 3



ECOHEALTH ALLIANCE



Background Information	Governance & Management
<p>Established in 2010. World's premier non-profit organization dedicated to protecting humans, animals, and the environment from the ravages of disease emergence. Working in more than 30 countries worldwide, EcoHealth Alliance develops innovations in research, training, capacity building, policy initiatives, and designs tools and interventions to prevent pandemics and promote conservation.</p> <p>Leads scientific research into the critical connections between human, animal, and environmental health. They develop solutions that prevent pandemics and promote conservation.</p> <p>Takes a holistic One health Approach.</p> <p>Corporate, government, and academic partners around the world. Approximately 60 organizations.</p> <p>Their global field work has led to the detection of more than 1,000 unique viruses and the discovery of 815 completely new ones. Their teams have trained more than 2,500 scientists, veterinarians, public health professionals, lab technicians, foreign government ministers, and medical personnel in disease prevention and prediction methods.</p> <p>Implement local conservation and public health programs through a variety of partnerships and collaborations. Their alliance partners include local scientists, universities, nongovernmental organizations, foreign ministries and agencies.</p> <p>\$16 million in revenue, 91% Government grant-funded.</p>	<p>Board of directors sets the strategic direction, ensures the financial health and sustainability of the organization, and hires and evaluates the performance of the president. Board provides expertise to help the organization enhance its ability to conduct research, advance science, and protect human, animal and ecosystems health.</p> <p>Senior Leadership: dedicated to furthering the organization's mission through solid research and the expertise of its scientific experts.</p> <p>EcoHealth Alliance's expert scientists include wildlife veterinarians, epidemiologists, biologists, technologists, analytic modelers and public health professionals.</p> <p>Staff, senior leadership is dedicated to furthering the organization's mission through solid research and the expertise of its scientific experts.</p> <p>Fellows are partners in their global research working to stop pandemics before they start.</p> <p>Young Professionals Council dedicated to raising awareness for the organization and its mission among young professionals. The Young Professionals Council aims to garner support for EcoHealth Alliance from a wide network of savvy, influential patrons through social outreach, special events, and lending the support of their own unique skills.</p>

Primary source: [ecohealthalliance.org/about](https://ecohealthalliance.org/about)

*This information is near-verbatim from the source above.  
We did not conduct a thorough validation or assessment process.*



Section 3



GLOBAL NETWORK FOR ANTI-MICROBIAL  
RESISTANCE AND INFECTION PREVENTION



Background Information

Established in 2015. Combines world class research with an interdisciplinary approach in combatting the increasing resistance that microbes display to countermeasures like antibiotics.

- Integrate responses through research excellence
- Enable engineers, physical scientists, clinicians, and social scientists to work together
- Find ways through these means, to bring antimicrobial resistance under control and attack this problem by preventing infection

Research falls into five themes: Prevention, behaviour, therapeutics, sensing diagnostics, and water sewage and waste. Members (researchers, students, policymakers, representatives from government and industry) are drawn from across the world, all wanting to tackle the threat of antimicrobial resistance. Approx. 100 members. External members act as ambassadors.

Based out of University of Southampton, UK. The network is currently unfunded, but is seeking support to enable UK researchers, healthcare workers and vets, industry, food producers, and policymakers to meet with knowledgeable contacts from LMICs so that they can:

- Understand the problems associated with Antimicrobial Resistance and Infection Prevention in LMICs
- Design solutions that are easy for the user to adopt, taking into account local constraints (training, infrastructure, transport, communications, resources, political and cultural pressures, socio-economic and historical drivers etc.)
- Educate UK academia on the need for such communication channels if real improvements are to be made

Research into Antimicrobial Resistance is communicated through film, radio interviews, and articles in magazine and blogs.

Governance & Management

- Structure:
- Chair
  - Steering Group (16 members)
  - Steering Committee for Global NAMRIP (14 members)
  - Ambassadors (6 members)

Governance mechanism/approach not available.

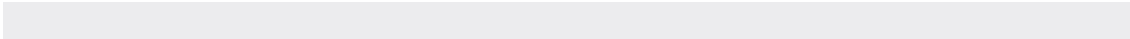
Primary source: [southampton.ac.uk/namrip](https://southampton.ac.uk/namrip)

*This information is near-verbatim from the source above.  
We did not conduct a thorough validation or assessment process.*

Section 3



GLOBAL ONE HEALTH  
NETWORK



Background Information	Governance & Management
<p>Established in 2019. An interdisciplinary research-to-action network intent on strengthening Canadian leadership in improving the global governance of infectious diseases and antimicrobial resistance. The Network brings together researchers and knowledge users from the social sciences as well as human, animal, and environmental health sciences to develop a transdisciplinary One Health approach to ID and AMR governance at global, national, and local levels.</p> <p>The objectives of Global 1HN are to:</p> <ul style="list-style-type: none"><li>• Develop and sustain a Network of local, national and international state and non-state actors to facilitate collaborative interactions among civil society, academics, industry, and policy communities</li><li>• Strengthen capacity for inter- and transdisciplinary research on, and the practice of, global governance of IDs and AMR</li><li>• Facilitate evidence-informed actions through: synergistic engagement of social and health sciences approaches to OH global governance; identifying and addressing existing barriers to, and enhancing existing and potential enablers of OH governance; and developing a OH evaluation framework</li><li>• Facilitate the implementation of a transdisciplinary OH approach to global governance of IDs and AMR through an integrated KT strategy</li></ul> <p>Network activities are spread across four Research Enabling Platforms (REPs) with the aim of generating new One Health transdisciplinary knowledge, by facilitating novel research collaborations in areas of crucial significance to the global governance of IDs and AMR. Each REP is located at one of the four main hosting institutions of Global 1HN:</p> <ul style="list-style-type: none"><li>• Surveillance (Université de Montréal)</li><li>• Response (University of Calgary)</li><li>• Institutionalization (York University) in the global governance of AMR</li><li>• Systematic aspects of equity (University of Ottawa)</li></ul> <p>CIHR funded.</p>	<p>Network leads (2), Principal Knowledge User (1), Members (48), International Knowledge Users (3), and a Member from the European Affiliate Network (SoNAR Global).</p> <p>Co-leads and executive committee oversee 4 work packages:</p> <ol style="list-style-type: none"><li>1. Network management</li><li>2. Enhance research capacity</li><li>3. Developing research-enabling platforms</li><li>4. Connect and engage</li></ol>

Primary source: [global1hn.ca](http://global1hn.ca)

*This information is near-verbatim from the source above.  
We did not conduct a thorough validation or assessment process.*

Section 3



JOINT PROGRAMMING INITIATIVE ON  
ANTIMICROBIAL RESISTANCE



Background Information

Established in 2014, is a global collaborative platform, engaging 28 member nations to curb antibiotic resistance (AMR) with a One Health approach. The initiative coordinates national funding to support transnational research and activities within the six priority areas of the shared JPIAMR Strategic Research and Innovation Agenda – therapeutics, diagnostics, surveillance, transmission, environment and interventions.

JPIAMR currently has 28 member states. The European Commission is a non-voting member.

Approx. 44 members from around the world. Yearly, JPIAMR joint funds research- and networking calls. Now for the tenth consecutive year. To date JPIAMR has supported 61 projects and over 340 research groups, 31 networks, with funding of approximately 80 million Euro. G7, G20 and the EU recognizes JPIAMR as a key initiative to support, and mechanism enabling global collaboration and coordination of calls. JPIAMR is pre-announcing a new research call in the area of AMR One Health Interventions and Transmission. 30 agencies and organisations from 21 JPIAMR member countries are participating in this call and the approximate budget is 25 million euros, including co-funding from the European Commission.

JPIAMR is continuously adding member nations.

JPIAMR is mapping AMR research funding continuously. €1.8 billion has been invested by Jan. 1st, 2017, in AMR research by JPIAMR members. JPIAMR has created an interactive dashboard that provides overview of the grant investments and research capacities. This tool visualises key data on how to invest in AMR research. Avoiding duplication – enabling innovation.

The JPIAMR is currently developing a platform to extend shared research capabilities on a global scale through the Virtual Research Institute (JPIAMR-VRI).

Governance & Management

The governance structure of JPIAMR includes a Management Board, a Steering Committee, a Scientific Advisory Board, a Stakeholders Advisory Board and a Secretariat.

The JPIAMR Strategic Working Groups contribute to the different activities of the JPIAMR related to governance, globalisation, policy alignment, the development of the JPIAMR Virtual Research Institute, research infrastructures and industry relations.

The Management Board is the main decision- making body of JPIAMR. It represents each member country with two representatives which have a Governmental mandate.

The Steering Committee provides steering direction of the JPIAMR initiative and strategic input to deliver its mission with 6 members.

The Scientific Advisory Board (SAB) assists the Management Board and the JPIAMR initiative in all matters of scientific interest, including establishing the Strategic Research Agenda (SRA), and proposing scientific priorities based on societal needs and new scientific evidence. It supports also the activities to implement the SRA with approx. 15 members.

The JPIAMR secretariat is hosted by the Swedish Research Council in Stockholm, Sweden, with 8 members.

Primary source: [jpiamr.eu](http://jpiamr.eu)

*This information is near-verbatim from the source above.  
We did not conduct a thorough validation or assessment process.*

Section 3



NETHERLANDS CENTRE FOR  
ONE HEALTH



Background Information

Governance & Management

Established in 2016, aims for an integrated One Health approach to tackle the global risk of infectious diseases. NCOH commits to create durable solutions for this major challenge by bundling world-leading academic top research in the Netherlands in the area of One Health. Aspires to function as the national coordinating platform for One Health research, strengthen and consolidate the One Health knowledge and research basis in the Netherlands, and provide a trusted and excellent launching platform for public-private partnerships in the international One Health research field.

The four NCOH strategic research themes are:

- Tackling Antimicrobial Resistance: NCOH-AMR
- Emerging Infectious Diseases Preparedness: NCOH-EID
- Smart & Healthy Farming: NCOH-SHF
- Healthy Wildlife & Ecosystems: NCOH-HWE

NCOH collaborates with organisations in both the private and public sectors, particularly Dutch universities, university medical centers, the Dutch Research Council (NWO), the Royal Netherlands Academy of Arts and Sciences (KNAW), and the Dutch National Institute for Public Health and the Environment (RIVM). Furthermore, NCOH provides strategic and organisational embedding for the Netherlands Antibiotic Development Platform (NADP), which fosters public-private collaborations in the development of new antibiotics and alternatives.

Young NCOH: network for PhD students and post-docs from the NCOH research groups. Aim of the network is sharing knowledge and expertise in One Health related disciplines, which can lead to new collaborations in research.

9 Partners and 1 Associate, 98 PIs, 400 Active Participants, \$50 Million invested, 30 collaborative projects, >65 PhD students.

Investments: NCOH's Partners signed a Consortium Agreement, jointly committing to Euro 11 million in the first 5 years for novel interdisciplinary PhD projects.

Supervisory Board, Executive Board (Scientific Advisory Board, Stakeholder Sounding Board), NCOH Assembly (made of Principal Investigators),

Supervisory Board: 9 members

Executive Board: 11 members (made up of Scientific Directors, Partners)

Management office reports to executive board, exec board and PIs liaise with scientific advisory and stakeholder sounding board.

Primary source: [ncoh.nl](https://ncoh.nl)

*This information is near-verbatim from the source above.  
We did not conduct a thorough validation or assessment process.*

Section 3



ONE HEALTH  
COMMISSION (US)



Background Information

Established in 2009. The Commission seeks to ‘Connect’ One Health Advocates and Stakeholders, to ‘Create’ networks and teams that work together across disciplines to ‘Educate’ about One Health and One Health issues.

Globally focused organization dedicated to implementing One Health and One Health actions around the world.

Preparing the Next Generation of One Health leaders and professionals by supporting Students for One Health and facilitating their efforts to further the One Health paradigm shift.

One health Education Initiative (launched in 2015): In collaboration with valued partners from the conference, the OHETF developed in 2017 two funding proposals. One focused on enabling school / education systems to prepare teachers, K-12 and beyond, including global lay communities, to integrate One Health / SDG values into curricula, principles and practice through pilot One Health-driven teacher workshops and programs. The other sought to increase direct involvement of civil society organisations (SSAs) in poverty reduction strategies underpinned by One Health and the UN-2030 SDGs.

Have Corporate sponsors, Vanguard Institutional Donor Sponsors, and Leader Institutional Donor Sponsors.

Governance & Management

Executive director and board of directors, student representatives and student members, and council of advisors.

The Commission’s founders saw a need to involve many minds in leading its One Health work and thus created a non-voting Council of Advisors (COA). These One Health leaders are called on from time to time to share expertise and guidance to the Commission. Participants may be invited by the Board, nominated by ‘Leader’ Corporate sponsors or by choosing to get involved and support the Commission as Individuals sponsors at the ‘Leader’ level.

There are 8 members on One Health Initiative autonomous pro bono team, 18 on council of advisors, 13 on Board of directors, and 6 student representatives.

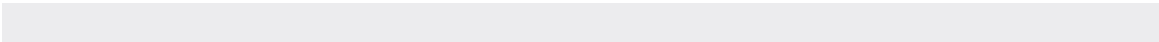
Primary source: [onehealthcommission.org/en/why\\_one\\_health/about\\_the\\_commission](https://onehealthcommission.org/en/why_one_health/about_the_commission)

*This information is near-verbatim from the source above.  
We did not conduct a thorough validation or assessment process.*

Section 3



ONE HEALTH EUROPEAN  
JOINT PROGRAMME



Background Information

Governance & Management

Established in 2018. An exemplar of the ‘One Health’ concept, and boasts a landmark partnership between 37 acclaimed food, veterinary and medical laboratories and institutes across 19 member states in Europe, and the Med-Vet-Net-Association.

An interdisciplinary, integrative and international approach to One Health is essential to address the existing and emerging threats of zoonotic disease and antimicrobial resistance. Most of the 38 institutes have reference responsibilities, representing a sustainable framework for an integrated research community. Through the OHEJP there are opportunities for harmonisation of approaches, methodologies, databases and procedures for the assessment and management of foodborne hazards, emerging threats and AMR across Europe, which will improve the quality and compatibility of information for decision making.

The Joint Research Projects (JRPs) and Joint Integrative Projects (JIPs) are key instruments to facilitate partner organisations working together and aligning their approaches, increasing their knowledge base of host-microbe interactions, and improving epidemiological studies and risk assessments which ultimately equip risk managers with the best tools for intervention measures.

Involve approx. 30-40 Public Health Agencies and Institutes across Europe

The OHEJP approach is to set up a common strategic research agenda among the partners, taking into account the initiatives taken by stakeholders EFSA, ECDC, JPI AMR, EU-JAMRAI, COMPARE and EFFORT. The One Health EJP (OHEJP) work plan is structured in seven work packages, each targeted towards specific overarching needs and objectives, as well as ensuring alignment and integration in the implementation of the programme.

One Health EJP has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement. EU contribution €45 million

The governing boards specific to the OHEJP include: The Project Management Team (PMT), Scientific Steering Board (SSB) and Programme Managers Committee (PMC). There are also important contributions from members outside of the OHEJP and these include: The Programme Owners Committee (POC), the External Scientific Advisory Board (ESAB), the Stakeholders Committee (SC), the Ethics Advisors and National Mirror Groups. The OHEJP Coordination Team are based at the French Agency for Food, Environmental and Occupational Health & Safety (ANSES), France.

The OHEJP Scientific Coordinator resides at Sciensano, the Belgian Institute for Health.

The Project Management Team consists of all the Work Package (WP) Leaders and Deputy Leaders.

Primary source: [onehealththejp.eu](https://onehealththejp.eu)

*This information is near-verbatim from the source above.  
We did not conduct a thorough validation or assessment process.*

## Section 4



### A NATIONAL ACTION PLAN TO CONTAIN ANTIMICROBIAL RESISTANCE IN CHINA



#### Background Information

A multi-year plan set out by the Chinese government. Goals of the 2016-2020 Plan include:

- To launch 1–2 new antibacterial agents and 5–10 new diagnostic techniques
- To implement the sale of antibiotics only with a prescription in pharmacies across the entire country and in animal husbandry in half of the provinces
- To optimize surveillance, to establish an evaluation system for antibacterial agent consumption and resistance in both the healthcare and animal husbandry sectors and to set up AMR reference laboratories and bacterial strain banks
- To implement an antimicrobial stewardship programme in all hospitals.
- To discontinue the use of antibiotics as animal growth promoters
- To educate medical staff, veterinarians, animal producers, students, and members of the public about AMR, and to set up an annual antibiotic alert week

Funding information not available.

Successes: The total resistance declined by 5.3% and culture positivity rates declined by 9.8% after the introduction of the NAP.

#### Governance & Management

Administered by the National Health and Family Planning Commission (NHFP), which oversees 14 ministries that are involved in the regulation of antibacterial agents and antimicrobial resistance control, such as research and development, registration and approval, production and circulation, and the use of antibiotics.

Health authorities will be responsible for strengthening management of the clinical application of antibacterial agents to curb bacterial resistance and will coordinate and supervise implementation of the Plan.

The NHFP will be responsible for the coordination of all work and the formation of a working group of the various ministries with distinct roles. Local government departments also need to take appropriate actions in accordance with the Plan.

An advisory committee will be established for scientific management, comprising a wide range of professionals selected on their professional strengths.

Primary source: [resistancecontrol.info/2017/a-national-action-plan-to-contain-antimicrobial-resistance-in-china-contents-actions-and-expectations](http://resistancecontrol.info/2017/a-national-action-plan-to-contain-antimicrobial-resistance-in-china-contents-actions-and-expectations)

*This information is near-verbatim from the source above.  
We did not conduct a thorough validation or assessment process.*

Section 4



AUSTRALIA'S NATIONAL ANTIMICROBIAL  
RESISTANCE STRATEGY – 2020 AND BEYOND



Background Information

The 2020 Strategy builds on the original 2015 strategy, broadening its ambit to encompass food, the environment and other classes of antimicrobials such as antifungals and antivirals.

- Clear governance for antimicrobial resistance initiatives
- Prevention and control of infections and the spread of resistance
- Greater engagement in the combat against resistance
- Appropriate usage and stewardship practices
- Integrated surveillance and response to resistance and usage
- A strong collaborative research agenda across all sectors
- Strengthen global collaboration and partnerships

Funding: Government of Australia committed \$22.5M for the 2020 Strategy.

Sample work:

- Creation of a One Health antimicrobial resistance online hub, which acts as a central repository for trusted information and resources related to antibiotic use and antimicrobial resistance
- The establishment of the Antimicrobial Use and Resistance in Australia (AURA) Surveillance System

Governance & Management

The Antimicrobial Resistance Governance Group (ARGG) will provide national coordination and linkage between sectors.

The Australian Strategic and Technical Advisory Group on AMR (ASTAG) will provide expert advice to the ARGG on current and emerging issues, research priorities and implementation approaches to support the Strategy.

In addition to national governance, all parts of Australia's public and private sectors – such as business owners, hospitals, and industry – will be encouraged to establish or review their own governance arrangements so that they integrate with this Strategy in their relevant areas of operations.

Implementation partners will be required to develop short- to medium-term action plans, setting out commitments and timeframes for their completion.

Primary source: [amr.gov.au/resources/australias-national-antimicrobial-resistance-strategy-2020-and-beyond](https://amr.gov.au/resources/australias-national-antimicrobial-resistance-strategy-2020-and-beyond)

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We did not conduct a thorough validation or assessment process.*



Section 4



EUROPEAN ONE HEALTH ACTION  
PLAN ON AMR



Background Information

Governance & Management

A multi-year action plan struck by the European Commission. The key objectives of the 2018-2022 plan are built on three main pillars:

- Making the EU a best practice region: EU action will focus on key areas and help Member States in establishing, implementing and monitoring their own national One Health action plans on AMR, which they agreed to develop at the 2015 World Health Assembly<sup>20</sup>;
- Boosting research, development and innovation by closing current knowledge gaps, providing novel solutions and tools to prevent and treat infectious diseases, and improving diagnosis in order to control the spread of AMR
- Intensifying EU efforts worldwide to shape the global agenda on AMR and the related risks in an increasingly interconnected world.

The EU AMR One-Health Network, chaired by the European Commission, includes government experts from the human health and animal health, the EU scientific agencies (ECDC, EMA, and EFSA) and Commission experts. The bi-annual EU AMR One-Health Network meetings provide members with a platform to present national action plans and strategies and keep each other up to date on their progress, to share best practices, and to discuss policy options and how to enhance cooperation and coordination. Network members include representatives from public health and animal health sides from all 28 EU countries.

More than 1 billion EUR has been invested in AMR research, and under Horizon 2020 (H2020), a cumulative budget of over 650 million EUR has already been mobilised so far; whereas the Commission has committed to invest more than 200 million EUR in AMR for the last three years of Horizon 2020.

The plan has led to the adoption of new legislation: Review EU implementing legislation on monitoring AMR in zoonotic and commensal bacteria in farm animals and food. EU health programme funding to support AMR networking collaboration and reference laboratory activities in human health: Improve AMR detection in the human health sector by providing EU support for networking collaboration and reference laboratory activities.

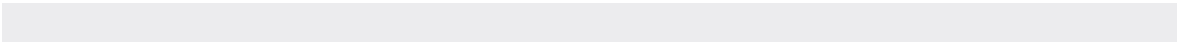
Primary source: [ec.europa.eu/health/antimicrobial-resistance/eu-action-on-antimicrobial-resistance\\_en](https://ec.europa.eu/health/antimicrobial-resistance/eu-action-on-antimicrobial-resistance_en)

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Section 4



GLOBAL ACTION PLAN



Background Information

Governance & Management

The 2015 WHO global plan outlines five objectives:

- To improve awareness and understanding of antimicrobial resistance through effective communication, education and training
- To strengthen the knowledge and evidence base through surveillance and research
- To reduce the incidence of infection through effective sanitation, hygiene and infection prevention measures;
- To optimize the use of antimicrobial medicines in human and animal health
- To develop the economic case for sustainable investment that takes account of the needs of all countries and to increase investment in new medicines, diagnostic tools, vaccines and other interventions

This action plan underscores the need for an effective One Health approach involving coordination among numerous international sectors and actors.

Funding information not available.

Successes: By May 2017, 79 countries reported that they had a plan, with a further 50 having a plan under development. While the 2017 target is still unmet, the second Tripartite self-assessment survey shows that progress has been sustained. 93 countries reported that they had a plan, and a further 51 have plans under development. Some of the non-respondents have also made progress, and the Tripartite, through its respective regional offices, is aware of at least seven other countries having national plans, taking the total to 100.

All Member States to have in place, within two years of the endorsement of the action plan by the Health Assembly, national action plans on antimicrobial resistance that are aligned with the global action plan and with standards and guidelines.

The Secretariat will facilitate this work by:

- Supporting countries to develop, implement and monitor national plans
- Leading and coordinating support to countries for assessment and implementation of investment needs, consistent with the principle of sustainability
- Monitoring development and implementation of action plans by Member States and other partners;
- Publishing biennial progress reports, including an assessment of countries and organizations that have plans in place, their progress in implementation, and the effectiveness of action at regional and global levels; and including an assessment of progress made by FAO, OIE etc.

Primary source: [who.int/antimicrobial-resistance/publications/global-action-plan/en](http://who.int/antimicrobial-resistance/publications/global-action-plan/en)

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## Section 4



### IRELAND NATIONAL AMR ACTION PLAN



#### Background Information

Ireland's multi-year action plan. INAP (2017-2020) aims to:

- Improve awareness and knowledge of AMR
- Enhance surveillance of AMR and antibiotic use through systems that facilitate greater standardisation of data collection, linkage and sharing of real time information
- Reduce infection and disease spread through prevention and control measures, national guidelines
- Optimise the use of antibiotics through development and implementation of antimicrobial stewardship programmes, and access to rapid diagnostics
- Promote research and sustainable investment in new medicines, diagnostic tools, vaccines through measuring evaluable costs of HCAI/AMR, identifying research opportunities, working with key stakeholders to develop alternative disease treatment tools

Funding information not available.

#### Governance & Management

The National Interdepartmental AMR Consultative Committee will have overall responsibility for monitoring the implementation of the national action plan. The Committee is a true 'One Health' committee that brings together many of the key stakeholders in the human health, animal health and environmental sectors.

National HSE HCAI/AMR Governance Health and Wellbeing Directorate has responsibility for coordinating the HSE's HCAI/AMR response and chairs the HSE National Task Force on HCAI AMR. Operational responsibility lies with relevant National Directors, Hospital Group CEOs and Community Health Organisation (CHO) Chief Officers. The national crossdivisional governance group (National Taskforce on HCAI AMR) guides and supports a coherent management response to HCAI/AMR.

The National Patient Safety Office (NPSO) and the National Clinical Effectiveness Committee (NCEC) at the Department of Health also support this work.

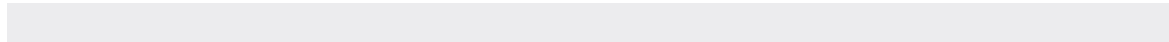
Primary source: [gov.ie/en/publication/ec1fdf-irelands-national-action-plan-on-antimicrobial-resistance-2017-2020/?referrer=http://www.health.gov.ie/wp-content/uploads/2017/10/iNAP\\_web-1.pdf](http://gov.ie/en/publication/ec1fdf-irelands-national-action-plan-on-antimicrobial-resistance-2017-2020/?referrer=http://www.health.gov.ie/wp-content/uploads/2017/10/iNAP_web-1.pdf)

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Section 4



NETHERLANDS AMR  
ACTION PLAN



Background Information	Governance & Management
<p>The Netherlands’ 2015- 2019 plan takes a multi-annual approach to:</p> <ul style="list-style-type: none"><li>• Increase awareness among the general public and professionals, and provide knowledge about the use and effect of antibiotics. Themes include finishing a treatment, not prescribing antibiotics for viral infections, and only using antibiotics if the GP deems it necessary and there are no alternatives.</li><li>• Providing concrete advice on the prevention of bacterial infections. Themes include food safety, hygiene, transmission of (resistant) bacteria via pets and the importance of following instructions about the use of antibiotics and hygiene guidelines.</li><li>• Using accessible information and a structure for raising awareness via easily accessible ways of communication and existing as well as new websites and educational forums.</li></ul> <p>It is currently difficult to say which financial means are required to realise the programme’s mission and goals. Working parties will formulate proposals for the desired approach, including corresponding budgets. The Ministry of Health, Welfare and Sport will consider working party proposals and ensure the availability of sufficient financial resources. The Ministry of Health, Welfare and Sport assumes that other stakeholders are also willing to invest in this programme.</p>	<p>The use of regional network structures embedded in a national network structure may optimise control policies, as they increase our understanding of the presence and movement of resistant bacteria within the networks. Such a network structure will also provide uniformity in policies across the various domains. Transparency on organisation and responsibilities for coordinating tasks is essential. The Centre for Infectious Disease Control (CIb) is expected to coordinate on a national level.</p> <p>The Ministry of Health, Welfare and Sport will indicate which public responsibilities are placed at a regional and a national level; once the working groups advise on this matter.</p>

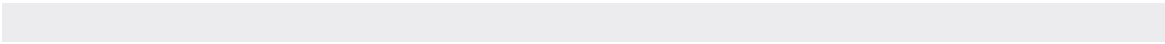
Primary source: [government.nl/binaries/government/documents/leaflets/2015/09/22/tackling-antibiotic-resistance/antibiotic-resistance-eng-web.pdf](https://government.nl/binaries/government/documents/leaflets/2015/09/22/tackling-antibiotic-resistance/antibiotic-resistance-eng-web.pdf)

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Section 4



NEW ZEALAND AMR  
ACTION PLAN



Background Information	Governance & Management
<p>The 2017-2022 New Zealand plan contains the following goals:</p> <ul style="list-style-type: none"><li>Awareness and understanding: Improve awareness and understanding of antimicrobial resistance through effective communication, education and training.</li><li>Surveillance and research: Strengthen the knowledge and evidence base about antimicrobial resistance through surveillance and research.</li><li>Infection prevention and control: Improve infection prevention and control measures across human health and animal care settings to prevent infection and the transmission of micro-organisms.</li><li>Antimicrobial stewardship: Optimise the use of antimicrobial medicines in human health, animal health and agriculture, including by maintaining and enhancing the regulation of animal and agriculture antimicrobials.</li><li>Governance, collaboration and investment: Establish and support clear governance, collaboration and investment arrangements for a sustainable approach to countering AMR.</li></ul> <p>Funding information not available.</p> <p>Successes: A guideline has been developed for responding to carbapenemase producing Enterobacteriaceae (CPE) and emerging multi-drug resistant organisms (MDRO). This guideline outlines the requirements for an enhanced surveillance programme including screening, laboratory identification, surveillance and critical resistance alerts. Implementation of the CPE and emerging MDRO guideline is being integrated into year two and years three to five activities.</p>	<p>While the Ministry for Primary Industries and Ministry of Health will jointly govern this action plan, specific activities are of particular relevance to the human health, animal health or agricultural sectors.</p> <p>The New Zealand Antimicrobial Resistance Action Plan Governance Group (NZAMRGG) provides strategic oversight of the implementation of the New Zealand Antimicrobial Resistance Action Plan (2017–2022). This group has been established to:</p> <ul style="list-style-type: none"><li>Oversee and provide advice on the implementation of the Action Plan</li><li>Provide alignment between the Ministry of Health and the Ministry for Primary Industries on the Action Plan</li><li>Provide transparency in the implementation of the Action Plan</li></ul>

Primary source: [health.govt.nz/our-work/diseases-and-conditions/antimicrobial-resistance/new-zealand-antimicrobial-resistance-action-plan](https://health.govt.nz/our-work/diseases-and-conditions/antimicrobial-resistance/new-zealand-antimicrobial-resistance-action-plan)

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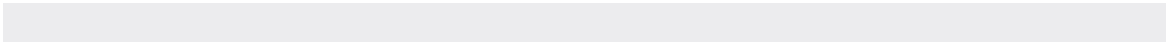
Section 4



HM Government

UK AMR NATIONAL ACTION PLAN



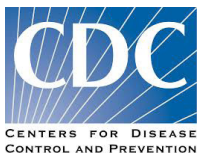


Background Information	Governance & Management
<p>The UK’s 2019-2024 plan has ultimately been designed to ensure progress towards our 20-year vision on AMR, in which resistance is effectively contained and controlled. It focuses on three key ways of tackling AMR:</p> <ul style="list-style-type: none"><li>• Reducing the need for, and unintentional exposure to, antimicrobials</li><li>• Optimising the use of antimicrobials</li><li>• Investing in innovation, supply, and access</li></ul> <p>Overall funding/budgets not available.</p> <p>The UK AMR funder’s Forum has reviewed the research skills and capacity needs of the field. To address the themes, UK Research and Innovation councils have supported 78 interdisciplinary projects at a total commitment of £44 million, and, in recognition of the global dimension of AMR, have committed £41 million, to support projects in partnership with members of the Joint Programme Initiative in AMR, and with emerging economies and low- and middle-income countries.</p> <p>This 20-year vision and five-year plan have been developed collaboratively across diverse government agencies, working with governments in Scotland and Wales, the administration in Northern Ireland, our national health services and animal health and welfare agencies. Together, they have set out a fully integrated and aligned UK One-Health approach.</p> <p>The UK has worked hard with the World Health Organization, the World Organisation for Animal Health, and the Food and Agriculture Organization to secure commitment to a global action plan in 2014 and the historic political declaration on AMR at the United Nations in 2016.</p>	<p>Delivery of the previous AMR strategy was overseen and driven by a cross government High Level Steering Group chaired by the Chief Medical Officer, with representation from all relevant government departments, human and animal health agencies and the devolved administrations. Ministers and senior officials will be closely involved in driving progress towards our ambitions over the coming five years.</p> <p>To coordinate and prioritise the UK’s national and international research response and provide a link with policy, the Medical Research Council (MRC) established the UK AMR Funders Forum in 2014. The Forum brings together 21 research funders, including the UK Research and Innovation Councils, government departments, devolved administrations and charities.</p>

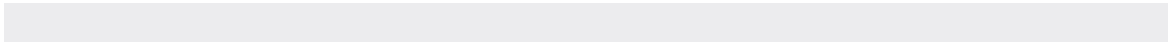
Primary source: [assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/784894/UK\\_AMR\\_5\\_year\\_national\\_action\\_plan.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/784894/UK_AMR_5_year_national_action_plan.pdf)

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Section 4



U.S. NATIONAL ACTION PLAN FOR COMBATING  
ANTIBIOTIC-RESISTANT BACTERIA



<b>Background Information</b>	<b>Governance &amp; Management</b>
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<p>The National Action Planexternal icon directs federal agencies to accelerate response to antibiotic resistance by presenting coordinated, strategic actions to improve the health and well-being of all Americans across the One Health spectrum. It strives to:</p> <ul style="list-style-type: none"><li>• Slow the emergence of resistant bacteria and prevent the spread of resistant infections</li><li>• Strengthen national One Health surveillance efforts to combat resistance</li><li>• Advance development and use of rapid and innovative diagnostic tests for identification and characterization of resistant bacteria</li><li>• Accelerate basic and applied research and development for new antibiotics, other therapeutics, and vaccines</li><li>• Improve international collaboration and capacities for antibiotic resistance prevention, surveillance, control, and antibiotic research and development</li></ul> <p>Funding information not available.</p> <p>Successes: According to CDC’s National Healthcare Safety Network (NHSN), methicillin-resistant Staphylococcus aureus (MRSA) bacteremia in U.S. acute care hospitals declined 13% between 2011 and 2014, and a further 5% by 2016. Meanwhile, C. difficile infections declined in U.S. acute care hospitals 8% between 2011 and 2014, and a further 7% by 2016. Still more progress is needed, as many people are still dying from these infections.</p>	<p>The CARB Task Force facilitates implementation of the Action Plan and is chaired by the Secretaries of the U.S. Departments of Health and Human Services (HHS), Agriculture (USDA), and Defense (DoD).</p> <p>Activities coordinated by the White House National Security Council and Office of Science and Technology Policy.</p> <p>Departments and agencies would take steps to combat antibiotic resistance that are not explicitly included in either the National Strategy or Action Plan; these efforts will also be included in the progress report to the President. Industry and other non-governmental organizations as well as international partners will play a key role in accelerating progress in combating antibiotic resistance.</p>
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Primary source: [cdc.gov/drugresistance/us-activities/national-action-plan.html](https://cdc.gov/drugresistance/us-activities/national-action-plan.html)

*This information is near-verbatim from the source above.  
We did not conduct a thorough validation or assessment process.*

