



OUTBREAK MANAGEMENT

Stacey Burns BN, RN, CIC

May 25, 2012

CHICA NB/PEI

FRIDAY AT 4PM



7 resident have been having diarrhea and vomiting since yesterday!!

D'oh!!!

OUTBREAK

- ◉ Defined as an increase over the expected occurrences of an event.
- ◉ A small rise in an occurrence may be called a cluster
- ◉ Thus surveillance must be in place to know what is the “norm”

CAUSES

- ◉ Food borne illness
- ◉ Introduction and transmission of an infectious disease within the site
- ◉ Lapse in Infection Prevention and Control Measures (Routine Practices)
- ◉ Contaminated or defective products or devices
- ◉ A reservoir for a pathogen in the healthcare site

STEPS TO OUTBREAK MANAGEMENT

- ◉ Determine if there is an outbreak
- ◉ Implement immediate control measures
- ◉ Confirm the existence of an outbreak/establish a case definition
- ◉ Assemble an outbreak team/committee
- ◉ Ongoing monitoring/communication
- ◉ Declaring the outbreak over
- ◉ Debriefing the staff
- ◉ Writing the report and recommendations

DETERMINE IF THERE IS AN OUTBREAK

- Who can you get reliable information from?
- Are there alternate causes?
- What is normal for your facility?
- Are there parameters that signify an outbreak of this type?
 - GI illness
 - 2 or more episodes of diarrhea in a 24hr period above what is considered normal for that person
 - 2 or more episodes of vomiting in a 24hr period or
 - Positive culture of a known enteric pathogen with a symptom of GI infection OR
 - 1 episode of bloody diarrhea (BC)
 - GI Outbreak
 - 3 or more cases of GI infection (as above), potentially related, occurring within a 4 day period within a geographical area (unit/ward)

IMPORTANT SURVEILLANCE INFORMATION TO GATHER

- ◉ Who is ill?
- ◉ What symptoms do they have?
- ◉ Where are the cases located?
- ◉ When did the symptoms start?
- ◉ Why?

Taking a few moments to find out the information and complete your LINE LIST is invaluable in developing a good surveillance report

Check with ALL units and pull together any information on staff who are off due to illness

IMPLEMENT IMMEDIATE CONTROL MEASURES

- ◉ Routine Practices/Additional Precautions
- ◉ Initially based on symptoms
- ◉ Separate from healthy patients/residents
- ◉ Communication with patients/residents and families

Collect Samples

- Make sure samples are being collected as appropriate depending on symptoms
- Sent for the correct tests
- Labeled correctly and specify outbreak
- Communicate with the lab that there is an outbreak and what specimens to expect

CONFIRM EXISTENCE OF AN OUTBREAK/ESTABLISH A CASE DEFINITION

- ◉ Notify your public health officer (MOH or CPHO)
- ◉ Use epidemiologist if available
- ◉ Develop case definition
 - What collection of symptoms constitutes a case and how many cases constitute an outbreak
- ◉ lab results

ASSEMBLE AN OUT BREAK TEAM

- ◉ Have a preassembled outbreak team for your facility
- ◉ Adjust as required for departments involved, such as nursing unit involved.
- ◉ Decisions made from this team.....the outbreak does not lie entirely on the shoulders of the ICP or designate!



DUTIES OF OUTBREAK TEAM

- ◉ How to communicate? Phone, in person, email updates?
- ◉ Hard decisions - signage to be used, closing unit/facility, who should be notified, media representative
- ◉ Tasks assigned
- ◉ Communication within facility and to other facilities
- ◉ Sick staff management - calling in extra staff

ONGOING MONITORING/COMMUNICATION

- Prevention
- Analyzing and interpreting data
- Is there anything else to do?
- Further communication with feeder facilities, outpatient clinics or any other areas where patients/residents might normally go

DECLARING THE OUTBREAK OVER

- ◉ Determine who can do this?
- ◉ Consider incubation period, length of illness
- ◉ Communication
 - Within facility
 - External
 - Media
 - Public health officer

DEBRIEFING THE STAFF

- ◉ Who is responsible to do?
- ◉ Who is involved in the debrief?
- ◉ What went well
- ◉ What to do better next time
- ◉ About improving performance and making recommendations to enhance performance

WRITE A REPORT

Outbreak Summary Report (example)

Date of onset of outbreak: _____ Date outbreak declared over: _____

Microorganism identified: _____ Laboratory Confirmed? Yes___ No___

Number of specimens identified in: _____ Suspected source: _____

Number of patients exposed: _____ Total number of cases (patients): _____

Attach rate for patients (# of exposed divided by # of cases, multiply by 100): _____

Number of HCPs exposed: _____ Total number of cases (HCPs): _____

Attach rate for HCPs (# of exposed divided by # of cases, multiply by 100): _____

Number of cases requiring higher level of care: _____

(E.g. transfer to hospital, transfer to ICU)

Number of deaths: _____

Unusual situations:

GOAL OF THE REPORT

- ◉ Summarize facts of the outbreak
- ◉ Substantiate recommendations
- ◉ Share new insights
- ◉ Prevent future outbreaks
- ◉ Assist in investigation and control of similar incidents
- ◉ Provide a document for potential legal issues

DEVELOP LONG TERM CONTROL AND PREVENTION MEASURES

- Use information from the outbreak report and debrief session to develop long term control and prevention measures for outbreaks.
 - they might be simple - pre-packaged specimen collection kits for each unit (including requisitions) OR
 - more complicated - develop an internal and external communications plan