



BRANT COUNTY
HEALTH UNIT

Lessons learned from a point source outbreak investigation in Brant using the incident management system

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Background

- Food borne illness – illness acquired through consumption of contaminated food or water
- Food borne illness outbreak – two or more cases linked by time, common exposure, and/or place
- Investigate to:
 - Identify source and agent
 - Prevent transmission
 - Communicate to ill individuals and stakeholders

From the beginning

- Phone call from concerned employee of Brant FACS
 - 26-30 ill employees
- Email from Human Resources
- 150 staff attended an agency wide meeting day prior where lunch was catered
- Details on caterer and menu items obtained
- Investigation begins

Outbreak Investigation

- Case management
 - Caterer
 - Food sample testing
 - Stool sample testing
 - Epidemiology
-
- Use of Incident Management System

Outbreak Investigation

- Case Management
 - Case questionnaire – self administered
 - Health teaching
 - Contact tracing
 - Stool specimen collection and testing

Outbreak Investigation

- Caterer
 - Inspection of catering operation
 - Obtain food samples
 - Obtain stool sample
 - Section 13 order
 - Charges

Investigation

- 25 stool specimens were submitted for testing
- 9 (36%) confirmed cases for enterotoxigenic *E. coli* (ETEC)
- 8 food samples submitted for testing
- 1 food sample, egg salad, tested above acceptable limits for total gram negative bacteria

Epidemiology

- 84% response rate for questionnaire (n=134)
- 78% attack rate (i.e., met case definition), 105 individuals

Food Attack Table

Food items consumed	Symptomatic cases		Non-symptomatic cases		Relative risk
	n	Attack rate %	n	Attack rate %	
Potato salad*	97	92.4	9	31.0	3.0*
Cookies	78	74.3	18	62.1	1.2
Couscous	60	57.1	20	69.0	0.8
Ham wrap	59	56.2	14	48.3	1.2
Egg salad wrap*	68	64.8	7	24.1	2.7*
Greek salad*	64	61.0	8	27.6	2.2*
Turkey wrap	45	42.9	12	41.4	1.0
Veggie wrap	14	13.3	5	17.2	0.8

Lessons Learned

- Incident Management System is helpful
- Timing of initiating IMS
- Functions of IMS and its value
- Provide input into the Community Outbreak Management Plan

Lessons Learned

- Catering is a complex business
- Laboratory specimen collection P&P
- Consult with Public Health Ontario and Public Health Laboratory

Many thanks to.....

- Brant Family & Children's Services
- Environmental Health
- Sexual Health
- Communications
- Program Planning & Evaluation
- Haldimand Norfolk Health Unit
- Public Health Ontario and PHO Laboratory



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Thank You!

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