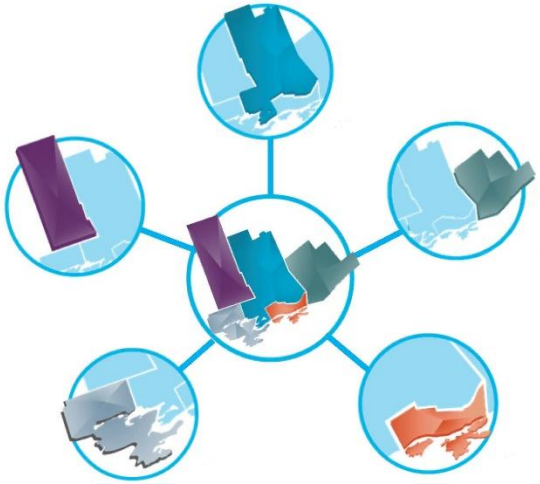
South East
IPAC
HUB & SPOKE



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Surveillance Workshop

SOUTH EAST IPAC HUB EDUCATIONAL WORKSHOP
APRIL 3, 2025

Land Acknowledgment

- Our work takes place across southeastern Ontario, which includes the ancestral and current homes of numerous and diverse Indigenous peoples.
- Since today's workshop takes place in Kingston, I wish to acknowledge the traditional and ancestral lands of the Haudenosaunee, Anishinaabe and Mississauga people.
- May we always be grateful to live, work, and learn on these lands. In doing so, we give our respect to its first inhabitants.
- We thank all the generations of people who have taken care of this land for thousands of years. We recognize and deeply appreciate their historic connection to this place.
- Today, this land is still home to many First Nations, Metis people, and other global Indigenous Peoples and we are grateful to have an opportunity to live, work and continue stewardship on this land.

WELCOME

- Thank you for attending today's Surveillance Workshop
- IPAC leads in attendance come from across the South East region
- The SE IPAC Hub team is here and is looking forward to an event filled day
  - Learn about surveillance
  - Network with colleagues
  - Learn about supportive systems

SE IPAC Hub Team

The SE IPAC Hub Team consists of:

- Natasha Salt – IPAC Hub Director (far left) and Dr. Gerald Evans (Medical Director)
- Clinical IPAC Hub Coordinators (in order left to right – Dana, Emily, Alison, Aneka and Lana)
- Saul Akandwanaho and Annette Oguine both are supports to the IPAC Hub program

Thank you, we are grateful

- Thank you to our speakers who have volunteered their time
- Thank you to our attendees for being here today – we will have a draw with various prizes at the end of our day! Stay tuned for a chance to win ☺
- Thank you to our sponsors for making this day possible
  - HealthConnex
  - Crede Technologies
  - Surge Learning

HealthConnex
Infection Control and Outbreak Management Software

Crede Technologies

SURGE
Learning · Quality · Policy

Special Note

- The SE IPAC Hub Team would like to recognize the efforts of Crede Technologies
- Due to unforeseen circumstances as a result of the ice storm Scott was not able to attend today's workshop
- Crede Technologies continued to provide sponsorship to ensure the workshop went off without issue
- Scott wanted to pass a message along to the group to have a wonderful day full of learning and networking
- He plans to share information with you all following the workshop

Points of Note

- ✓ Washrooms
- ✓ Water bottle fill stations
- ✓ Emergency Exits
- ✓ Certificate of Attendance (IPUs)
- ✓ An overview of today's events are detailed in the agenda

Agenda

April 3, 2025

Agenda

SURVEILLANCE SKILLS WORKSHOP

Thursday April 3rd, 2025

9:45am - 3:00pm

9:45 am	Welcome	Lana King, Emily Moslinger & Dr. G. Evans
10:20 am	Introduction to Surveillance: *Why are we here?*	Jim Gauthier
10:55 am	IPAC Lead Surveillance Experience: *Fairmount Home*	Payton Hunt
11:10 am	Interactive Session: *Case Definitions & HAIs*	Alison Carvalho & Aneka Nithianandan IPAC Hub Team
12:10 pm	**LUNCH**	
12:50 pm	*Data collection, analysis and reporting*	Saul Akandwanaho
1:45 pm	IPAC Lead Surveillance Experience: *E.J. McQuigge Lodge*	Dana Anderson
2:05 pm	IPAC Lead Surveillance Experience: *Arbour Heights*	Marcus Mishael
2:20 pm	Sponsor Presentations	HealthConnex Surge Learning
2:50 pm	Closing Remarks	Dana Finnegan-Yee

Thank you to our generous sponsors!

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Infection Control and Outbreak Management Software

SURGE

Dr. Gerald Evans

Gerald A. Evans, MD FRCPC FAMMI FIDSA

Professor & Chair, Division of Infectious Diseases

Queen's University/Kingston Health Sciences Centre

Dr. Gerald Evans

Dr. Gerald Evans is the former Chair of the Division of Infectious Diseases and a Professor in the Departments of Medicine, Biomedical & Molecular Sciences and Pathology & Molecular Medicine at Queen's University and an attending physician in Infectious Diseases at Kingston Health Sciences Centre, where he has been Medical Director of Infection Prevention & Control since 2011.

He is a former President of the Association for Medical Microbiology and Infectious Disease (AMMI Canada), the specialty society for Infectious Disease physicians and Medical Microbiologists in Canada, where he also a Fellow of the society (FAMMI). He was recently elected as a Fellow of the Infectious Disease Society of America. (FIDSA).

He is the current Editor-in-Chief of the Journal of the Association of Microbiology and Infectious Disease Canada affectionately known as “JAMMI”.

A message from Dr. Gerald Evans

"Surveillance for infectious diseases is a vital part of our knowledge and understanding from which we can direct our infection prevention and control resources. Surveillance of infections in the hospital environment has been a well-established practice for over 25 years, but that same sort of surveillance has not been as firmly established in the long term care setting."

...

A message from Dr. Gerald Evans

"With this in mind this workshop is intended to provide you the knowledge and skills necessary to establish consistent and good surveillance practices, which will inform where the necessary IPAC practices should be focused in order to improve the health of residents, clients, and patients in long term care. I firmly believe that the information you learn today will be of great utility to you in your future work as IPAC professionals."

- Dr. Gerald Evans

Let’s hear from Jim

Jim Gauthier is a medical technologist by training.

Jim worked in general microbiology, water and food bacteriology, and parasitology. While in the lab, Jim found his love of infection prevention and became board-certified in 1990.

Jim has worked in, or consulted to acute care, long term care, medical and dental clinics, optometrists, schools, industry, public health and even funeral homes.

Jim has lectured throughout North America and internationally in England, Germany, France, Portugal, Hong Kong and New Zealand.

Jim Gauthier, MLT, CIC

ALMOST RETIRED OLD GUY

Disclaimer

- Jim was employed by Diversey from 2015-2023. He received salary and benefits from this company
- Jim has also consulted with Arjo, Baxter and Crede Technologies in the last two years.
- None of these companies have had input into this presentation from a commercial interest
- Any images used in the presentation are for emphasis and do not imply a recommendation / endorsement

What is Surveillance?

LET'S KEEP IT SIMPLE

Surveillance is the routine process of…

- gathering information
- looking for patterns
- sharing your findings with those who can make a difference.

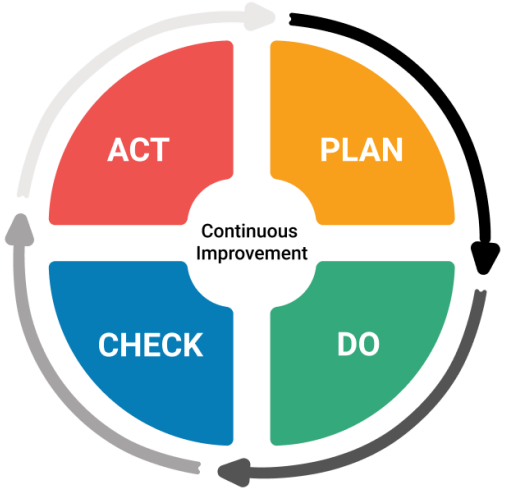

Photo source: https://kanbanize.com/lean-management/improvement/what-is-pdca-cycle

Why Conduct Surveillance?

- Goal: to reduce the risk of acquiring healthcare associated infections (HAI)
  - HAIs are common in long term care homes, frequently resulting in death
  - Outbreaks can be difficult to contain and result in significant costs
  - Up to ~70% of HAIs are preventable

An effective surveillance program will help reduce the frequency of health care-associated infection.

Why Conduct Surveillance?

Surveillance can be used for many purposes, including:

- To detect and monitor HAI
- To identify risk factors for HAI
- To evaluate preventive interventions
- To provide information to inform, educate, and reinforce practice

Mandatory Requirements

Fixing Long-Term Care Act, 2021, S.O. 2021, c. 39, Sched. 1

Requirements of program

(2) The infection prevention and control program must include,

(a) evidence-based policies and procedures;

(b) an educational component in respect of infection prevention and control for staff, residents, volunteers and caregivers;

(c) daily monitoring to detect the presence of infection in residents of the long-term care home;

Mandatory Requirements

Fixing Long-Term Care Act, 2021, S.O. 2021, c. 39, Sched. 1

Requirements of program

(2) The infection prevention and control program must include,

(d) measures to prevent the transmission of infections;

(e) a hand hygiene program; and

(f) any additional matters provided for in the regulations.

What does an ICP Have Time For?

- Lucky to get lunch
- Lucky to get out on time
- Lucky to get through the resident load
- Lucky to get to the bathroom!

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(1): The phone rings, Ward 3a

- Sniffles, sneezes, coughs and wheezes
  - Been going on since Tuesday!
- Not the same people that have been vomiting!
  - Since Wednesday!
- Managed to find enough staff to cover those that are off with….
  - Vomiting and diarrhea

Communication

- New to site
- New to staff
- Lines of communication
  - OH&S

(2) Case Definitions

Dec 26 (on call)

- Patient with explosive diarrhea, nausea
  - Positive *C. difficile* test
  - Initiated contact precautions

Dec 27

- Same unit, patient with vomiting and diarrhea
  - Physician indicates new medication, typical side effects

Of Course!

Dec 27, later in day

- Two more vomiting and diarrhea
- Two nurses from yesterday phone in with vomiting and diarrhea
- Outbreak declared
- Can’t remember total outcome, except 2 deaths (with Norovirus, not from Norovirus)

Fixing Long-Term Care Act, 2021

ONTARIO REGULATION 246/22

GENERAL

CURRENT Consolidation period: March 21, 2025 - e-Laws currency date (March 28, 2025)

Last amendment: 27/25.

Mandatory Requirements

Fixing Long-Term Care Act, 2021, S.O. 2021, O. Reg. 246/22: General

102. (2) The licensee shall implement

a) any surveillance protocols given by the Director for a particular communicable disease or disease of public health significance,

b) Any standard or protocol issued by the Director with respect to infection prevention and control. O. Reg. 246/22, s. 102 (2).

(4) (a) …interdisciplinary team…

(5) The licensee shall designate a staff member to co-ordinate the program who has education and experience in infection prevention and control practices, including,

(a) infectious diseases; (b) cleaning and disinfection; (c) data collection and trend analysis;

(d) reporting protocols; (e) outbreak management; (f) asepsis; (g) microbiology; (h) adult education;

(i) epidemiology; (j) program management; and

(k) current certification in infection control from the Certification Board of Infection Control and Epidemiology. O. Reg. 246/22, s. 102 (5). (CIC, LTC-CIP, a-IPC - https://www.cbic.org/)

Mandatory Requirements

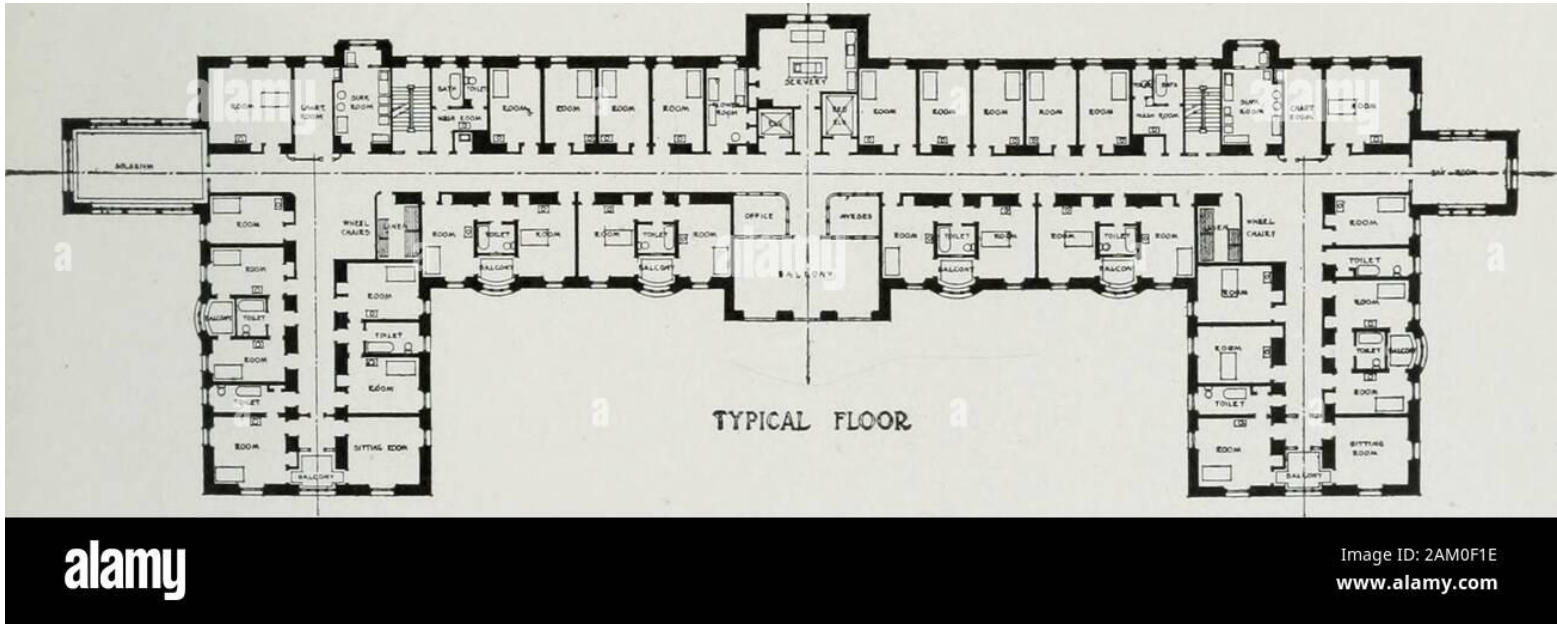
(9) The licensee shall ensure that on every shift,
(a) **symptoms indicating the presence of infection in residents are monitored** in accordance with any standard or protocol issued by the Director under subsection (2); and
(b) the symptoms are **recorded** and that immediate action is taken to reduce transmission and isolate residents and place them in cohorts as required. O. Reg. 246/22.s. 102(9).

10) The licensee shall ensure that the information gathered under subsection (9) is **analyzed daily to detect the presence of infection and reviewed at least once a month to detect trends,** for the purpose of reducing the incidence of infection and outbreaks. O. Reg. 246/22, s. 102 (10).

(11) The licensee shall ensure that there are in place,
(a) an outbreak management system for **detecting, managing, and controlling infectious disease outbreaks**, including defined staff responsibilities, reporting protocols based on requirements under the *Health Protection and Promotion Act*, communication plans, and protocols for receiving and responding to health alerts
(b) A written plan for responding to infectious disease outbreaks O. Reg. 246/22, s. 102 (11).

Jim’s Experience (3)

- Consultant to an 86 bed LTC facility
- Presented with stack of surveillance sheets

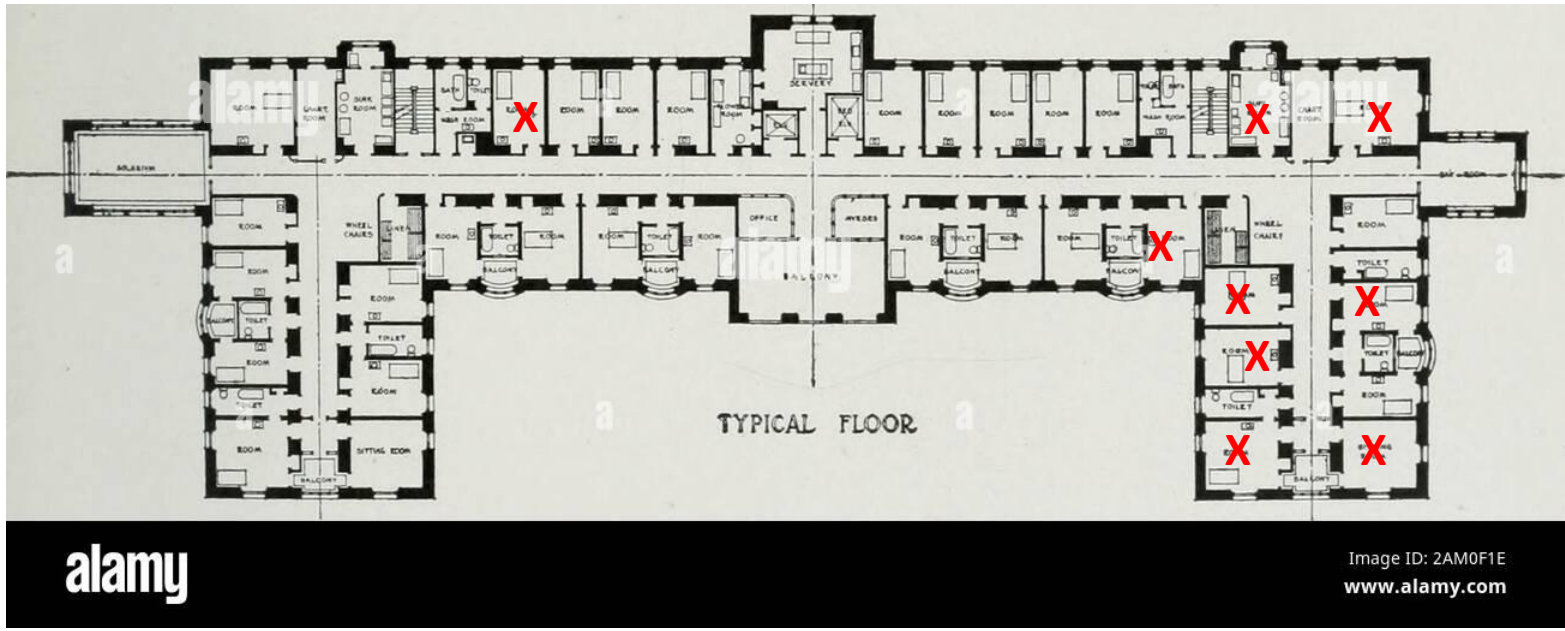


Surveillance

- Person
- Place
- Time
- Symptoms
  - Gastroenteric
  - Respiratory
  - Urinary
  - Skin and wound

Results

- 2-week period
- Gastroenteric



Other Requirements

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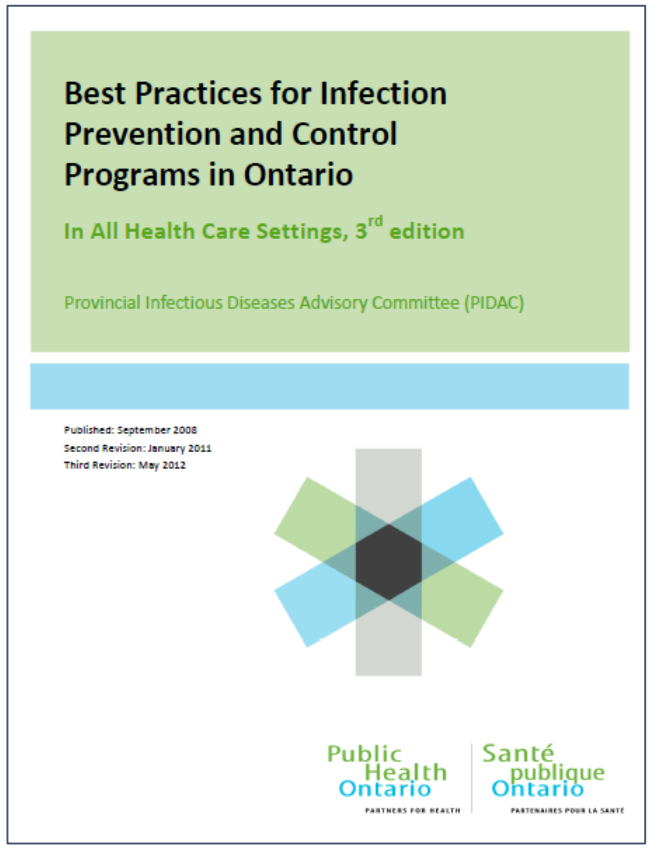
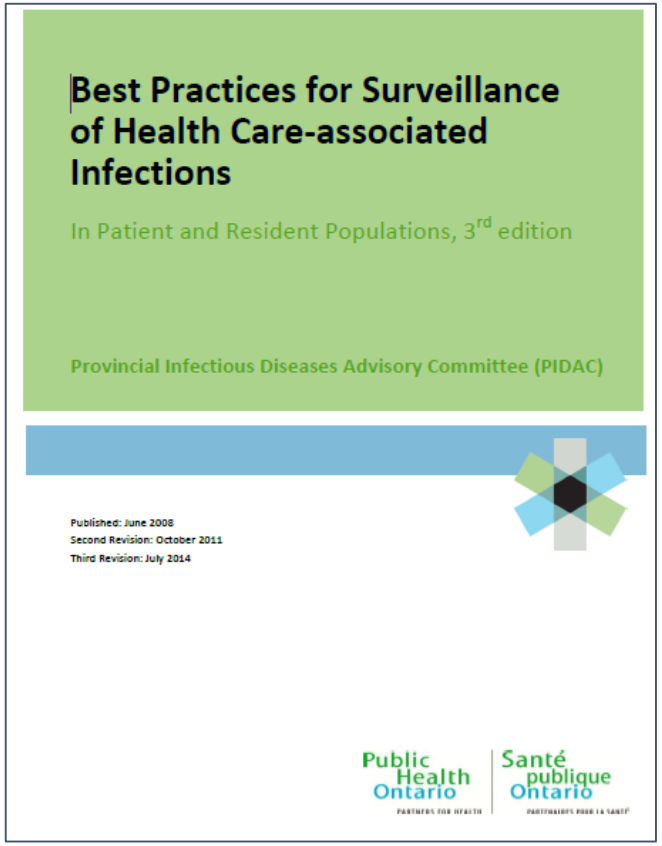
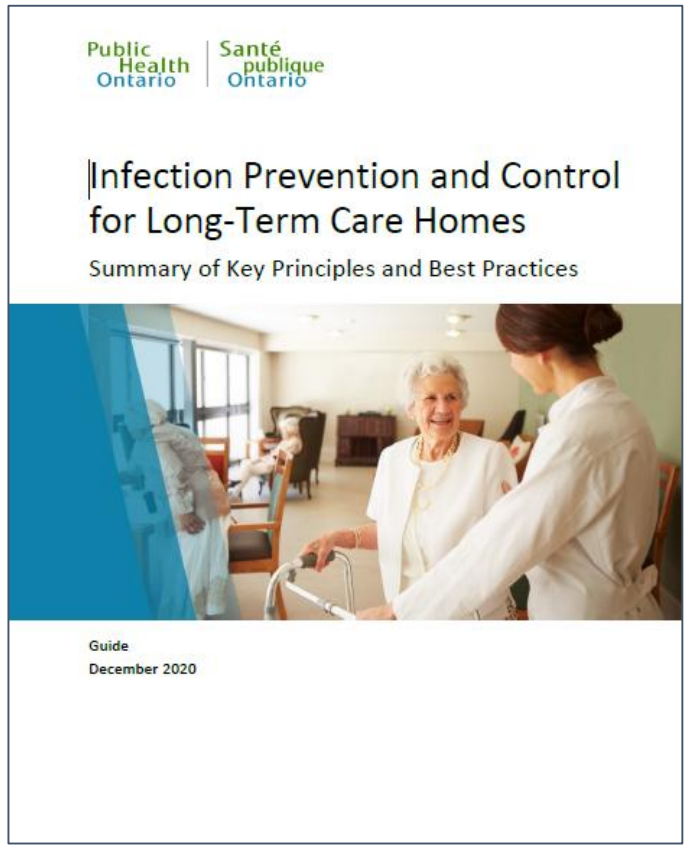
Ontario

PIDAC Best Practices

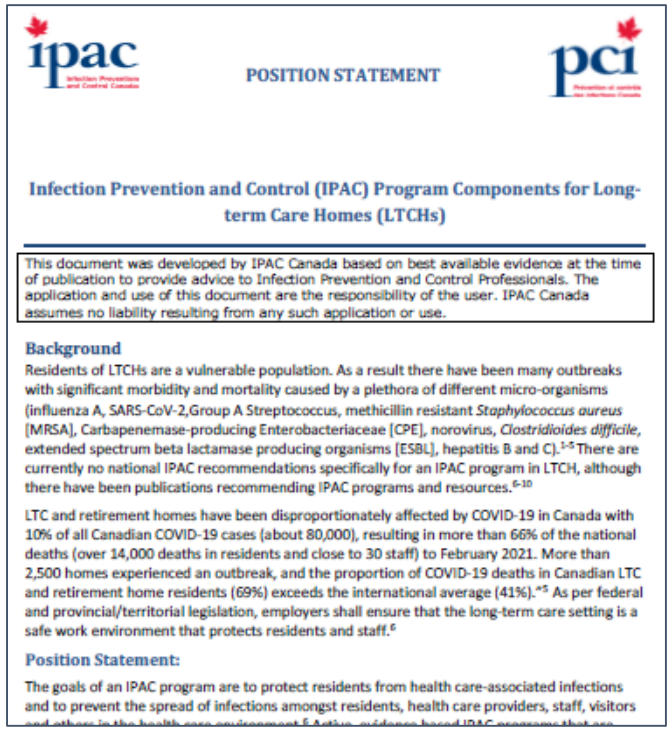






IPAC-Canada Position Statements

IPAC Program Components for LTCH



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POSITION STATEMENT

pci Prévention et contrôle des infections Canada

Infection Prevention and Control (IPAC) Program Components for Long-term Care Homes (LTCHs)

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Background

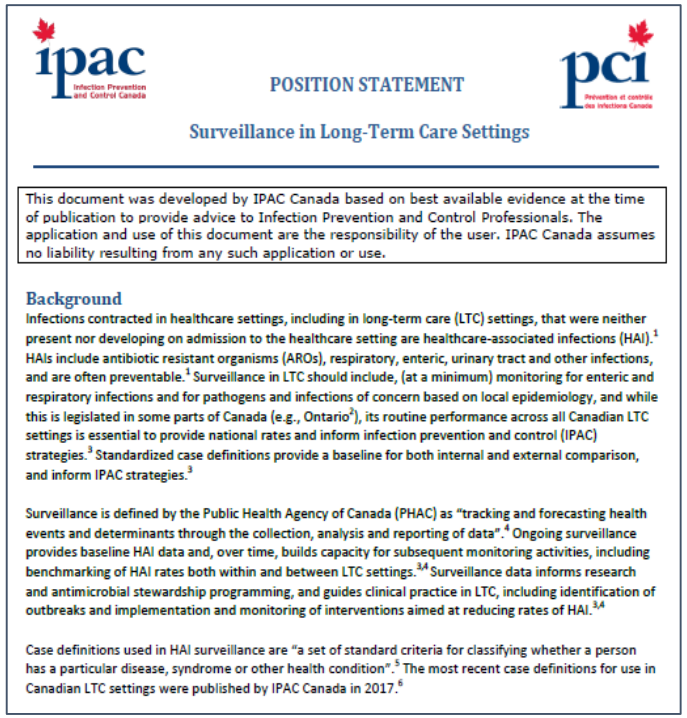
Residents of LTCHs are a vulnerable population. As a result there have been many outbreaks with significant morbidity and mortality caused by a plethora of different micro-organisms (influenza A, SARS-CoV-2,Group A Streptococcus, methicillin resistant *Staphylococcus aureus* [MRSA], Carbapenemase-producing Enterobacteriaceae [CPE], norovirus, *Clostridioides difficile*, extended spectrum beta lactamase producing organisms [ESBL], hepatitis B and C).[1-5] There are currently no national IPAC recommendations specifically for an IPAC program in LTCH, although there have been publications recommending IPAC programs and resources.[6-10]

LTC and retirement homes have been disproportionately affected by COVID-19 in Canada with 10% of all Canadian COVID-19 cases (about 80,000), resulting in more than 66% of the national deaths (over 14,000 deaths in residents and close to 30 staff) to February 2021. More than 2,500 homes experienced an outbreak, and the proportion of COVID-19 deaths in Canadian LTC and retirement home residents (69%) exceeds the international average (41%).“[5] As per federal and provincial/territorial legislation, employers shall ensure that the long-term care setting is a safe work environment that protects residents and staff.[6]

Position Statement:

The goals of an IPAC program are to protect residents from health care-associated infections and to prevent the spread of infections amongst residents, health care providers, staff, visitors

Surveillance in LTC Settings



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POSITION STATEMENT

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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).[1] HAIs include antibiotic resistant organisms (AROs), respiratory, enteric, urinary tract and other infections, and are often preventable.[1] 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[2]), its routine performance across all Canadian LTC settings is essential to provide national rates and inform infection prevention and control (IPAC) strategies.[3] Standardized case definitions provide a baseline for both internal and external comparison, and inform IPAC strategies.[3]

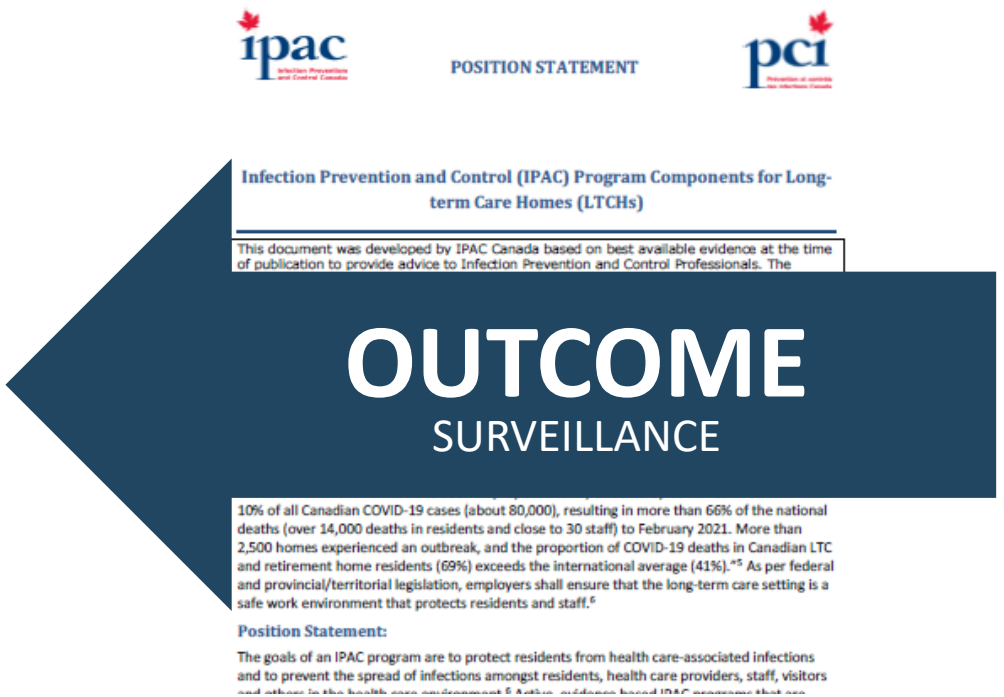
Surveillance is defined by the Public Health Agency of Canada (PHAC) as “tracking and forecasting health events and determinants through the collection, analysis and reporting of data”.[4] Ongoing surveillance provides baseline HAI data and, over time, builds capacity for subsequent monitoring activities, including benchmarking of HAI rates both within and between LTC settings.[3,4] 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.[3,4]

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”.[5] The most recent case definitions for use in Canadian LTC settings were published by IPAC Canada in 2017.[6]

Position Statement:
IPAC Program Components for LTC

As a minimum, surveillance shall include:

- **Admission screening**
- **Active syndromic surveillance**
  e.g., respiratory infection and gastroenteritis
- **Identification of sentinel events**
  e.g., invasive GAS, SARS-CoV-2

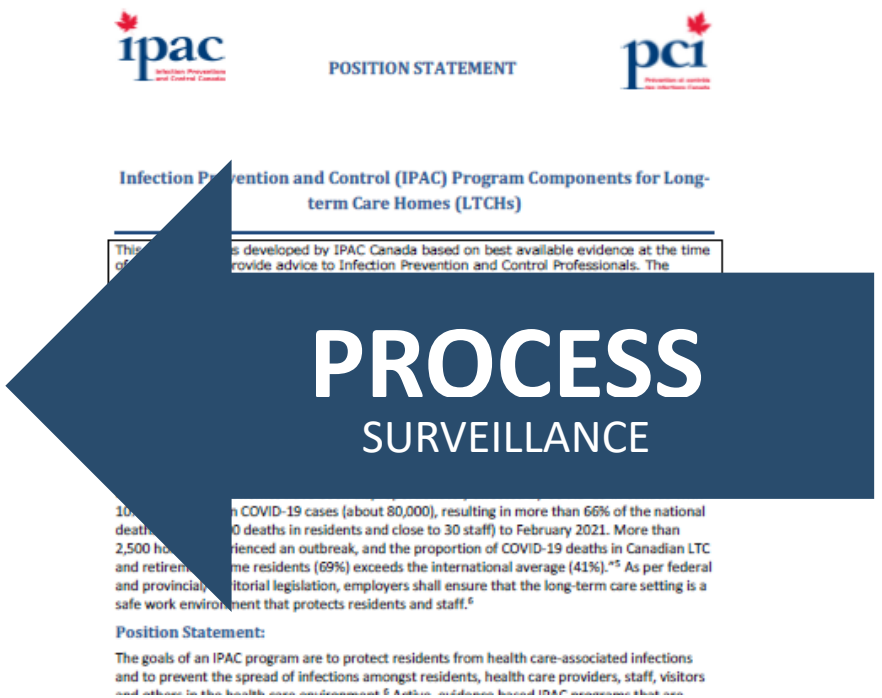


Position Statement:
IPAC Program Components for LTC

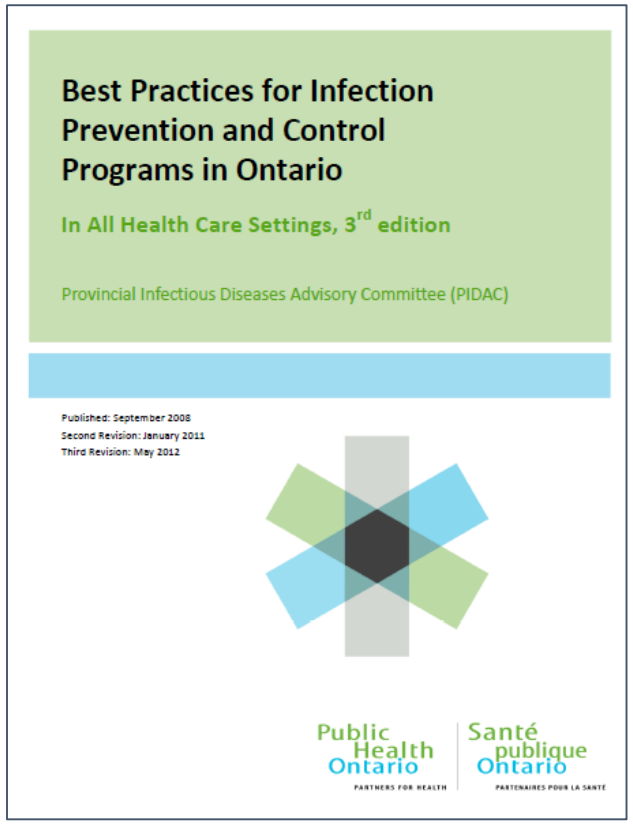
As a minimum, surveillance shall include:

- **Audits**

  e.g., compliance with Routine Practices and Additional Precautions - hand hygiene, personal protective equipment use, environmental cleaning, shared equipment cleaning



What should you be looking for?



- Outlines the recommended surveillance indicators in long term care

TABLE 2: RECOMMENDED OUTCOME SURVEILLANCE INDICATORS

Surveillance Component	Reference #	Acute Care	CCC	LTC	HHC
Facility-acquired respiratory infection in clients/patients/residents	80	✓	✓	✓	
Facility-acquired ARO in clients/patients/residents	79	✓	✓	✓	
Facility-acquired *Clostridium difficile*-associated disease in clients/patients/residents	117	✓	✓	✓	
Facility-acquired acute GI infection in clients/patients/residents		✓	✓	✓	
Facility-acquired group A streptococcal infections in clients/patients/residents		✓	✓	✓	
Staff tuberculin skin test (or interferon-gamma release assay) conversions	81	✓	✓	✓	✓
Procedure-specific surgical site infections (SSI)	86, 87	✓			✓ *
Central line-associated bloodstream infections in high risk areas	91-93	✓			✓ *
New acquisition of hepatitis in hemodialysis patients	84	✓	✓	✓	
Skin and soft tissue infections in clients/residents			✓	✓	

Legend: CCC = Complex Continuing Care LTC = Long-term Care HHC = Home Health Care

*** in collaboration with the agency that inserted the central line/performed the surgery**

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Table 2: Recommended Outcome Surveillance Indicators

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TABLE 1: RECOMMENDED PROCESS SURVEILLANCE INDICATORS

Surveillance Component	Reference #	Acute Care	CCC	LTC	HHC
Adherence to ARO screening protocols for clients/patients/residents	79	✓	✓	✓	
Adherence to ARI screening protocols for clients/patients/residents	80	✓	✓	✓	✓
Adherence to screening protocols for tuberculosis in clients/residents	81		✓	✓	
Adherence to screening protocols for acute GI infection in clients/patients/residents		✓	✓	✓	✓
Influenza vaccination rates (clients/residents)	82		✓	✓	
Pneumococcal vaccination rates (clients/residents)	82		✓	✓	
Adherence to screening protocols for hepatitis, MRSA and VRE in hemodialysis patients	83-85	✓	✓	✓	
Staff tuberculosis screening	81	✓	✓	✓	✓
Staff vaccination rates including annual influenza vaccination	82	✓	✓	✓	✓
Sharps injury surveillance	89, 90	✓	✓	✓	✓
Adherence to central line protocols	91-93	✓	✓	✓	✓

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Table 1: Recommended Process Surveillance Indicators

Page 19-20

Surveillance Component	Reference #	Acute Care	CCC	LTC	HHC
Adherence to ventilator use protocols	94, 95	✓	✓		
Adherence to protocols related to surgical procedures (e.g., pre-operative antibiotic use)	86, 87	✓			
Adherence to hand hygiene protocols	96-98	✓	✓	✓	✓
Adherence to Routine Practices protocols, including the correct use of PPE	2, 3	✓	✓	✓	✓
Adherence to reprocessing practices protocols	96, 105	✓	✓	✓	✓
Adherence to environmental cleaning protocols	96, 102	✓	✓	✓	
Adherence to IPAC construction/renovation protocols	100, 101	✓	✓	✓	
Adherence to recommendations of the antimicrobial stewardship program	63, 104, 106	✓	✓	✓	
Adherence to practices to limit urinary catheter use	103	✓	✓	✓	✓

Legend: CCC = Complex Continuing Care LTC = Long-term Care HHC = Home Health Care

Table 1: Recommended Process Surveillance Indicators (continued)

Page 19-20

Where to start?

ENSURE FAMILIARITY WITH CASE DEFINITIONS

Surveillance Planning

Select the Outcomes for Surveillance

- Syndromic surveillance of respiratory infections and gastroenteritis should be undertaken in all LTCH

- To identify additional outcomes for surveillance in your home, consider the following:
  - the frequency of the infection
  - the impacts of the infection (including % case fatality and excess costs)
  - the preventability of the infection

Surveillance Planning

Select the Outcomes for Surveillance

- In LTCH, the preventable infections may influence what you choose to look for in outcome surveillance.
- Some preventable infections include:
  - Acute respiratory infection (ARI)
  - Skin and soft tissue infections
  - Urinary tract infection

Surveillance Planning

Use Established Case Definitions For Infection

- Refer to *Surveillance Definitions of Infections in Canadian Long-Term Care Facilities* for case definitions
- Apply case definitions accurately and consistently

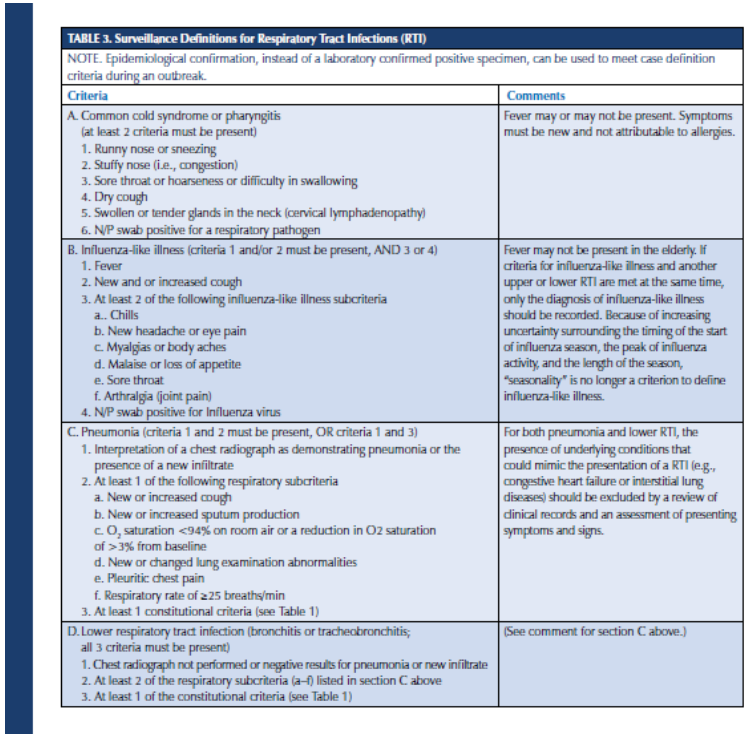

TABLE 3. Surveillance Definitions for Respiratory Tract Infections (RTI)

NOTE. Epidemiological confirmation, instead of a laboratory confirmed positive specimen, can be used to meet case definition criteria during an outbreak.

Criteria	Comments
A. Common cold syndrome or pharyngitis (at least 2 criteria must be present) 1. Runny nose or sneezing 2. Stuffy nose (i.e., congestion) 3. Sore throat or hoarseness or difficulty in swallowing 4. Dry cough 5. Swollen or tender glands in the neck (cervical lymphadenopathy) 6. N/P swab positive for a respiratory pathogen	Fever may or may not be present. Symptoms must be new and not attributable to allergies.
B. Influenza-like illness (criteria 1 and/or 2 must be present, AND 3 or 4) 1. Fever 2. New and or increased cough 3. At least 2 of the following influenza-like illness subcriteria a.. Chills b. New headache or eye pain c. Myalgias or body aches d. Malaise or loss of appetite e. Sore throat f. Arthralgia (joint pain) 4. N/P swab positive for Influenza virus	Fever may not be present in the elderly. If criteria for influenza-like illness and another upper or lower RTI are met at the same time, only the diagnosis of influenza-like illness should be recorded. Because of increasing uncertainty surrounding the timing of the start of influenza season, the peak of influenza activity, and the length of the season, "seasonality" is no longer a criterion to define influenza-like illness.
C. Pneumonia (criteria 1 and 2 must be present, OR criteria 1 and 3) 1. Interpretation of a chest radiograph as demonstrating pneumonia or the presence of a new infiltrate 2. At least 1 of the following respiratory subcriteria a. New or increased cough b. New or increased sputum production c. O_2 saturation <94% on room air or a reduction in O_2 saturation of >3% from baseline d. New or changed lung examination abnormalities e. Pleuritic chest pain f. Respiratory rate of ≥25 breaths/min 3. At least 1 constitutional criteria (see Table 1)	For both pneumonia and lower RTI, the presence of underlying conditions that could mimic the presentation of a RTI (e.g., congestive heart failure or interstitial lung diseases) should be excluded by a review of clinical records and an assessment of presenting symptoms and signs.
D. Lower respiratory tract infection (bronchitis or tracheobronchitis; all 3 criteria must be present) 1. Chest radiograph not performed or negative results for pneumonia or new infiltrate 2. At least 2 of the respiratory subcriteria (a–f) listed in section C above 3. At least 1 of the constitutional criteria (see Table 1)	(See comment for section C above.)

Happe et al. Can J Infect Control 2023;38(43) 139-146

Surveillance Planning

Extra Consideration: Preparation & Training

- Ensure **staff** have proper training about…
  - what to look for
  - how to document
  - how to communicate
- Ensure staff understand why surveillance is taking place
- Recruit **champions** and ensure that documentation occurs properly and routinely
- Consider using practice forms as part of your training process

Data Collection

Collect the Surveillance Data

What data do you need? How will you collect this data?

- Data collection may be time consuming
- Variety of sources available for data/information

Health Care Associated Infections

- In LTC, for an infection to be considered nosocomial:
  - no evidence that the infection was present on admission or re-admission (following hospitalization or community visit).
  - no evidence that the infection resulted from a procedure performed at a hospital or in a physician's office.
- When a particular infection meets case definition, it should only be considered nosocomial if it was not present or incubating when the resident was admitted.
- *Consider the incubation period.* Infections that occur more than 48 to 72 hours after admission may be considered to be associated with health care.

Summary

- ✓ Health care settings must monitor targeted IPAC outcomes using surveillance for health care-associated infections.
- ✓ Infection surveillance must include standardized collection of data using written definitions of infection.
- ✓ Communication is vital!

Gauthier-ism

Never spend more time on surveillance than you do on education!

Everyone in the facility is an ICP!

Listen to family!