

What causes an outbreak?

Outbreaks in healthcare settings may be due to a variety of factors, including:

- Lapses in infection prevention or clinical practices,
- Contaminated or defective products or devices, or
- Colonized or infected healthcare personnel.

Why Investigate an Outbreak?

- To establish that an outbreak exists
- Determine source of infection
- Control spread of infection
- To identify factors that contributed to the outbreak and develop future prevention strategies
 - i.e. prevent future outbreaks

Quick and Dirty Outbreak Investigation

Declaring War – Outbreak!

Declaring War – Outbreak!

- **Instructions:**
- As a group discuss and answer the questions under Phases 1, 2 and 3
- We will take up the answers **after each phase**
- *Hint:* resources in the envelope on your table will help you answer the questions

Phase 1: Identifying the outbreak

You are the Infection Control Practitioner of *Mind Your Manners Manor*, a long term care home in eastern Ontario. It is Friday June 20th at 2:30 pm and staff have just reported four (4) residents from various wings in the facility with new/worse coughs, sore throats and stuffy noses (congestion) starting today.

- 1. What are the criteria for a confirmed respiratory outbreak?**

Phase 1: Identifying the outbreak (continued)

- 2. Do you meet the criteria to declare an outbreak?**

Phase 1: Identifying the outbreak (continued)

After reviewing the information, you feel you meet the criteria for declaring an outbreak so you contact your local health unit. The health unit staff you speak with agrees and an outbreak is declared and they provide you with an outbreak number. The health unit requests that you initiate a resident and staff line list and collect Nasopharyngeal (NP) specimens.

- 3. Which residents should you collect NP specimens from?**

Phase 2: Controlling the outbreak

- 1. Who is on your Outbreak Management Team (OMT)?**

Phase 2: Controlling the outbreak (continued)

It has been confirmed that the causative agent of your outbreak is **influenza**. Using the case definition below and the information provided on the line list, determine which residents/staff should be included in the outbreak.

Case definition: Any resident and/or staff with lab confirmed influenza and/or any two of the following symptoms: new cough, congestion, runny nose, sore throat, myalgia, malaise, on or after June 20th.

- **Residents included:**
- **Staff included:**

Phase 2: Controlling the outbreak (continued)

3. **List at least six (6) control measures for controlling an influenza outbreak**

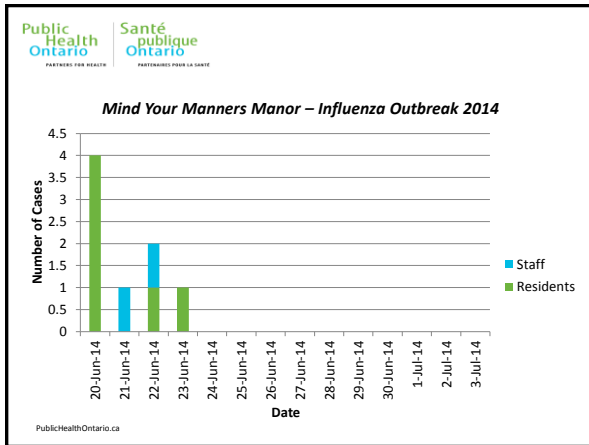
Phase 3: Declaring the outbreak over

It is now June 27th. It appears the hard work of the staff of *Mind Your Manners Manor* implementing the appropriate outbreak control measures is having an effect; the outbreak is winding down as it has been a four (4) days since adding a new case.

1. **What are the criteria for declaring a respiratory/influenza outbreak over?**

Phase 3: Declaring the outbreak over (continued)

2. **Provided there are no new cases, what date can the outbreak be declared over? (hint: June has 30 days)**



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Phase 3: Declaring the outbreak over (continued)

3. Who declares the outbreak over?

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References/Resources

- Association for Professionals in Infection Control and Epidemiology. APIC Text of Infection Control & Epidemiology, 3rd edition. 2009
- Association for Professionals in Infection Control and Epidemiology. Infection Prevention Competency Review Guide. 4th edition. 2011.
- Ministry of Health and Long-Term Care, Public Health Division and Long-Term Care Homes Branch. A guide to the control of respiratory infection outbreaks in long-term care homes. Toronto, ON: Queen's Printer for Ontario; 2004. Available from: http://www.health.gov.on.ca/english/providers/pub/pubhealth/ltc_respon_tbreak/ltc_respoutbreak.pdf

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Questions

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Summary

- Reviewed
 - What is an outbreak
 - What causes an outbreak
 - Why we investigate outbreaks
- Interactive
 - Walked through three stages of an outbreak investigation
 - Identifying the outbreak
 - Controlling the outbreak
 - Declaring the outbreak over