

## **IPAC Canada Remarks**

Meeting of the House of Commons Standing Committee on Health

November 2<sup>nd</sup>, 2017

Good afternoon. My name is Suzanne Rhodenizer-Rose.

I serve as Past President of Infection Prevention and Control Canada and am pleased to be with you this afternoon to address the pressing issue of Antimicrobial Resistance, or AMR, in Canada. I am joined by my colleague, Jennifer Happe, who is an Infection Control Professional and an Officer of IPAC Canada. IPAC Canada is a multidisciplinary association, with over 1600 members nationwide and is committed to public wellness and safety by advocating for best practices in infection prevention and control in all settings.

I want to begin by commending the committee for taking time to study this issue, which deserves attention from elected officials and the public they serve, though it is also often reduced to short sound bites on the news. People who have heard of ‘superbugs’ and outbreaks of pandemics may be inclined to think these issues are far-removed from them, whether in the past or many continents away, however that assertion would be deeply flawed.

AMR has been identified as a fundamental threat to the modern healthcare system. AMR creates challenges, not just for the patients that endure its effects, but also for the healthcare system as a whole. When the best medicines we have to combat illness cannot defeat the microorganisms that infect people, illnesses become more easily spread and harder to treat. Additionally, the World Health Organization, which has shown exceptional leadership on this issue, has noted that “Antimicrobial resistance increases the cost of health care with lengthier stays in hospitals and more intensive care required.” These are the facts of AMR and they are issues that our members confront every day in Canada’s hospitals, clinics, dental offices and other care settings.

It is important to provide more detail on the pressure placed on our hospitals and health care system as antimicrobials become increasingly ineffective at treating certain pathogens. In testimony to the U.S. House of Representatives in 2013, Dr. Tom Frieden, a CDC Director put the consequences very plainly “patients with

resistant infections are often much more likely to die, and survivors have significantly longer hospital stays, delayed recuperation and long-term disability.” It should come as no surprise then, that the overall capacity of our healthcare system declines daily as care providers find themselves using additional rounds of antibiotics and resorting to less commonly used, more toxic pharmaceuticals, to treat the most prevalent antibiotic resistant organisms such as MRSA, *Clostridium difficile* and the recent and concerning emergence of carbapenemase-producing organisms. At the same time, investments in new and improved treatments by pharmaceutical companies have declined and professionals are not being equipped with the resources they need to effectively stem the tide.

Taken together, these facts make it more important than ever to ensure appropriate infection prevention and control measures are in place to limit the spread of antimicrobial resistant organisms and improve treatment when they are encountered in patients. Infection Control Professionals in Canada’s hospitals, in public health roles, and in other care settings are working hard to ensure this is the case, however we have been fighting an uphill battle.

We believe Canada is well positioned to become a leader in the fight against antimicrobial resistance, but to get there for the good of our population, we will have to make significant investments that support national systems and provide funding for adequate human resources to implement and encourage infection prevention and control practices in a variety of settings.

Antimicrobial Resistance is a very complex issue that cannot be addressed by a single policy change or advancement in medical practice and technology. Rather, the federal & provincial governments, healthcare professionals and administrators, the agricultural community, our international partners, and the public at large need to be made aware of the pressing and global concern that has been echoed widely. Steps have been taken by the federal and provincial governments and regional health authorities to address AMR challenges, including limiting the spread and occurrence of infections caused by antimicrobial resistant organisms and encouraging responsible use of antimicrobials. However, there remains one key area in which Canada remains behind other countries and where the federal government needs to be a leader—tracking incidence of resistant bacteria and analyzing the success of our collective interventions.

The Government of Canada has launched “Antimicrobial Resistance and Use in Canada: A Framework for Action.” The four pillars of the framework are strongly supported by IPAC Canada.

In order to effectively implement change, it is necessary to have the ability to measure whether steps taken are having the intended impact. Through surveillance, which is one of the best measures of AMR, we have the number and rate of antibiotic-resistant organisms in the healthcare setting. In order to be able to carry out surveillance effectively, measurement needs to occur in the same way so ‘apples are compared to apples, and oranges are compared to oranges’. When carried out in a uniform manner, surveillance provides a measure of the burden of illness, establishes benchmark rates for internal and external comparison, identifies potential risk factors, and allows for the assessment of specific interventions. As such, IPAC Canada urges the implementation of a national surveillance strategy for antimicrobial resistant microorganisms.

Currently in Canada, we largely measure the number and rate of resistant microorganisms in different ways across the country; as such, the process is fragmented. Antimicrobial Resistance does not understand provincial and territorial borders. A fragmented approach defeats the goal of protecting the health of all Canadians and does not align with a One Health strategy or with the Federal Action Plan.

We absolutely acknowledge there are some measures in place to do this now, but we believe these piecemeal approaches are not suitable to address the growing threat of antimicrobial resistance we face. The Canadian Nosocomial Infection Surveillance Program gathers data that is considered highly reliable, yet covers only a very small fraction of the many healthcare facilities in Canada; most hospitals and all long-term care facilities are not currently able to participate in CNISP surveillance. CNISP lacks the human resources support and technical infrastructure it needs to reach its full potential.

The existing Canadian Network for Public Health Intelligence (CNPHI) is also gathering data, but could be better leveraged to support collection and integration with other data sources.

The Canadian Institute for Health Information (CIHI) has recently explored the use of information and administrative data contained within the individual patient

medical record as a source of data on AMR and healthcare-associated infections. While this electronic method of data collection is efficient and allows for global reach across the country, it cannot provide the level of reliability needed to accurately define the level of AMR in Canada.

The establishment of the Canadian Antimicrobial Resistance Surveillance System (CARSS), a federal commitment to support the Federal Action Plan on AMR and use in Canada, has made an important first step in defining priority AMR organisms to conduct surveillance on; however this is but one piece and the potential data from this system can complement the data from a national repository for healthcare-associated infections.

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

We are not starting from scratch. Through a collaborative effort with other organizations, IPAC Canada has established standardized surveillance case definitions for long term care settings, advanced the establishment of standardized surveillance definitions for acute care, and a commitment to continue to seek options for pan-Canadian adoption. There is also a groundswell of interest and commitment from partner organizations to explore options using infrastructure currently available to support a pan-Canadian approach. These goals align and support the achievement of the goals defined in the government's federal framework.

Canada has been recognized as a world leader in many aspects of health, yet we lag behind many international jurisdictions in the development and implementation of a national approach to address AMR. Federal engagement with provincial and territorial partners at the ministerial and deputy ministerial level is needed to establish a consistent national surveillance system, with nationally-approved case definitions, that is adequately funded. We need support to make the data being collected better-integrated and more useful for the people working to fight antimicrobial resistance on a daily basis.