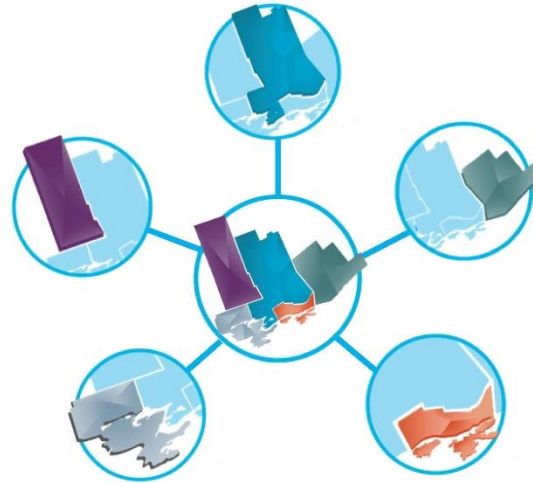


South East
IPAC
HUB & SPOKE



EDUCATION
PRACTICE
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IPAC EDUCATION SESSION #1

Outbreak Management

FOR LONG-TERM CARE AND RETIREMENT HOMES
SE IPAC HUB & SPOKE - MAY 28, 2021

Agenda

- Introduction to the Hub & Spoke Team
- Infection Prevention and Control Regulatory Requirements
- Routine Practices and Additional Precautions
- Surveillance
- What is an Outbreak?
- Outbreak Preparedness
- Outbreak Management
- Outbreak Case Scenario



Introduction to the IPAC Hub & Spoke Team



Who are we?



Dr. Gerald Evans
Medical Director

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 Medical Director of IPAC at Kingston Health Sciences Centre and Providence Care Hospital. Member of the Ontario COVID-19 Science Advisory Table, the Ontario COVID-19 Testing Strategy and Policy Task Force and the Ontario COVID-19 Behavioral Sciences Working Group.



Dr. Santiago Perez Patrigeon
Physician Lead

Infectious Disease physician at Kingston Health Science Centre and Associate professor in the Department of Medicine, Queen's University. He completed a clinical fellowship in HIV/AIDS and a PhD in HIV-Immunology at Institute Pasteur in Paris, France. He worked as a clinician-researcher at Instituto Nacional de Ciencias Médicas y Nutrición "Salvador Zubirán". He is currently engaged in COVID-19 research with multi-national clinical trials.



Heather Candon
Director

Background in microbiology and health care administration. She is CIC certified with experience in LTC, acute care and government sector specifically in IPAC, Quality, Patient Safety and Risk. Heather is the Course Coordinator and Instructor for the IPAC Canada Essentials in Infection Control course.



Jane Van Toen
Manager

MLT, Certificate in Occupation Health and Safety and Medical Device Reprocessing Techniques. She has her CIC and IPAC experience in LTC and acute care. Jane is the Course Coordinator and Instructor for the IPAC Canada Essentials in Infection Control course.



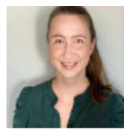
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Who are we?



Dana Finnegan-Yee
Clinical IPAC Coordinator

Experience in the field of Infection Prevention and Control for 14 years, board certified in Infection Control (CIC) since 2011. Experienced educator and registered with the Ontario College of Teachers. Registered MLT.



Caitlin Prentice
Clinical IPAC Coordinator

Caitlin has 10 years' experience in Public Health as a Public Health Inspector with an emphasis on infection control. She has IPAC team experience, which included active roles in outbreak management. Caitlin is currently working towards her CIC.



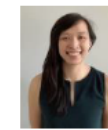
Eric Hofstee
Clinical IPAC Coordinator

Eric has previous experience working as a Critical Care RN in Adult Intensive Care as well as Infection Prevention and Control experience in an acute hospital setting. Eric is currently working towards his Certificate in Infection Control.



Lana King
Clinical IPAC Coordinator

Lana is a RN and has worked in areas of Critical Care, Public Health within the Infectious and Vaccine Preventable Disease Division, Occupational Health and Infection Prevention and Control. Lana completed the IPAC Canada Infection Control course and is preparing for certification from the Certification Board of Infection Control.



Sarah Lee
Clinical IPAC Coordinator

Sarah has previous experience in Public Health as a public health inspector with various infectious diseases teams. She has been continuously involved in providing IPAC education and actively engaged in outbreak preparedness and management. Sarah is currently working towards her Certificate in Infection Control.



Kimberly Craig
Clinical IPAC Coordinator

Kim has been working in Public Health for over 10 years as a Public Health Inspector. She has worked in a variety of roles including IPAC, Infectious Diseases, food safety and safe water. Currently Kim is working towards a certificate in infection prevention and control.



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IPAC Hub & Spoke Role

The IPAC Hub serves to:

- Provide IPAC expertise for both prevention and response
- Provide specialized guidance and direct support to congregate living settings, which will aid in capacity development
- Answer questions and direct to appropriate resources
- Provide consistent messages and education about proper PPE use
- Promote best practices related to IPAC



IPAC Hub & Spoke Services

The IPAC Hub services are:

- For congregate living settings to access direct support and guidance on IPAC practices, IPAC training and skills development services
- To set up communities of practice which will be available for consultations regarding IPAC practices in the facility



IPAC Regulatory Requirements in Long-term Care and Retirement Homes



Requirements

- **LTC Homes** - Requirements under the *Long-Term Care Homes Act, 2007* and Regulation 79/10 to ensure there is an IPAC program in place.
- **Retirement Homes** - Requirements under the *Retirement Homes Act, 2007* and Regulation 166/11 to have an IPAC program in place
- **Goals of an IPAC Program:**
 - Protect residents from infection
 - Prevent the spread of infections
 - Comply with regulatory requirements of having IPAC practices in place



Requirements

- IPAC program must be for both outbreak and non-outbreak situations
- Must meet certain requirements including having surveillance protocols
- Requirements under Regulation 559 that any gastroenteritis or respiratory outbreak in an institution must be reported to Public Health



Training and Education

- Requirement under the respective Acts to provide training and education on the IPAC program
- Ensuring staff are trained on IPAC practices helps to prevent outbreaks.



Directive #3

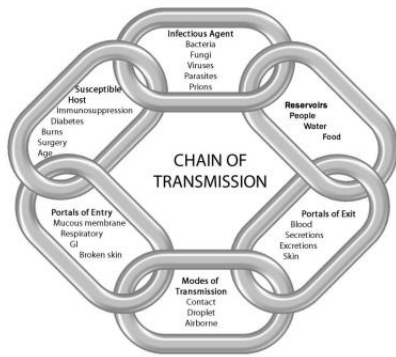
- Requirements that LTCH and RH need to do in regard to COVID-19
 - COVID-19 Outbreak Preparedness Plan
- Dictates requirements for screening, testing of residents, staff and visitors
- Outbreak management requirements including required steps in an outbreak



Routine Practices & Additional Precautions



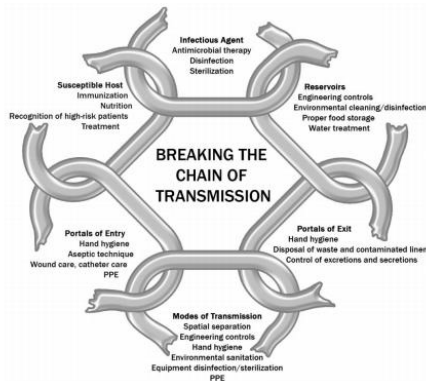
Chain of Transmission



All elements in the chain must be present for transmission of disease/illness to take place

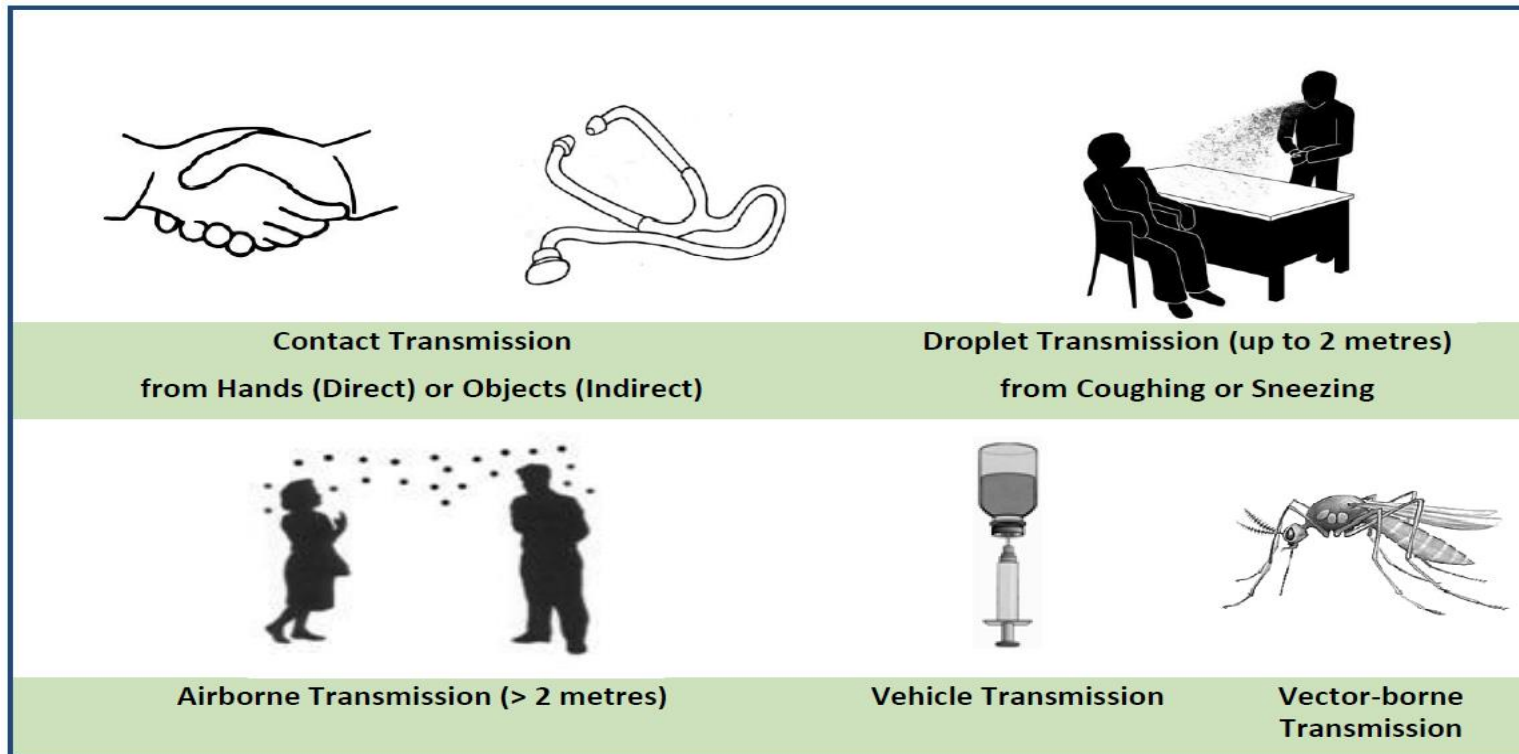
There are many ways you can break a link in the chain of transmission!

- Hand Hygiene
- Cover your cough
- Cleaning the environment
- Vaccination/Immunization
- Don't visit if unwell
- **Wear a mask to contain droplet particles**



Transmission of Microorganisms

There are many different Modes of Transmission



Hierarchy of Controls

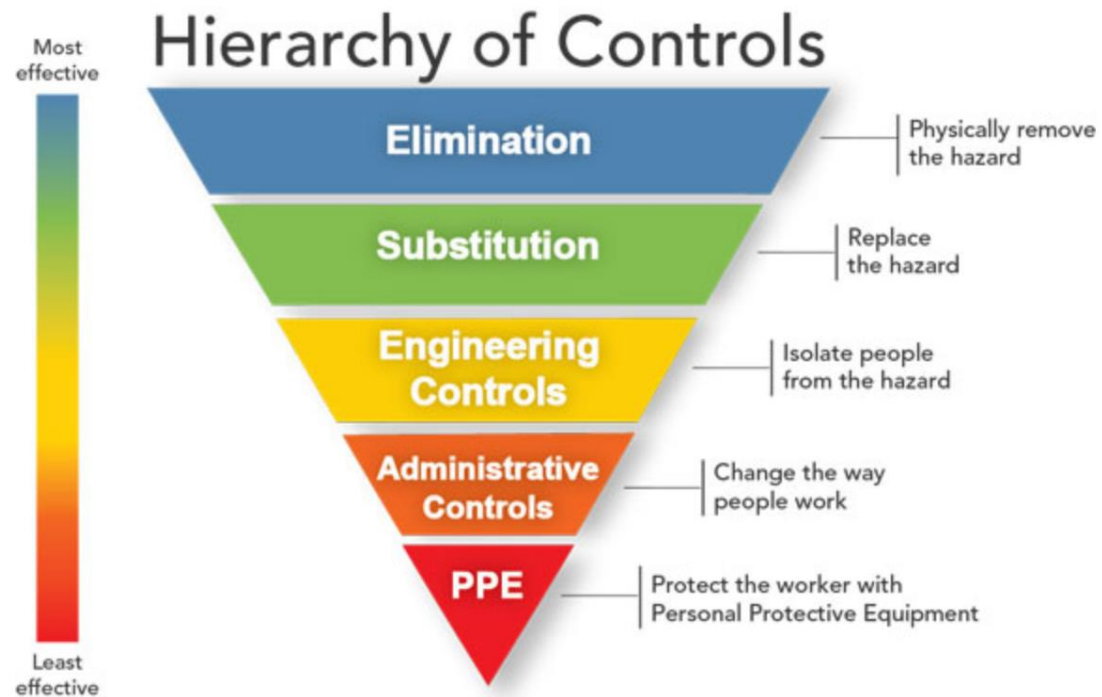


Image: Hierarchy of Controls. Source: National Institute for Occupational Safety and Health (NIOSH). Hierarchy of Controls [Internet]. Atlanta, GA: Centers for Disease Control and Prevention, 2015. Available from: <https://www.cdc.gov/niosh/topics/hierarchy/>.



Different Types of Isolation Precautions

“Additional Precautions” are based on Mode of Transmission

- **Contact Precautions**
eg. Client/resident/patient with undiagnosed diarrhea
- **Droplet Precautions**
eg. Client/resident/patient with pneumonia
- **Airborne Precautions**
eg. Client/resident/patient with tuberculosis
- **Reverse Isolation**
eg. Client/resident/patient on chemotherapy

**CONTACT
PRECAUTIONS**

**DROPLET
PRECAUTIONS**

**AIRBORNE
PRECAUTIONS**

Reverse
Isolation

What are Routine Practices?

Routine Practices:

These are personal everyday practices used by healthcare workers that reduce or eliminate the risk of spreading germs to patients, visitors, coworkers or themselves.

Examples of routine practices are hand hygiene, cleaning shared equipment between patient use, cleaning the environment, using personal protective equipment (PPE) as required, safe handling and disposal of sharps.

This concept means to treat everyone as though they are infectious!!



Routine Practices

Routine Practices Fact Sheet for All Health Care Settings







ROUTINE PRACTICES to be used with <u>ALL PATIENTS</u>	
	<p>Hand Hygiene Hand hygiene is performed using alcohol-based hand rub or soap and water:</p> <ul style="list-style-type: none"> ✓ Before and after each client/patient/resident contact ✓ Before performing invasive procedures ✓ Before preparing, handling, serving or eating food ✓ After care involving body fluids and before moving to another activity ✓ Before putting on and after taking off gloves and PPE ✓ After personal body functions (e.g., blowing one's nose) ✓ Whenever hands come into contact with secretions, excretions, blood and body fluids ✓ After contact with items in the client/patient/resident's environment
	<p>Mask and Eye Protection or Face Shield [based on risk assessment]</p> <ul style="list-style-type: none"> ✓ Protect eyes, nose and mouth during procedures and care activities likely to generate splashes or sprays of blood, body fluids, secretions or excretions. ✓ Wear within two metres of a coughing client/patient/resident.
	<p>Gown [based on risk assessment]</p> <ul style="list-style-type: none"> ✓ Wear a long-sleeved gown if contamination of skin or clothing is anticipated.
	<p>Gloves [based on risk assessment]</p> <ul style="list-style-type: none"> ✓ Wear gloves when there is a risk of hand contact with blood, body fluids, secretions, excretions, non-intact skin, mucous membranes or contaminated surfaces or objects. ✓ Wearing gloves is NOT a substitute for hand hygiene. ✓ Remove immediately after use and perform hand hygiene after removing gloves.
	<p>Environment and Equipment</p> <ul style="list-style-type: none"> ✓ All equipment that is being used by more than one client/patient/resident must be cleaned between clients/patients/residents. ✓ All high-touch surfaces in the client/patient/resident's room must be cleaned daily.
	<p>Linen and Waste</p> <ul style="list-style-type: none"> ✓ Handle soiled linen and waste carefully to prevent personal contamination and transfer to other clients/patients/residents.

Image source: Ontario Agency for Health Protection and Promotion, Provincial Infectious Diseases Advisory Committee. Routine Practices and Additional Precautions in All Health Care Settings. 3rd edition. Toronto, ON: Queen's Printer for Ontario; November 2012. Retrieved from: <https://www.publichealthontario.ca/-/media/documents/B/2012/bp-rpap-healthcare-settings.pdf?la=en>.



Required Level of Precaution

APPENDIX N: CLINICAL SYNDROMES/CONDITIONS WITH REQUIRED LEVEL OF PRECAUTIONS

ORGANISM/ DISEASE	CATEGORY *	TYPE OF PRECAUTION	SINGLE ROOM?	DURATION OF PRECAUTIONS	COMMENTS
* = Paediatric precautions apply to children who are incontinent or too immature to comply with hygiene RP = Routine Practices					
ABSCESS	Minor	RP	No		If community-associated MRSA is suspected, use Contact Precautions until ruled out.
	Major (drainage not contained by dressing)	Contact	Yes	Continue precautions for duration of uncontained drainage.	
ADENOVIRUS INFECTION	Conjunctivitis	Contact	Yes	Continue precautions for duration of symptoms.	May cohort patients in outbreaks.
	Pneumonia	Droplet + Contact	Yes		
AIDS	See HIV				
AMOEBIASIS (Dysentery) <i>Entamoeba histolytica</i>	Adult	RP	No		Reportable Disease
	Paediatric* and incontinent or non-compliant adult	Contact	Yes		
ANTHRAX <i>Bacillus anthracis</i>	Cutaneous or pulmonary	RP	No		Reportable Disease Notify Infection Control
ANTIBIOTIC-RESISTANT ORGANISMS (AROs) - not listed elsewhere		Contact may be indicated	May be indicated	Precautions, if required, are initiated and discontinued by Infection Control.	See also listings under MRSA, VRE, ESBL and CPE.
ARTHROPOD-BORNE VIRAL INFECTIONS Eastern, Western, & Venezuelan equine encephalomyelitis; St. Louis & California encephalitis; West Nile virus		RP	No		Reportable Disease No person-to-person transmission.
ASCARIASIS (Roundworm) <i>Ascaris lumbricoides</i>		RP	No		No person-to-person transmission.
ASPERGILLOSIS <i>Aspergillus</i> species		RP	No		If several cases occur in close proximity, look for

Image source: Ontario Agency for Health Protection and Promotion, Provincial Infectious Diseases Advisory Committee. Routine Practices and Additional Precautions in All Health Care Settings. 3rd edition. Toronto, ON: Queen's Printer for Ontario; November 2012. Retrieved from: <https://www.publichealthontario.ca/-/media/documents/B/2012/bp-rpap-healthcare-settings.pdf?la=en>.



Point of Care Risk Assessment

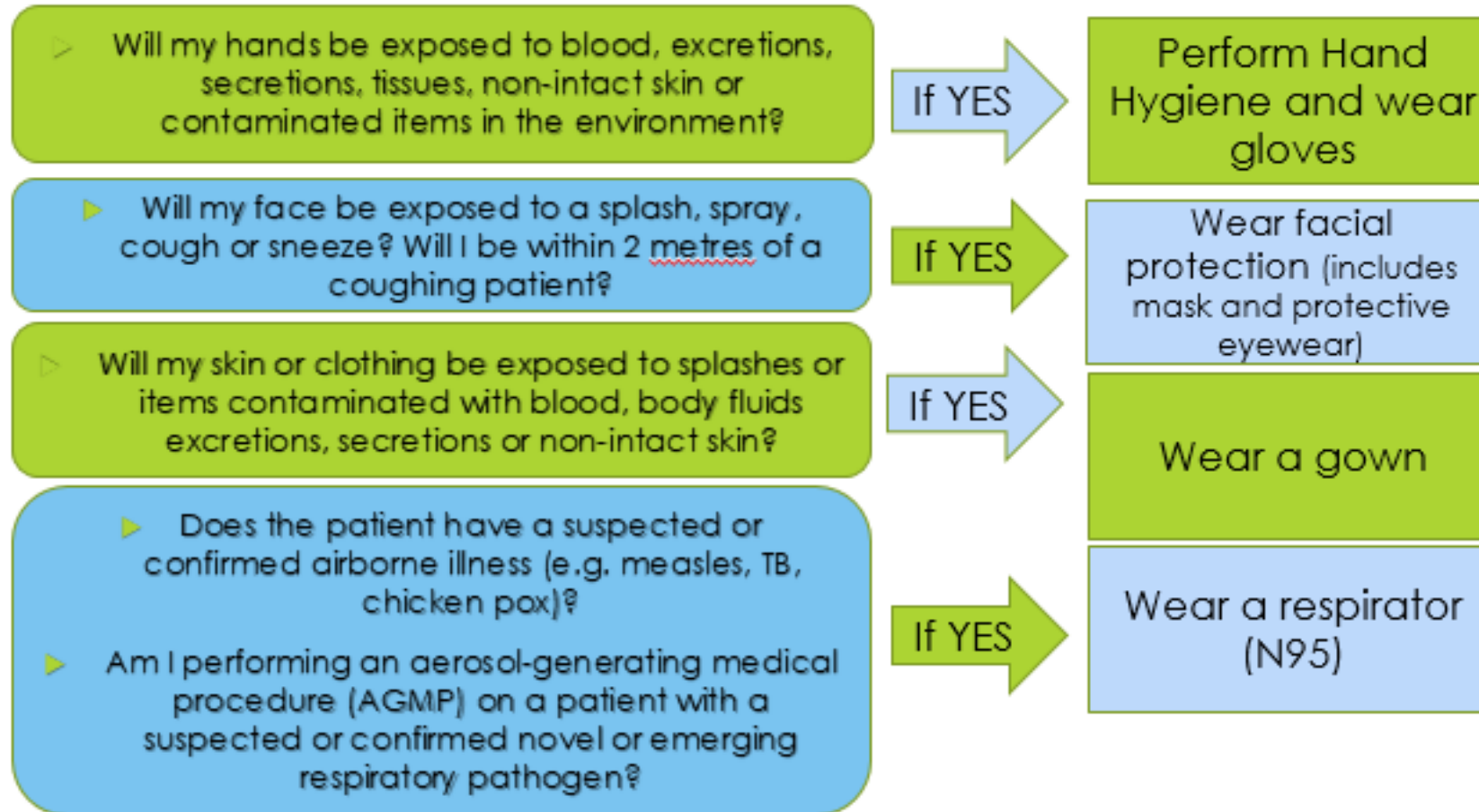
Before each patient/resident/client interaction, the health care worker completes a “**Point of Care Risk Assessment (PCRA)**” by asking a set of questions to determine the risk of exposure and appropriate Routine Practices or Additional Precautions required for safe care.

The PCRA allows the health care worker to determine what personal protective equipment (PPE) to select and wear for that interaction.

IPAC screening is separate from a point of care risk assessment. This is when a staff member will call each client before their home visit to complete screening related to COVID-19 symptoms and exposures. If it is identified through screening that a client in their home has or suspected to have COVID-19, the provider will determine if canceling the service is appropriate.

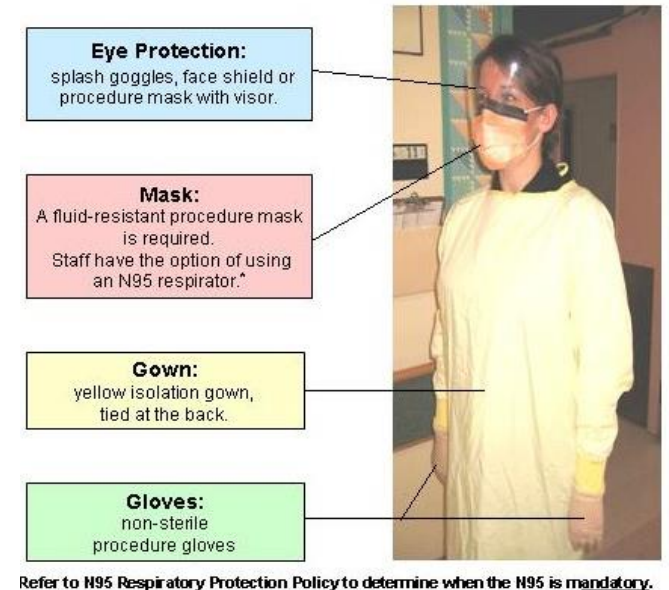


Risk Assessment Steps



Personal Protective Equipment (PPE)

- PPE is very important to prevent transmission of organisms and keep staff safe.
- Reinforcing proper use is critical because improper use can lead to transmission and PPE supply has been limited due to high demand.
- Using PPE properly and when appropriate is key in safe guarding the supply.
- When potential for splashes or sprays, a fluid resistant gown, gloves, mask, and protective eye wear should be worn.



Donning and Doffing PPE



[Donning Video](#)

[Doffing Video](#)

Important that staff are properly trained in PPE use. Staff can easily become contaminated from improperly removing PPE.



Hand Hygiene

- Is removing or killing microorganisms on hands
- Is maintaining skin integrity
- Is the responsibility of ALL individuals involved in health care



Is the SINGLE most important measure to prevent the spread of infection and will break the chain of transmission!



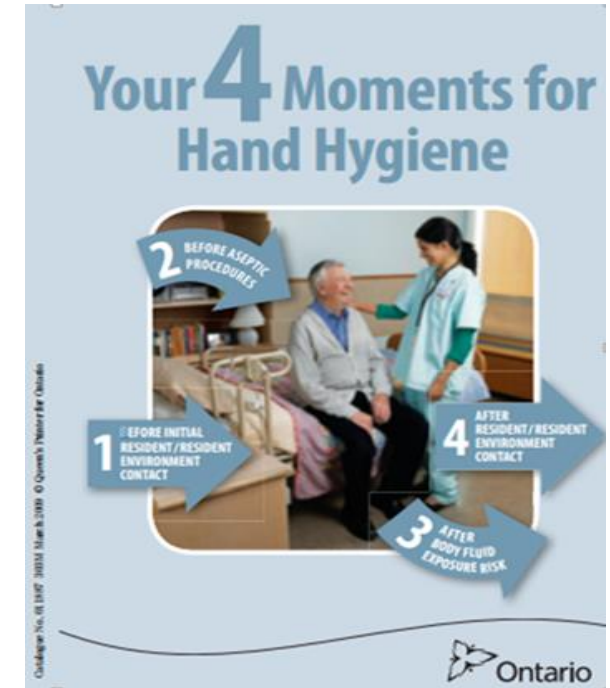
When to Perform Hand Hygiene

BEFORE:

- Contact with a patient
- Putting on gloves **and/or putting on mask**
- Performing invasive procedures
- Handling food

AFTER:

- Contact with a patient
- After contact with item in the patients environment
- After removing gloves **or removing mask**
- Personal body functions



To keep it simple remember to always perform hand hygiene BEFORE and AFTER contact with a patient or the patient's environment or anytime hands are visibly soiled!

Surveillance



What is surveillance?

“Surveillance is the systematic, ongoing collection, collation and analysis of data with timely dissemination of information to those who require this information in order to take action.”

Source: Ontario Agency for Health Protection and Promotion (Public Health Ontario), Provincial Infectious Diseases Advisory Committee. Best practices for surveillance of health care-associated infections in patient and resident populations. 3rd ed. Toronto, ON: Queen's Printer for Ontario; 2014. Available from: <https://www.publichealthontario.ca/-/media/documents/b/2014/bp-hai-surveillance.pdf?la=en>.



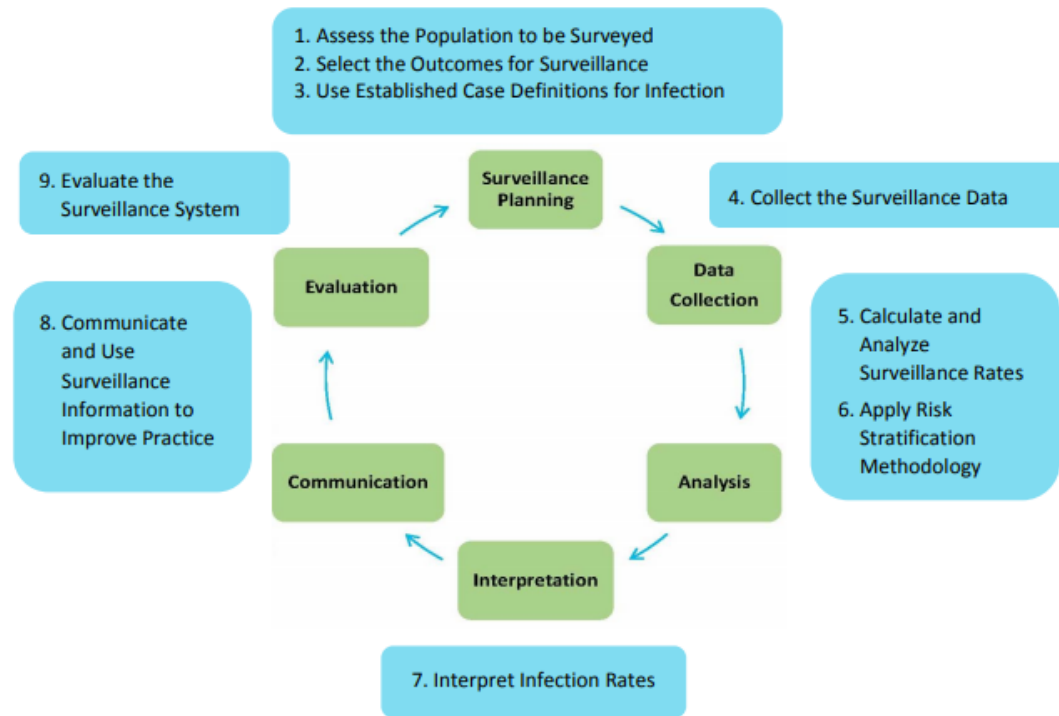
Surveillance

- Long-term care and retirement homes are required to perform ongoing surveillance.
- Surveillance can help detect significant changes from baseline rate and identify trends.
- Goal of surveillance – identify symptomatic residents and staff so that proper IPAC measures can be implemented as soon as possible.

Source: Ministry of Health and Long-Term Care. Control of Respiratory Infection Outbreaks in Long-Term Care Homes, 2018. Toronto, ON: Queen's Printer for Ontario; November 2018.
Available from: https://www.health.gov.on.ca/en/pro/programs/publichealth/oph_standards/docs/reference/RESP_Infectn_ctrl_guide_LTC_2018_en.pdf.



Planning a surveillance system



Best practices for each stage are available [here](#)

Image reproduced from: Ontario Agency for Health Protection and Promotion (Public Health Ontario), Provincial Infectious Diseases Advisory Committee. Best practices for surveillance of health care-associated infections in patient and resident populations. 3rd ed. Toronto, ON: Queen's Printer for Ontario; 2014. Available from: <https://www.publichealthontario.ca/-/media/documents/B/2014/bp-hai-surveillance.pdf?la=en>



Surveillance Toolkit

- [The LTC surveillance toolkit guide](#)
 - Contains 6 tools to help guide LTCH in conducting surveillance of infections in residents.
- Tools support the surveillance process ranging from daily monitoring to data analysis.
- Webinar explaining the LTC surveillance toolkit is available [here](#).



Daily surveillance

Passive Surveillance	Active Surveillance
<ul style="list-style-type: none">• Identification of infections by the staff who care for the residents during their daily care• Residents reporting their symptoms to staff.	<ul style="list-style-type: none">• Trained staff seeks out infections (e.g. conducting unit rounds)• Reviewing pharmacy antibiotic use records.

Source: Ministry of Health and Long-Term Care. Control of Respiratory Infection Outbreaks in Long-Term Care Homes, 2018. Toronto, ON: Queen's Printer for Ontario; November 2018.
Available from: https://www.health.gov.on.ca/en/pro/programs/publichealth/oph_standards/docs/reference/RESP_infectn_ctrl_guide_LTC_2018_en.pdf.



Surveillance

- Ensure designated individual is assigned to review the surveillance data and data is shared appropriately.
- Want to identify cases and clusters of illness early
- Any suspect outbreak must be reported to the local Public Health Unit.



Directive #3

Directive #3 mandates active screening of residents twice per day

- Residents – Temperature and symptoms (and exposure history if returning to the home)

Once daily screening for:

- Staff, visitors and essential visitors - Symptoms and exposure history
- Visitors and essential visitors

Essential Visitors

Essential visitors include a person:

- performing essential support services (e.g., food delivery, phlebotomy, maintenance, family providing care and other health care services required to maintain good health);
- OR**
- visiting a very ill or palliative resident.

Screening Questions

1. Do you have any of the following **new or worsening** symptoms or signs?

- | | | |
|--|------------------------------|-----------------------------|
| New or worsening cough | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Shortness of breath | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Sore throat | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Runny nose, sneezing or nasal congestion
(in absence of underlying reasons for symptoms such as seasonal allergies and post nasal drip) | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Hoarse voice | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Difficulty swallowing | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| New smell or taste disorder(s) | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Nausea/vomiting, diarrhea, abdominal pain | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Unexplained fatigue/malaise | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Chills | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Headache | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

2. Have you travelled outside of Canada or had close contact with anyone that has travelled outside of Canada in the past 14 days?

- Yes No

3. Do you have a fever?

- Yes No

4. Have you had close contact with anyone with respiratory illness or a confirmed or probable case of COVID-19?

- Yes – go to question 5 No – screening complete

5. Did you wear the required and/or recommended PPE according to the type of duties you were performing (e.g., goggles, gloves, mask and gown or N95 with aerosol generating medical procedures (AGMPs)) when you had close contact with a suspected or confirmed case of COVID-19?

- Yes No

What is an Outbreak?



What is an outbreak?

“ a sudden rise of a illness in a particular time and place”

“ uncontrolled and undesired transmission of infection”

“an sudden increase in the number of cases of disease above what is normally expected in that population in that area”

“when there are more people with illness than you might normally expect”



Appendix B: Provincial Case Definitions for Diseases of Public Health Significance

Disease: Gastroenteritis Outbreaks in Institutions and Public Hospitals

Effective: February 2019



Appendix B: Provincial Case Definitions for Diseases of Public Health Significance

Disease: Respiratory Infection Outbreaks in Institutions and Public Hospitals

Effective: February 2019



Outbreak Definition - Respiratory

SUSPECT OUTBREAK

- Two cases of acute respiratory infection (ARI) occurring within 48 hours with any common epidemiological link (e.g. unit, floor)

OR

- One laboratory-confirmed case of influenza

CONFIRMED OUTBREAK

- Two cases of ARI within 48 hours with any common epidemiological link (e.g., unit, floor), at least one of which must be laboratory confirmed

OR

- Three cases of ARI (laboratory confirmation not necessary) occurring within 48 hours with any common epidemiological link (e.g., unit, floor)

Respiratory Infection - Who is a case?

A suspect case should have at least two of the following symptoms:

- Abnormal temperature
- Chills
- Runny nose, sneezing
- Sore throat, hoarseness
- Cough - dry or productive
- Headache
- Tiredness
- Muscle aches
- Poor appetite
- Stuffy nose
- Swollen or tender glands in the neck

Source: Ministry of Health and Long-Term Care. Control of Respiratory Infection Outbreaks in Long-Term Care Homes, 2018. Toronto, ON: Queen's Printer for Ontario; November 2018.
Available from: https://www.health.gov.on.ca/en/pro/programs/publichealth/oph_standards/docs/reference/RESP_Infecntn_ctrl_guide_LTC_2018_en.pdf.



Outbreak Definition - Gastroenteritis

SUSPECT OUTBREAK

- If an outbreak is suspected, notify the local board of health to support with the investigation and management.

CONFIRMED OUTBREAK

- Two or more cases meeting the case definition with a common epidemiological link (e.g. specific unit or floor, same caregiver) with initial onset within a 48 hour period.

Infectious Gastroenteritis - Who is a case?

- Two or more episodes of diarrhea or watery stool (takes the form of its container) within a 24-hour period*

OR

- Two or more episodes of vomiting within a 24-hour period

OR

- One episode of diarrhea or watery stool **AND** one episode of vomiting within a 24-hour period

Source: Ministry of Health and Long-Term Care. Recommendations for the Control of Gastroenteritis Outbreaks in Long-Term Care Homes, 2018. Toronto, ON: Queen's Printer for Ontario; November 2018. Available from: https://www.health.gov.on.ca/en/pro/programs/publichealth/oph_standards/docs/reference/Control_Gastroenteritis_Outbreaks_2018_en.pdf.



Outbreak Definition - COVID-19

SUSPECT OUTBREAK

- One single lab-confirmed COVID-19 case in a resident.

CONFIRMED OUTBREAK

- Two or more lab-confirmed COVID-19 cases in residents and/or staff (or other visitors) in a home with an epidemiological link, within a 14-day period, where at least one case could have reasonably acquired their infection in the home. (e.g., no obvious source of infection outside of the LTCH setting, known exposure in the LTCH setting)

COVID-19 Testing

Screening Questions

1. Do you have any of the following new or worsening symptoms? Symptoms should not be chronic or related to other known causes or conditions.

Ontario 

Fever and/or chills Temperature of 37.8 degrees Celsius/100 degrees Fahrenheit or higher	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Cough or barking cough (croup) Continuous, more than usual, making a whistling noise when breathing, not related to other known causes or conditions (e.g., COPD, post-infectious reactive airways)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Shortness of breath Out of breath, unable to breathe deeply, not related to other known causes or conditions (e.g., asthma)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Decreased or loss of taste or smell Not related to other known causes or conditions (e.g., allergies, neurological disorders)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Sore throat Not related to other known causes or conditions (e.g., seasonal allergies, acid reflux)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Difficulty swallowing Painful swallowing, not related to other known causes or conditions	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Runny or stuffy/congested nose Not related to other known causes or conditions (e.g., seasonal allergies, being outside in cold weather)	<input type="checkbox"/> Yes	<input type="checkbox"/> No

Pink eye Conjunctivitis, not related to other known causes or conditions (e.g., reoccurring styes)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Headache Unusual, long-lasting, not related to other known causes or conditions (e.g., tension-type headaches, chronic migraines)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Digestive issues like nausea/vomiting, diarrhea, stomach pain Not related to other known causes or conditions (e.g., irritable bowel syndrome, anxiety in children, menstrual cramps)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Muscle aches/ joint pain Unusual, long-lasting, not related to other known causes or conditions (e.g., a sudden injury, fibromyalgia)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Extreme tiredness Unusual, fatigue, lack of energy, not related to other known causes or conditions (e.g., depression, insomnia, thyroid dysfunction)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Falling down often For older people	<input type="checkbox"/> Yes	<input type="checkbox"/> No

*One symptom?
Isolate & Test*



Outbreak Preparedness



Overview

- Outbreaks can happen at any time. By being prepared it can help positively guide the outbreak response.
- If you had 3 hours to move out of your house how would that move go? The move would likely be chaotic and disorganized as there is no time to plan in the moment on what to do.
- Being prepared will lead to a smoother and more effective response.



Policies and Procedures

- Policies and procedures on:
 - Staff and Resident Education
 - Outbreak related procedures
 - Antiviral use and immunizations
 - Exclusion policies
- Ensure appropriate policies and procedures are reviewed and updated annually.

Source: Ministry of Health and Long-Term Care. Control of Respiratory Infection Outbreaks in Long-Term Care Homes, 2018. Toronto, ON: Queen's Printer for Ontario; November 2018.
Available from: https://www.health.gov.on.ca/en/pro/programs/publichealth/oph_standards/docs/reference/RESP_Infectn_ctrl_guide_LTC_2018_en.pdf.



Outbreak Resources from local PHU

- Review the local PHU outbreak binder and resources.
 - Hastings Prince Edward Public Health – [Resources](#)
 - KFL&A Public Health – [Resources](#)
 - Leeds, Grenville & Lanark District – [Resources](#)



Resources

- The resources from the local PHU include outbreak control measure checklists, which help to ensure all appropriate actions are completed.
- Create any additional ‘to-do’ lists as needed to help keep the facility on track during an outbreak.
- Examples:
 - ✓ Have appropriate contact information
 - ✓ Notify family, staff and volunteers
 - ✓ Daily conversation with PHU
 - ✓ Fax daily line-list



Education

- Ensure staff are up to date on training and education.
- Audits of IPAC practices:
 - PPE donning and doffing
 - Hand hygiene
 - Cleaning and disinfection



Education

- The SE IPAC Hub is available for free on-site education.
 - In-service Donning & Doffing and PPE Practices
 - Supportive visits and consults
 - Best Practice Recommendations and Implementation Support



Resident considerations

- Confirm resident medical directives in place.
- Are consents signed? (e.g. for antivirals and immunizations)



Personal Protective Equipment

- Ensure appropriate PPE supply (masks, N95 respirators, eye protection, gown, gloves); can also use a [PPE Burn Rate Calculator](#).
- Confirm the availability of PPE wall mounts, carts etc.
- Ensure staff are fit-tested for N95 respirators.
 - N95 required when going into a room of a suspect/confirmed COVID-19 resident on an aerosol-generating medical procedure.

Centres for Disease Control and Prevention. Personal protective equipment (PPE) burn rate calculator [Internet]. Atlanta, GA: Centers for Disease Control and Prevention; 2021 [cited 2021 Apr 8]. Available from: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/burn-calculator.html>.
Ontario Agency for Health Protection and Promotion (Public Health Ontario). COVID-19: infection prevention and control checklist for long-term care and retirement homes. Toronto, ON: Queen's Printer for Ontario; 2020. Available from: <https://www.publichealthontario.ca/-/media/documents/ncov/ipac/covid-19-ipack-checklist-ltcrh.pdf?la=en>.



Signage

- Have appropriate signage prepared



Supplies

- Ensure adequate supply of test kits.
 - Always have 3-4 virus respiratory kits and enteric kits on-site.
 - Check expiry date.
- Are there trained and appropriate staff to collect a nasopharyngeal (NP) swab?
- Determine how specimens are being transported to lab.
 - Considerations to be given for more frequent trips during an outbreak.



Contact Information

- Have all the appropriate contact information for resident families and power-of-attorney.
 - Proper communication is important during an outbreak.
- Have the contact numbers and after hours contact information of the local Public Health Unit.



Contact Information

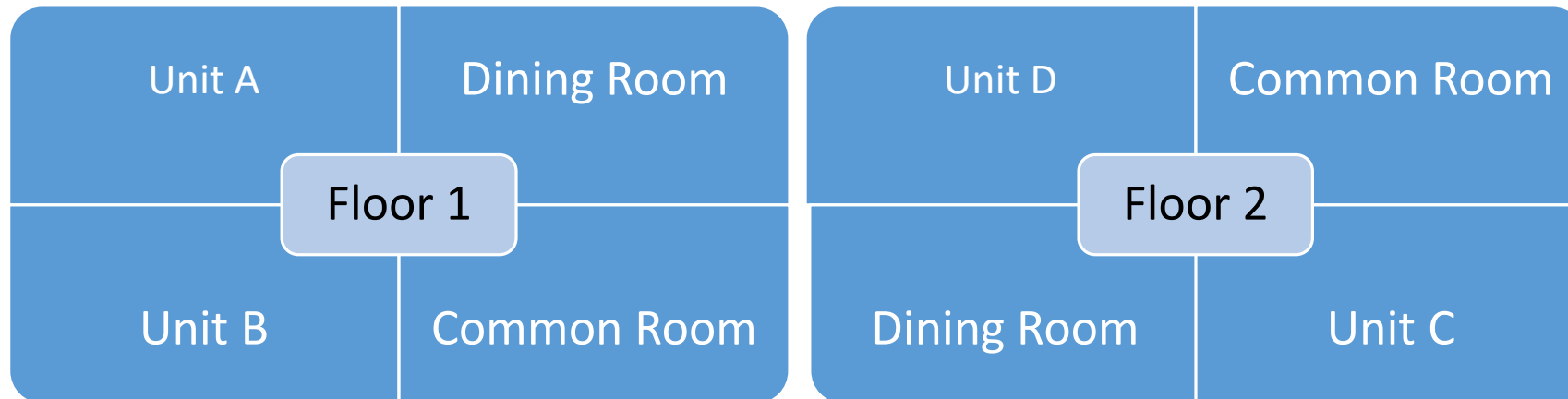
For COVID-19 cases...

- Local PHU will work with the outbreak home to identify high-risk and low-risk contacts.
- Backward contact tracing – assess acquisition in the previous 14 days
- Important to keep good records
 - Including list of visitors, transfers out of home



Facility Map

- If possible, have a labelled facility map available to provide to the PHU (including where any isolation rooms/alternative spaces are)



Communication

- Have a communication template prepared ahead of time so it can be quickly distributed.
- Have a sample agenda for an outbreak meeting prepared.
- Identify who will communicate the messaging to family members, staff, media etc.
- Ensure plan in place to notify other facilities (e.g. hospital, transfer services) regarding the outbreak.



Outbreak Management Team (OMT)

- The OMT is responsible for overseeing the outbreak management
- Meet daily and monitor the outbreak.
- OMT should include representatives of the home from each department and a representative from the local PHU.
 - Plan for who will be on the OMT
 - Representation must include the ICP
 - Other members may include:
DOC, medical director, director of nursing, director of food services, director of housekeeping, director of volunteer services, administrator, staff members, resident representatives, etc.



Outbreak Management Team (OMT)

- Determine who will have the following roles in the OMT:
 - Chairperson – Sets meeting and delegates tasks.
 - Outbreak Coordinator (usually ICP) – Confirms OMT decisions occur and activities for outbreak management.
 - Administrative support - Records minutes
 - Media Spokesperson

Source: Ministry of Health and Long-Term Care. Control of Respiratory Infection Outbreaks in Long-Term Care Homes, 2018. Toronto, ON: Queen's Printer for Ontario; November 2018. Available from: https://www.health.gov.on.ca/en/pro/programs/publichealth/oph_standards/docs/reference/RESP_Infectn_ctrl_guide_LTC_2018_en.pdf.



Cohorting of Staff

- If possible, try and cohort staff to work in certain areas (e.g. staff are assigned to a particular floor).
 - Minimize the number of cohorts each staff member works with.
- Consider locations of break rooms to separate cohorted staff.
- If unable to fully cohort consider partnering units/floors including break room use.
- Staff are to work in one home or healthcare facility unless they are fully immunized.
 - Maintain a list of staff working at multiple sites.

Source: Ontario Ministry of Health. COVID-19 Guidance: Long-Term Care Homes and Retirement Homes for Public Health Units. Toronto, ON: Queen's Printer for Ontario; 2021. Retrieved from: https://www.health.gov.on.ca/en/pro/programs/publichealth/coronavirus/docs/2019_LTC_homes_retirement_homes_for_PHUs_guidance.pdf.



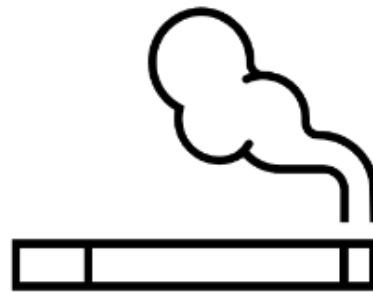
Break rooms

- Break rooms – Where are staff taking their breaks?
 - ✓ Chairs 6 feet apart
 - ✓ Signage to remind staff to mask after eating
 - ✓ Maximum room capacity posted
 - ✓ ABHR available for use



Smoking breaks

- Are staff appropriately distanced during outside breaks?
- Consider taping designated spots to stand on the ground to ensure appropriate distancing.



Outbreak Management



Outbreak Management Overview

Many of the following steps occur concurrently.

Steps	Actions
Step 1	Determine if there is a suspect or confirmed outbreak. Establish Case Definition. Begin Line-List.
Step 2	General IPAC measures
Step 3	Declare Outbreak. Notify PHU of suspect or confirmed outbreak.
Step 4	Notify appropriate individuals. Establish OMT
Step 5	Call initial OMT meeting.
Step 6	Communicate lab results.
Step 7	Monitor the outbreak.
Step 8	Declare outbreak over.
Step 9	Complete outbreak investigation file.

Source: Ministry of Health and Long-Term Care. Control of Respiratory Infection Outbreaks in Long-Term Care Homes, 2018. Toronto, ON: Queen's Printer for Ontario; November 2018. Available from: https://www.health.gov.on.ca/en/pro/programs/publichealth/oph_standards/docs/reference/RESP_Infectn_ctrl_guide_LTC_2018_en.pdf.



Case Definition

- Establish a preliminary case definition
 - Determines who is potentially part of the suspect or confirmed outbreak.
 - Can be modified if needed to ensure most of the cases are included by the definition.
- Case definition includes:
 - Clinical signs and symptoms
 - Time, place and person



Line List

Respiratory Outbreak Line Listing Form																																	
Check one	Data:	<input type="checkbox"/>	Investigation Name:																	Case Definition:													
	Resident Data:	<input type="checkbox"/>	Investigation Number:																														
Case Identification			Symptoms										Complications				Specimens/Diagnostics			Prophylaxis/Treatment													
Case (Sequential)	Name and Location (Floor, Room, Bed)	Gender	Age	Onset of First Symptoms (d/m)	Abnormal temperature (°C)	Dry cough (new)	Runny nose/sneezing	Nasal Congestion/Stuffiness	Sore Throat	Hoarseness/Difficulty	Chills	Myalgia	Malaise	Productive Cough (new)	Headache	Poor appetite	Other (please specify)	Bronchitis (d/m)	Pneumonia (d/m)	Hospitalization (d/m)	Death (d/m)	Nasopharyngeal swab (d/m)	Nasopharyngeal Swab Result date	X-Ray confirmed pneumonia (Y/N)	Other – Specify (d/m)	Result (d/m)	Antiviral Medication	Flu vaccination (d/m)	Pneumo vaccine (d/m)	Antibiotic (d/m)			
Comments:																																	

- A working document
- Update daily with
 - New cases
 - Test results
 - Outcomes
- Change the date and fax daily to the Public Health Unit
- Use separate lists for residents and staff

Source: Ontario. Ministry of Health and Long-Term Care. Control of Respiratory Infection Outbreaks in Long-Term Care Homes, 2018 [Internet]. Toronto, ON: Queen’s Printer for Ontario, 2018. Available from: https://www.health.gov.on.ca/en/pro/programs/publichealth/oph_standards/docs/reference/RESP_Infectn_ctrl_guide_LTC_2018_en.pdf.

Line List

- Must be faxed daily to the local Public Health Unit
 - Method must be secure – do not email.
 - Local Public Health Unit may have another secure method to send line lists (e.g. online through Sync.com).
- Assign responsibility in the home for who will be sending in the line list every day including on the weekend.



Initial IPAC measures

- Put symptomatic residents on droplet and contact precautions.
 - Put any roommates on droplet and contact precautions.
- Notify staff of potential outbreak.
- Put appropriate signage on room door.
 - Include steps for PPE donning and doffing.
- Reinforce hand hygiene with staff and residents.
- Contact the Health Unit



PPE cart set-up

- ✓ Alcohol-based hand sanitizer (70-90% alcohol)
- ✓ Masks
- ✓ Eye protection
- ✓ Gowns
- ✓ Gloves
- ✓ Cleaner Disinfectant wipes
- ✓ No-touch waste receptacle
- ✓ Signs

Notification

- Local Public Health Unit must be notified of any suspect or confirmed outbreak.
 - Discuss initial control measures that have been done
 - Obtain outbreak number
 - Provide contact name of primary person from the home/point of contact
- Long-term Care – notify MOHLTC through the Critical Incident System



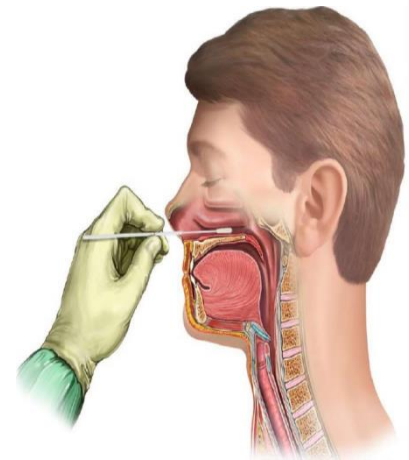
Information to give the PHU

- Provide the line-list.
- Provide the total number of residents and staff.
- Determine with PHU if outbreak is confined to a unit/floor or facility wide. Provide a layout of the facility
- Provide information on any specimen collection done and follow any direction given by the PHU.
- For COVID-19 cases:
 - Provide list of staff, visitors and resident contacts as directed by the PHU.
 - Include anyone who has left the facility.




Collect specimens

- During COVID-19 pandemic, testing is required of all symptomatic residents/staff and resident roommates.
- Make sure the transport media isn't expired.
- Every specimen is tested for SARS-COV-2 and up to 4 outbreak specimens will have FLUVID testing.
- Enteric outbreak – Maximum of 5 stool samples per outbreak can be submitted to the lab.
- Follow any recommendations for specimen collection from PHU.



Outbreak Management Team (OMT)

- Initial OMT meeting to occur right away and throughout the outbreak.
- Have an agenda and take minutes through the meeting.
- Discuss action items and assign most responsible person.
- Review outbreak control measures – refer also to specific outbreak measures control checklist from local PHU.



Notes
Outbreak Management Team
Meeting
May 31, 2021 at 2:00 pm
Virtual Meeting via Teams

Attendees:

Title	Name	Title	Name
Physician		Director of food services	
DOC		Administrator	
ICP		Director of Environmental Services	
Director of Nursing		Other	
PHU representative		Other	
Director of housekeeping		Other	

NO.	ITEM	MRP	NOTES
1.0	Welcome		
2.0	Review Case Definition		
3.0	Review Line-Lists and Epi Curve		
4.0	Specimen Collection -Number of specimens collected -Review Results		
5.0	Review staff and resident cohorting		
6.0	Review IPAC measures -practice audits of IPAC practices (PPE doffing, hand hygiene, environmental cleaning)		
7.0	Additional items to be discussed		
8.0	Date of next meeting (June 1, 2021) and Adjournment		



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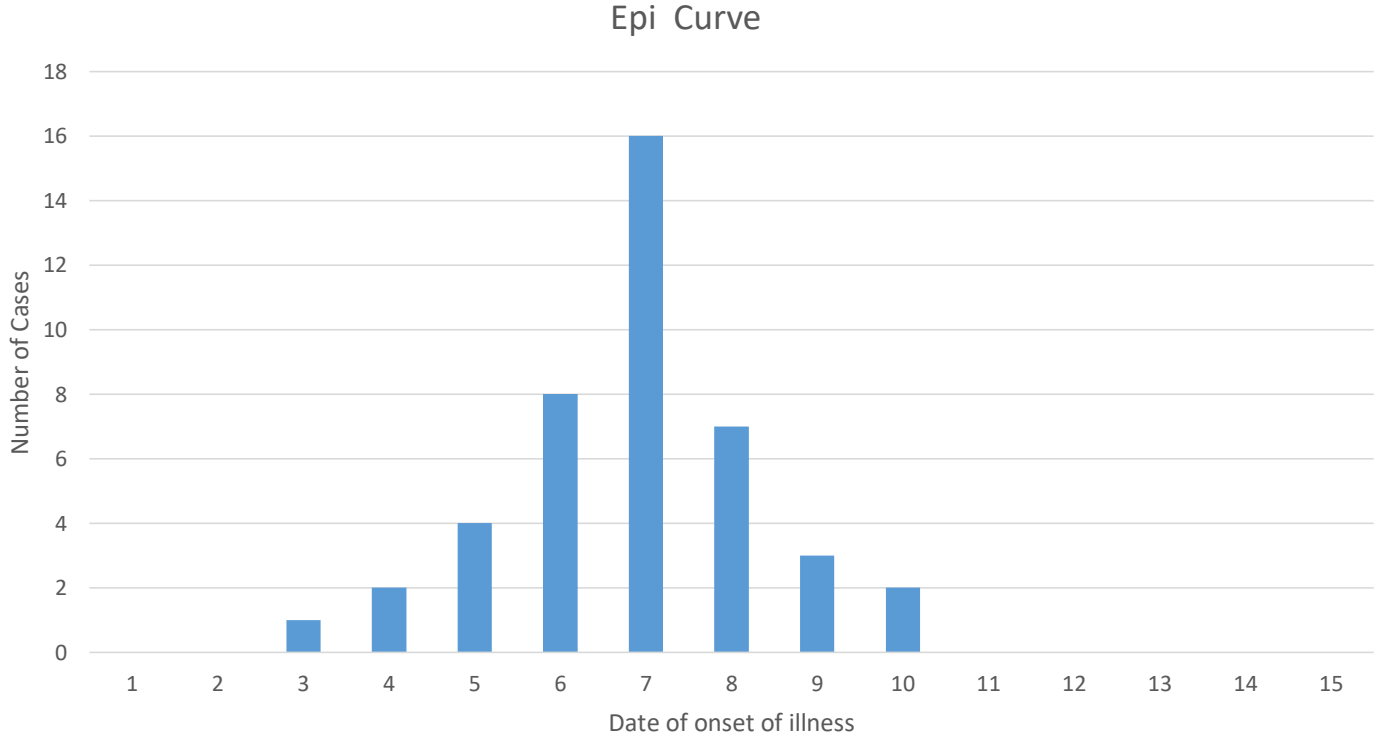
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Outbreak Management Team (OMT)

- OMT duties include:
 - Reviewing case definition
 - Reviewing line-list
 - Review epidemic curve
 - Confirming plans for specimen collection and transportation
 - Review and implement control measures
 - Plans for cohorting
 - Audits and Monitoring – who will be doing and when
 - Communications
- Confirm process for laboratory test result communication




Epidemic Curve



Outbreak Control Measures

- Each PHU will have an outbreak control measures checklist to be implemented and reviewed.

OB Number: _____

 KFL&A
Public Health

Respiratory Outbreak Control Measures Checklist

Facility: _____ Date: _____

Date OB Declared: _____ Date OB Declared Over: _____

Case Definition: _____

Date of initial Outbreak meeting: _____

CONSULT WITH PUBLIC HEALTH
<input type="checkbox"/> Obtain outbreak number from Public Health (PH)
<input type="checkbox"/> Begin a respiratory line listing; fax to PH
<input type="checkbox"/> Obtain swabs from ill residents using nasopharyngeal kits and send to Public Health Lab; on the weekend, consult with PH manager on-call before obtaining samples
NOTIFICATION
<input type="checkbox"/> Call family and notify of the outbreak
<input type="checkbox"/> Notify visitors – post signs on entrance doors to facility
<input type="checkbox"/> Notify MOHLTC compliance advisor
IMPLEMENT DROPLET/CONTACT PRECAUTIONS
<input type="checkbox"/> Increase hand hygiene. Alcohol-based hand rub containing at least 70% alcohol preferred when hands not visibly soiled
<input type="checkbox"/> Reinforce hand hygiene with staff, residents, visitors and volunteers. Assist residents with compliance.
<input type="checkbox"/> Gloves – upon entry to room, discard after use, perform hand hygiene
<input type="checkbox"/> Gowns – for direct resident care
<input type="checkbox"/> Masks and eye protection – fluid resistant surgical/procedure mask for direct resident care; discard after use; use within 2 meters of a coughing resident
ENVIRONMENTAL CONTROLS
<input type="checkbox"/> Increase cleaning frequency of high touch surfaces
<input type="checkbox"/> Dedicate resident care equipment to ill resident; if not dedicated, clean and disinfect between residents
<input type="checkbox"/> Handle linen and garbage carefully
<input type="checkbox"/> Ensure chemical concentration of the disinfectant meets manufacturer's instructions and the solutions are changed frequently; pay special attention to contact times
OUTBREAK MANAGEMENT TEAM (OMT) MEETING
<input type="checkbox"/> Form an OMT with representation from each operational area of the facility; include those with decision-making authority and a representative from PH
<input type="checkbox"/> Differentiate between a sporadic case and outbreak-associated case when identifying the last outbreak-related resident and staff case
RESIDENTS
<input type="checkbox"/> Restrict cases to room – for infectious period (usually 5 days) or until symptoms are completely resolved, whichever is shorter
<input type="checkbox"/> Restrict well residents to unit.

SEE NEXT PAGE
→



Outbreak Control Measures

Environmental Controls

- Use a hospital grade disinfectant
 - Has a drug identification number (DIN)
 - Approved for use in Canadian health care settings
 - Has a stated kill time for common organisms
- Enhanced cleaning and disinfection
 - Cleaning – physical removal of foreign and organic material by scrubbing, washing, rinsing
 - Disinfection – inactivates pathogens and reduces the bioburden
- Do not double-dip if using the bucket method
 - Use a fresh cloth in the bucket each time and put the used cloth in a separate container for disposal/laundry.



Outbreak Control Measures

Disinfectants

- Always follow the manufacturer's instructions for use.
 - Contact time
 - Appropriate dilution
 - Usage instructions
 - Storage
 - Expiration date

Outbreak Control Measures

- Certain set of measures to be followed during the COVID-19 pandemic for known/suspect cases:
 - Communal dining – Discontinue communal dining in affected areas and switch to tray service.
 - Group activities – Cancel all group activities
 - Visitors – No general visitors; essential visitors are allowed.
- Signage
- Education

Source: Ontario Agency for Health Protection and Promotion (Public Health Ontario). COVID-19: infection prevention and control checklist for long-term care and retirement homes. Toronto, ON: Queen's Printer for Ontario; 2020. Available from: <https://www.publichealthontario.ca/-/media/documents/ncov/ipac/covid-19-ipack-checklist-ltcrh?la=en>.



Outbreak Control Measures

- Cohort
 - A cohort is a group of people who have or may have a pathogen or are at similar risk of developing an infection from the pathogen.
- Defining the cohorts
 - Determine if the whole facility will be considered the outbreak area or if there is also a non-outbreak area.
 - Consider how to separate and restrict movement between the affected and unaffected units to limit exposures and transmission

Source: Ontario Agency for Health Protection and Promotion (Public Health Ontario). Focus on: cohorting in outbreaks in congregate living settings. Toronto, ON: Queen's Printer for Ontario; 2020. Available from: <https://www.publichealthontario.ca/-/media/documents/ncov/cong/2020/06/focus-on-cohorting-outbreaks-congregate-living-settings.pdf?la=en>.



Staff Cohorting

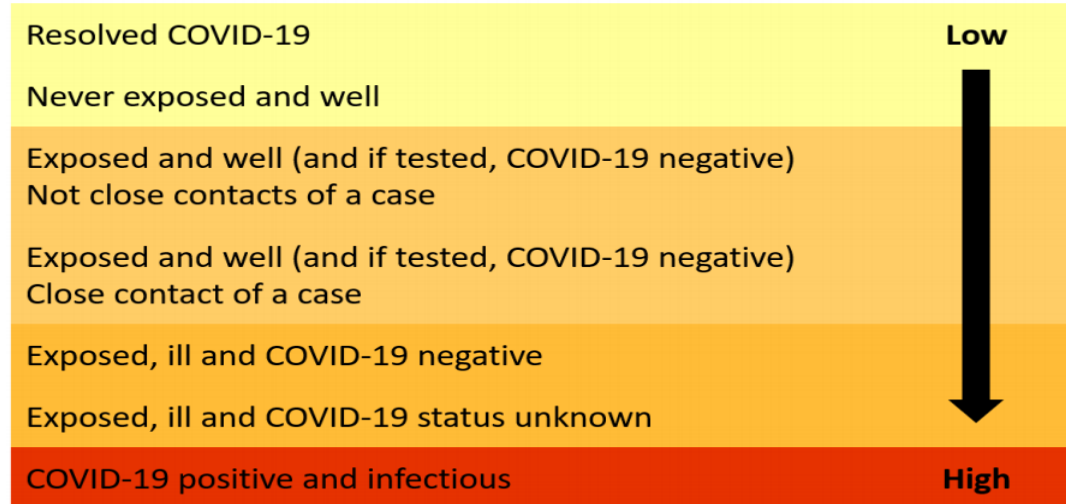
- Staff Cohorting: Assign staff to care for a particular group of residents (e.g. unaffected residents) and other staff to look after ill residents.
- If possible, staff should be assigned to one cohort only. Ideally for the duration of the outbreak.
- If residents of a specific cohort are not in the same geographical area in the facility then staff must still care for only that one cohort.
- Keep staff assigned to different cohorts separate from each other (e.g. breakrooms, medication and supply rooms, etc.)

Source: Ontario Agency for Health Protection and Promotion (Public Health Ontario). Focus on: cohorting in outbreaks in congregate living settings. Toronto, ON: Queen's Printer for Ontario; 2020. Available from: <https://www.publichealthontario.ca/-/media/documents/ncov/cong/2020/06/focus-on-cohorting-outbreaks-congregate-living-settings.pdf?la=en>.



Staff Cohorting

- If staff must work in different cohorts then they should go from lowest risk cohort to highest risk.
- Example during a COVID-19 outbreak:



Resident Cohorting

- Resident Cohorting: Grouping residents based on their risk of infection or whether they have tested for positive during the outbreak.
- Any resident moves should be in accordance with the policies and procedures of the setting and the rights of the residents.
- Consider:
 - Separation in cohorts and spacing in sleeping areas
 - Meal delivery
 - Bathroom requirements
 - Additional mental, emotional supports
 - Alternate activities and entertainment



Monitor the Outbreak

- Daily OMT meetings to review control measures, status of outbreak and identify issues.
- Monitor supplies including PPE.
- Ongoing active surveillance to determine if any new cases in residents or staff.
- Monitor precautions and IPAC measures.
- Consider contacting us to help with audits for PPE use, hand hygiene, etc.



Update the PHU

- Fax daily line-lists
- Provide updates to PHU on ill residents and staff on any significant changes to their outcomes
 - Update on any transfers to hospitals.



Declaring the Outbreak Over

COVID-19

- COVID-19 outbreak must be declared over by the PHU.
- The outbreak may be declared over by the PHU when there are no new cases in residents or staff after 14 days (maximum incubation period) from the latest of:
 - Date of isolation of the last resident case; OR
 - Date of illness onset of the last resident case; OR
 - Date of last shift at work for staff cases

Source: Ontario Ministry of Health. COVID-19 Guidance: Long-term care homes and retirement homes for Public Health Units. Toronto, ON: Queen's Printer for Ontario, 2021. Available from: https://www.health.gov.on.ca/en/pro/programs/publichealth/coronavirus/docs/2019_LTC_homes_retirement_homes_for_PHUs_guidance.pdf.



Declaring the Outbreak Over

Respiratory (not COVID-19)

- Outbreak is declared over by Public Health when there's no evidence of ongoing transmission
 - Based on the causative organism
 - Period of communicability + one incubation period
 - Influenza: no new cases in 8 days (5 days communicable + 3 incubation)

Source: Ontario. Ministry of Health and Long-Term Care. Control of Respiratory Infection Outbreaks in Long-Term Care Homes, 2018 [Internet]. Toronto, ON: Queen's Printer for Ontario, 2018. Available from: https://www.health.gov.on.ca/en/pro/programs/publichealth/oph_standards/docs/reference/RESP_Infectn_ctrl_guide_LTC_2018_en.pdf.



Declaring the Outbreak Over

Gastroenteritis

- Determined on a case-by-case basis by PHU.
- Depends on the etiological agent
 - one infectious period + one incubation period
- Norovirus can be declared over after no new cases for 5 days (3+2).

OR

- 48 hours after symptoms have resolved from the last case and
 - All appropriate precautions were taken
 - No confirmed etiologic agent
 - Norovirus was not suspected

Source: Ontario. Ministry of Health and Long-Term Care. Recommendations for the control of Gastroenteritis outbreaks in long-term care homes, 2018 [Internet]. Toronto, ON: Queen's Printer for Ontario, 2018. Available from: https://www.health.gov.on.ca/en/pro/programs/publichealth/oph_standards/docs/reference/Control_Gastroenteritis_Outbreaks_2018_en.pdf.



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Outbreak Investigation File

- Keep all correspondence and documentation including summary report and lab results.
- Assess what went well and the lessons learned/areas for improvement
 - Use this information to update outbreak policies and procedures

Outbreak Case Scenario





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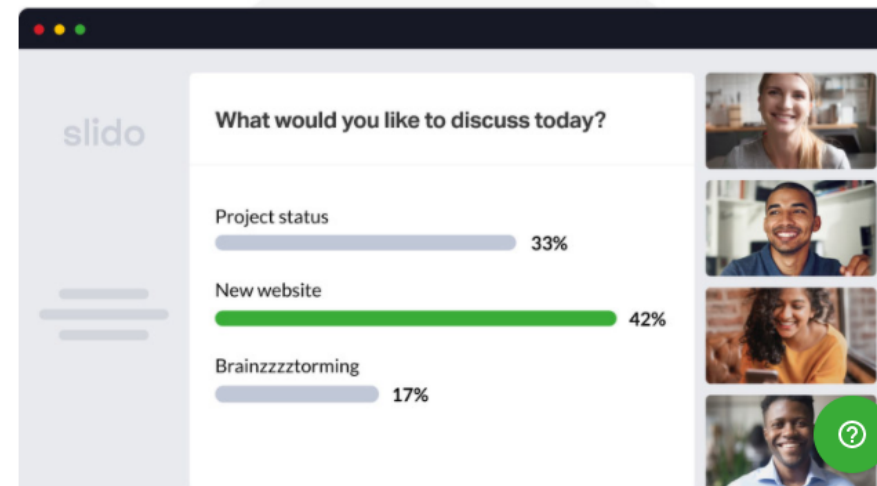


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A screenshot of a Slido event interface. The top navigation bar is blue and contains a menu icon, the event title "IPAC Education #1:Outbre...", a "Q&A" tab, a "Polls" tab, and a user profile icon. Below the navigation bar, the event title "IPAC Education #1:Outbreak Mana..." is displayed, along with the date "May 28, 2021" and the hashtag "#IPAC". A sidebar on the left contains three items: "Live interaction" with a chat icon, "Switch event" with a double arrow icon, and "Dark mode" with a gear icon and a toggle switch. The main content area shows a message "There are no active polls at the moment." with a green button labeled "Go to Q&A".



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What is your favourite fruit?

 Start presenting to display the poll results on this slide.

Case Scenario - Part A

You are the DOC for a 72 bed home.

There are THREE wings with 24 residents on each wing
(main wing, upper wing, lower wing).



Case Scenario - Part A

At 7 am, the night staff have indicated on turn over the following:

- **Main wing:** Two residents are experiencing a runny nose and cough (R1 and R2). R2 normally has a smoker's cough. A different resident experienced one episode of vomiting during the night (R3).
- **Lower wing:** One resident had one episode of vomiting (R4)
- **Upper wing:** One resident had an episode of diarrhea (R5)

What are your first steps?



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Part A - What are your first steps?

 Start presenting to display the poll results on this slide.

Part A - Actions

- ✓ Review each case
- ✓ Isolate ill residents
- ✓ Start a line list
- ✓ Collect specimens, if applicable for resident

Case Scenario - Part B

More information is known as you are reviewing each case. The following is noted:

- R1 is now presenting with additional symptoms: sneezing, sore throat, fever (in addition to runny nose and cough)
- R2 and R3 has no additional symptoms or episodes.
- R4 is eating well and indicates feeling great. It was noted that the resident started a new medication yesterday.
- R5 has no further episodes or other symptoms. It was noted a laxative was provided to the resident due to constipation.

What are your next steps?



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Part B - What are your next steps?

 Start presenting to display the poll results on this slide.

Part B - Actions

- ✓ Update and review line list
- ✓ Monitor residents

Respiratory Outbreak Line Listing

This form is for use during institutional outbreaks or outbreak investigations.

Outbreak Number: _____ Name of Facility: Cascading Falls Home Staff Line List OR Resident List
 Date: May 28, 2021 Unit/Floor: _____ Facility Contact: DOC Yours Truly
 Case Definition: _____ Phone Number: 555-555-5555
 Fax Number: 555-555-5556

Please line list each resident or staff member once only.

	Case Identification				Symptoms (new onset)										Specimens/Diagnostics			Prophylaxis/Treatment		Outcome									
	Name	Room Number	Gender (Male or Female)	Date of Birth (day/month/year)	Onset date (day/month/year)	Abnormal temperature (record in °C)	Runny nose or sneezing	Nasal congestion	Sore throat/hoarseness	Dry Cough	Productive Cough	Swollen glands in neck	Tiredness (malaise)	Muscle aches (myalgia)	Poor appetite	Headache	Chills	Other (please specify)	Nasopharyngeal (day/month)	Result - Direct (+/-)	Result - PCR/NAT (+/-)	Result - Culture (+/-)	Flu Vaccine (yes/no)	Prophylaxis (day/month)	Treatment (day/month)	Resolved (day/month)	Hospitalization (day/month)	Death (day/month)	
R1	John Doe	M4	M		*	X	X	X	X																				
R2	Bob Energizer	M5	M		*		X																						
R3	Sally Cadeau	M2	F		*											1 episode vomiting													

* = May 28, 2021

Case Scenario - Part C


- R2 is now experiencing a worsened cough.
- R3 is now experiencing cough and fatigue. No further episodes of vomiting reported.
- Another two residents are now presenting with cough, fever, and fatigue (R6 and R7) both located on the main wing.
- One staff member has called in sick and reported sore throat and fever. The staff member worked yesterday.

What are your next steps?



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Part C - What are your next steps?

 Start presenting to display the poll results on this slide.

Part C - Actions

- ✓ Review new cases
- ✓ Isolate newly ill residents
- ✓ Collect specimen
- ✓ Begin a staff line list
- ✓ Update and review resident line list

Respiratory Outbreak Line Listing

This form is for use during institutional outbreaks or outbreak investigations.

Outbreak Number: _____

Name of Facility: Cascading Falls Home

Staff Line List OR Resident List

Date: May 28, 2021

Unit/Floor: Main Wing

Facility Contact: DOC Yours Truly

Phone Number: 555-555-5555

Case Definition: _____

Fax Number: 555-555-5558

Please line list each resident or staff member once only.

Case Identification				Symptoms (new onset)											Specimens/Diagnostics				Prophylaxis/Treatment			Outcome							
Name	Room Number	Gender (Male or Female)	Date of Birth (day/month/year)	Onset date (day/month/year)	Abnormal temperature (record in °C)	Runny nose or sneezing	Nasal congestion	Sore throat/pharyngitis	Dry Cough	Productive Cough	Swollen glands in neck	Tiredness (malaise)	Muscle aches (myalgia)	Poor appetite	Headache	Chills	Other (please specify)	Nasopharyngeal (day/month)	Result - Direct (+/-)	Result - PCR/NAT (+/-)	Result - Culture (+/-)	Flu Vaccine (yes/no)	Prophylaxis (day/month)	Treatment (day/month)	Resolved (day/month)	Hospitalization (day/month)	Death (day/month)		
R1	John Doe	M4	M	*	X	X		X	X																				
R2	Bob Energizer	M5	M	*		X			X																				
R3	Sally Cadeau	M2	F	*					X		X					1 episode vomiting													
R6	Mary Glasses	M3	F	*	X				X		X																		
R7	Lucy Maple	M1	F	*	X				X		X																		

* = May 28, 2021

	Name	Room Number	Gender (Male or Female)	Date of Birth (day/month/year)	Onset date (day/month/year)	Abnormal temperature (record in °C)	Runny nose or sneezing	Nasal congestion	Sore throat/pharyngitis	Dry Cough	Productive Cough	Swollen glands in neck	Tiredness (malaise)	Muscle aches (myalgia)	Poor appetite
R1	John Doe	M4	M		▪	X	X		X	X					
R2	Bob Energizer	M5	M		▪		X			X					
R3	Sally Cadeau	M2	F		▪					X		X			
R6	Mary Glasses	M3	F		▪	X				X			X		
R7	Lucy Maple	M1	F		▪	X				X			X		

Confirmed Respiratory Outbreak:

Two cases of acute respiratory infections (ARI) within 48 hours with any common epidemiological link (e.g., unit, floor), at least one of which must be laboratory confirmed;

OR

Three cases of ARI (laboratory confirmation not necessary) occurring within **48 hours** with any **common epidemiological link** (e.g., unit, floor).

Part C – Actions (continued)

- ✓ Review new cases
- ✓ Isolate newly ill residents
- ✓ Collect specimen, if applicable
- ✓ Begin a staff line list
- ✓ Update and review resident line list
- ✓ ***Notify Public Health***



Case Scenario - Part D

- Public Health has now declared a confirmed respiratory outbreak on the Main Wing of the home.
- You have received an outbreak number from Public Health. It is written on your test requisitions for the specimens collected. It's shipped out to the lab for testing.
- You have discussed with Public Health what control measures will be implemented in the home. Some are already put in place; additional measures are to be put in place.



Part D – Actions

- ✓ Establish an Outbreak Management Team (OMT)
- ✓ Implement the recommended control measures
- ✓ Continue to ...
 - Monitor residents and staff
 - Communicate with staff, residents, and families
 - Communicate with your local PHU and follow their guidance and direction



Case Scenario – Part E

You have received the following lab results for the specimens collected:

- Resident 1: COVID-19 not detected, RSV detected
- Resident 2: COVID-19 not detected, no pathogen identified
- Resident 3: COVID-19 not detected, RSV detected
- Resident 6: COVID-19 not detected, RSV detected
- Resident 7: COVID-19 not detected; respiratory panel cancelled

Case Scenario – Post-OB Considerations

- ✓ Conduct Outbreak Debrief with your team
 - Review current outbreak protocols
 - *What went well? What can be improved?*
- ✓ Consider how to slowly return back to “normal” function

Outbreak Management Resources

Each Public Health Unit has their own outbreak resources

- Leeds, Grenville & Lanark District Health Unit - <https://healthunit.org/for-professionals/hospitals-ltc-retirement-homes/outbreak-management-resources/>
- KFL&A Public Health - <https://www.kflaph.ca/en/partners-and-professionals/Respiratory-Outbreak-Control-Measures-Checklist.aspx>
 - Use the Sync.com for Line lists and outbreak control measures checklist
 - Please contact KFL&A Public Health for a copy of the outbreak binder
- Hastings, Prince Edward Public Health - <https://hpepublichealth.ca/outbreak-management/>



Questions?

Contact us by email:

SEhubintake@kingstonhsc.ca

Visit our website at:

<https://kingstonhsc.ca/healthcare-providers/se-ipac-hub-and-spoke>



Discussion Point!

What is the biggest hurdle in preparing for an outbreak?



Thank You!

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Discussion Point!

What are some of the challenges faced with implementing an IPAC program in your home?



Thank You!

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Discussion Point!

What are some of the challenges faced with conducting surveillance in your home?

Discussion Point!

Because of the focus on COVID-19, what are the challenges in recognizing clusters of gastroenteritis or respiratory infections?



References

- Centres for Disease Control and Prevention. Personal protective equipment (PPE) burn rate calculator [Internet]. Atlanta, GA: Centers for Disease Control and Prevention; 2021 [cited 2021 Apr 8]. Available from: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/burn-calculator.html>.
- Ontario Agency for Health Protection and Promotion (Public Health Ontario). COVID-19: infection prevention and control checklist for long-term care and retirement homes. Toronto, ON: Queen's Printer for Ontario; 2020. Available from: <https://www.publichealthontario.ca/-/media/documents/ncov/ipac/covid-19-ipack-checklist-ltcrh.pdf?la=en>.
- Ministry of Health and Long-Term Care. Control of Respiratory Infection Outbreaks in Long-Term Care Homes, 2018. Toronto, ON: Queen's Printer for Ontario; November 2018. Available from: https://www.health.gov.on.ca/en/pro/programs/publichealth/oph_standards/docs/reference/RESP_Infectn_ctrl_guide_LTC_2018_en.pdf.
- Ministry of Health and Long-Term Care. Recommendations for the Control of Gastroenteritis Outbreaks in Long-Term Care Homes, 2018. Toronto, ON: Queen's Printer for Ontario; November 2018. Available from: https://www.health.gov.on.ca/en/pro/programs/publichealth/oph_standards/docs/reference/Control_Gastroenteritis_Outbreaks_2018_en.pdf.
- Ministry of Health and Long-Term Care. Appendix B: Provincial Case Definitions for Diseases of Public Health Significance [Internet]. Available from: https://www.health.gov.on.ca/en/pro/programs/publichealth/oph_standards/docs/gastro_outbreaks_cd.pdf
- Ministry of Health. COVID-19 Screening Tool for Long-Term Care Homes and Retirement Homes. Available from: https://www.health.gov.on.ca/en/pro/programs/publichealth/coronavirus/docs/2019_screening_guidance.pdf.
- Ontario Agency for Health Protection and Promotion, Provincial Infectious Diseases Advisory Committee. Routine Practices and Additional Precautions in All Health Care Settings. 3rd edition. Toronto, ON: Queen's Printer for Ontario; November 2012. Retrieved from: <https://www.publichealthontario.ca/-/media/documents/B/2012/bp-rpap-healthcare-settings.pdf?la=en>.



References (continued)

- Ontario Ministry of Health. COVID-19 Guidance: Long-Term Care Homes and Retirement Homes for Public Health Units. Toronto, ON: Queen's Printer for Ontario; 2021. Retrieved from: https://www.health.gov.on.ca/en/pro/programs/publichealth/coronavirus/docs/2019_LTC_homes_retirement_homes_for_PHUs_guidance.pdf.
- Ontario Agency for Health Protection and Promotion (Public Health Ontario). Focus on: cohorting in outbreaks in congregate living settings. Toronto, ON: Queen's Printer for Ontario; 2020. Available from: <https://www.publichealthontario.ca/-/media/documents/ncov/cong/2020/06/focus-on-cohorting-outbreaks-congregate-living-settings.pdf?la=en>.
- Ontario Agency for Health Protection and Promotion (Public Health Ontario). COVID-19: infection prevention and control checklist for long-term care and retirement homes. Toronto, ON: Queen's Printer for Ontario; 2020. Available from: <https://www.publichealthontario.ca/-/media/documents/ncov/ipac/covid-19-ipack-checklist-ltcrh?la=en>.
- Ontario Agency for Health Protection and Promotion (Public Health Ontario). Focus on: cohorting in outbreaks in congregate living settings. Toronto, ON: Queen's Printer for Ontario; 2020. Available from: <https://www.publichealthontario.ca/-/media/documents/ncov/cong/2020/06/focus-on-cohorting-outbreaks-congregate-living-settings.pdf?la=en>.
- Ontario Ministry of Health. COVID-19 Guidance: Long-term care homes and retirement homes for Public Health Units. Toronto, ON: Queen's Printer for Ontario, 2021. Available from: https://www.health.gov.on.ca/en/pro/programs/publichealth/coronavirus/docs/2019_LTC_homes_retirement_homes_for_PHUs_guidance.pdf.
- Ontario Agency for Health Protection and Promotion (Public Health Ontario). Examples for Resident Cohorting in Long-Term Care Homes. Toronto, ON: Queen's Printer for Ontario; 2021. Available from: <https://www.publichealthontario.ca/-/media/documents/ncov/ltcrh/2021/01/resident-cohorting-ltch-infographic.pdf?la=en>.
- Ontario Agency for Health Protection and Promotion (Public Health Ontario). Infection prevention and control for long-term care homes: summary of key principles and best practices. Toronto, ON: Queen's Printer for Ontario; 2020. Available from: <https://www.publichealthontario.ca/-/media/documents/i/2021/ipac-ltch-principles-best-practices.pdf?la=en>
- Ontario Agency for Health Protection and Promotion (Public Health Ontario), Provincial Infectious Diseases Advisory Committee. Best practices for surveillance of health care-associated infections in patient and resident populations. 3 rd ed. Toronto, ON: Queen's Printer for Ontario; 2014. Available from: <https://www.publichealthontario.ca/-/media/documents/B/2014/bp-hai-surveillance.pdf?la=en>

