

## Surveillance in Long-Term Care Settings

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### Background

Infections contracted in healthcare settings, including in long-term care (LTC) settings, that were neither present nor developing on admission to the healthcare setting are healthcare-associated infections (HAI).<sup>1</sup> HAIs include infections with antibiotic resistant organisms (AROs), respiratory, enteric, urinary tract and other infections, and are often preventable.<sup>1</sup> Surveillance in LTC should include, (at a minimum) monitoring for enteric and respiratory infections and for pathogens and infections of concern based on local epidemiology, and while this is legislated in some parts of Canada (e.g., Ontario<sup>2</sup>), its routine performance across all Canadian LTC settings is essential to provide national rates and inform infection prevention and control (IPAC) strategies.<sup>3</sup> Standardized case definitions provide a baseline for both internal and external comparison, and inform IPAC strategies.<sup>3</sup>

Surveillance is defined by the Public Health Agency of Canada (PHAC) as “tracking and forecasting health events and determinants through the collection, analysis and reporting of data”.<sup>4</sup> Ongoing surveillance provides baseline HAI data and, over time, builds capacity for subsequent monitoring activities, including benchmarking of HAI rates both within and between LTC settings.<sup>3,4</sup> Surveillance data informs research and antimicrobial stewardship programming, and guides clinical practice in LTC, including identification of outbreaks and implementation and monitoring of interventions aimed at reducing rates of HAI.<sup>3,4</sup>

Case definitions used in HAI surveillance are “a set of standard criteria for classifying whether a person has a particular disease, syndrome or other health condition”.<sup>5</sup> The most recent case definitions for use in Canadian LTC settings were published by IPAC Canada in 2017.<sup>6</sup>

Point prevalence surveys can also be used to identify trends in HAI locally and nationally.<sup>5</sup> A point prevalence survey in Canadian LTC settings was piloted by PHAC in 2017, in partnership with IPAC Canada. The study provided preliminary information on infections caused by AROs and antimicrobial use in LTC, and demonstrated the feasibility of carrying out surveillance for HAI in LTC.

### Position Statement

#### Surveillance of Infections:

- LTC settings throughout Canada should routinely conduct surveillance for HAIs, regardless of whether or not this is a legislative requirement for their province or territory.
- Surveillance for HAIs should focus on infections most commonly associated with outbreaks and/or significant morbidity or mortality (e.g., respiratory and gastrointestinal) and those for which interventions can be implemented to limit or prevent further transmission and serious outcomes.
- Surveillance for other infections (e.g., urinary tract infections (UTIs), skin, soft tissue, and mucosal infections, and AROs) should be prioritized based on local epidemiology, and aligned with the vision and goals of the LTC home or organization.

### **Surveillance Definitions:**

- Surveillance in Canadian LTC settings should be conducted using the IPAC Canada case definitions (2017) to ensure consistency of case identification and to allow for comparison within a facility over time or against other facilities in the same geographic region and across Canada.

### **Local and National Studies/Surveys:**

- LTC settings should participate in point prevalence surveys, at the local and/or national level, to build a repository of data to provide a baseline for comparison for various infections. This enables consistent measurement of a facility's performance over time and the ability to "benchmark" against that of other facilities to identify opportunities for further improvement.

## **Stakeholders**

LTC Facility Leadership

Infection Control Professionals (ICP) in LTC and/or LTC Facility Staff with ICP Responsibilities

Government and Regulatory Authorities

## **Participants in Development of Position Statement**

This position statement was developed by the IPAC Canada Surveillance and Applied Epidemiology Interest Group

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## **Glossary/Definitions**

As per the Canadian Standard Association (CSA):

"SHALL" is used to express a requirement, i.e., a provision that the user is obliged to satisfy in order to comply with the standard;

"SHOULD" is used to express a recommendation or that which is advised but not required; and "MAY" is used to express an option or that which is permissible within the limits of the standard, an advisory or optional statement.

## **References**

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5. Centers for Disease Control. Principles of Epidemiology in Public Health Practice, Third Edition. An Introduction to Applied Epidemiology and Biostatistics. Accessed online at: <https://www.cdc.gov/ophss/csels/dsepd/ss1978/lesson1/section5.html>
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