

Outbreak Preparedness Table Top Exercise: Enteric Outbreak Scenario Facilitator's Guide

Introduction: A tabletop exercise (TTX) 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. “A TTX simulates an emergency situation in an informal, stress-free environment” (WHO Exercise Manual, 2017). This is not an individual test, the goal is to identify issues now – before something happens.

Time required for activity: 45 to 60 min

Target Audience: Individuals involved with OB management at the facility.

Tabletop Objectives:

- Identify existing response protocols/plans at participants’ local facilities.
- Promote interprofessional collaboration, coordination and communication.
- Emphasize the 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 an enteric outbreak at the facility.

Instructions: Read through the following enteric 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.

Activity:

Enteric Outbreak Scenario

Background:

Apple Tree is a retirement home with 35 residents and 45 staff. It is comprised of 3 units: Willow, Birch and Maple. All resident rooms are single occupancy and there is one communal dining space for all residents as well as one shared activity space. There is no memory care unit at the facility.

April 4, 2022

Resident Red Spartan, on the Willow Unit, reported symptoms of nausea and 3 episodes of diarrhea to the RN at the facility. Red was recently at an overnight stay with their family and had returned on April 3, 2022. Red has no roommates, is up to date in their COVID-19 vaccinations and has had no known exposures to a COVID-19 case. Assessment was completed and non-

infectious causes of infection ruled out (eg. no change in medication or diet, not related to any underlying medical condition).

1. What additional information would be important?

- Are there any other staff on the unit who have been sick recently?
- Are there any other residents on the unit and at the entire facility who have had similar symptoms recently?
- Last date of any visitors and if they were unwell during the visit?

2. What are the next steps that should be taken by the ICP and/or other staff at the facility?

- Place resident Red Spartan in isolation on 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
 - Droplet/contact signage placed on or by resident's door
 - Resident to remain in room as much as possible – all meals delivered to room
 - Increased cleaning of resident's room
- Obtain an order for an NP swab for COVID-19 as well as a stool sample for gastroenteritis
- Identify any residents or staff with similar symptoms

April 4, 2022 (continued)

There were no reports of any other symptomatic residents or staff on Willow Unit or throughout the entire facility and no staff sick calls at this time. Red Spartan remains in DCP and had several more episodes of diarrhea and vomiting overnight into April 5.

April 5, 2022

Red Spartan's COVID-19 results came back negative this morning and stool sample results are still pending. Two additional residents on Willow Unit (Golden Delicious and Crisp Macintosh) report several episodes of gastroenteritis symptoms of vomiting and diarrhea. One staff member, who had cared for all three symptomatic residents on Willow unit, called in sick with similar symptoms. The staff and residents that reported ill are up-to-date on their COVID-19 vaccinations. The staff on the unit flagged the symptomatic residents to the infection control specialist (ICP), who had also been notified by occupational health of the staff absence.

3. Do you suspect that there may be an outbreak?

- Yes, as per [Appendix 1: Case Definitions and Disease-Specific Information. Disease: Gastroenteritis Outbreaks in Institutions and Public Hospitals \(2022\)](#):
 - 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.
- The **case definition** in an outbreak is dependent on the presenting signs and symptoms and circumstances. It may vary between outbreaks and also vary during an outbreak. Symptoms must not be attributed to another cause (e.g., medication side effects, laxatives, diet or prior medical condition) and are not present or incubating upon admission and at least one of the following must be met:
 - Two or more episodes of diarrhea (i.e., loose/watery bowel movements) within a 24-hour period OR
 - Two or more episodes of vomiting within a 24-hour period; OR
 - One or more episodes of diarrhea AND one or more episodes of vomiting within a 24-hour period.
- Note: Outbreak Case Definition will be discussed and determined at an OMT meeting.

4. What are the next steps that should be taken by the ICP and/or other staff at the facility?

- Place residents Golden Delicious and Crisp Macintosh on Droplet Contact Precautions (same protocol as listed in question 2 responses above with Red Spartan) and perform COVID-19 nasopharyngeal swabs on both residents. Collect stool sample specimens as soon as possible to symptom onset date for both residents (within 48 hours onset, if possible).
- Request that the symptomatic staff see their physician for referral for any gastroenteritis testing and exclude the staff from work
- Heightened surveillance for additional residents on unit and any close contacts
- Since resident Red Spartan tested negative for COVID-19, Red Spartan does not need to be on droplet precautions but is to remain in contact precautions and room isolation
- Inform TPH and Hospital Hub of the symptomatic residents and staff
- Begin a line list
- Retain food samples from each meal (unable to assume the illness is related to Red Spartan's overnight stay)
 - Note: Whenever there is an enteric outbreak declared, regardless of suspected source, the TPH Liaison will make a referral to the TPH Healthy Environments team and they will provide further guidance based on their assessment.
- **Note:** Review [Initial Exposure/Outbreak Control Measures](#) document

Note/Discussion:

- An OMT meeting will be scheduled in consultation with TPH and the affiliated Hospital Hub – this is where OB Case Definition is developed and control measures discussed.
- Official outbreak declaration is the responsibility of Toronto Public Health and if declared, TPH will provide the facility with the OB# for testing.
- Ensure OB stool kits are available (check expiry dates)
- Inform TPH and the Hospital Hub of resident specimen results once received

- Monitor residents and staff for development of symptoms and implement control measures for visitors to the facility.
- Most enteric pathogens in this setting are viral and spread from person to person, but consumption of contaminated food or water or improper food safety practices may be a cause. Whenever there is an enteric outbreak declared, regardless of suspected source, the TPH Liaison will make a referral to the TPH Healthy Environments team.

April 5, 2022 - am

You contact your Toronto Public Health Liaison, who confirms that the confirmed outbreak definition is met and they declare a confirmed enteric outbreak on Willow Unit. 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.

5. Who else should be members of the Outbreak Management team?

Possible answers may include the following:

Long-term care director, Director of Care, Chief nursing officer, IPAC lead, Hospital Hub, Long-term care physician, Nurse Manager of outbreak unit, Environmental Services, Pharmacy, patient/family liaison.

April 5, 2022 - pm

The **Outbreak Management Team (OMT)** meets that afternoon and you discuss the next steps.

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

- Confirm OB case definition
- Maintain contact precautions for residents line listed
- Reinforce the importance of hand hygiene (4 moments of hand hygiene)
- Increase surveillance of all residents and staff for any symptoms
- Obtain COVID-19 and stool samples for any symptomatic residents
 - Place any roommates of symptomatic residents on DCP - no need to test roommates unless symptomatic
- Downgrade to contact precaution once results are negative and roommate can come off DCP if they have no symptoms
- Discontinue communal dining that mixes residents from different units/areas. Implement tray service for the ill residents. Communal dining on a single unit can continue for well residents.
- Any staff with symptoms should notify Occupational Health and immediately refrain from working until cleared
- Enhance cleaning and disinfection of the high touch areas. Ensure the correct cleaning agent is being used.
- Cohort staff
 - Staff and residence from outbreak affected areas and non-outbreak affected areas should not mix
 - Minimize movement between areas as much as possible
- Provide update to TPH daily

- Hold admission to outbreak unit only - use TPH Outbreak Transfer Notification form if resident from OB floor leaves the unit

Note/Discussion:

- The home will remain in confirmed OB status for a specific time period based on the agent identified. If it is an unknown agent, the time period is based on Norovirus, which means TPH can declare the OB over 5 days after onset of symptoms in the last resident case. If it's a staff case, then 1 incubation period (48 hours) needs to pass since the staff case last day worked while infectious. When counting from last resident or staff case, whichever time period is longer will be used to declare the OB over.

April 6, 2022:

On April 6, Red Spartan resulted positive for Norovirus and residents Crisp Macintosh and Golden Delicious resulted negative for COVID-19. Red Spartan's symptoms subsided late evening April 5 and residents Crisp Macintosh and Golden Delicious remain symptomatic. There have been no further reports of symptomatic residents or staff on Willow Unit or throughout the entire facility and no staff sick calls.

7. What are the next steps that should be taken by the ICP and/or other staff at the facility?

- Notify TPH and Hospital Hub of specimen test results. Provide daily update on any new symptomatic residents or staff at the facility and provide updated line list to TPH daily or more frequently if needed.
- Monitor residents and staff for development of symptoms and implement OB control measures as discussed at the OMT meeting.
- Contact TPH and Hospital Hub for support as needed.

April 7-11, 2022

Residents Crisp Macintosh and Golden Delicious resulted positive for Norovirus on April 7 and there were no further reports of any symptomatic residents or staff on Willow Unit or throughout the entire facility over the next few days. TPH declared the Confirmed OB over on April 11, 2022.

Debrief Discussion Questions:**1. When can contact precautions be removed for the affected residents?**

- Additional precautions can be discontinued 48 hours after symptoms have resolved, if Norovirus or no causative agent is identified.
- If a causative agent other than Norovirus is identified, refer to Appendix 2 in the [Ministry of Health and Long Term Care: Recommendation for the Control of Gastroenteritis Outbreaks in Long Term Care \(2018\)](#) document for when to remove Additional Precautions.

2. What steps would you take if resident Crisp Macintosh reported only one episode of diarrhea and no vomiting within a 24 hour period and does not meet the case definition?

- If Crisp Macintosh only had one episode of diarrhea or vomiting and they do not meet the case definition, isolate Crisp Macintosh and put them on DCP and swab for COVID-19.

- Continue to monitor Crisp Macintosh for additional episodes/symptoms. If an additional episode occurs within 24 hours, they will meet the case definition and need to be added to the line list. If they do not have any further episodes, do not add them to the list. If they are on the line list, then you can indicate DNM.

3. What steps would you take if resident Red Spartan had an asymptomatic roommate?

- If Red Spartan's roommate is asymptomatic, they should be placed on DCP until COVID-19 is ruled out in Red Spartan. Once COVID-19 is ruled out, the roommate can be released from DCP if asymptomatic, but should remain on the affected unit.

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?

References/Additional Resources

1. 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
2. [Ministry of Health and Long Term Care: Recommendation for the Control of Gastroenteritis Outbreaks in Long Term Care \(2018\)](#)
3. [Ministry of Health Infectious Disease Protocol Appendix 1: Case Definitions and Disease-Specific Information. Disease: Gastroenteritis Outbreaks in Institutions and Public Hospitals \(2022\)](#)
4. [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, Enteric Line Enteric Line List, Initial Outbreak Notification Form and more!
5. [PHO General Test Requisition](#)
6. [PHO Kit and Test Ordering Instructions](#)
7. [TPH Outbreak Transfer Notification](#) form