

Table Top Foodborne Outbreak Exercise

Dean Middleton (OAHPP)
Foodborne Diseases Investigation &
Management: An Ontario Symposium
March 1, 2010

Outline of the Table Top Exercise

- Five-part scenario will be provided.
- Ten questions will accompany the scenario.
- Short time for discussion at each table.
- One table will provide their answer,
 - followed by any volunteers from the floor,
 - followed by our Resource Team.

The Resource Team

- Adrienne Kong – CFIA
- Alison Samuel – MOHLTC
- Sylvanus Thompson – HU, ASPHIO
- Robert Blenkinsop – OMAFRA

- **Scribes**
- Louise Sharpe – CFIA

Exercise Part A

15 minutes

- The CFIA receives a complaint from an individual that they experienced gastrointestinal illness which the person believes they experienced as a result of consuming mushrooms at a restaurant.

- 1. What is the role of the CFIA?

- 2. What other agencies should be involved and what are their roles?

Table Top Exercise – Part A

1. What is the role of the CFIA?

- *As per Traceback document,*
 - *Gather information*
 - *Refer to the Health Unit*

2. What other agencies should be involved and what are their roles?

- *Health Unit*
 - *Gather information and investigate the situation*
 - *Inform the CFIA of the findings*

Exercise Part B

10 minutes

- A provincial-level outbreak of *E. coli* O157:H7 is occurring in Ontario. Ten health units, either part of, or in close proximity to, the Greater Toronto Area, are experiencing cases. An “Ontario Outbreak Investigation Coordinating Committee” has been formed.
- Epidemiological investigation findings reveal that 90% of cases attended “Super-Duper” restaurants in all 10 health unit areas. All of the “Super-Duper” restaurants are part of the large, well known “Super-Duper” restaurant-chain throughout Ontario. Ninety percent of the cases consumed mushrooms as part of their meal at the restaurants. No other food items were of concern.

Exercise Part B

10 minutes

- 3. What agency/agencies have responsibility for the trace-back investigation of the mushrooms from the restaurant to the supplier?

Table Top Exercise – Part B

3. What agency/agencies have responsibility for the trace-back investigation of the mushrooms from the restaurant to the supplier?

- *Individual Health Units at the restaurant-level*
- *MOHLTC would summarize the findings from the HU's*

Exercise Part C

40 minutes

- The ten health units and the MOHLTC trace the mushrooms to a large facility that grows the mushrooms at a plant north of Toronto.
- It is known that the plant sells and distributes mushrooms only within Ontario.

Exercise Part C

40 minutes

- 4. What agency/agencies now assume responsibility for the traceback investigation of the mushrooms? Identify the roles of the agencies and the expertise that they contribute?
- 5. In general, at what stage of this outbreak investigation should an investigation of the mushroom plant be undertaken?
- 6. What agency/agencies should be involved in the mushroom plant investigation? List the roles of each agency identified in the plant investigation.
- 7. What agency should be the “lead” for the plant investigation?
- 8. Who assumes responsibility for the trace-forward investigation of the mushrooms?

Table Top Exercise – Part C

4. What agency/agencies now assume responsibility for the traceback investigation of the mushrooms? Identify the roles of the agencies and the expertise that they contribute?

- *CFIA, with the assistance of OMAFRA*

Table Top Exercise – Part C

5. In general, at what stage of this outbreak investigation should an investigation of the mushroom plant be undertaken?

- *Two scenarios based on the evidence linking the plant to the outbreak.*

Limited Evidence

- *A plant investigation may not occur*
- *If undertaken, the purpose would be to rule in/rule out the plant*
- *In this scenario, a single agency only may investigate the plant*

Stronger Evidence (i.e., plant likely involved based on traceback investigation)

- *Multi-agency investigation recommended, however, in the essence of time, and in accordance with each agency's mandate one or more of the agencies may need to conduct an initial or several investigations at the plant prior to a multi-agency visit.*
- *The OOICC should have discussion as early as possible in the outbreak investigation pertaining to the appropriate time to investigate the plant.*

Table Top Exercise – Part C

6. What agency/agencies should be involved in the mushroom plant investigation? List the “high-level” roles of each agency identified in the plant investigation.
 - *OMAFRA – expertise and contacts*
 - *CFIA – jurisdiction and traceforward*
 - *HU - jurisdiction*
 - *Field Epidemiologist – to obtain understanding pertaining to the epidemiology investigation*

Table Top Exercise – Part C

7. What agency should be the “lead/coordinator” for the plant investigation?

- *OMAFRA*
 - *has contacts at the plant*
 - *has knowledge and expertise*

Table Top Exercise – Part C

8. Who assumes responsibility for the trace-forward investigation of the mushrooms?

- *CFIA*

Exercise Part D

15 minutes

- The mushrooms in the plant were found to be contaminated with *E. coli* O157:H7. The *E. coli* had the same PFGE pattern and phage type as the human cases. When the results are released, it is determined that the mushrooms are still within their expected shelf life.
- The CFIA technical assessors, in consultation with Health Canada, provided a health risk assessment and the CFIA recommended a Class I Recall to the consumer level with a public warning.
- The mushroom producer implemented a “Voluntary Recall” of the mushrooms. Simultaneously, the local health unit closed the operation of the plant under a HPPA Section 13 Order.

Exercise Part D

15 minutes

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- It is determined that the mushrooms are widely distributed across Ontario, that the firm has over 1000 accounts, and that each of the accounts should be checked.
 - The CFIA issues a letter to MOHLTC requesting the assistance of the local boards of health in conducting recall effectiveness checks at retail stores and provides a detailed distribution list of accounts.

Exercise Part D

15 minutes

- Mushrooms contaminated with E. coli O157:H7.
- Same PFGE pattern and phage type as the human cases.
- Mushrooms are within their expected shelf life.
- The CFIA recommended a Class I Recall with a public warning.
- The mushroom producer implemented a “Voluntary Recall”.
- The local health unit closed the operation of the plant (i.e., Section 13 Order).
- The firm has over 1000 accounts in Ontario.
- Each of the accounts should be checked.
- The CFIA requests assistance in conducting recall effectiveness checks at retail stores.

CFIA Letter to MOHLTC (1)

- March 1, 2010
- Attention: Akbar Ali
- RE: VOLUNTARY RECALL OF FUN-GUS BRAND MUSHROOMS, 454 g, LOT CODE MR 05, 2010 BY FUN-GUS-ARE-US MUSHROOM PRODUCERS.
- This letter will confirm our discussion held on March 1, 2010, at which time the CFIA advised it is requesting the assistance of the Ministry of Health and Long-Term Care (MOHLTC) and the affected Ontario Local Boards of Health (LBH) in conducting recall effectiveness checks at the accounts listed to verify the effectiveness of the above-mentioned recall. The CFIA is requesting your assistance because of the widespread distribution of this product and the number of illnesses associated with this product. The CFIA will also be monitoring the effectiveness of the recall by conducting checks at chain retail stores on the recalling firm's distribution list.
- The following product is affected: Fun-Gus brand mushrooms, 454 g, lot code MR 05, 2010
- The details of the recall are as follows: Recall Classification: 1 with a Public Warning
Depth of Recall: Consumer
- Reason for Product Recall: E. coli O157:H7 was detected in the product. This is in contravention of 4 (a) of the Food and Drugs Act.

(FOR EXERCISE PURPOSES ONLY)

CFIA Letter to MOHLTC (2)

- Please request inspectors to do the following:
 - a) Conduct on-site visits to each of the accounts listed to determine if they have received the Notice of Recall from the recalling firm and have taken the prescribed action.....
 - b) Record the information obtained on the Effectiveness Checks for Food Recall Recording form as per the attached instructions.
 - c) If any deviations are encountered with the CFIA recall, the inspector should advise the undersigned by telephone of the deviation as it is encountered, i.e., while they are still onsite at the account.....
 - d) Upon completion of all recall effectiveness checks, please complete the Recall Effectiveness Checks Summary Report for each health unit.

- Please confirm receipt of this request and advise me of the names of the LBHs that will be assisting the CFIA with this request and those that will not **as soon as possible** so that the CFIA can take appropriate action.
- Due to the short shelf life of this type of product, please have this request initiated immediately and have as many accounts as possible visited by March 4, 2010.
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- Please return all reporting forms (i.e. Effectiveness Checks for Food Recall recording forms and Recall Effectiveness Checks Summary Reports) by fax or e-mail to the undersigned within 5 business days of March 4, 2010.

(FOR EXERCISE PURPOSES ONLY)

CFIA Letter to MOHLTC (3)

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- Thank you for your assistance.
- Regards,
- Adrienne Kong
- Ontario Area Recall Coordinator

- Enclosures:
 - 1. Public warning issued by CFIA on February 28, 2010.
 - 2. Distribution list.
 - 3. Notice of Recall sent by recalling firm to accounts.
 - 4. Copy of the label.
 - 5. Effectiveness Check for Food Recall recording form and attached instructions.
 - 6. Recall Effectiveness Checks Summary Report.

(FOR EXERCISE PURPOSES ONLY)

Exercise Part D

15 minutes

- 9. What action should be taken by which agency/agencies in response to this letter?

Table Top Exercise – Part D

9. What action should be taken by which agency/agencies in response to this letter?

- *MOHLTC receives the CFIA letter, assesses to determine if further clarification is required, and then distributes it to the local Boards of Health through the Food Recall Coordinators.*
- *MOHLTC Food Recall Coordinator liaises and maintains contact with the local Board of Health “Food Recall Lead”.*
- *If any deviations are encountered with the CFIA recall, the inspector should advise the CFIA by telephone of the deviation as it is encountered, i.e. while they are still onsite at the account.*
- *As per the letter, local BOHs would complete the effectiveness checks and forward their findings on the “Effectiveness Checks for Food Recall Recording Forms” to the CFIA Area Recall Coordinator.*

Exercise Part E

20 minutes

- New cases associated with the outbreak are not being identified. Consideration is being given to allowing the mushroom plant to resume production and distribution of the mushrooms.
- 10. What agency/agencies are involved in developing criteria for allowing the mushroom producer to resume production of the mushrooms?
- List the “high-level” roles of each agency identified.

Table Top Exercise – Part E

- **OMAFRA**
 - *expertise,*
 - *contacts at plant,*
 - *“Lead/Coordinator” on the multi-agency plant investigation Team.*
- **Health Unit**
 - *jurisdiction,*
 - *the HU closed the plant by Section 13 Order.*
- **CFIA**
 - *jurisdiction and expertise,*
 - *CFIA may detain the product as part of the re-opening criteria based on “hold and test” prior to distribution.*
- **OOICC**
 - *made aware of findings, plans, and “corrective action plan”.*

Exercise Part F

Thank you all for your participation!