Infection Prevention and Control

“What Retirement Homes Need to Know” about

OUTBREAK MANAGEMENT

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Retirement Home Act 2010

The infection prevention and control requirements of the Retirement Home Act 2010 came into effect in January 2013
Assumption

In the absence of specific guidelines for the control of respiratory infections and gastroenteritis outbreaks in retirement homes, the control guidelines for long-term care facilities are being used.
Terms/Definitions

**Surveillance**: Systematic ongoing collection, collation and analysis of data. Dissemination of data.

**Sporadic Case**: Occurring irregularly, from time to time and generally infrequently.

**Outbreak**: The occurrence of a case of illness in excess of normal expectancy over a specified length of time.

**Line Listing**: Form which contains key data items such as suspect case name, floor/room, onset date of symptoms, symptoms etc.

**Prophylaxis**: The word "prophylaxis" is from the Greek and means "an advance guard." An example is medication given to prevent a disease (Tamiflu in an influenza outbreak).

**Cohort**: A well-defined group of subjects or patients who have had a common experience or exposure. It can also be used as a verb i.e. to cohort residents.
“Effective surveillance is essential to ensure the early identification of outbreaks so that control measures can be instituted as soon as possible.”

• Target Groups: Residents & Staff
Surveillance

“Direct-care staff members are the key to good resident surveillance. Staffs who recognize and report initial signs of resident illness allow control measures to be implemented early, which is a vital step in preventing an outbreak”.

Education for staff

- The role of staff in surveillance and its importance
- Symptoms of gastroenteritis/febrile respiratory illness
- Criteria for a suspected outbreak
- Procedures for reporting
Daily Surveillance Forms
(include off-hours, weekends, holidays)

Residents:
• Conduct ‘rounds’ – speaking with residents
• Receive verbal reports from unit staff based on their clinical observations
• Use communication books/logs or unit reports

Staff:
• Ill staff self-screen and stay home
• Report to supervisor responsible for employee health
What is an Outbreak?

• Increased number of persons with similar-like symptoms within a short time period
Objectives of an Outbreak Investigation
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- Identify the health problem (case definition)
- Determine its extent in terms of time, person and place characteristics (use line list)
- Identify the agent, the source, the method of spread and contributing factors
- Implement control measures

Laboratory is a key partner in outbreaks
Role of Health Unit

- Assign outbreak number (2262-YR-Number)
- Notify Public Health Lab
- Report to Ministry of Health within specific timeframes (1 day for respiratory)
- Member of outbreak management team
Role Of Health Unit

- Assist in the investigation, confirmation and management of the outbreak
- Investigate potential sources (food/water samples)
- Provide disease specific information
- Provide specimen kits
- Communicate to institutions/media
- Provide final outbreak report to MOHLTC
Outbreak Management Team

• The OMT directs and oversees the management of all aspects of an outbreak

• Members of the team often include:
  – An infection control designate
  – Administrator/Director
  – Public Health unit representative
  – Director of food services
  – Housekeeping personnel
  – Staff member(s)
Communication

• Occurs daily or as needed between Health Unit and Retirement home (provide update & review line list)

• Between Public Health unit and Public Health Lab if necessary

• Between Health Unit & other Institutions re: outbreak

• Between Health unit, Retirement Home & Media
Respiratory Outbreaks
Including Influenza
Potential Respiratory Outbreak

• **ONE** laboratory confirmed case of influenza

OR

• Two residents in one unit area with 2 or more respiratory symptoms within 48 hours of each other including:
  
  • Stuffy nose/congestion
  • Sore throat/hoarseness
  • Runny nose/sneezing
  • Dry or productive cough
  
  • Pneumonia
  • Rales/rhonchi/wheezes
  • New/increased shortness of breath

• Also consider malaise, muscles aches, loss of appetite, headache, chills, fever (≤ 35.5 C or ≥37.5)

OR

• More than one unit having a case of acute respiratory illness within 48 hours.
Confirmed respiratory outbreak

• Any further progression (additional cases or lab confirmations) of the potential outbreak will be considered an outbreak.

• An outbreak can be declared at any time by the MOH, or their designate, or by the Medical Director for the Retirement Home*.

• MOH or designate and Retirement Home discuss whether a facility-wide or one unit is in an outbreak.

*If retirement home has a medical director
Potential Outbreak:
• Increase hand hygiene
• Enhance cleaning and disinfecting
• Exclude ill staff and volunteers from work
• Isolate ill residents in their rooms x 5 days OR until symptoms resolved
• Use gloves, masks, eye protection and gowns when necessary
• Immunize as appropriate

Confirmed Outbreak – all above measures and:
• Post outbreak signs at all entrances
• Immunize as appropriate
• Cohort staff
• Educate staff and volunteers
• Restrict ill visitors, admissions and transfers
• Reschedule non-urgent appointments
• Stop communal meetings
Influenza Outbreak – Management of Staff

**Vaccinated** pre-outbreak:
- may work with **no restrictions**
- change uniform between facilities

**Unvaccinated**: Accept vaccination and take antiviral prophylaxis x 2 weeks (until vaccination starts to be effective)

**Decline vaccination**:
- should receive antivirals **until outbreak over**
  
  - AND …
Influenza Outbreak- Management of Staff

• Unvaccinated HCWs who refuse chemoprophylaxis
  – should not work in outbreak facility
  – should not work in another unit/facility until past the incubation period (3 days)

• Consider antivirals for all staff if strain does not vaccine matched
Ill staff should stay off work for 5 days from acute stage of illness or until symptoms are resolved—in non-influenza outbreaks, restrictions may change depending upon organism identified.

Cohorting of staff is recommended – attempts should be made to minimize movement of staff, students, or volunteers between floors/resident home areas especially if some units are unaffected.
Gastroenteritis/Enteric Outbreaks
Suspected Gastroenteritis Outbreak

Two suspected cases of infectious gastroenteritis in a specific area, such as a unit, or floor within 48 hours.
Confirmed Gastroenteritis Outbreak

An occurrence of gastroenteritis beyond what is normally expected based on surveillance data

• Three or more cases of infectious gastroenteritis in a specific area within a four-day period, or

• Three or more units/floors having a case of infectious gastroenteritis within 48 hours, or cases in which an alternate cause cannot be identified.
Case Definition - A person with...

- Two or more episodes of unformed (takes the form of its container) or watery stool more than normal for the individual within a 24-hour period or

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

- One episode of unformed or watery stool and one episode of vomiting within a 24-hour period, or

- Laboratory confirmation of a known gastrointestinal infection and at least one symptom of nausea, vomiting, diarrhea, abdominal pain or tenderness
Suspected Outbreak Control Measures

• Increase hand hygiene
• Enhance environmental cleaning and disinfecting
• Exclude ill staff and volunteers from work for at least 48 hours after symptoms disappear (if causative agent identified by lab – apply disease specific exclusions)
• Try to isolate ill residents in their rooms for at least 48 hours after the symptoms have resolved/been treated
• Use gloves, masks, protective eyewear and gowns when necessary
Confirmed Outbreak – all previous measures plus:

- Post outbreak signs at all entrances
- Cohort staff-minimize movement of staff between affected and unaffected floors/units
- Reinforce outbreak control measures with staff and volunteers
- Restrict ill visitors
- Suspend admissions and transfers
- Reschedule non-urgent appointments
- Stop communal meetings/group outings from affected unit or floor
Role of Public Health Inspector

• Mandatory routine inspections are completed in the Kitchen

• Consultant for infection control (Environmental services: housekeeping and laundry)

• Part of the Outbreak Management Team to rule out food and water as the cause and to review control measures put in place for environmental services
Outbreak Control Measures - Kitchen

- Snacks/breakfast service: individually wrap ready-to-eat foods and ensure proper dispensing units to protect food.
- Rethink service style: remove table cloths, full meal brought at once vs. courses.
- Ensure staff serving residents are washing hands and hand sanitizing often.
- Have residents hand sanitize before entering dining room.
Outbreak Control Measures - Housekeeping

- Additional staff may be necessary to reduce outbreak transmission

- Cleaning achieved with water, detergents, mechanical action and appropriate disinfectants

- Routine cleaning; aim is to achieve a clean environment with regular and conscientious general housekeeping.

- Rigorous cleaning during an outbreak; routine cleaning practices achieved with additional attention spent on high traffic areas (ie: rails in the hallway, door handles, common phone, light switches)

Remember that physical cleaning/broad spectrum (depending on organism disinfectant may not be effective) may need to be assessed and changed
Challenges

- Surveillance processes not well established leading to difficulties in recognition of an outbreak (because of newness of requirements for retirement homes)
- Difficulties with specimen collection
- Lower rates of flu vaccine for residents compared to residents in LTC homes
- Residents have their own physicians and obtain medication through individual pharmacies leading to delays both in specimen collection & accessing antivirals
Response to Challenges

- Trained staff who are knowledgeable in taking specimens
- Education in early recognition of outbreaks
- Early notification of Health unit
- Process to obtain antivirals quickly
- Offer on site flu vaccine
- Readily available PPE
References

A Guide to the Control of Gastroenteritis Outbreaks in Long-Term Care and Retirement Home Settings
MOHLTC, November 2007  Draft Document

Control of Gastrointestinal Outbreaks in Long Term Care Homes, Sept. 2011

Routine Practices and Additional Precautions for Preventing the transmission of Infection in Health Care,
PHAC, 1999

It's QUESTION TIME!!