Facilitator Guide

Initial Foodborne Illness Investigation

Team Activity 2

Initial Interview Training
Laboratory Submission Review

Integrated Food Safety
Centers of Excellence
Tennessee

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Welcome to the Tennessee Integrated Food Safety Center of Excellence *Initial Foodborne Illness Investigation* Team Activity Facilitator Guide.

This team activity is intended for members of a local outbreak investigation team. It has been designed to further develop the acquired knowledge of public health professionals who have completed the online courses *Foodborne Outbreak Investigation and Response Team Roles and Responsibilities: Parts A & B,* and *Initial Foodborne Illness Investigation*.

These activities were created around the online courses' learning objectives and they are intended as a complement to the online courses, although they may be used independently if desired. Each of the complementary team activities contains independent or group activities and discussions that will build upon the online coursework and previous team activities. All necessary instructional materials have been provided – worksheets, handouts, and a PowerPoint presentation. After completing all online courses independently and working through the complementary team activities jointly, an outbreak investigation team should have a well-developed set of investigative skills as well as the foundation for a concrete outbreak investigation plan for their jurisdiction.

This team activity is designed to be used by a single local outbreak investigation team. However, if necessary, more than one jurisdiction may meet with a facilitator at once, in which case participants should be seated with others from their corresponding organization as they carry out the team activities.

The "Facilitator Guide" is provided as a tool to assist the facilitator as team members complete and discuss the included activities. The overview on page ii lists necessary supplies and learning objectives for the activity. The left hand column of the guide provides an estimate of time required for each section, to help plan an agenda for completing the activity. Each guide also contains read aloud statements (denoted by bold font), discussion prompts, and possible answers to assist with facilitation.

Make sure to read through all materials prior to facilitating the activity. We hope your group enjoys this hands-on, team-building activity!

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Activities	**Initial Interview Training** **Laboratory Submission Review**
Materials	**Facilitator:** Laptop, Internet connection, Facilitator Guide, Team Activity PowerPoint, and Activity 2 Team Evaluation link **Team members:** Participant Materials packet, including a copy of Appendices 1-5 only <u>Copies of Appendix 6 for each participant should be retained by the facilitator until the designated time in the group activity.</u> Copies of Appendices 6-7 may be included if the facilitator expects the scheduled meeting time to be sufficient to address the optional final activity.
Learning Objectives Addressed	**Course 3, Module 1 Objectives** 2. Identify considerations that must be addressed during a foodborne illness investigation. 3. Describe how analyzing descriptive data from various sources can support the initial stages of a foodborne illness investigation. **Course 3, Module 2 Objectives** 3. Explore the importance of proper packaging and transport of specimens and samples. **Course 3, Module 3 Objectives** 1. Describe effective interviewing techniques. 2. Identify techniques for overcoming barriers that arise during interviewing. **Course 3, Module 4 Objectives** 1. Explore communication strategies that support successful outcomes for foodborne illness investigations.

Title:	**Initial Interview Training**
Materials	*Complaint Scenario* *Interview Tips* *Environmental Health Questionnaire* *Epidemiology Questionnaire* *Injects – Barriers to Actionable Information* (do not distribute until indicated in the activity)
Learning Objectives	C3. M1.2 C3. M1.3 C3. M3.1 C3. M3.2 C3. M4.1
Getting Started (~5 minutes, introduction)	• As participants arrive, split them into groups of three (if possible – depending on group size you may have to make groups smaller or larger, but ideally you should have 3-6 groups all together). Match each Epidemiologist or Nurse with a Lab representative (if possible) and one or more Environmental Health personnel. Ask the small groups to sit together for the following activity. • Briefly recap the team's accomplishments during the first group activity and what actions have been implemented since you last met. What action items remain? Refer to the completed "Communication Checklist" from Activity 1. • Briefly describe the agenda for Team Activity 2 and any objectives you wish to accomplish during the session.
Interview Activity (~40 minutes, group work)	• Show participants the Oregon Department of Health Just-in-time Interviewer Training video – https://www.youtube.com/watch?v=O6gKLQpEkfY (9 minutes) o *Serves as a refresher or as an introduction for interviewers. Although it focuses on patient interviews, the "cardinal rules" are useful when conducting any informational interactions that may occur during an investigation: interviews with patients, well meal companions, food workers, facility managers, hospital or other providers, etc.* • Transition from the video to the team activity. **"As you can see from the video training, interviewing is a skill that is developed with practice. We will do that now as we explore this critical step in moving from a complaint to an organized and integrated investigation."**

- Have participants read through the complaint scenario (Appendix 1) with their groups or read the scenario aloud.
- After groups have had a minute to read through the complaint scenario, ask group members to practice interviewing each other using the indicated interviewing tools (Appendices 3-4) and referring to Appendix 2 for tips, as needed:
  - ***Nurse/Epi /Laboratorian***

    "Using the Environmental Health Questionnaire (Appendix 3), nurses, epidemiologists, and laboratorians will take turns interviewing EH group members acting as food workers or facility managers."
  - ***Environmental Health Specialist***

    "Using the Epidemiology Questionnaire (Appendix 4), Environmentalists will take turns interviewing nurses, epidemiologists, or laboratorians acting as ill complainants."
  - **"Please note that the questionnaires used in this exercise will likely differ from those that your jurisdiction uses. Although the content is standard, they have been shortened to allow for completion during the allotted meeting time. They are intended to provide a sense of what information each discipline gathers and draw attention to barriers that an investigation may encounter."**
- After participants have had 20 minutes to practice interviewing, the facilitator should stop the groups and pass out a copy of Appendix 5 to each group.
  - Copies of Appendix 5 should be retained by the facilitator until this point in the interview activity. The purpose of the injects is to present participants with challenges that can occur during the course of an outbreak investigation.
  - Participants will be tasked with discussing and strategizing ways to overcome these barriers in their small groups before discussing them with the group as a whole.
  - The facilitator may choose to give each group the same inject or may assign different injects to each group. Tell the groups whether they should focus on a specific inject or address the entire list.

Discussion and Evaluation
(~10 minutes, group work)

- This may be determined by the amount of time remaining or based on the experience of the team members. Dedicating additional time to this step may be very useful for less seasoned investigators.

- The groups should then resume discussing the outbreak scenario for an additional 5 minutes, focusing on what barriers are represented by the information in Appendix 5 and how they can be overcome.
  - Discuss ways to overcome these barriers. Ask for input from other groups.
- Recognizing that the specific questionnaires were likely distinct from those used in their jurisdiction, ask participants to reflect on the ways in which the type of interview completed differed from the type of information that they normally collect.
  - **"What information collected on the Environmental Health Questionnaire is the same as that collected on the Epidemiology Questionnaire?**
  - **How does the information collected support other disciplines' lines of investigation?"**
- If any laboratorians are participating, ask what their perspective on interviewing is.
  - How does the information gathered from cases and/or food workers impact the next steps that the laboratory would take or guidance they would provide?
  - What laboratory-related considerations would be present at this point of an initial foodborne illness investigation?
- If ending here, the facilitator should thank the group for their participation in the team activity and discuss future objectives for the group.
- Provide the evaluation link to all participants and reiterate that it will also be distributed by e-mail: https://is.gd/compl_activity_eval .

Title:	**Laboratory Submission Review (Optional Activity)**
Materials	*Clinical Submission Requisition* *Food/Environmental Sample Chain of Custody*
Learning Objectives	C3. M2.3
Getting Started (~5 minutes, continuation)	• If there is sufficient time to address this optional component, continue to dig deeper into the interaction between the interviewing disciplines and the laboratory. Continue the discussion from the end of the previous section, focusing on the laboratory-related considerations present at this stage of an initial investigation. o What EH/Epi/Lab interactions would be occurring at this point? o What types of samples might be collected, given the limited information available from the initial complaint and food worker and case interviews?
Spot the Error Activity (~5 minutes, group work)	• Each group will be provided with two forms: Clinical Submission Requisition Example (Appendix 6) and Food/Environmental Sample Chain of Custody Example (Appendix 7). The forms have been completed, but contain some errors. • Team members should work together to identify the errors in each form and note what impact these errors have on the lab component of the investigation.
Discussion and Evaluation (~10 minutes, group work)	• Upon completing the lab submissions activity, ask each group to share the errors that they identified in the completed forms. • Discuss what confusion may surround the forms' completion for non-laboratorians. o **"What information might be included or training might be useful in ensuring that the forms are completed correctly?** o **Where can such training be succinctly provided in an outbreak response plan?"** • The facilitator should thank the group for their participation in the team activity and discuss future objectives for the group. • Provide the evaluation link to all participants and reiterate that it will also be distributed by e-mail: https://is.gd/compl_activity_eval .

Appendices

Appendix 1
Complaint Scenario

During the past week, 5 adults have called into the health department complaining that they became ill after eating at restaurant X. In response, an investigation has been opened. Environmental Health plans to investigate restaurant X while epidemiologists or nurses begin contacting complainants and others who have eaten at the restaurant recently.

Appendix 2
Interview Tips

Bill Keene's Keys to Interviewing Success and Ten Cardinal Rules for Conducting Interviews

Bill Keene's Keys to Interviewing Success

- Keep the interview as conversational and as natural as possible while staying in the confines of the questionnaire.
- Show empathy to the interviewee.
- Explain what you're doing and why you're doing it.

Ten Cardinal Rules for Conducting Interviews

1. Do a practice run until you're comfortable with the questionnaire
2. Find a quiet place to conduct your interviews
3. Be non-judgmental
4. Avoid leading the witness
5. Accurately record what people say
6. Ensure confidentiality, beginning with conducting interviews in a private location
7. Gently re-direct, as needed
8. Probe if answers are vague, particularly about time of symptom onset
9. Work with epidemiology staff to provide language interpretation, if needed
10. Thank interviewee at closing and explain how info will be used

Additional Resources:
Additional interview tips can be found in the following video https://www.youtube.com/watch?v=-uZsoal0by0 produced by the Colorado CoE.

Appendix 3
Environmental Health Questionnaire

Establishment: _____Date of Suspected Meal: ____/____/____ Log#: _____

Foodborne Illness Investigation: Food Worker Interview

The Department of Health is investigating an outbreak of gastrointestinal illness among persons who that had food prepared Restaurant X. We are interviewing all food workers who helped prepare/serve the food. We understand that some people did not become ill, but it is important that we talk with everyone in order to determine what caused the illness. The questionnaire will take about 5-10 minutes to complete. All information will remain strictly confidential.

Date of Interview: _____/_____/_____

Food worker name: _____ Position: _____

Address: _____ Phone: _____

Work History:

- How long have you worked at this establishment? _____ Years _____Months _____Days

- Do you work as a food worker anywhere else? □ Yes □ No
  If Yes, where? _____

Time period of concern: (usually 10 days prior to suspect meal)

- When did you work during this time period? (Indicate hours worked)
  Sun_____ Mon_____ Tues_____ Wed_____ Thurs_____ Fri_____ Sat_____
  Sun_____ Mon_____ Tues_____ Wed_____ Thurs_____ Fri_____ Sat_____
  Sun_____ Mon_____ Tues_____ Wed_____ Thurs_____ Fri_____ Sat_____

Illness History:

- Did you have any of the following symptoms during this time period? (Check all that apply) □ Yes □ No

  □ Nausea □ Vomiting □ Abdominal cramps □ Fever
  □ Chills □ Muscle ache □ Headache
  □ Diarrhea: # of episodes/day_____

  If any of the above symptoms experienced:

  - When did the symptoms begin? Date and time: ____/_____/____ ____:____ AM/PM
  - When did the symptoms end? Date and time: ____/_____/____ ____:____ AM/PM

- Did you see a doctor or go to the hospital? □ Yes □ No
  If Yes, who was your healthcare provider? _____
  Diagnosis?_____

- When did you return to work after being ill? _____

- Has anyone in your household been ill during this same time period? □ Yes □ No

  If Yes, which symptoms did the person experience?

  □ Nausea □ Vomiting □ Abdominal cramps □ Fever
  □ Chills □ Muscle ache □ Headache
  □ Diarrhea: # of episodes/day_____

  If any of the above symptoms experienced by household member:

  - When did the symptoms begin? Date and time: ____/_____/____ ____:____ AM/PM
  - When did the symptoms end? Date and time: ____/_____/____ ____:____ AM/PM
  - What is the occupation of the ill household member?_____

- Do you know of anyone else (co-workers, friends, etc.) with a similar illness during the same time period?

  □ Yes □ No

  If yes, who? _____ Telephone: _____

- Did you eat any foods prepared on the date of the suspected meal(s)? □ Yes □ No

  If yes, indicate foods eaten: _____

- What foods do you prepare/serve? _____

  _____

  _____

Appendix 4
Epidemiology Questionnaire

Patient's Name (last, first):		Respondent is... □self □parent □spouse
Pt's phone #s – Home:	**Cell:**	
Age:	**Sex:** □ **Male** □ **Female**	**Ethnicity:** □ **Hispanic** □ **Not Hispanic**
Race: □ **Caucasian** □ **African-American** □ **Asian** □ **Other: _____**		
Home Address:	**City:**	**State & Zip:**

Lead-In Questions (Ask of Everyone)
Did/Do you …

a. **Travel anywhere (different from your normal routine) from 6/6/17 to 6/13/17?**
□ **Yes** □ **No** □ **Don't Know**
***If yes*, give place(s) that you traveled to: _____**
When: ___ /___ /___ thru ___ /___ /___

b. **Participate in group gatherings, parties, field trips or other group activities (e.g., local sporting events) from 6/6/17 to 6/13/17?**
□ **Yes** □ **No** □ **Don't Know**
***If yes*, list activities: _____**
Where? _____ When? _____

c. **Know anyone who has been ill with diarrhea or vomiting since 6/4/17?**
□ **Yes** □ **No** □ **Don't Know**
***If yes*, who (relationship and name)? _____**
When did they get sick? ___ /___ /___

Food Exposures

d. **Did you eat at Restaurant X between 6/6/17 and 6/9/17?** □ **Yes** □ **No**
***If yes*, when? ___ /___ /___**

e. **At Restaurant X, did you eat any of the following?**

Item	**Y**	**N**	**D/K**
Fried Chicken	□	□	□
BBQ Pork	□	□	□
Vegetable Soup	□	□	□
Herbed Potato	□	□	□
Corn on the Cob	□	□	□
Dessert – Specify:	□	□	□
Condiments/Dips – Specify: **(Ketchup, Honey Mustard, BBQ Sauce, Butter, etc.)**	□	□	□

f. **What did you have to drink? _____**
g. **Did you have ice in your drink? □ Yes □ No □ Don't Know**
h. **Did you have any garnishes in your drink? (lemon, lime, etc.) □ Yes (specify) _____ □ No □ D/K**

Symptom History

Now I want to ask you some questions about recent stomach illness you may have experienced.

i. **Have you been sick at all with diarrhea since 6/6/2017?**
By diarrhea, I mean three or more loose stools in a 24-hour period. □ Yes □ No □ Don't Know

Since 6/6/17, did you have any...

Y	N	D/K		Y	N	D/K	
□	□	□	Nausea	□	□	□	Chills
□	□	□	Vomiting	□	□	□	Headache
□	□	□	Diarrhea	□	□	□	Backache
□	□	□	Blood in stool	□	□	□	Muscle aches
□	□	□	Cramps	□	□	□	Unusual fatigue (feeling tired)
□	□	□	Constipation	□	□	□	Other (*if other, specify* _____)
□	□	□	Fever				("Did you feel sick any other way?")
			(*if yes*, □ subjective or _____˚)				

***If this person has NOT had either diarrhea or vomiting*, STOP HERE (Go to Ending Statement).**
***If they have had these symptoms*, CONTINUE.**

Onset and Duration

Get precise answers for onset time. If you don't get a date and time, it can't be placed on an epi curve. Estimates are OK. Prompt as needed: "What is your best guess of the time?" Don't accept vague responses like "morning" or "after midnight." Be careful with times such as "midnight" or early morning hours—which day do they mean? By "2am Friday night," for example, do they mean Saturday morning? Keep probing until it is unambiguous.

j. **On what date did you first feel sick? ___ /___ /___**
k. **At what time did you first feel sick? □ _____ am □ noon □ _____ pm □ midnight (end of day)**
l. **What was your first symptom? _____**
m. ***[If applicable]* On what day did you start having the diarrhea? ___ /___ /___**
n. ***[If applicable]* At what time did the diarrhea begin?**
□ _____ am □ noon □ _____ pm □ midnight (end of day)
o. **Are you still having any diarrhea now? □ Yes □ No**
***If Yes,* Are you willing to submit a stool specimen? □ Yes □ No**

***If No,* How long did the diarrhea last? _____ minutes _____ hours _____ days**

p. **Did you have contact with anyone else who was sick with vomiting and/or diarrhea during the 7 days prior to becoming ill?**
***If Yes*, who and when? _____**

Ending Statement

Thank you very much for your time. These interviews are extremely valuable in helping us solve the mystery of why people are getting sick. Depending on what we find out when we put these interviews together, we may need to follow up about a few details. Would it be okay if I contacted you again if we have additional questions?

Appendix 5
Injects – Barriers to Actionable Information

A wide variety of challenges can occur during the course of an outbreak investigation, complicating team efforts to resolve the situation. Small teams will be assigned one or more of the following injects. Teams should discuss the injects for an additional 5 minutes. Teams should strategize ways to overcome these barriers before discussing them with the group as a whole.

1. Patient specimens arrive at the lab without being properly labeled.
2. Food samples arrive at the lab out of temperature.
3. The wrong test was used to test patient specimens at the local hospital and the samples have been discarded.
4. A suspected food vehicle cannot be distinguished from patient interviews.
5. The majority of interviewees are uncooperative and unwilling to give epidemiologists/nurses any information.
6. A potential source of contamination is found at Restaurant X during a site visit by Environmental Health personnel, but it does not have a clear relationship to the suspected food vehicle.

Appendix 6
Clinical Submission Requisition Example

Coe County *Safer. Happier. Epier.*	**Coe County Department of Health Clinical Submission Requisition**	***Place Lab Accession Label Here***

***Indicates Required Fields**

SPECIMEN COLLECTION INFORMATION

***Last Name:** Morgan	***First Name:** Mark	MI:
***DOB:** 11/18/1985	***Gender:** ■ Male □ Female	Outbreak Number (if applicable): 17-256
Race: □ American Indian □ Asian □ Black □ Hawaiian/Pacific islander ■ White □ Other (_____)	Ethnicity: □ Hispanic ■ Non Hispanic	
Address: 2256 Bobby Gray Road		
City: Coeville	***County of Residence:** Coe	State: TN / Zip Code: 37955
***Date of Collection:** 10/31/	***Specimen Type:**	***Specimen Source:**

SUBMITTER INFORMATION

***Submitting Facility:** Coeville Medical Center	Patient Medical Record Number: 123-4567	
Address: 1906 Alacoe Highway	Phone Number: 765-345-0546	Fax Number:
City: Coeville	State: TN	Zip Code: 37955
Ordering Provider:	Phone Number:	Fax Number:
Sample Collection Facility: Department of Health	Patient Medical Record Number:	
Address: 2101 Medical Center Way	Phone Number: 765-424-5539	Fax Number: 765-424-5538
City: Coeville	State: TN	Zip Code: 37955
Point of Contact: Mary Dee	Phone Number: 765-424-0319	Fax Number:

TEST REQUESTED

Culture
- □ Actinomycete (Aerobic)
- □ Aerobe
- □ Anaerobe
- □ Enteric
- ■ Gonorrhoeae
- □ Herpes Simplex Virus
- □ Legionella
- □ Mycobacteria Smear & Culture
- □ Mycobacteria Reference Isolate
- □ Mycology
- □ Viral: Virus Suspected _____

Parasitology
- ■ Blood Parasite
- □ Ova & Parasite
- □ Cryptosporidium

Serology
- □ Arbovirus Panel
- □ HBV Screen
- □ HCV Screen
- □ HIV Screen
- □ Measles/Rubella IgM
- □ Syphilis RPR
- □ VDRL

Molecular
- □ Bordetella (Pertussis) PCR
- □ *C.trachomatis/N.gonorrhoeae* (GenProbe)
- □ GI Panel (Biofire)
- □ MCR 1/2 PCR (Colistin resistance)
- ■ Norovirus PCR
- □ Plasmodium PCR

Miscellaneous
- □ ARLN Reference DST
- □ CRE Colonization
- □ CRE Confirmation
- □ **Other** _____

ADDITIONAL INFORMATION

Is this isolate/specimen being submitted in response to the CCDH Reportable Diseases and Events Guidelines? □ No ■ Yes

Is this isolate/specimen being submitted as part of a surveillance program? ■ No □ Yes If yes, program name: _____

Please provide the following information with regard to isolates/specimens submitted:
Gram Stain Reaction: oxidase-positive diplococcal strain Other lab tests performed and results: Superoxol Test +ve; all strains give 4+ reaction
Automated ID if applicable: 4456 Suspected Organism: Neisseria gonorrhoeae

Appendix 7
Food/Environmental Sample Chain of Custody Example

Coe County *Safer. Happier. Epier.*	Coe County Department of Health Food and Environmental Sample Testing	*Place Lab Accession Label Here*

*Indicates Required Fields

SAMPLE COLLECTION INFORMATION

*Outbreak ID: 17-667	Sample # 1 of 5	
*County: Coe	*Sample Collector:	*Contact Phone # ( )
*Date of Collection: 05/09/2017	*Sample Type/Lot No.: 24	*Temperature: 4
Comments:		

Suspected Organism(s) for testing based on Epi data:

- ☒ Salmonella
- ☐ Shiga-toxin producing E. coli
- ☐ Shigella
- ☐ Bacillus cereus
- ☒ Staphylococcus aureus
- ☒ Clostridium perfringens
- ☐ Campylobacter
- ☐ Norovirus (environmental sampling only)
- ☐ Other _____

CHAIN OF CUSTODY

Collected By: Mary	Date: 05/19/2017	Time: 07:30	Signature:
Organization: CCHD	Phone Number: ( )		County: Coe
Address:	City:		State: / Zip:

Date/ Time	Released By	Received By	Purpose of Change in Custody	Temp (if applicable)
	Signature: Name, Title: Mary, Health Inspector	Signature: Name, Title: Robert, Microbiologist		
	Signature: Name, Title:	Signature: Name, Title:		
	Signature: Name, Title:	Signature: Name, Title:		
	Signature: Name, Title:	Signature: Name, Title:		
	Signature: Name, Title:	Signature: Name, Title:		

For Laboratory Use Only:

Date Sample Destroyed	Person Responsible
	Signature:
	Name, Title: