

# PHO Exchange Workshop

Outbreak preparedness: Prepare for the unexpected

June 29, 2017

# Objectives

By the end of this presentation, participants should be familiar with:

- the key components that are essential to every outbreak
- preparation measures that can minimize the length and extent of each outbreak
- measures that can be implemented to minimize challenges associated with outbreaks

# Agenda

## A. Introduction and Icebreaker

## B. Outbreak Identification and Investigation

- Essential components of outbreak investigations
- Roles and responsibilities during outbreaks
- Challenges

## C. Outbreak Preparedness

- Components of preparedness
- Challenges

## D. Wrap-up



Introduce yourself at your table:

- Give your name, where you work (health unit, LTCH, hospital or other) and your position/title.
- Think of the first outbreak that you were involved with and what one lesson or experience, if any, stood out in your mind.

# Outbreak scenario

*Task: Individually, or at your table, list **all the steps that you can think of in responding to the following scenario:***

3 LTCH residents reported having **symptoms of bloody diarrhea, fever and stomach cramps** within three days of each other. All three residents ate the same meals and were in close contact with each other. It is unknown whether the illness was transmitted person-to-person or foodborne.

# Outbreak management

- Establish existence of an outbreak
- Coordinate and collect appropriate clinical and environmental specimens where applicable
- Verify the diagnosis
- Establish an outbreak team
- Develop outbreak case definition (modify as needed)
- Implement prevention and control measures
- Conduct environmental inspections of implicated premise where applicable
- Identify the origin of suspected food, along with the transportation, storage and preparation process
- Implement and tailor communication and notification plans depending on the scope of the outbreak
- Conduct ongoing epidemiological analysis on data collected
- Declare outbreak over

# Roles and responsibilities

## Enteric outbreak in a long-term care home (LTCH)

- Role of public health
- Role of the LTCH
- Role of hospital
- Role of others?

## Individual Activity

A spreadsheet is provided on the table with the components of an outbreak listed. Check which organization does what in each column.



# The role of public health

*Public health personnel are available 24/7 to provide guidance and assistance when needed*

- Provide support and representation on the outbreak management team (OMT)
- Provide disease specific information (knowledge expert) including on the occurrence of the disease in other jurisdictions
- Consult on surveillance, infection prevention and control policies and procedures, and outbreak management
- Perform food and environmental inspections and sample testing as required; coordinate with Public Health Lab; provide specimen kits
- Collect data, analyze outbreaks, report to the Ministry of Health and Long-Term Care on institutional gastroenteritis outbreaks
- Review of line list and case definition

# Role of the long-term care home

- Ongoing surveillance to keep track of reports of illnesses among residents (note: look for unexplained new or unusual symptoms)
- Communication of suspected outbreak to public health
- Establish and manage outbreak management team (OMT)
- Ensure effective **outbreak management**, including infection prevention and control and communication activities, until the outbreak is declared over



## The role of hospitals/acute care settings

- Diagnosis and treatment
- Reporting
- Infection control
- Admissions/discharge
- Consultation
- What if the outbreak is in a hospital?
- Other?

# The role of other parties

- Coroner's office
- Laboratories
- Pharmacists
- PHO

# Summary

- Why is it important to understand the components of an outbreak?
- Why is it important to know the roles of other organizations as well as your own in an outbreak situation?

# Challenges

- On the spreadsheet column marked 'Challenges', identify some potential challenges with any of the components.
- At your tables discuss possible solutions to each of the challenges.
- For each table, write two challenges and solutions on the flip charts provided.

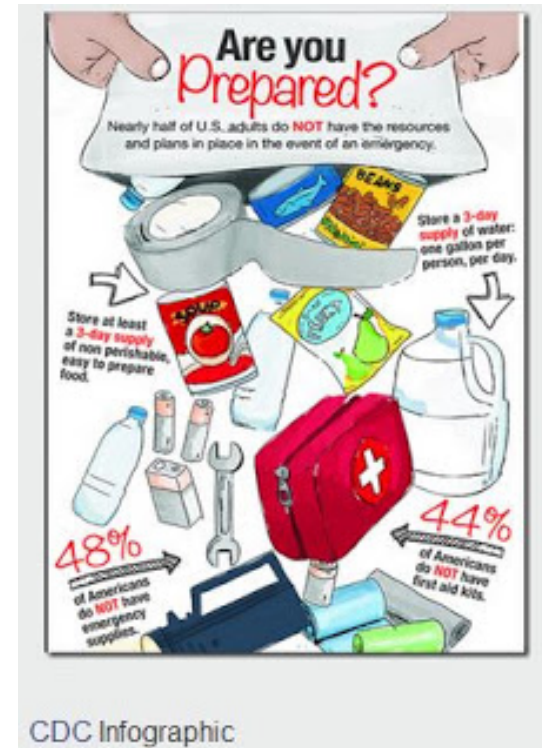
## Part C: Outbreak preparedness

### Activity:

Share whether you have any emergency preparedness plans in place for your family/home (e.g., in case of fire, break-in, loss of electricity). What do you prepare for?

# Outbreak preparedness: What can you plan for?

- Policies and procedures
- Communication
- Education
- Equipment readiness
- Maintaining records



Source: Centers for Disease Control and Prevention. Are you prepared? [Internet]. Atlanta, GA: Centers for Disease Control and Prevention; 2016 [2017 Jun 26]. Available from: [https://www.cdc.gov/phpr/documents/emergency\\_kit.pdf](https://www.cdc.gov/phpr/documents/emergency_kit.pdf)



# Policy and procedure review

1. What policies and procedures should be reviewed and updated annually?
2. Are there any changes in organizational or team structure that may change the way things are done?
3. Is there a more effective way of doing things?
4. Is workload management and delegation of tasks effective?



# Policy and procedures

- Outbreak debriefs – key component of preparedness
- Serves many purposes:
  - ensures that control measures implemented during an outbreak were effective
  - helps to identify any gaps that need to be addressed ahead of future outbreaks
  - ensures that best practices are carried out for all outbreak investigation
  - ensures that roles and responsibilities during an outbreak were clear and carried out accordingly

How do you prepare communication for an outbreak with the following?

- Infection control practitioner (ICP) and LTCH staff
- LTCH and residents
- LTCH and family/visitors and others
- LTCH and public health unit
- LTCH and the media



# Communication

- LTCH and public health unit
  - Build rapport between public health and the LTCH
  - Update contact information; know who's who before things happen
  - Report illness to public health
- LTCH staff
  - Report illnesses of staff or residents (use Daily Surveillance Forms) to ICP
- LTCH and residents
  - Regular communication of what to expect and changes in routine that may occur during outbreak situations
  - Advise them of any change to visiting policies
- LTCH and family/visitors/others
  - Keep open and ongoing communication with family and visitors to minimize anxiety and uncertainty during outbreak situations

Why is education an important measure in preparing for an outbreak?

1. How do you identify needs and areas of education to focus on?
2. What type of education materials/methods are effective (brochures, signs, posters, courses, demonstrations)?



# Education Considerations

- Policies and procedures
- Knowledge of outbreak pathogens
- Outbreak surveillance
- Specimen collection and submission
- Personal protective equipment (PPE)
- Outbreak control measures (e.g., environmental cleaning and disinfection methods and products)
- Safe food handling practices
- Health and safety

# Equipment readiness

What can you do to ensure that equipment is readily available in the event of an outbreak?

- Cleaning and disinfectant products
- 70-90% alcohol-based hand sanitizer
- Gloves, gowns and other PPE
- Specimen collection kits (check expiration dates!)
- Signage
- Checklist, stock monitoring program

# Maintaining records

- What are some examples of records that are kept by a LTCH that may be used during a gastrointestinal outbreak?
- Why is it important to keep these records, especially during outbreak situations?





# Maintaining records

- Surveillance: ongoing collection, collation and analysis
- Food Safety: temperature logs, purchase orders (ingredients and suppliers)
- Menu records, what food was served to whom and when
- Schedules, special events, etc.
- Staffing schedule

## Dealing with challenges: open discussion

Describe any challenges that you have dealt with previously where planning and preparedness now would minimize its impact.

## Additional thoughts on preparedness

- Keep an open mind: you may not know what you are dealing with but understanding the key components of an outbreak will help you to navigate them more effectively.
- Prepare where you can:

*“By failing to prepare, you are preparing to fail.”*

*Benjamin Franklin*

- Outbreaks can and will occur. Debriefing is important to identify what went right and opportunities for improvement.

*“There’s no harm in hoping for the best as long as you’re prepared for the worst.”*

Stephen King

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- Add inspector's guide

