Outbreak Preparedness Toolkit

Respiratory Outbreak Table Top Activity

Facilitator's Guide

Time Required: 45 to 60 min

Target Audience: Individuals involved with OB management at the facility, such as: IPAC Leads/Back-ups, Nurse Managers (including evening and weekend), Directors or Care, Administrators, IPAC Champions, New hires (RNs, RPNs, PSWs)

Introduction

A tabletop exercise is a discussion based event that uses a progressive simulated scenario, together with a series of scripted injects to make participants consider the impact of a potential health emergency on existing plans, procedures and capacities. This exercise will walk through a respiratory outbreak scenario. Let's get prepared!

Respiratory Outbreak Definitions (Ministry of Health, May 2022):

- Confirmed Respiratory Infection Outbreak Definition:
  - 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).
- Suspect Respiratory Infection Outbreak Definition:
  - Two cases of ARI occurring within 48 hours with any common epidemiological link (e.g., unit, floor); OR
  - One laboratory-confirmed case of influenza.

** Note: Suspect Outbreak notifications reported to Toronto Public Health on weekends and holidays are followed up on next business day; Confirmed Outbreak notifications are addressed via lrct@toronto.ca 7 days/week*

Objectives

- Identify existing response protocols/plans at participants' local facilities.
- Promote inter-professional collaboration, coordination and communication.
- Emphasize importance of communication among staff at a long-term care facility or retirement home, with Toronto Public Health and hospital IPAC hub, and to patients/families.
- Orient participants to the roles and responsibilities of stakeholders involved in a respiratory outbreak at the facility.

Instructions

Read through the following respiratory outbreak scenario and questions below to engage in discussions and next step planning as the scenario evolves. Questions are presented at various stages of the scenario and the decisions made will help guide the outcomes of the scenario. This exercise is intended to be an informal, inclusive and non-judgemental environment. The participant worksheet that accompanies this facilitator guide can be used to record discussions and answers to the questions. Facilitator may print off the participant worksheet for each participant to record their answers.

Note: If you would like to obtain a PowerPoint version of this activity, please email your TPH Liaison or LRCT@toronto.ca.

Activity

Respiratory Outbreak Scenario

Background

Strawberry Care Home is a 120 bed facility divided into 4 units (Unit A, B, C and D), each with 30 beds. Each unit is comprised of the following:

- 6 private (1 bed) rooms
- 3 semi-private (2 bed) rooms
- 3 previous ward-style (4 bed) rooms, currently with two residents maximum per room

The facility has 2 shared dining spaces (each used by 2 units: A and B share, and C and D share) and there is 1 shared activity space that is utilized by all 4 units.

March 1

During morning rounds on Unit B, resident Green Pear is more sleepy than usual, and later in the day is found to be febrile (38.5ºC). He is non-verbal at baseline due to advanced Alzheimer dementia. He was in his usual state of health until this morning. He lives in a private (1 bed) room. He eats all meals in the dining facility on his floor and sits with 1 other resident. He occasionally visits the shared activity space (2 to 3 times per week). Green Pear is fully vaccinated for COVID-19, last dose in February. Green Pear received influenza vaccine this year.

1. **What additional information would be important to gather from the facility?**
   - Are there any staff on the unit (especially those who directly care for Green Pear) who have recently been sick?
   - Are there other residents on the unit (and throughout the entire long-term care home) that are sick or who have had similar symptoms recently?
   - Are they up to date with COVID-19 vaccine? Date of last dose?
   - Date of last time Green Pear was offsite?
2. **What are the next steps that should be taken by the ICP and/or other staff at the facility?**

- Contact the long-term care home physician regarding Green Pear's status and for initiation of treatment.
- Obtain nasopharyngeal swab from Green Pear for Multiplex Respiratory and COVID-19.
- Place Green Pear in droplet/contact precautions:
  - Strict hand hygiene for healthcare workers (all 4 moments) and wear masks/face shields, gowns, and gloves for all encounters.
  - Personal protective equipment and dedicated alcohol-based hand wash readily available outside resident's room.
  - Clear droplet/contact signage placed on or by resident's door
  - Resident to remain in room as much as possible (meals delivered to room)
  - Increased cleaning of resident's room.
  - Heightened surveillance for additional cases of respiratory infection (especially for close contacts e.g., dining partner, other individuals in shared activity space).

3. **If Green Pear was in a semi-private room or ward-style room, would Green Pear have curtains drawn when in DCP? Yes or No?**
   - Yes, place Green Pear in DCP with curtains drawn.

March 3

Green Pear's nasopharyngeal swab returns positive for RSV. You are informed that 2 other individuals on Green Pear's unit (Unit B) have developed similar symptoms of fever, myalgia, malaise, and cough.

4. **Does this meet an outbreak definition?**

Yes, as per Appendix 1: Case Definitions and Disease Specific Information. Disease: Respiratory Infection Outbreaks in Institutions and Public Hospitals; May 2022

Reminder/Discussion:

- The case definition is made in partnership with TPH and the affiliated Hospital Hub at the OMT meeting. When creating the case definition, be specific. Think

about who (epidemiology), when (period of communicability, period of exposure), and what (clinical findings and laboratory testing).

Example case definition:

A resident or staff member *(WHO)* on Unit B of Long-term Care Home *(WHERE)* with illness onset on or after DATE *(WHEN)* with *(WHAT)*:

- Laboratory confirmation of respiratory infection, and/or
- Experiencing 2 or more of the following symptoms:
    - Temperature ≤35.5ºC or ≥37.5ºC (or abnormal for resident), malaise, myalgia/arthralgia, headache, loss of appetite, loss of energy, pharyngitis, rhinorrhea, congestion, new or increased cough, new or increased sputum production, new or increased dyspnea.
- Note that long-term care home or retirement home residents may not (1) present with the "classic" symptoms of an acute respiratory infection (cough, fever, muscle aches) and (2) be able to express their symptoms (e.g., speech impediment, cognitive impairment).
- Presenting symptom(s) may be subtle:
    - Change in ability to perform activities of daily living.
    - Altered energy level and increased sleeping duration.
    - Reduced appetite and oral intake.
    - Other symptoms can include: Sore throat, runny nose, headache, fatigue, loss of appetite, nausea, vomiting, diarrhea.

5. What are your immediate control measures?

- Place all symptomatic patients in droplet/contact precautions.
- Heightened surveillance for additional residents on the unit with symptoms (especially in close contacts such as roommates, shared dining partners, shared activity partners).
- Follow all routine practices and additional precautions, as for Green Pear.
- Start a line list of all residents and staff with acute respiratory infection symptoms.
- Post notification signage.
- Enhance environmental cleaning.

- Note: Review **Initial Exposure/Outbreak Control Measures** document.
- Contact the TPH Liaison.

Additional Info to discuss: Nasopharyngeal Specimen Collection

- If there are nasopharyngeal swabs in stock at the facility, need to ensure they are not expired.
- Nasopharyngeal swabs should be stored in an easily accessible location, which should be communicated clearly with the nursing staff before respiratory virus season.
- Resident name and date of birth must be on all specimen containers.
- Work with Toronto Public Health to:
    - Obtain additional nasopharyngeal swabs, if required.
    - Complete laboratory requisitions.

March 3

You contact your liaison with Toronto Public Health, who confirms that the case meets outbreak definition. They ask you to establish an Outbreak Management Team and schedule a meeting. Toronto Public Health will attend the meeting along with a representative from your affiliated hospital Infection Prevention and Control hub**.**

March 4

The next morning, the **Outbreak Management Team** meets and you strategize the next steps.

6. What are some of the priorities you discuss and identify at the OMT meeting?

- Consider closing communal spaces (e.g., dining room, shared activity spaces) and canceling group activities.
- Discuss plans for further testing and when DCP can be discontinued for residents.
- Clarify admission/transfer process during outbreak.
- Ensure outbreak notification signs posted throughout facility.
- Enhanced environmental cleaning.

- More frequent cleaning of high-touch surfaces/objects (e.g., countertops, hallway railings, light switches, door handles) with veridical agent.

Residents

- Residents to remain in rooms (and at least on units) as much as possible for duration of outbreak.
- **Symptomatic/laboratory confirmed:**
  - Immediately place in droplet/contact precautions (to remain for 5 days or until symptom resolution for 24 hours, whichever is shorter).
- **Asymptomatic:**
  - Heightened surveillance for additional cases.

Staff

- Any staff with symptoms should notify Occupational Health and immediately refrain from working until cleared.
- Staff to be cohorted to outbreak unit as much as possible.
- Staff working at multiple facilities should avoid working at other facilities while current facility is on outbreak.
  - Advise staff to always check with other places of work and follow their specific policies.

March 5

Since the last outbreak meeting, four residents on Unit B, three residents on Unit C, one resident on Unit D and two residents on Unit A have developed symptoms. In addition, the healthcare worker who was assigned to Green Pear on March 3 has developed symptoms, as have two other employees on that unit. All of these symptomatic residents and staff have tested negative for COVID-19.

9. Should this outbreak be expanded to Facility-Wide (after consultation with TPH)? Yes or No?

- Outbreak expanded facility-wide (after consultation with TPH).
  - Extend outbreak measures to entire facility.
  - All residents and healthcare workers at long-term care facility to follow measures outlined.

        - Resident movement should be restricted (at least to unit-level).
        - Cohort staff to unit-level.
    - Symptomatic staff to report to Occupational Health and Safety and immediately leave work.
        - Return to work as per Occupational Health and Safety guidance.
    - Remember: all symptomatic residents should still be tested for COVID-19.

10. Green Pear has two visitors who would like to visit him on March 7th. His daughter, who is his Essential Caregiver (ECG), and his daughter's husband. What visitation policies are discussed and established during the OMT?

- Complete closure of the long-term care home is not permitted unless order issued by Toronto Public Health.
- Visitation policies (to be discussed with Outbreak Management Team):
    - Visitors encouraged to receive influenza vaccination.
    - Ill visitors not allowed (unless extenuating circumstances).
    - Visitors encouraged to wear appropriate personal protective equipment and perform hand hygiene.
    - Visit resident in room only and avoid communal areas.
    - Visit only one resident (if possible) and leave facility immediately afterward.
    - **Essential caregivers** should be given special consideration
        - Defined as individuals who provide necessary support for resident (e.g., feeding, dressing, other activities of daily living).
        - Should always be allowed to visit even if home is on outbreak.

Ten days later on March 15, 2022

Over the last 10 days, there have been many changes at Strawberry Care Home:

- All unvaccinated staff and residents have been vaccinated
- Residents have their meals in their rooms (shared dining room closed)
- All shared activities cancelled

The last positive case was detected on March 7. There have been no further residents meeting the case definition since that time.

11. Can you declare the outbreak over?

- Toronto Public Health will officially make determination of the end of the outbreak.
- For respiratory outbreaks, generally the outbreak can be declared over if there have been no new cases that have occurred in 8 days from the onset of symptoms of the last resident case or 3 days from the last day of work of any ill staff (whichever is longer).
- For this scenario the last day of the outbreak is March 15 (8 days after the last case on March 7) and it can be declared over on March 16, 2022.

12. With the outbreak terminated, the outbreak management team has one final meeting. What steps can be taken to prevent or prepare for a similar outbreak next year?

- Review protocols for managing respiratory virus outbreaks (Outbreak Preparedness Plan), including protocols to communicate with Toronto Public Health liaison.
- Designate Infection Prevention and Control lead for your site, and provide resources for ongoing training and certification
- Establish relevant policies (e.g., healthy workplace, visitation during outbreak settings).
- Higher index of suspicion for acute respiratory illnesses when cases rise in the community.
- Ensure adequate supply of personal protective equipment.
- Ensure adequate supply of non-expired nasopharyngeal swabs before anticipated respiratory season.
- Although this was not an influenza scenario, it is important to have preauthorized antiviral consents and orders for all residents prepared prior to the start of the influenza season each year. As well to have processes in place to rapidly obtain antiviral medications (by Pharmacy).
- Annual influenza vaccination campaign, including education and awareness campaigns for benefits of vaccination, and development of policies for staff vaccination.

Debrief Discussion Questions

1. **If COVID-19 results come back first and they are negative, but the resident remains symptomatic, should they remain on DCP?**
   - Yes, keep resident on DCP while multiplex results still pending.

2. **When residents are on DCP, does it mean they need to be confined to their room at all times? If not, what are they able to do?**
   - Residents are able to leave their room in certain scenarios as long as the appropriate precautions are in place, such as the following:
     - Scheduled and supervised walks in the empty hallway, with both the resident and individual supervising (e.g. staff, essential caregiver) wearing appropriate PPE.
     - If there is a shared shower facility, a scheduled time can be set up so the resident is able to shower. Ensure the shower facility is disinfected after use.
     - Separate bathroom facilities should be in place for residents on DCP. However, if a shared washroom needs to be used, it should be disinfected between uses.
   - Consult with TPH and your Hospital Hub to discuss specific scenarios at your facility.
   - Note: Residents on DCP cannot participate in communal dining or group activities.
3. **How might this scenario played out differently if the residents of the facility were highly independent and moved socially from floor to floor? How might this scenario have been different if one of the involved units involved wandering residents/residents who have difficulty maintaining DCP? What suggestions could be made to mitigate spread in these circumstances?**
   - If residents are highly independent, transmission may have been higher amongst the floors.
   - If one of the involved unit involved wandering residents/residents who have difficulty maintaining DCP, suggestions could include:

- Consistent redirection resident to stay in room.
- Assigning a staff member to be 1:1 with the resident to reduce contact with other residents while wandering.
- Encouraging masking of wandering resident.
- Additional suggestions can be found in Dementia Isolation Toolkit resource.

4. **What went well during this exercise?**
5. **What did not go well?**
6. **What are some areas for improvement and/or ideas to incorporate into the workplace?**

Feedback

Thank you for completing the activity. We want to hear your feedback. Please complete this short survey (1-2 min) so we can continue to improve the tools.

https://s.tphsurvey.chkmkt.com/TPH_OBPrep_Toolkit

Additional Resources/References

- World Health Organization. (2017). WHO simulation exercise manual: a practical guide and tool for planning, conducting and evaluating simulation exercises for outbreaks and public health emergency preparedness and response. World Health Organization. https://apps.who.int/iris/handle/10665/254741. License: CC BY-NC-SA 3.0 IGO
- Ministry of Health Appendix 1: Case Definitions and Disease Specific Information. Disease: Respiratory Infection Outbreaks in Institutions and Public Hospitals; May 2022
- Toronto Public Health: Infection Prevention & Control Information for Long Term Care Homes & Retirement Homes
    - Click the above link to access the TPH tools, such as TPH Outbreak Alert Sign, COVID/Respiratory Line List, Initial Outbreak Notification Form and more!
- PHO COVID-19 and Respiratory Virus Test Requisition
- PHO Kit and Test Ordering Instructions
- TPH Outbreak Transfer Notification Form
- Dementia Isolation Toolkit

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