



ANTIMICROBIAL RESISTANCE SURVEILLANCE AND ANTIMICROBIAL USE MONITORING Request for Proposals

The National Collaborating Centre for Infectious Diseases is pleased to extend a request for proposals for a comprehensive review of Canadian programs involved in the surveillance of antimicrobial resistance (AMR) and the monitoring of antimicrobial use and recommendations to achieve optimal programs.

Proposals are due by November 4, 2011 for work to be completed in 2012.

Background

The National Collaborating Centre for Infectious Diseases (NCCID) is one of six National Collaborating Centres for Public Health established and funded by the Public Health Agency of Canada. NCCID's mission is to protect the health of Canadians by facilitating the use of evidence and research on infectious diseases. This is done, in part, by identifying knowledge gaps and translating knowledge to improve public health programs and policies.

In 2006, the Canadian Committee on Antibiotic Resistance (CCAR) published a report, *Towards an International Report on Antimicrobial Resistance*, that compared countries with respect to their performance in identifying and reducing the prevalence of antimicrobial-resistant organisms. Despite many well-developed surveillance programs, the report identified little basis for international comparison due to differences in performance targets, methodologies, and reporting. Even within Canada, a wide range of programs was found for the surveillance of resistant organisms and the monitoring of antimicrobial use.

In follow up to the CCAR report, NCCID held expert consultations in 2008 and 2010 to further identify priority areas for AMR work. In addition to highlighting gaps in the areas of governance/leadership, education, and research, participants agreed that while much work was being done in the area of AMR surveillance, efforts were fragmented and there was insufficient communication across the country. A better understanding of available antimicrobial use and resistance information, along with how it is communicated, is needed.

Objectives

- Determine **core elements** of ideal AMR surveillance and antimicrobial use monitoring programs in Canada
- Summarize current national, provincial, and regional **AMR surveillance programs/initiatives** in Canada
- Summarize current national, provincial, regional, and private **antimicrobial use monitoring programs/initiatives** in Canada
- Identify **what is missing** in the area of antimicrobial use and resistance surveillance
- Provide **recommendations** for obtaining optimal antimicrobial use monitoring and resistance surveillance programs in Canada

Report Content



The report will be composed of two main components – the surveillance of antimicrobial resistant organisms and the monitoring of antimicrobial use. The report can be divided into two or more independent products, as necessary.

1. Antimicrobial Resistance Surveillance

- What would be the ideal national AMR surveillance program? What are the necessary elements and structures? What are the barriers to implementing an ideal program in Canada?
- National, provincial/regional, and private surveillance programs/initiatives: What exists, what are the program's goals and objectives, what organisms are tracked, how long has the program existed, and what are the program's main strengths and weaknesses?
 - Humans: Hospitals and other institutions, community
 - Animals: Food production, companion animals
 - Environment
- How is the information collected, compiled, analyzed, and shared? Is it timely?
- How is the information used and by whom?
- Recommendations for meeting needs and filling gaps in AMR surveillance: What is missing in Canada?

2. Antimicrobial Use Monitoring

- What would the ideal antibiotic use monitoring program look like? What are the necessary elements and structures? What are the barriers to implementing an ideal program in Canada?
- National, provincial/regional, and private (e.g. IMS) programs/initiatives: What exists, what antimicrobials are tracked, how long has use been monitored, and what are the program's main strengths and weaknesses?
 - Humans: Hospitals and other institutions, community, non-prescription use
 - Animals: Food production (treatment, prophylaxis/growth, non-prescription), companion animals
 - Environment and personal use (e.g. household cleaning products)
- How is the information collected, compiled, analyzed, and shared? Is it timely?
- How is the information used and by whom?
- Recommendations for meeting needs and filling gaps in antimicrobial use monitoring: What is missing in Canada?

Process

In consultation with topic experts, NCCID will review and select one proposal based on the strength and feasibility of the project and the experience of the team.

As many surveillance and monitoring programs are not published or disseminated widely, structured interviews will be required. These should be well documented, and the results shared with NCCID. Additionally, to obtain information on what is missing in Canada, key Canadian and international experts will have to be interviewed. These expert opinions, along with published research and grey literature, should form the basis of the report. NCCID can assist with the selection of interviewees.

Draft reports will be reviewed by an independent expert review committee established by NCCID, with feedback provided to the project team in a compiled format. Writers are responsible for making final



revisions to the document based on this feedback, and a letter explaining how/whether the feedback was incorporated must accompany the final report.

Deliverables

The following deliverables will be required:

- A final report (or separate reports, as appropriate) that includes sections describing the information collection strategy, analysis, results, gap identification, conclusions, and references
- A summary of up to five pages that reviews the key findings from the report, including implications, gaps, and recommendations

Application Requirements

The proposal should clearly outline the report content and data collection process. The following information must be included:

- Description of project plan, search strategy and interview process
- Timeline for delivery of draft and final documents
- Proposed budget
- Contact information and curriculum vitae of the lead investigator and description of relevant experience of all project team members
- Declaration of any conflicts of interest

Proposals should be submitted electronically no later than November 4, 2011 to nccid@icid.com.