



Introduction to Effective Interviewing

Administrative Guide



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Getting Started

Course Scope

This training is designed to cover the fundamental skills and key principles for conducting effective interviews for foodborne illness investigations. The course can be delivered either as an in-person, instructor-led training, or as a virtual instructor-led training.

The course will cover:

- When interviews should be conducted
- Different types of interviews
- Steps in preparing for an interview
- Basic interview protocols
- Best practices for effective interviewing
- Communicating data

Participants will be provided an opportunity to practice interview skills.

Target Audience

The primary course audience is staff from local, regional, state, and territorial public health departments responsible for foodborne illness investigations.

Course Level

Introductory

Prerequisites

None

Course Length

8 hours

Room Setup

Tables should be set up to be in pods accommodating 6-8 students per pod.

Course Facilitators

Facilitators of this training are experienced and skilled in conducting foodborne illness investigations and interviews. The following recommendations are suggested:

- 2-3 instructors to facilitate the classroom delivery of this course.
- 3-4 instructors to facilitate the virtual instructor-led training (vILT)
 - Additional instructors are for support of potential technical issues and to aid in the facilitation of virtual breakout rooms.
- A maximum of 30-35 students per class.

Group Activities

During group activities for both classroom and virtual delivery, instructors will monitor breakout groups and move around in groups observing participant's progress and answering questions as needed. Instructions for classroom activities are noted within each module respectively.

Instructor hints are provided throughout the course to give instructors administrative guidance or instructional tips that aid in the flow of the instruction.

The instructor should periodically check with the class if there are any questions for understanding or clarification before proceeding to the next topic.

If virtual group work is assigned, instructors should assign participants to different workgroups prior to Activity 1.1.

- It is recommended to avoid making assignments prior to a class start in case of "no shows".
- An assistant can help set up group assignments for virtual delivery prior to Activity 1.1.

Engagement Options

Engagement options contain optional strategies suggested throughout the course for to consider as an aid to enhance participant engagement with the learning topic. It is not intended that all ENGAGEMENT OPTIONS listed be used. Each instructor should choose what works best for their style and for their learners.

Assessment Strategy

The course utilizes a pre- and post-test along with knowledge checks. The instructor should:

- Monitor participant involvement throughout course activities and discussions.
- Assess participant learning through knowledge checks, questioning, and exercises.
- Administer the pre and post-test to evaluate learning. (* *Virtual delivery of tests will be administered through REDCap.*)
- An end-of-course evaluation is administered at the conclusion of the course with a focus on evaluating the overall learning experience.

Testing/Certification

Pre- and post-tests are provided in the materials for administration to participants. A pre-test will be administered prior to instruction in the first module and a post-test will be administered after completion of instruction of the last module. Both tests are made up of multiple-choice questions and designed to assess mastery of the learning objectives. A graded post-test with a minimum of 70% is required to earn a Certificate of Completion. CEU units will be issued by those agencies with the ability to issue CEUs

based on total training hours. (For example, 2-day training totaling 16 hours would equate to 1.6 CEU units.)

Evaluation Strategy

Comparison of post-test results and the evaluation form will be used to gauge course effectiveness and the effectiveness of instructors in delivery of the material. This information can be reviewed to identify adjustments to course materials and to improve the effectiveness of content delivery, if necessary.

Virtual (vILT) Delivery

Information is provided throughout this guide to support training delivered virtually. A separate slide deck is provided for use during virtual training delivery presentation and the slide visuals are integrated into the Module 1 section in this guide.

Polling

The course administrator may opt to use virtual polling option in chosen virtual platform (Zoom, Teams, etc.). If so, insert the knowledge check question and answer choices into virtual poll and administer per the platform guidance. Existing knowledge check slides can augment the virtual poll in this manner:

- Show Knowledge Check slide and read question to participants
- Launch virtual poll and allow participants to answer; close virtual poll and share responses (optional)
- Advance slide to highlight the correct response and discuss as needed

Virtual Instruction Engagement Strategies

The following strategies can be used to increase engagement in a virtual learning environment.

- 1. Require participant cameras on during class**
 - *This will increase attention level among participants more than any other strategy because it removes temptation to complete other tasks during class*
 - *Include this requirement in pre-course communication*
- 2. Instructors should practice looking at camera, not the screen to simulate eye contact**
- 3. Plan for instructors to arrive in the virtual classroom at least 15 minutes early for casual conversation with those who arrive early**
 - *Brainstorm a few casual topics for conversation to break the ice and draw in other participants as they arrive in the virtual classroom.*
 - *Casual topic ideas: upcoming vacation plans; pets; sharing favorite recipes; asking about job duties; hobbies; etc.*

- 4. Ask participants to rename their screen name to their real name**
 - *It will be much easier to address “John Smith” than “Lake County 0523”*
 - *Call on participants by name in a non-threatening way to add their opinions and experiences on learning topics*
- 5. Start class with a demonstration of how to use the chat feature**
 - *Encourage participants to chat the answer to a low-level ice breaker such as where they are from, their next vacation spot or last movie they saw and encourage people to talk on screen about these low-pressure topics*
- 6. If a definition or key concept is listed on a slide call on a participant to engage with it by:**
 - *Deciding if they agree with the statement (John, what do you think of that? Do you agree?)*
 - *Restating the concept in their own words (John, can you put that in your own words?)*
 - *Call on other participants to lend assistance (Kate, what do you have to add? Kate, help him out—what do you think?)*
- 7. Encourage participants to rotate responsibility as break out group spokesperson**
 - *This allows multiple participants to engage rather than just the most dominate personalities*
- 8. Introduce some healthy and good-natured competition between break out groups**
- 9. Give participants advance notice that you want their engagement on a topic by stating things such as:**
 - *John, at the end of the module can you give us a 30 second synopsis on...<chosen topic>*
 - *We are going to discuss <chosen topic> and then I'll ask John, Kate and Mary their thoughts on it.*
- 10. Use participants reaction buttons (thumbs up/down; yes/no; etc.) and chat feature**
 - *This will provide kinesthetic opportunities for engagement*
 - *This is also a way to check for learning*
- 11. Take regular breaks**
 - *Display a countdown clock to keep participants on track for when class will resume*

- *Consider incorporating music into the countdown slide so participants can hear when to return to their screen*

12. Create a positive virtual classroom environment

- *Involve participants in discussion, sharing opinions and experiences*
- *Instructors should maintain a conversational instructional style*
- *Attempt to make the atmosphere fun and light, inviting questions (consider an “open mic” policy for asking questions rather than a more formal “hand raise” environment)*

Sample Facilitative Questions

The following example of questions are optional and may be adapted for your use to help engage learner’s participation.

Low Level Thinking Skills

Knowledge

- Can you list three...?
- Can you recall...?
- How would you describe...?
- How would you explain...?

Comprehension

- Can you explain what happened?
- How could you rephrase...?
- How would you summarize...?
- What can you say about...?

High Level Thinking Skills

Application

- How could you use...?
- How would you...?
- What approach would you use?
- How would you apply or adapt... to your work?
- What would happen if...?
- What elements would you choose to change?
- What questions would you ask?

Analysis

- Can you list...?
- What inference can you make...?
- What conclusions can you draw...?
- Can you make a distinction between...?

Synthesis

- What changes would you make...?
- What could be done to minimize...?
- Can you suggest an alternative...?
- How would you design...?
- Can you formulate a hypothesis for...?

Evaluation

- Do you agree with...?
- Would it be better if...?
- How would you evaluate...?
- How would you prioritize...?
- What information would you use...?
- What follow-up questions would you ask?
- How would you summarize...?

Training Resources

For this training, you will need the following:

- Facilitator Guide
- Participant Guide
- PowerPoint Slide Decks (*Modules 1, 2, 3, 4, 5, and 6*) – used for Classroom delivery format
- PowerPoint Slide Decks (Modules 1, 2, 3, 4, 5, and 6) – used for Virtual delivery format
- Whiteboard or flipchart pad/easel
- Whiteboard or flipchart markers
- Sticky Note pads
- Flipchart markers
- Whiteboard markers
- Pens/pencils
- Highlighter markers
- Computer
- Projector
- Projection screen
- Zoom

Videos

- Utah Department of Health Food Compliant System, 1- minute (Module 2); Source: (<https://pubredcap.health.utah.gov/surveys/?s=AMR9NWM7YP8FFDF3>)
- Do's and Don'ts of Outbreak Interviewing, Integrated Food Safety Centers of Excellence, , 9-minutes (Module 4); Source: (<https://www.youtube.com/watch?v=O6gKLQpEkfY>), FOMES: <https://www.oregon.gov>

** All videos are embedded/linked within the module slide decks.*

MODULE 1 Course Overview

Participants will be able to state the course goal and the reasons for conducting interviews in food-borne illness investigations.



*In slide notes you will find instructor hints to help teach concepts on each slide as well as suggestions for engaging learners. Specifically, you will find **ASK** and **ENGAGEMENT OPTION(S)**.*

- **ASK:** *(These are suggested questions to encourage engagement and discussion of learning topics. Expected answers are included in parentheses.)*
- **ENGAGEMENT OPTION(S):** *(These are optional strategies throughout the course for instructors to consider for further engaging participants with the learning topic. It is not recommended to implement all engage options listed nor to use engage options on each slide. Each instructor should choose what works best for their style and for their learners.)*

*Also, instructors should reference the Admin Guide for further ideas for engaging participants and tips on virtual instruction. In addition, you will find **VIRTUAL INSTRUCTION ENGAGEMENT STRATEGIES** with ideas for enhancing slide concepts in the virtual environment.*

Introduce the lead instructor. (*Introduction of other instructors comes later.*)

ASK:

- How do you think interviewing is essential to foodborne illness investigations? (helps determine commonalities among cases; helps determine source of illness)
- What do you think can help make interviewing effective? (wide variety of answers are possible. The question is meant to help the instructor gauge familiarity with the topic and to identify themes to return to as the module develops.)

Notes:

Module 1: Objectives

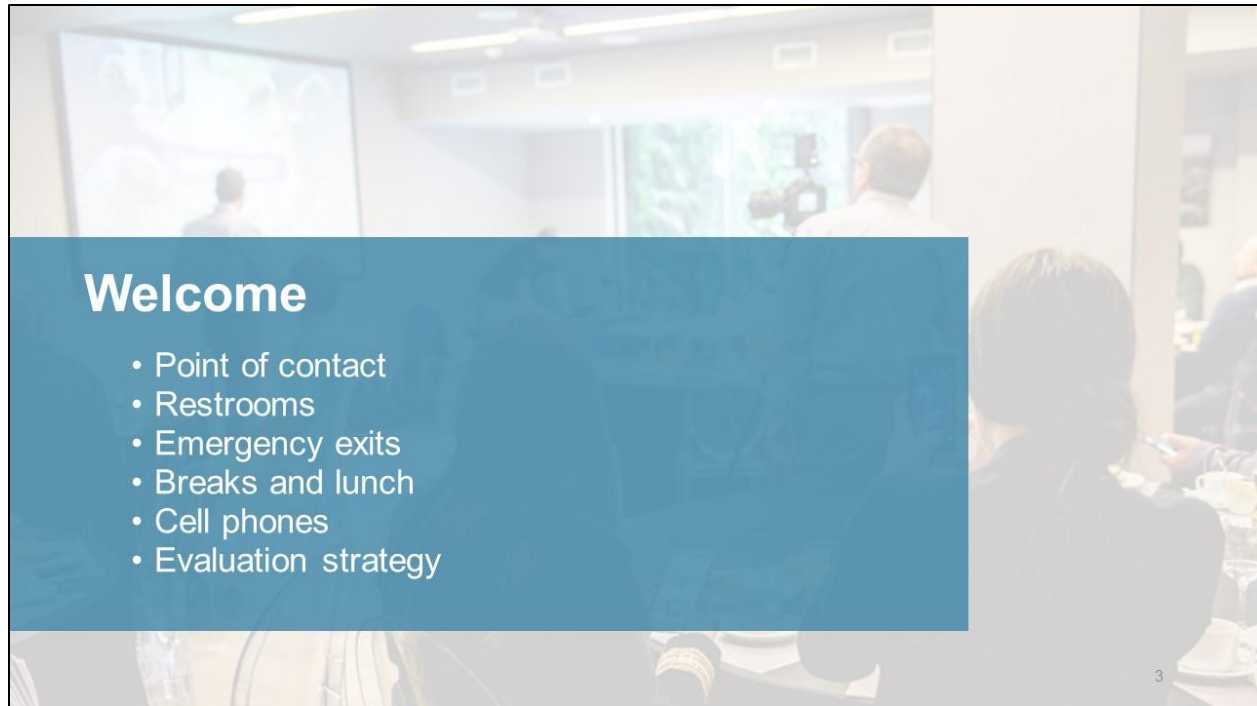
This module will:

1. Explain the importance of interviewing during foodborne illness investigations
2. Describe the content and structure of this course

2

Briefly state the module objectives. Emphasize that objectives help determine where we are going and to provide context to the material in a module.

Notes:



- First invite any local points of contact to make necessary announcements/welcome remarks.
- Ensure that participants know locations of restrooms and emergency exits;
- Outline how often breaks will occur and what time lunch will be
- Ask participants to silence cell phones and take necessary calls outside the classroom
- Explain that there will be a pre & posttest and knowledge checks throughout the course as well as discussion and activities to reaffirm learning

Note to instructors:

Participants can miss no more than three hours of class. They will need to review the content missed in the participant guide. If they have questions after reading the content, they should arrange to have them answered by an instructor.

vILT Delivery

Explain the following features in the virtual environment:

- Mute
- Camera On/Off (strongly encourage cameras on throughout course to increase engagement)
- Chat feature (have them test it by typing their hometown)
- Raise hand feature (have them test raising and lowering hand)

- Reactions (if desired)
- Polls (if used)
- Encourage participants to private message an instructor not actively teaching if they need technical help during the course.

Notes:

Virtual Housekeeping

- Breaks
- Technical support
- Raise hand using the “Reactions” function
- Chat
- Cameras
- Questions



4

NOTE TO FACILITATOR:

- For vILT delivery, the slide deck will contain this slide on **Virtual Housekeeping**.
- For classroom delivery, this slide will not appear in the slide deck, and you may skip to the slide titled, **Using the Participant Guide**.

vILT Delivery

Explain the following to the online participants:

- Participant cameras are required to be on during this course. Microphones should remain muted unless speaking.
- Provide the name and email contact for technical support should participants get kicked off and cannot reconnect or encounter other technical issues. (*Suggest that participants write this down.*)
- Announce that a timer will display during all break times. (**Optional:** *Use a timer with music so participants can tell if the break is over.*)
- Explain the use of virtual tools (reaction, chat, annotations, stamps, etc.)

ENGAGEMENT OPTION(S):

- Demonstrate how to raise a hand using the “Reactions” function.
- Invite participants to practice.
- Demonstrate the use of the Chat feature.
- Invite participants to type an entry into the Chat field.
- Demonstrate the use of Cameras (optional).



Virtual Polling Functions

Polling functions will be used to:

- Review content and assess understanding
- Answer knowledge check questions

5

NOTE TO FACILITATOR:

- For vILT delivery, the slide deck will contain this slide on **Virtual Polling Functions**.
- For classroom delivery, this slide will not appear in the slide deck, and you may skip to the slide on **Course Materials**.

vILT Delivery

Briefly explain:

- The purpose for polling functions.
- How to answer questions

Be prepared to provide a brief demonstration of the polling feature and how it may be used for other activities.

ENGAGEMENT OPTION(S):

- Demonstrate a quick polling question and how it will appear for the participant.
- Invite participants to respond.
- Demonstrate showing the results of the polling to the participants.

Notes:

Using the Participant Guide

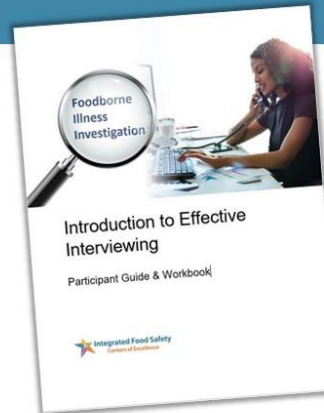
- Fill-in-the-blank **Text Boxes** may appear on some slides.
- Type your **NAME** in the sample Text Box below.

Type Here:

- To enter **Notes**, select available “Click or tap here to enter text” field below and type in a brief statement.

Click or tap here to enter text.

** For printed versions, simply manually complete these field options.*



5

Display a copy of the Participant Guide being provided.

Explain to participants that they should have received a digital copy of the Participant Guide and handouts after completing the pretest.

- Briefly review the Participant Guide with the learners.
- Explain how the Guide also functions as a workbook and can be digitally completed (or manually completed if using a printed version).
- Be prepared to email a digital copy of documents to any participants who indicate they do not have the information.

Demonstrate how to use the Guide:

- Explain how Text Boxes will appear on some slide images to serve as fill-in-the-blank areas to reinforce notetaking.
- Demonstrate filling in a Text Box.
- Invite participants to practice.
- Explain how the “Click or tap here to enter text” fields are provided to support their ability to take notes throughout the training.
- Demonstrate filling in a “Click or tap here to enter text” field.
- Invite participants to practice.

vILT Delivery

- Display a copy of the Participant Guide and any resources being provided
- Explain to participants that they should have received a digital copy of the Participant Guide after completing the pretest.
- Briefly review the Participant Guide with the learners.

- Explain how the Guide also serves as a workbook and can be digitally completed.
- Be prepared to email a digital copy of documents to any participants who indicate they do not have the information.

Notes:



Welcome participants and introduce yourself, and any other instructors who may be helping to deliver the training, by offering the following information:

- Name
- Title/Agency
- Desired outcome from the course
- Experience relevant to the course subject matter

vILT Delivery

Stop sharing the screen to allow a more casual virtual atmosphere for learner introductions. Call on learners to share the above information.

VIRTUAL SUGGESTION:

Place the following in the chat box to remind them what to share:

- Name
- Position/Title & Agency
- What you hope to learn from course
- Previous knowledge of topic

Notes:

Course Goal

To apply interviewing skills and techniques to gather needed information to facilitate foodborne illness surveillance and outbreak investigation activities.



8

Emphasize that effective interviewing can help solve foodborne illness investigations and thus, prevent additional illness.

Be sure to bring out the prevention of illness part stronger in the upcoming discussion to reinforce the importance to the learner.

ASK:

What skills and techniques are needed for an effective interview? (attention to detail; communication skills; patience; teamwork; etc.)

ENGAGEMENT OPTION(S):

- Ask a participant to read the course goal and restate in their own words.
- Ask participants what can make an interview challenging.

vILT Delivery

VIRTUAL SUGGESTION:

Have participants use the chat feature to “chat” what can make an interview challenging.

Notes:

Course Agenda

Module Number	Module Title	Hours of Instructional Time
1	Course Overview	1
2	Interviews: The What, the When, and the Why	1.5
3	Preparing for the Interview	1.5
4	Conducting Interviews: The Fundamentals	1
5	Best Practices for Effective Interviewing	1.25
6	Documenting and Conveying Case Data	1.75

8

Review the course agenda. *The blue line indicates either lunch break (in person) or the end of the first day (virtual).*

Notes:

Why Interview?

Why is interviewing important for the investigation?



10

DISCUSS: Facilitate a whole class discussion exploring why interviews are important for the investigation. Aim to spend 5-10 minutes on this discussion to set the stage for why interviewing matters and the impact on the investigation. Ideas for discussion:

- Generates hypotheses for the cause of illness as commonalities are identified between cases.
- Helps characterize symptoms, onset dates/times
- Helps uncover any demographic commonalities or shared events
- Identifies locations where transmission is occurring, including secondary transmission
- Guides decisions for possible food testing at the laboratory
- Helps identify suspect food products for potential regulatory actions, like traceback and removal from the marketplace
- Identifies infected people working in or attending high risk settings that need to be excluded
- Educates the public about risk & safe food handling

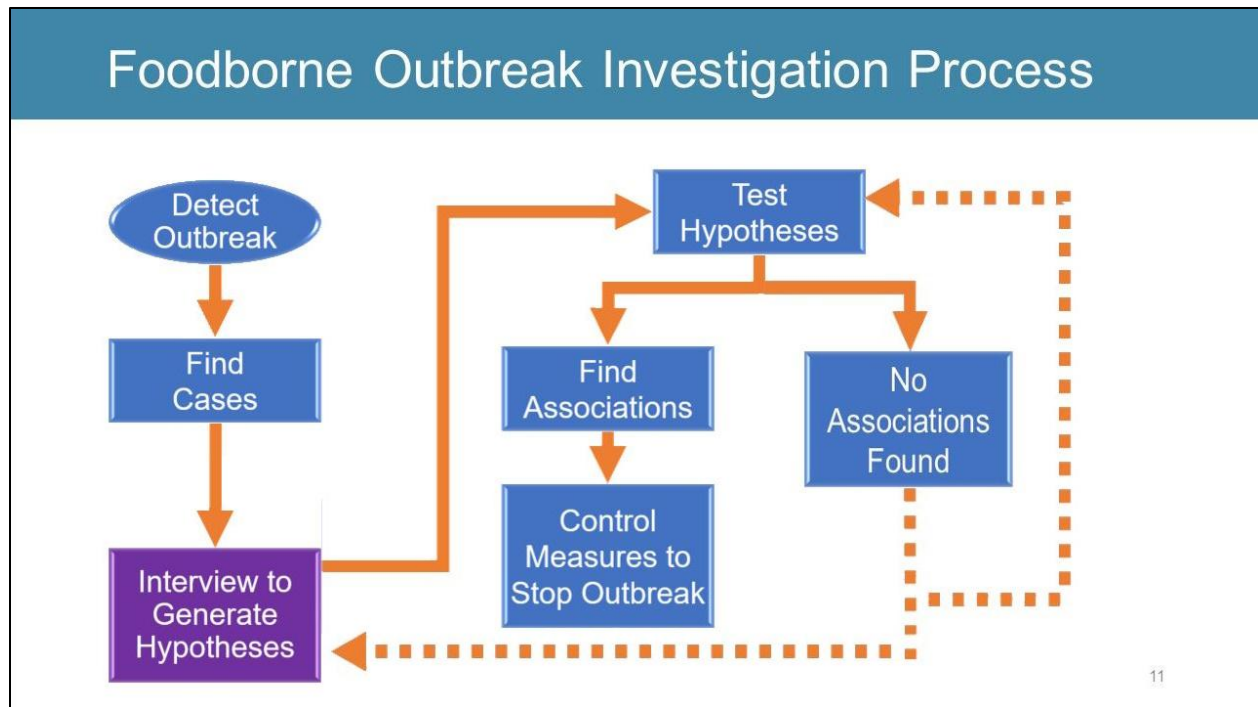
ASK:

- What are the consequences of a poorly conducted interview?
 - Lack of reliable exposure information to guide the investigation
 - Lack of trust between interviewer and interviewee
 - Difficulty determining illness source—leading to additional ill persons in community

ENGAGEMENT OPTION(S): (to underscore “What’s In It For Me” or WIIFM)

- Ask participants why they want to improve interview skills.
- Ask participants to share an experience of how interviewing has assisted foodborne illness outbreak investigations.

Notes:



*This is an animated slide.

Emphasize that interviewing is a critical part of the overall process of foodborne investigation. Explain that interviewing can generate hypotheses about what is causing illness, and this can lead to implementing control measures to stop the outbreak.

<Click to advance the slide.>

1. **Outbreak is detected.** Explain that outbreaks are detected in a variety of ways: routine disease surveillance, food complaints, notification from community partners, etc. Don't go into too much detail here—surveillance comes in the next module.

<Click to advance the slide.>

2. **Find Cases.** Explain that investigators need to determine which people merit interviews. Sometimes it's obvious (people who attended the dinner associated with illness) but sometimes they may need to look back in the surveillance system to identify which cases need interview. Case findings will be covered in detail in a later module, just touch on it superficially.

<Click to advance the slide.>

3. **Interview to Generate Hypotheses.** Explain that investigators need to interview to form a hypothesis about what might be making people sick - investigators are looking for trends.

<Click to advance the slide.>

4. Test Hypotheses. If a hypothesis emerges about what might be causing illness it must be tested.

- **ASK:** How can investigators test these hypotheses? (laboratory food testing; case control or cohort studies; environmental sampling, looking at shopper card data; etc.)

<Click TWICE to advance the slide.>

5a. Find Associations/Implement Control Measures. If the hypothesis is tested and found to be associated with illness, appropriate control measures can be implemented

- **ASK:** What kind of control measures might be implemented to stop an outbreak? (recalling food; excluding an ill food worker; environmental cleaning at a restaurant; etc.)

5b. No Associations Found. Explain that sometimes no hypotheses are found, or no associations are made. Explain that this will lead to additional hypothesis testing and possibly more interviewing and that sometimes interviewing is iterative.

After explaining the investigation process, a phone icon will appear. Select the phone icon to begin the threaded scenario where an audio file will play describing an increase in ill people presenting to the Emergency Department.

Advise students that a text version of the audio is provided within the Participant Guide for those who wish to read along.

ENGAGEMENT OPTION(S):

ASK PARTICIPANTS:

- Have you ever been on the receiving end of a call like this?
- Describe the situation and what they did.

If no one has experience to share, ask if their health department has a protocol for handling a call like this.

Notes:

Activity 1.1

Answer the following questions:

1. Does this scenario merit gathering additional information?
2. What additional information is needed? How would you get it?

Choose a spokesperson to report out group findings.



12

Group Activity:

This activity should take 10 minutes (5 minutes in groups and 5 minutes for reporting out).

- Divide the class into breakout groups.
- Explain how this exercise will present an audio of a telephone call that will require them to make some determinations.
- Invite the groups to select a spokesperson who will report their responses following the exercise.
- Each group is to answer the questions on the slide.
- Invite the class to review the two questions displayed.

Let the class know when you are ready to start the telephone call audio.

<Click to reveal the Telephone Icon.>

<Click on either the Telephone Icon or on the Play button of the audio Playbar to play the audio file.>

Facilitate a group discussion as breakout groups report their findings.

ASK PARTICIPANTS:

- Does this scenario merit additional information gathering? (Likely yes—some level of additional information is needed. This facility is seeing an increase in illness, so an outbreak is potentially occurring. Some initial hypothesis generating interviews may provide investigators direction)

- What additional information is needed? (questions to identify commonalities among where cases live, work, common activities or gatherings, common grocery chains or restaurants; questions to identify onset date and time, symptoms experienced, any ill contacts. Questions to determine if exclusion from childcare or work is needed)
- How would you get this information? (preliminary interviews at Emergency Department with cases; get additional details from ED staff)
- At the conclusion of the activity, simply

<Click to advance to the next slide.>

vILT Delivery

- Send participants to pre-assigned breakout rooms for 5 minutes to discuss Activity 1.1 questions in Guide.
- Instruct each group to choose a participant to report findings upon return to large group.
- After breakout groups return to main session ask each group to share a synopsis of their discussion.

Notes:

Activity 1.1 GI Illness Scenario

Phone Call Audio Description

(Telephone rings 3 times.)

Public health staff answers:

Lake County Health Department Communicable Disease. This is Stacey.

Caller:

Hello, this is Martha from Memorial Hospital Emergency Department. Yeah, we wanted to let you know that something may be going on. We've seen a big increase today in the number of patients with GI illness--our waiting room has been full all day and that is not normal for us on a Monday. Oh, I have to go there's more coming in the door now.

(Telephone caller hangs up.)

- Does this scenario merit additional information gathering?

(Participants can enter their responses here.)

- What additional information is needed?

(Participants can enter their responses here.)

- How would you get it?

(Participants can enter their responses here.)

Notes:

Module 1 Summary

This module:

1. Explained the importance of interviewing during foodborne illness investigations
2. Described the content and structure of this course



13

Briefly summarize all content that was covered in this module.

Invite participants to ask questions for clarity or understanding before moving to sharing what is next.

What's Next?

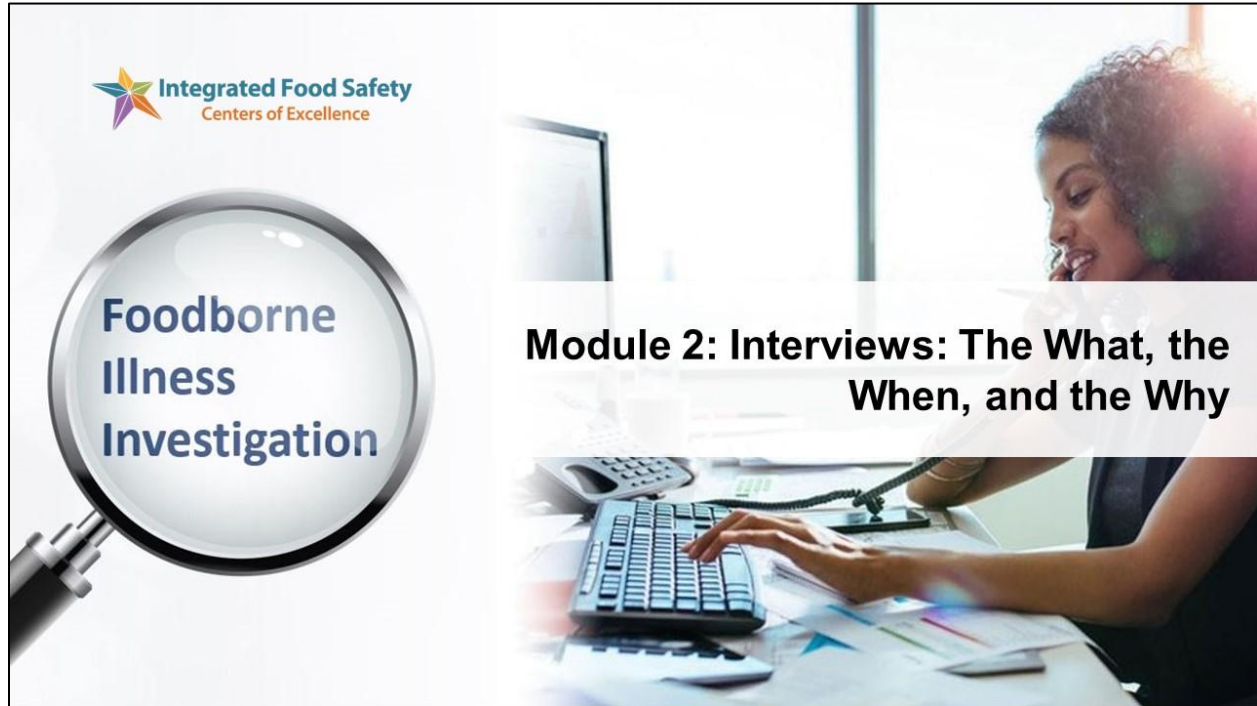
Explain what the focus of the next module in the course will be:

Module 2: Interviews – The What, the When, and the Why

Notes:

MODULE 2 Interviews: The What, the When, and the Why

Participants will be able to describe the different categories and types of interviews and their appropriate use.



Notes:

Module 2: Objectives

After completion of this module, you will be able to:

1. Identify types of surveillance that may lead to interviewing
2. Recognize interview types
3. Distinguish between hypothesis-generating and hypothesis-testing interviews
4. Explain the purpose of interviewing well persons

2

Briefly state the module objectives.

ENGAGEMENT OPTION(S):

- Task a breakout group by providing a 30 second summary of one of the learning objectives at the end of the module. Tell them you will remind them when you get to that part of the lesson. *(Suggest choosing only 1-2 objectives to have participants summarize. However, ensure that no objective is left out of the selection.)*

** Breakout groups apply to both classroom and virtual settings.*

vILT Delivery

Same as for ILT.

Notes:

When to Interview?



What situations prompt interviewing?

3

DISCUSS:

Facilitate a whole class discussion exploring how we determine when interviews are merited. There are several different scenarios that may arise and if not, additional prompting questions may be needed. The next few slides cover surveillance so, avoid lecturing here, rather have a healthy discussion. Ideas for discussion:

- Community partner notifies health department of a potential increase in symptomatic people (nursing home, school, hospital, daycare, etc.)
- Food complaint received from the public

ASK:

Does your jurisdiction interview each food complainant or only if multiple complaints are received for same establishment?

- Disease surveillance data indicates a potential cluster of disease (i.e.—# of Salmonella cases above expected, or baseline)
- Laboratory surveillance data indicates cases that are likely related
- State or federal partners notify that a case is part of a multi-state outbreak (this often requires using a specific questionnaire, such as the National Hypothesis Generating Questionnaire)
- Certain diseases may require an interview per local or state protocol (i.e.—Listeria for national surveillance)

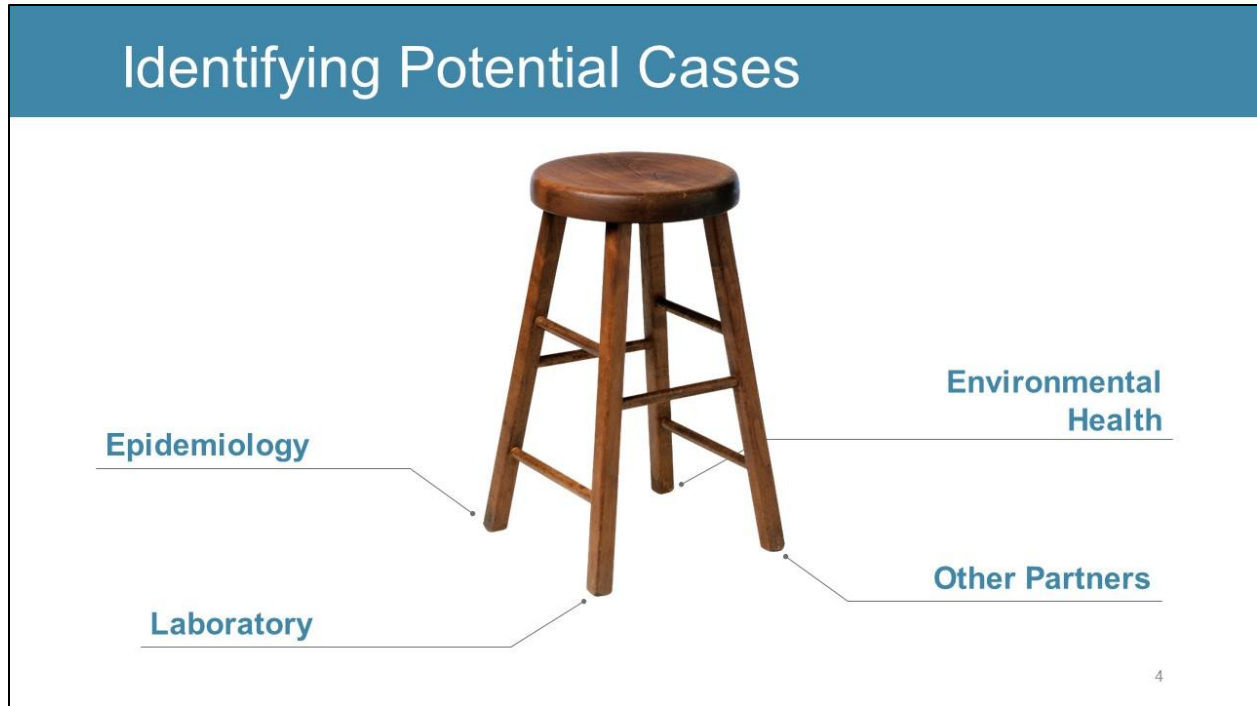
ENGAGEMENT OPTION: (to underscore “What’s In It For Me” or WIIFM)

Ask participants if an interview of an individual case really matters. Why or why not? (one case often signals MANY more unreported cases; each case interviewed increases likelihood of recognizing commonalities between cases and can impact source identification and ultimately prevention.)

vILT Delivery

Same as for ILT.

Notes:



This is an introductory slide. How these groups identify potential cases will be covered in subsequent slides.

Do not spend much time on it.

Emphasize that information alerting investigators of cases who need interviewing can come from a variety of sources and reiterate the “team sport” approach to outbreak response. Much like a stool needs multiple legs to be stable, public health authorities need cooperation with multiple disciplines to identify and response to community health hazards.

Source: https://foodsafety.utk.edu/?page_id=29

vILT Delivery

Same as for ILT and learners can follow along by completing information fields digitally.

Notes:

Reportable Disease Surveillance

Case-based Reporting

- Pathogen-specific reports required by law from medical providers
- Passive system

COMMUNICABLE DISEASE REPORTING		
Table 17, California Code of Regulations, §2506, requires that known or suspected cases of any of the diseases or conditions listed below are to be reported to the local health jurisdiction within the specified time frame:		
REPORT IMMEDIATELY BY PHONE During Business Hours: (661) 321-3000 After Hours: (661) 324-6551 (Ask for Health Officer On Call)		
Anthrax Botulism (Specify Infant, Foodborne, Wound, Other) Brucellosis, Human Cholera Clostridia Fish Poisoning Diphtheria Domestic Acid Poisoning (Ammoniac Shellfish Poisoning)	Flavivirus Infection of Undetermined Species Foodborne Disease (2 or More Cases) Hemolytic Uremic Syndrome Illness due to novel Strains (Human) Measles (Rubella) Meningococcal Infections Middle Eastern Respiratory Syndrome (MERS) Novel Virus Infection with Pandemic Potential Paratyphoid Shellfish Poisoning Plague (Specify Human or Animal)	Rabies (Specify Human or Animal) Scombroid Fish Poisoning Shiga Toxin (Detected in Food) Smallpox (Variola) Tularemia, human Viral Hemorrhagic Fever (Crimean-Congo, Ebola, Lassa, and Marburg Viruses)
Immediately report the occurrence of any unusual disease OR outbreaks of any disease.		
REPORT BY PHONE, FAX, MAIL WITHIN ONE (1) WORKING DAY Phone: (661) 321-3000 Fax: (661) 868-0261 Mail: 1800 Mt Vernon Ave, Bakersfield CA 93306 Conditions may also be reported electronically via the California Reportable Disease Information Exchange (CalREIDIE).		
Babesiosis Campylobacteriosis Chikungunya (Outbreak, Hospitalization and Death) Chikungunya Virus Infection Cryptosporidiosis Dengue Virus Infection (outbreak) Eosinophilic (Specify Viral, Bacterial, Fungal, Parasitic)	Hantavirus Infection Hepatitis A, Acute Infection Leptospirosis Malaria Meningitis (Specify Viral, Bacterial, Fungal, or Parasitic) Paratyphoid Fever (NEW)	Salmonellosis (Other than Typhoid Fever) Shigellosis Syphilis (all stages, including congenital) Trichinosis Tuberculosis (Tb) Typhoid Fever (Case or Carrier) Other Infections

5

Explain that each state has a list of reportable diseases that medical providers are required to report for the purposes of identifying and controlling infectious diseases. *Instructor may want to find the jurisdiction's reportable disease list ahead of time online for review.*

ASK:

What is meant by a "passive system"?

- (The reports are passively received, not actively sought by health departments.)

NOTE: Some states participate in a grant funded CDC active surveillance project called FoodNet and actively solicit surveillance information on enteric pathogens.

ENGAGEMENT OPTION(S):

- Ask participants which enteric diseases are on your jurisdiction's list of reportable diseases.
- Ask participant if suspected outbreaks reported per your jurisdiction's list, even if the pathogen is not yet known or not reportable as an individual case. (Example—a case of Norovirus is typically not reportable but a cluster of suspected Norovirus in a school would be reportable.)

Photo source: <https://kernpublichealth.com/communicable-disease-reporting/>

vILT Delivery

Same as for ILT.

Laboratory Surveillance

Isolate Submission

- Pathogen-specific submission of isolates or clinical material required by law from laboratories for further characterization
- Passive system

LABORATORIES

CIVIL PENALTIES FOR VIOLATIONS OF OREGON REPORTING LAW

A civil penalty may be imposed against a qualifying laboratory that fails to seek or obtain ELR approval, or against a clinical laboratory for failing to report a reportable disease according to Oregon Administrative Rules.⁶

Civil penalties shall be imposed as follows:

- First violation \$100, second violation \$200, third or subsequent violation \$500;
- Each day out of compliance will be considered a new violation.

Report by phone immediately, day or night. **New reportables are highlighted.**

Report within 24 hours.

NOTE: Those items below without a symbol next to them require reporting within one local public health authority working day.

Forward isolate to the Oregon State Public Health Laboratory (OSPHL).

Forward isolate if cultured; otherwise, send the test-positive specimen to OSPHL.

Oregon State Public Health Laboratory:
503-693-4100

BACTERIA

Anaplasma

Bacillus anthracis³ 🚨 🚨

Bacillus cereus

biovar anthracis³ 🚨 🚨

Bordetella pertussis

Borrelia

Brucella³ 🚨 🚨

Mycobacterium, other

(non-respiratory only)

Neisseria gonorrhoeae

Neisseria meningitidis 🚨 🚨

Rickettsia prowazekii³ 🚨 🚨

Rickettsia, non-prowazekii

Salmonella 🚨

Shigella 🚨

Arenaviruses^{3,11} 🚨 🚨

Filoviruses^{3,11} 🚨 🚨

Hantavirus

Hepatitis A

Hepatitis B

Hepatitis C

Hepatitis D (delta)

Hepatitis E

6

Explain that some reportable diseases require isolates or other clinical material be sent to the state laboratory for further characterization. This further characterization helps determine which cases might be related and potentially, part of the same outbreak.

ENGAGEMENT OPTION(S):

- Ask participants to guess how many different serotypes of Salmonella there are. (There are ~2,500) Use this to emphasize the importance of further characterization, such as serotyping and WGS. Laboratory surveillance is very helpful to determining which case interviews should be prioritized.

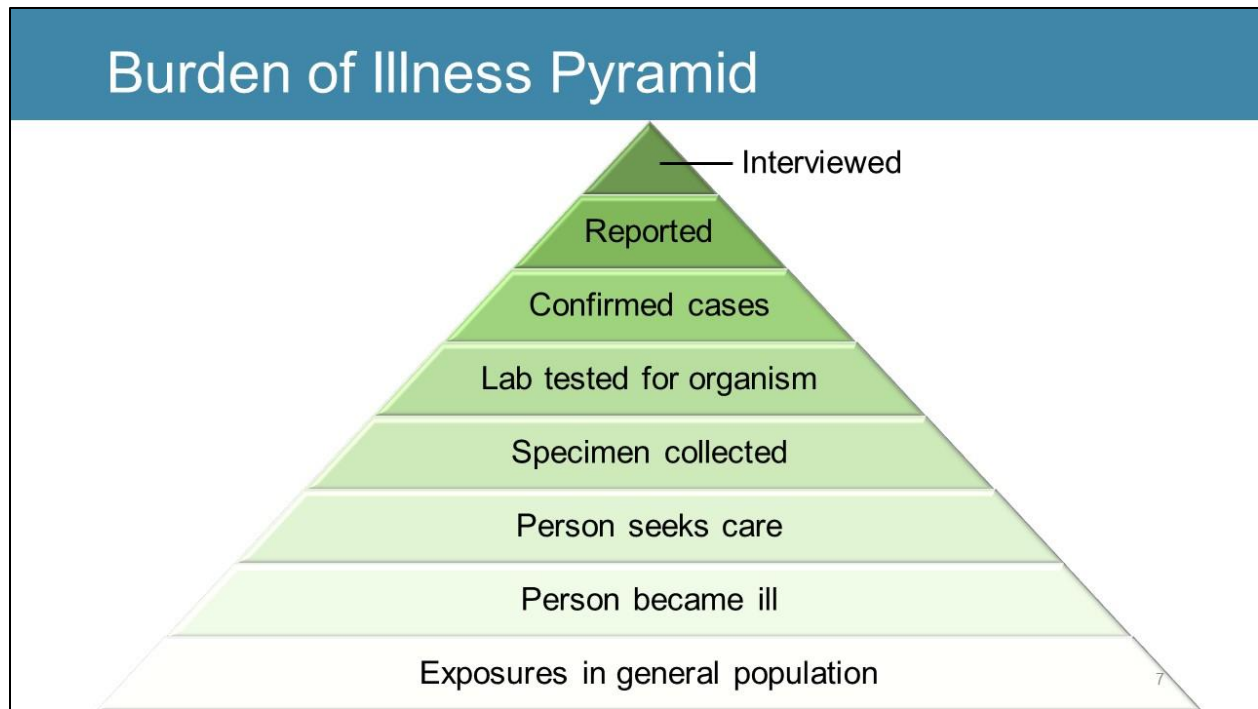
Photo source:

<https://www.oregon.gov/oha/PH/DISEASES/CONDITIONS/COMMUNICABLEDISEASE/REPORTINGCOMMUNICABLEDISEASE/Documents/ReportingPosters/poster-laboratory.pdf>

vILT Delivery

Same as for ILT.

Notes:



Use this burden of illness pyramid to explain that each case the health department knows about represents many unreported cases. Walk through each level of the pyramid starting at the bottom and have a large group discussion about each level. Point out the large group of people in the general population exposed to contaminated food.

ASK:

- Why did some of them not become ill?
 - **RESPONSE:**
 - Only had small amount of item/dose response; “stomach of steel”; on antibiotics for other reason; etc.

Walking up the pyramid, ask the following questions in order:

- Why did all the ill people not seek care?
 - **RESPONSE:**
 - Embarrassing symptoms; waited it out; no ride; wanted to save money; don’t have a provider; etc.
- Why did all the people who sought care not have specimen collected?
 - **RESPONSE:**
 - The provider told them it was a virus; no desire to collect stool; did not follow through; etc.
- Why did all the specimens collected not get tested for the organism?
 - **RESPONSE:**
 - Tested for wrong agent; specimen not collected/submitted correctly; etc.

- Why did all the tested organisms not get confirmed?
 - **RESPONSE:**
 - Laboratory error; under detection levels; person on antibiotics; etc.
- Why did all the confirmed cases not get reported?
 - **RESPONSE:**
 - Lack of adherence to reporting laws; submitted incorrectly to the health department; etc.

ASK:

- For each reported case of Salmonella, how many would you estimate occurred but did not get reported?
 - **RESPONSE:**
 - CDC estimates 29 cases of Salmonella occur for each case we know about.

Source: Adapted from the <https://www.cdc.gov/foodnet/surveillance.html>

vILT Delivery

Same as for ILT.

Notes:

Complaint Surveillance

Food Complaints

- Reports of possible foodborne illness from individuals or groups
- Passive system

Report a Food Poisoning

Everything you share in this report is kept confidential at the Rhode Island Department of Health. Your contact information is essential for our staff to effectively respond to your complaint. (*denotes required fields)

Your Information

Full name*

City/town where you live*

Phone number*

Email

8

Explain that food complaints will include illnesses (i.e.-food intoxications such as *C. perfringens* and *B. cereus*) that, while not reportable, may reveal unsafe food handling practices at local establishments.

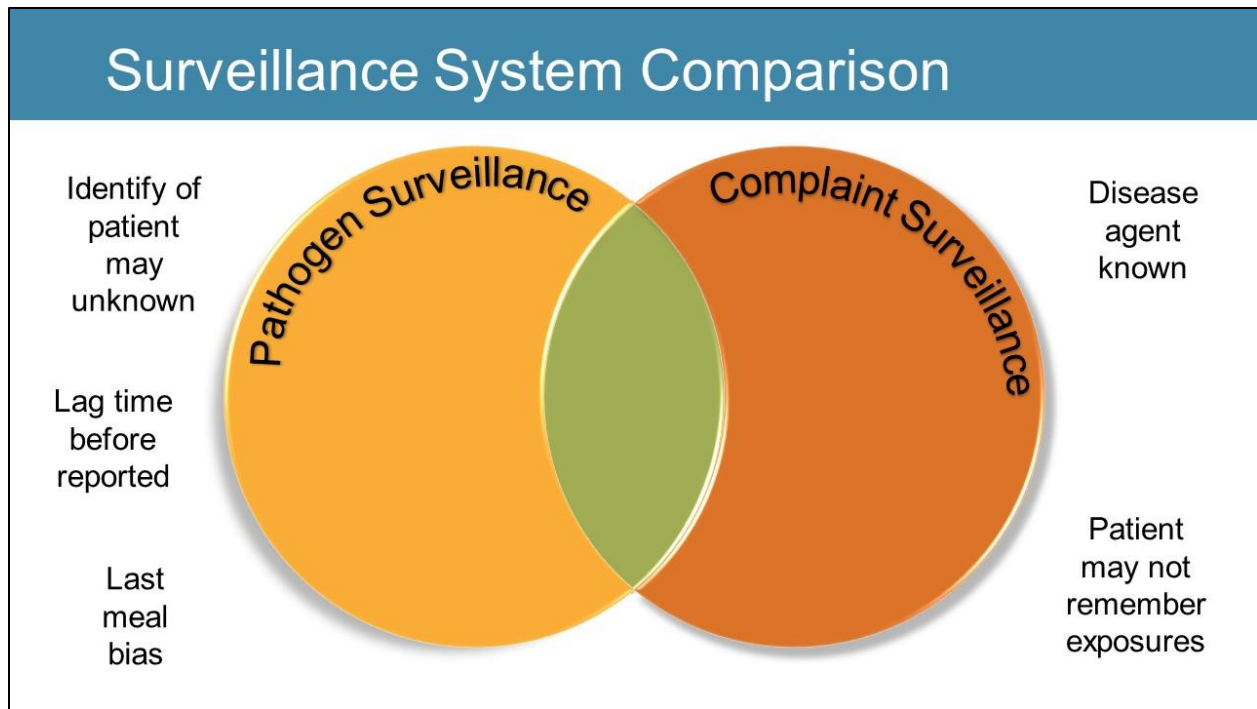
ASK:

- How are these reports received and handled in your jurisdiction?
- Is your complaint system centralized statewide or is it a local system?
- Has an outbreak been detected in your jurisdiction through food complaint surveillance?
- If a case has spanned multiple jurisdictions, how have interviews been coordinated?

vILT Delivery

Same as for ILT.

Notes:



*This is an animated slide

The following surveillance system characteristics will appear. Have the class decide where they (typically) belong.

- **Identify of patient may not be known**(complaint)—Complaints may be anonymous. Pathogen specific surveillance comes from medical providers and identity is known.
- **Often lag time before reported** (pathogen)—It takes time to see a provider, get tested and be reported. These confirmed cases have more lag time than complaints.
- **Patient biased toward most recent meal** (complaint)—Often complainants have strong beliefs about what meal made them sick.
- **Disease-causing agent known** (pathogen)—the pathogen is known, which can help with finding other cases and exposure timeframe of interest.
- **Patient may not remember exposures** (both)—A skilled interviewer can help with this!

vILT Delivery

Same as for ILT.

Notes:

Community Partner Notifications

Suspected Outbreaks

- Reports of increased enteric illness
- May be reported by a variety of community partners and congregate settings



10

Explain that other partners may report suspected enteric outbreaks. Sometimes these are related to food and sometimes they are not. Examples include schools, long term care facilities, detention centers, etc.

ASK:

Which community partners have reported a suspected enteric outbreak to you and how was it handled?

vILT Delivery

Same as for ILT.

Notes:

Knowledge Check

Pathogen-specific disease surveillance relies on _____ of certain communicable diseases.

- A. case interviews
- B. complaint-based calls
- C. historic trends
- D. physician and laboratory reports

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Question Slide

Knowledge Check

Pathogen-specific disease surveillance relies on _____ of certain communicable diseases.

- A. case interviews
- B. complaint-based calls
- C. historic trends
- D. physician and laboratory reports

12

Answer Slide

The instructor displays the question to the class.

The instructor will read the question-and-answer options to the class. Participants are asked to select an answer. For classroom training, the instructor has the option to ask participants for a show of hands or write down their answer option. Allow participants a moment to make a decision.

The instructor then displays the question with the correct answer shown.

The correct answers are **D. physician and laboratory reports.**

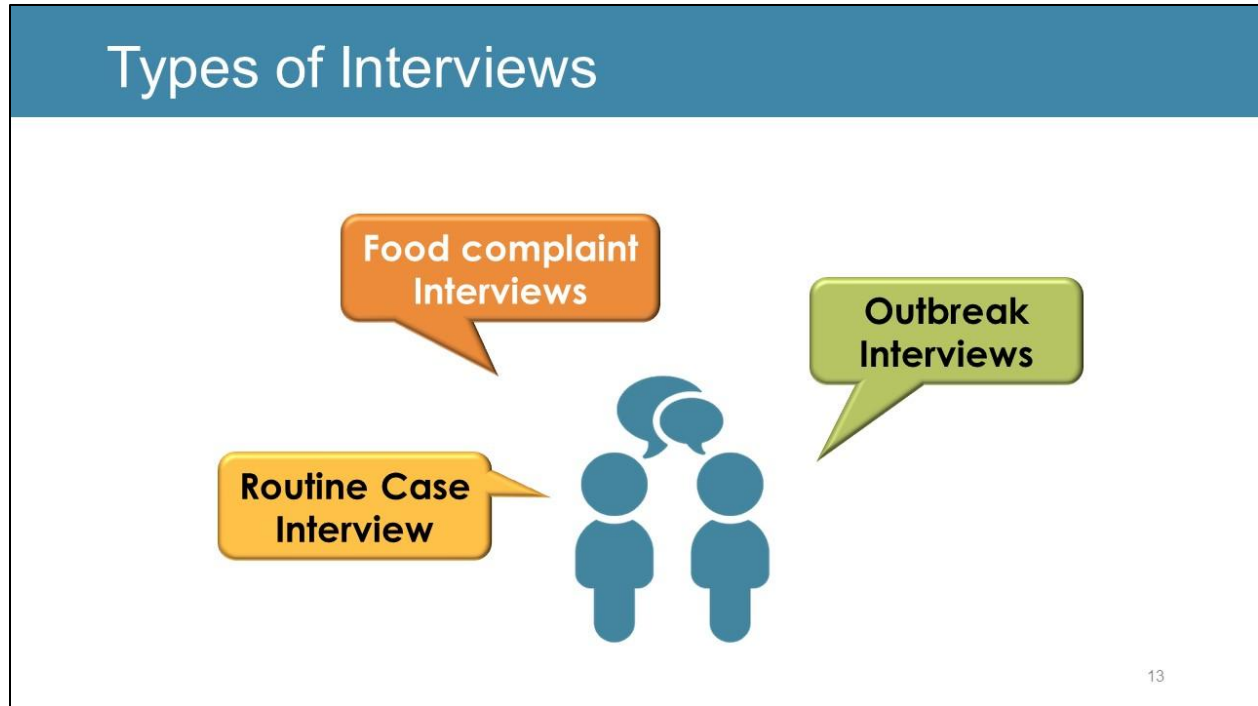
After the results are shown, if there are a large number who selected an incorrect response, the instructor should be prepared to offer further explanation for the correct response.

vILT Delivery

The course administrator may opt to use virtual polling option in chosen virtual platform (Zoom, Teams, etc.). If so, insert the knowledge check question and answer choices into virtual poll and administer per the platform guidance. Existing knowledge check slides can augment the virtual poll in this manner:

- Show Knowledge Check slide and read question to participants
- Launch virtual poll and allow participants to answer; close virtual poll and share responses (optional)
- Advance slide to highlight the correct response and discuss as needed

Notes:



Introduce that there are several different types of interviewing situations and that the questionnaires used will vary. We will discuss three basic types of interviews.

Note: Some participants may be involved in interviewing food handlers—this will be handled later in the module as a separate topic.

vILT Delivery

Same as for ILT and learners can follow along by completing information fields digitally.

Notes:

Routine Case Interviews

- Enhances outbreak detection
- Best if completed rapidly to maximize exposure recall
- Important to use standardized questionnaire for comparison



Explain that each jurisdiction may vary with resources available for routine case interviewing, but they can greatly enhance outbreak detection by uncovering commonalities between cases with the same disease.

ENGAGEMENT OPTION(S):

- Ask participants if their jurisdiction does routine case interviewing and for what diseases.
 - Who does routine case interviews in your jurisdiction?
 - Do those individuals interview all reportable foodborne diseases?
- Ask participants if their jurisdiction has a system to review the data collected and look for commonalities?

vILT Delivery

Same as for ILT.

Notes:

Routine Case Interview Challenges

- Volume of cases may overwhelm capacity
- Difficulty in identifying or recognizing meaningful commonalities between cases
- Patient recall



15

Routine case interviews can be challenging. Review common challenges.

ASK:

- What ideas do you have to address these challenges?
 - **Capacity**
 - Local capacity to interview cases is often a problem. Some states receive grant funding to hire interviewers for routine enteric disease cases—one such program is FoodCORE. Other states have student interviewing teams. Other states prioritize routine case interviews in some way (by disease; by laboratory subtyping data; by demographics; etc.)
 - **Recognizing commonalities**
 - Some jurisdictions have developed automated reports to analyze routine case interview data and flag commonalities; another idea is to couple laboratory subtyping data to zero in on potential clusters and examine those routine interviews.
 - **Patient recall**
 - Attempting the interview as quickly as possible after receiving the report will minimize recall issues; using holidays/routines to jog a patient's memory and suggesting the patient look at the calendar on their phone to remember exposures may help.

vILT Delivery

Same as for ILT.

Complaint-Based Interviews

- Short, focused questionnaires aimed at assessing risk
- Collect complete food history, not just suspect meal
- Stronger suspicion if ill persons do not live in same household
- May result in facility visit



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Briefly emphasize that complaint-based interviews differ from case reports because typically no pathogen is known.

ASK:

- What type of information would be needed from food complainants?
 - **RESPONSE:**
 - Symptoms; illness onset & duration information; food history (at least 3 days); any other ill contacts; etc.

ENGAGEMENT OPTION(S):

ASK:

- Have you ever been involved in complaint interviews and to share their experiences.
- Have they identified outbreaks this way?

vILT Delivery

Same as for ILT.

Notes:

Complaint-Based Interview Challenges

- Complainants MAY live together and have many shared exposures
- Uncertainty about diagnosis
- “Last meal” bias
- Volume of complaints
- Many individual complaints that are not actionable



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Complaint interviews can be an overwhelming part of life at the local health department. Review common challenges.

ASK:

- How can we handle “last meal” bias?

ENGAGEMENT OPTION(S):

- Black out screen and ask participants what challenges exist with complaint interviews.
- After a discussion, show the screen and cover any challenges that weren’t mentioned.
- How does your department prioritize food complaints?
- Which ones are interviewed and receive follow up?
 - It’s often wise to prioritize establishments with multiple complaints, complaints involving large groups and obvious health hazards.

vILT Delivery

Same as for ILT.

Notes:

Outbreak Interviews

- Goal to rapidly identify source and implement control measures
- Questionnaire may vary (outbreak-specific)
- Often team of interviewers



19

Explain that outbreak interviews may involve a questionnaire with outbreak-specific questions and to ensure they are done rapidly are typically divided among multiple investigators.

Remind participants that an outbreak is typically defined as “two or more people living in separate households ill with similar symptoms and exposures”. Such situations often merit outbreak interviewing.

ENGAGEMENT OPTION(S):

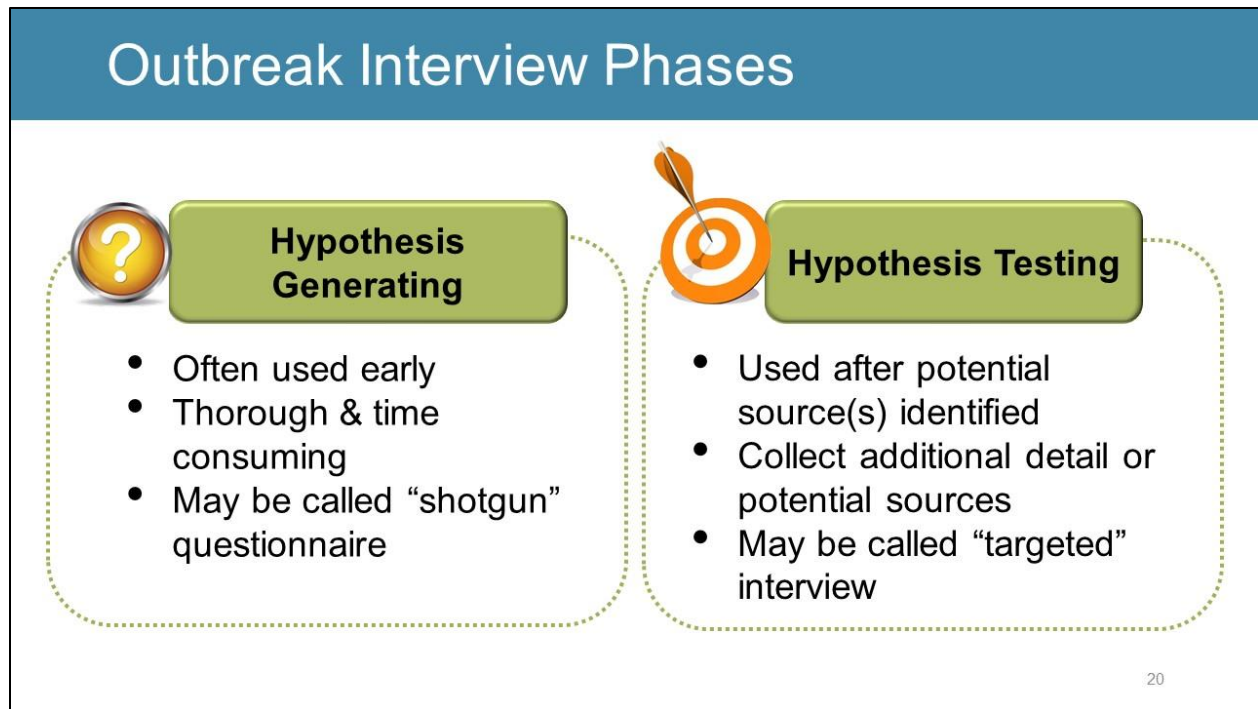
Ask participants if they have been involved in outbreak interviewing. Describe the outbreak.

- How was it done?
- Was it a team effort?
- What type of questionnaire was used?

vILT Delivery

Same as for ILT and learners can follow along by completing information fields digitally.

Notes:



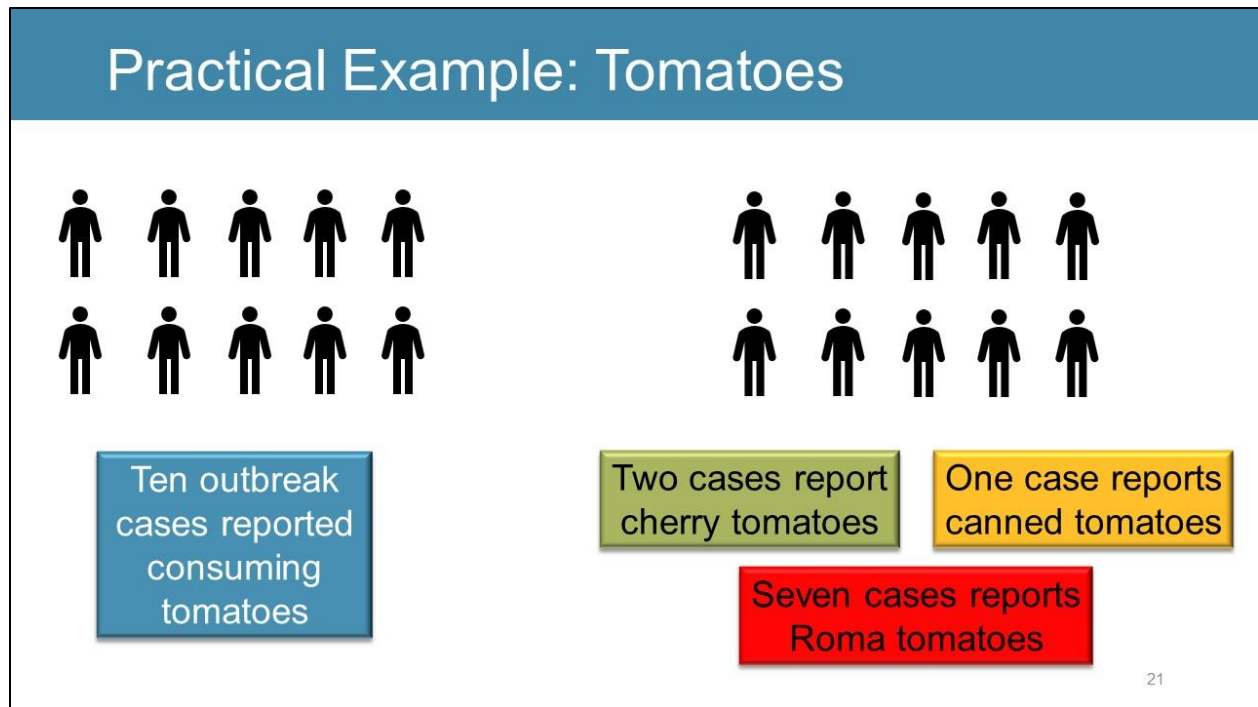
Emphasize that different types of interviews may be used at different stages of the outbreak:

- **Hypothesis-generating interviews:**
 - used early to collect information on wide variety of exposures, with the goal of identifying commonalities between cases
- **Hypothesis-testing interviews:**
 - used after one or more potential exposures of interest is identified, with the goal of collected additional details about these exposures

vILT Delivery

Same as for ILT.

Notes:



**This is an animated slide.*

Review a practical example to clarify hypothesis-generating and hypothesis-testing.

ASK: Imagine ten outbreak cases reported consuming tomatoes during interview.

- Are we ready to recall tomatoes?
 - **RESPONSE:** No.
- Why not?
 - **RESPONSE:** We need more information.
- What type of information do we need?
 - **RESPONSE:** Variety; packaging type; purchase place/date; etc.

<Click to advance slide and show the results of further questioning about tomato eating.>

Note: Sometimes upon re-interview cases clarify in unexpected ways (canned tomatoes). In this scenario investigators would also have collected additional information about purchase place & date to learn as much as possible about Roma tomatoes during the hypotheses-testing interview.

vILT Delivery

Same as for ILT.

Outbreak Interview Types: Events

Event Outbreaks

- Known common exposure
- Often defined menu
- Often defined group of attendees
- Requires coordination with event point of contact
- Potential for subsequent related outbreaks

Explain that sometimes outbreaks occur at a large event such as a wedding or banquet. These outbreaks have unique challenges and opportunities:

- Often a guest list exists as well as a menu of items served
- An event point of contact may be able to help coordinate communication with attendees
- Subsequent outbreaks can occur if the venue has contaminated surfaces (ie-norovirus) or an ill caterer has additional events planned

ASK:

- Who would you want to interview?
 - **RESPONSE:** Sick people, well people, event coordinator, food handlers.
- What would you want to ask them?
 - **RESPONSE:** Details of the event, including a list of items served as well as other potential shared exposures, such as the rehearsal dinner the night before, if a wedding.

vILT Delivery

Same as for ILT.

Notes:

Outbreak Interview Types: Multi-state

Multi-state Outbreaks

- Cases spread across multiple states
- Often related to a widely distributed food product
- Requires coordination with state & federal partners
- Likely to use National Hypothesis Generating Questionnaire



23

Explain that sometimes CDC contacts states when individual cases are part of a multi-state outbreak. These investigations require national coordination to solve and are usually identified through laboratory subtyping surveillance data:

- Often a widely distributed food product is implicated
- Sometimes jurisdictions only have 1 or 2 cases and would be unlikely to recognize the local case as an outbreak case without the power of national surveillance data
- CDC will typically request the case be interviewed with the NHGQ, although an outbreak-specific hypothesis-testing questionnaire is possible

ASK:

- Have any participants ever interviewed a case that was part of a multi-state outbreak investigation?
- Describe the situation.

Source: <https://www.cdc.gov/foodsafety/outbreaks/basics/data-types-collected.html>

vILT Delivery

Same as for ILT and learners can follow along by completing information fields digitally.

Notes:

Knowledge Check

When is a hypothesis-generating questionnaire used?

- A. At all times
- B. Often at the beginning of an investigation
- C. Only to interview well persons
- D. Every other Thursday

24

Question Slide

Knowledge Check

When is a hypothesis-generating questionnaire used?

- A. At all times
- B. Often at the beginning of an investigation
- C. Only to interview well persons
- D. Every other Thursday

25

Answer slide

The instructor displays the question to the class.

The instructor will read the question-and-answer options to the class. Participants are asked to select an answer. For classroom training, the instructor has the option to ask participants for a show of hands or write down their answer option. Allow participants a moment to make a decision.

The instructor then displays the question with the correct answer shown.

The correct answer is **B. Often at the beginning of an investigation.**

After the results are shown, if there are a large number who selected an incorrect response, the instructor should be prepared to offer further explanation for the correct response.

vILT Delivery

The course administrator may opt to use virtual polling option in chosen virtual platform (Zoom, Teams, etc.). If so, insert the knowledge check question and answer choices into virtual poll and administer per the platform guidance. Existing knowledge check slides can augment the virtual poll in this manner:

- Show Knowledge Check slide and read question to participants
- Launch virtual poll and allow participants to answer; close virtual poll and share responses (optional)
- Advance slide to highlight the correct response and discuss as needed

Notes:

Activity 2.1

Recall the scenario from Module 1 with increased GI illness at the emergency department.

1. What type of surveillance detected this potential outbreak?
2. What type of interviewing should be done?
3. Does your jurisdiction have a questionnaire that would likely be used for this situation?

Choose a spokesperson to report out group findings.

26

Group Activity:

This activity should take 5 minutes.

- Divide the class into breakout groups/rooms.
- Have them answer questions in their groups and appoint a spokesperson to report out.
- Facilitate a group discussion as breakout groups report their findings.

ASK PARTICIPANTS:

- What type of surveillance detected this potential outbreak? (community partner notification—from the emergency department. Emphasize the importance of maintaining good relationships with community partners)
- What type of interview should be done? (outbreak interviewing—with the goal of hypothesis generation; the agent causing illness is unknown and a group of people are ill, so it's not a routine interview; at this point there is not a known common event—although early interviews may uncover something)
- Does your jurisdiction have a questionnaire that would likely be used for this situation? (a pathogen specific case report form wouldn't be appropriate since we don't know the pathogen; possibly a general enteric illness questionnaire to get the initial information needed to define next steps for the investigation.)

At the conclusion of the activity, simply *<Click to advance to the next slide.>*

vILT Delivery

- Send participants to pre-assigned breakout rooms for 5 minutes to discuss Activity 2.1 questions in Guide.

- Instruct each group to choose a participant to report findings upon return to large group.
- After breakout groups return to main session ask each group to share a synopsis of their discussion.

Notes:

Who to Interview?

- Ill Persons
- Well Persons
- Food Workers



27

Remind participants that we've discussed ill person interviews primarily so far. Emphasize that interviewers may be called upon to conduct interviews with several types of people during an investigation.

This is a brief introductory slide—these groups will be covered in subsequent slides.

ENGAGEMENT OPTION(S):

- Ask participants if they have ever interviewed other types of people during an investigation and if so, who. (teacher/coach to provide background information; event coordinators; etc.)

vILT Delivery

VIRTUAL SUGGESTION:

- Ask participants to place others that might need to be interviewed during an investigation in the chat (teacher/coach to provide background information; event coordinators; etc.)

Notes:

Interviews: Ill vs Well Person

Case or Ill Person

- Symptomatic person who meets the case definition
- May be able to provide food samples or clinical specimens

Control or Well Person

- Person who is not ill interviewed with same questionnaire to provide a comparison

Comparing well person interview data to ill person interview data can flush out the exposures of interest

28

Explore why well people might be interviewed:

- To provide a comparison group to see what the sick people did that the well people did not

ASK:

- What do you do with a person who was mildly ill?
- Are they a case or a control?
 - **RESPONSE:**
 - (If they don't meet the case definition, they aren't a case. But if they had mild symptoms, it's best to not count them as a control either. The wisest thing to do is exclude them from your questionnaire analysis.

vILT Delivery

Same as for ILT.

Notes:

Interviews: Food Worker and Manager

- May have critical information about food sources and handling
- Potential for recent illness among food workers



29

Emphasize that food workers have vital information about food sources, preparation and handling practices and recent illness in the establishment.

ASK:

- What are the challenges to interviewing food workers?
 - **RESPONSE:**
 - They may be source of outbreak, or they may be additional victims and it can be hard to tell; they may be hesitant to be interviewed or give erroneous information due to fear of job loss—be sure to emphasize the importance of keeping food worker interview information confidential.

vILT Delivery

Same as for ILT.

Notes:

Activity 2.2: Interview Identification

Identify most applicable type of interview:

- Routine Interview
- Event-based outbreak interview
- Multi-state outbreak interview



Scenario 1



Scenario 2



Scenario 3

30

Whole Class Activity:

Guide the participants through four scenarios and ask them to identify most applicable type of interview to conduct for each:

- Routine interview
- Event-based outbreak interview
- Multi-state outbreak interview

Different jurisdictions sometimes use interviews in different ways

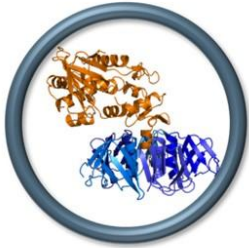
Focus your answer based on information presented in module

vILT Delivery

Same as for ILT.

Notes:

Scenario One



Local public health receives a lab report of Shiga-toxin producing *E. coli*.

- ☐ Routine interview
- ☐ Event-based outbreak interview
- ☐ Multi-state outbreak interview

31

Class Activity: Interview Identification – Scenario 1

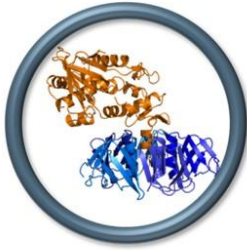
The instructor will read Scenario 1 and then ask participants to determine the most applicable type of interview:

- Routine interview
- Event-based outbreak interview
- Multi-state outbreak interview

vILT Delivery

The course administrator may opt to use virtual annotate or polling option in chosen virtual platform (Zoom, Teams, etc.). If so, either enable annotate and allow participants to “stamp” their chosen response or insert question and answer choices into virtual poll and administer per the platform guidance.

Scenario One—Answer Key



Local public health receives a lab report of Shiga-toxin producing *E. coli*.

- ✓ **Routine interview**
- ☐ Event-based outbreak interview
- ☐ Multi-state outbreak interview

32

The correct answer is **Routine interview**.

After the results are shown, if there are a large number who selected an incorrect response, the instructor should be prepared to offer further explanation for the correct response.

Notes:

Scenario Two



The state foodborne epidemiologist notifies you that two cases of *Salmonella* match other cases in the national database.

- ☐ Routine interview
- ☐ Event-based outbreak interview
- ☐ Multi-state outbreak interview

33

Class Activity: Interview Identification – Scenario 2

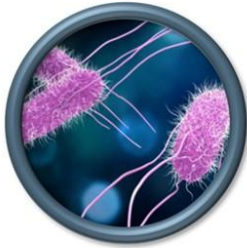
The instructor will read Scenario 2 and then ask participants to determine the most applicable type of interview:

- Routine interview
- Event-based outbreak interview, or
- Multi-state outbreak interview

vILT Delivery

The course administrator may opt to use virtual annotate or polling option in chosen virtual platform (Zoom, Teams, etc.). If so, either enable annotate and allow participants to “stamp” their chosen response or insert question and answer choices into virtual poll and administer per the platform guidance.

Scenario Two – Answer Key



The state foodborne epidemiologist notifies you that two cases of *Salmonella* match other cases in the national database.

- ☐ Routine interview
- ☐ Event-based outbreak interview
- ✓ **Multi-state outbreak interview**

34

The correct answer is **Multi-state outbreak interview**.

After the results are shown, if there are a large number who selected an incorrect response, the instructor should be prepared to offer further explanation for the correct response.

Notes:

Scenario Three



Three community members from different household's report getting fever and diarrhea after attending a wedding.

- ☐ Routine interview
- ☐ Event-based outbreak interview
- ☐ Multi-state outbreak interview

35

Class Activity: Interview Identification – Scenario 3

The instructor will read Scenario 3 and then ask participants to determine the most applicable type of interview:

- Routine interview
- Event-based outbreak interview, or
- Multi-state outbreak interview

vILT Delivery

The course administrator may opt to use virtual annotate or polling option in chosen virtual platform (Zoom, Teams, etc.). If so, either enable annotate and allow participants to “stamp” their chosen response or insert question and answer choices into virtual poll and administer per the platform guidance.

Scenario Three – Answer Key



Three community members from different household's report getting fever and diarrhea after attending a wedding.

- ☐ Routine interview
- ☒ **Event-based outbreak interview**
- ☐ Multi-state outbreak interview

36

The correct answer is **Event-based outbreak interview**.

After the results are shown, if there are a large number who selected an incorrect response, the instructor should be prepared to offer further explanation for the correct response.

Notes:

Module 2 Summary

1. Identified types of surveillance that may lead to interviewing
2. Recognized interview types
3. Distinguished between hypothesis-generating and hypothesis-testing interviews
4. Explained the purpose of interviewing well persons



37

Review briefly the material covered in Module 2.

ENGAGEMENT OPTION

- If a participant was assigned a topic at the beginning of the module to provide a 30 second summary on, now is the time to report out

Describe what to expect in *Module 3: Preparing for an Interview*.

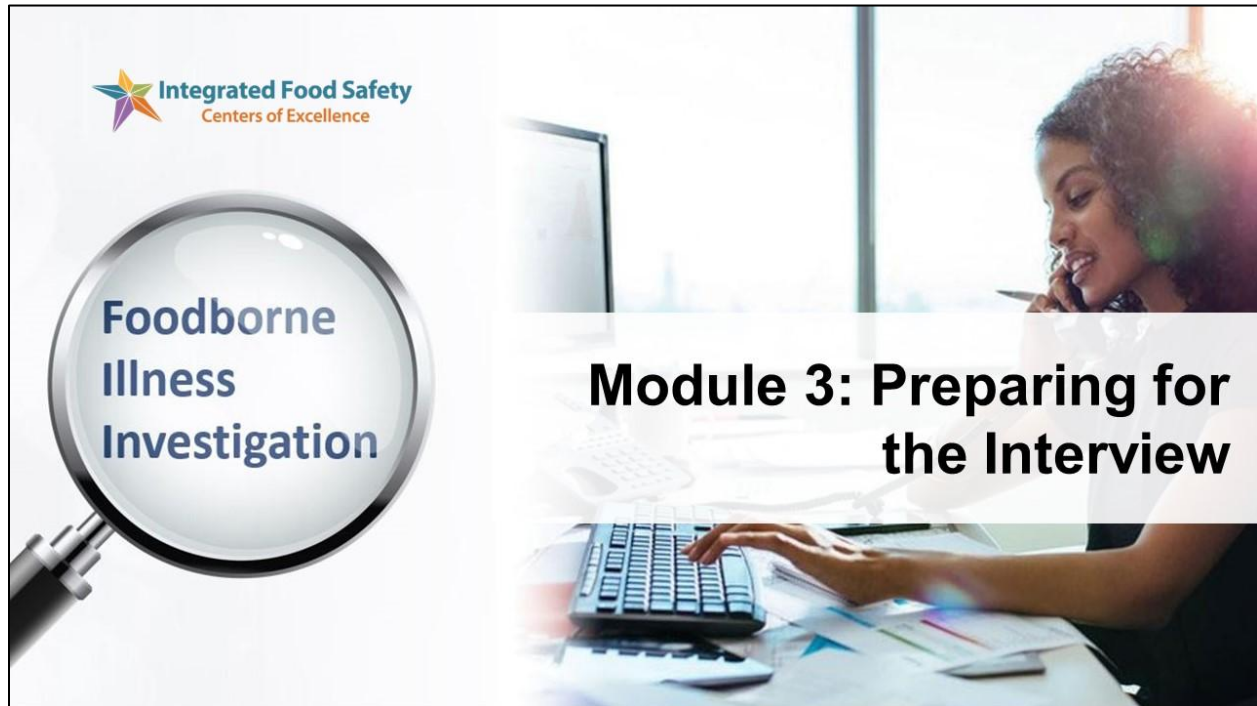
vILT Delivery

Same as for ILT.

Notes:

MODULE 3 Preparing for the Interview

Participants will be able to describe the steps to prepare for an interview and the best ways to make initial contact.



Instructor Note

Introduce the module.

“By failing to prepare, you are preparing to fail.” –Benjamin Franklin

Notes:

Module 3 Objectives

After completion of this module, you will be able to:

1. Describe the steps and their respective elements to apply when preparing for an interview
2. Identify components that are essential in questionnaires
3. List tools to support interviewing

2

Instructor Note

Briefly introduce the module objectives.

ENGAGEMENT OPTIONS:

- Assign a participant to list the 5 steps to prepare for interviewing when called upon at the end of the module.

vILT Delivery

Same as for ILT.

Notes:



Instructor Note

Facilitate a whole class discussion exploring how we can prepare for interviewing. Ideas for discussion:

- Know the questionnaire—understand the questions, why they are asked and the pronunciation of potentially unfamiliar words
- Review information about the disease

ASK:

- What type of questions might you need to answer for the patient about the disease?
 - **RESPONSE:**
 - potential routes of transmission; prevention/education to prevent spread to loved ones; duration of illness; etc.
- Review any existing information about the case being interviewed prior to contacting them
 - **RESPONSE:**
 - info from food complaint system, disease surveillance system, etc.
- Be clear on what to do with interview information collected
 - **RESPONSE:**
 - enter info into shared database? Submit completed questionnaires to team lead? etc.

Emphasize that preparation can help interviewers avoid unwanted surprises during the interview

ENGAGEMENT OPTION(S): (to underscore “*What’s In It For Me*” or WIIFM)

ASK:

- What do the benefits of good preparation for interviewing include.
 - **RESPONSE:**
 - More efficient use of time; higher quality/more accurate interview data; better overall interaction with interviewee; more confidence among interviewers.

vILT Delivery

Same as for ILT.

VIRTUAL SUGGESTION:

Ask learners to use the chat feature to chat a characteristic of a prepared interviewer (researched; organized; well equipped; trained; confident; informed; etc.)

Notes:

Steps to Take to Prepare for the Interview



4

Instructor Note

This is an overview slide. Much of this may have already come up during the previous discussion slide.

Do not spend much time here.

Briefly state that you will explore these five steps to prepare for interviewing over the next few slides and how each of these steps can help the interviewer handle challenges as they arise during the interview.

vILT Delivery

Same as for ILT.

Notes:

1

Review Case Information in the Reporting System

- Basic demographics
- Disease associated with illness (if known)
- Laboratory results
- Symptoms and onset date
- Name of provider and date seen
- Any special accommodations



Instructor Note

Emphasize that multiple surveillance systems and even multiple disciplines may have existing information about the case. Valuable information to be found can include:

- Contact information and other demographic data (are there multiple phone numbers to try?)
- Disease
- Laboratory results (does it meet the case definition?)
- Symptoms & onset
- Information about medical visit/hospitalization
- Heads up for any accommodations that might be needed (i.e., a need for interpretation services)

ASK:

- How can this existing information be useful to the interviewer?
 - **RESPONSE:**
 - Alert interviewer of special circumstances such as need for interpretation services or case being a minor; can help establish rapport with interviewee by “vetting” interviewer as someone official who has received the illness report; can help with interviewee recall of dates; can increase efficiency by verifying the info and not starting from scratch; there may be information that connects case to other ill persons, such as workplace or residential facility.

ENGAGEMENT OPTIONS:

ASK:

- Is it OK to skip sections of the interview that can be answered by looking at the surveillance system?
- Why or why not?
 - **RESPONSE:**
 - No, you need to verify the information with the interviewee but having it penciled in/accessible may save you time.

vILT Delivery

Same as for ILT.

Notes:

Need for Proxy Interview

- Interview of alternate adult in place of case
- Proxies considered for:
 - Minor
 - Deceased
 - Severely ill
 - Others unable to be interviewed in a traditional format



Instructor Note

State that when looking at the case to be interviewed you may note that a proxy will be needed. Explain that there are times the case cannot be interviewed directly. Emphasize that finding the best person able to describe exposures during the time-period of interest is critical.

Proxy interviews are common when the case is a child, severely ill, or unable to be interviewed in a traditional format for other reasons, such as disability. If the case is deceased, the caregivers or family members may be interviewed—although this is a particularly delicate situation and waiting until after the funeral is advised unless a serious ongoing threat to public health is suspected.

ENGAGEMENT OPTION(S):

ASK:

- Have you ever conducted an interview by proxy? Describe the situation.

vILT Delivery

Same as for ILT.

Notes:

Need for Interpretation Services

- Interviewer and interviewee may not share a common language
- Most jurisdictions have access to interpreters
- Refer to your jurisdiction's protocol



Use professional interpreters

Instructor Note

Reviewing existing case information may alert you that interpretation services will be needed to conduct the interview. Ask your supervisor how to handle this situation as each jurisdiction is unique. Use professional interpreters, if possible, not a family member or staff person with some knowledge of the language needed.

Emphasize that it will be important to make sure the interpreter understands the questions you are asking and the purpose of the interview.

ASK:

- Does your jurisdiction have access to interpreter services?
- How does that process work?

vILT Delivery

Same as for ILT.

Notes:

Knowledge Check

Which of the following situations might merit a proxy interview?

- A. An excessively talkative case
- B. A case under 18 years of age
- C. A case who knows the interviewer personally
- D. A case ill with two pathogens

8

Knowledge Check

Which of the following situations might merit a proxy interview?

- A. An excessively talkative case
- B. A case under 18 years of age
- C. A case who knows the interviewer personally
- D. A case ill with two pathogens

9

Instructor Note

The instructor displays the question to the class.

The instructor will read the question-and-answer options to the class. Participants are asked to select an answer. For classroom training, the instructor has the option to ask participants for a show of hands or write down their answer option. Allow participants a moment to make a decision.

The instructor then displays the question with the correct answer shown.

The correct answer is **B. A case under 18 years of age.**

After the results are shown, if there are a large number who selected an incorrect response, the instructor should be prepared to offer further explanation for the correct response.

vILT Delivery

The course administrator may opt to use virtual polling option in chosen virtual platform (Zoom, Teams, etc.). If so, insert the knowledge check question and answer choices into virtual poll and administer per the platform guidance. Existing knowledge check slides can augment the virtual poll in this manner:

- Show Knowledge Check slide and read question to participants
- Launch virtual poll and allow participants to answer; close virtual poll and share responses (optional)
- Advance slide to highlight the correct response and discuss as needed

Notes:

2

Review the Disease

- Signs and symptoms
- Duration of symptoms
- Incubation period
- Modes of transmission
- Common sources associated with agent
- Prevention messaging



10

Instructor Note

Review the important things for an interviewer to understand about the disease impacting the interviewee and why:

- Signs and symptoms
- Duration of symptoms
- Incubation period

ASK:

- What is an incubation period? (Time between exposure to an agent and onset of symptoms.)
- How does the incubation period impact the interview? (It defines the exposure period of interest.)
- Modes of transmission (Emphasize that an agent can have multiple modes of transmission, for example foodborne and person-to-person.)
- Common sources associated with agent (i.e.—Salmonella with eggs; Campylobacter with chicken; etc.)

CAUTION:

While common exposures are worth noting be careful not to focus solely on common exposures—many unique exposures lead to illness

- Prevention messaging (to help case not spread disease to others)

ASK:

- Where do participants plan to get this information?

ENGAGEMENT OPTION(S):

ASK:

- What are the differences in signs and symptoms?
 - **RESPONSE:**
 - **Signs:** manifestation of illness that can be seen or measured, such as fever, episodes of vomiting.
 - **Symptoms:** manifestation of illness that a patient experiences but cannot be seen or measured, such as abdominal pain or body aches)

ASK:

- What do you do if the disease is unknown, such as during a cluster of unknown enteric illness?
 - **RESPONSE:**
 - Get a summary of symptoms thus far among known cases and rely on the team lead for direction. Often general prevention messages will be shared until more is known.)

vILT Delivery

Same as for ILT.

VIRTUAL SUGGESTION:

- Using “Yes” or “No” reaction buttons ask the following questions to affirm learning:
- Fever is a sign (Yes-it is objective)
- Fatigue is a sign (No-it is subjective. Fatigue is a symptom.)
- The incubation period is the time between exposure to disease and onset of symptoms. (Yes)

Notes:

Pathogen Reference “Cheat Sheet”

Foodborne Illness-Causing Organisms in the U.S. WHAT YOU NEED TO KNOW

While the American food supply is among the safest in the world, the Federal government estimates that there are about 48 million cases of foodborne illness annually—the equivalent of sickening 1 in 6 Americans each year. And each year these illnesses result in an estimated 128,000 hospitalizations and 3,000 deaths.

The chart below includes foodborne disease-causing organisms that frequently cause illness in the United States. As the chart shows, the threats are numerous and varied, with symptoms ranging from relatively mild discomfort to very serious, life-threatening illness. While the very young, the elderly, and persons with weakened immune systems are at greatest risk of serious consequences from most foodborne illnesses, some of the organisms shown below pose grave threats to *all* persons.

ORGANISM	COMMON NAME OF ILLNESS	ONSET TIME AFTER INGESTING	SIGNS & SYMPTOMS	DURATION	FOOD SOURCES
<i>Bacillus cereus</i>	<i>B. cereus</i> food poisoning	10-16 hrs	Abdominal cramps, watery diarrhea, nausea	24-48 hours	Meats, stews, gravies, vanilla sauce
<i>Campylobacter jejuni</i>	Campylobacteriosis	2-5 days	Diarrhea, cramps, fever, and vomiting; diarrhea may be bloody	2-10 days	Raw and undercooked poultry, unpasteurized milk, contaminated water
<i>Clostridium botulinum</i>	Botulism	12-72 hours	Vomiting, diarrhea, blurred vision, double vision, difficulty in swallowing, muscle weakness. Can result in respiratory failure and death	Variable	Improperly canned foods, especially home-canned vegetables, fermented fish, baked potatoes in aluminum foil
<i>Clostridium perfringens</i>	Perfringens food poisoning	8-16 hours	Intense abdominal cramps, watery diarrhea	Usually 24 hours	Meats, poultry, gravy, dried or precooked foods, time and/or temperature-abused foods
<i>Cryptosporidium</i>	Intestinal cryptosporidiosis	2-10 days	Diarrhea (usually watery), stomach cramps, upset stomach, slight fever	May be remitting and relapsing over weeks to months	Uncooked food or food contaminated by an ill food handler after cooking, contaminated drinking water

Source: FDA

Instructor Note

Emphasize that there are a number of available reference materials online and in print. Some interviewers also like to have a quick reference chart handy for the most commonly needed pathogen details, such as this chart, ***Foodborne Illness-Causing Organisms in the U.S. WHAT YOU NEED TO KNOW***, developed by the FDA.

Source: <https://epublication.fda.gov/catalog>

ASK:

- 1) What is the incubation period for *B. cereus* (pronounced “Be serious”)? (10-16 hours)
- 2) What foods are associated with *Campylobacter*? (undercooked poultry, raw milk, contaminated water)
- 3) How long does illness with *cryptosporidium* last? (may relapse over weeks to months)

Use a laser pointer to show where this information is on the chart.

vILT Delivery

- You can ask participants to raise their hand using the Reactions function to ask questions or enter their comments in Chat.

Knowledge Check

This characteristic of the disease helps define the exposure period of interest:

- A. Mode of transmission
- B. Case definition
- C. Signs and symptoms
- D. Incubation period

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Question slide

Knowledge Check

This characteristic of the disease helps define the exposure period of interest:

- A. Mode of transmission
- B. Case definition
- C. Signs and symptoms
- D. Incubation period

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Answer slide

Instructor Note

The instructor displays the question to the class.

The instructor will read the question-and-answer options to the class. Participants are asked to select an answer. For classroom training, the instructor has the option to ask participants for a show of hands or write down their answer option. Allow participants a moment to make a decision.

The instructor then displays the question with the correct answer shown.

The correct answer is **D. Incubation period**

After the results are shown, if there are a large number who selected an incorrect response, the instructor should be prepared to offer further explanation for the correct response.

vILT Delivery

The course administrator may opt to use virtual polling option in chosen virtual platform (Zoom, Teams, etc.). If so, insert the knowledge check question and answer choices into virtual poll and administer per the platform guidance. Existing knowledge check slides can augment the virtual poll in this manner:

- Show Knowledge Check slide and read question to participants
- Launch virtual poll and allow participants to answer; close virtual poll and share responses (optional)
- Advance slide to highlight the correct response and discuss as needed

3

Familiarize Yourself With the Questionnaire

- Are there any unfamiliar terms?
- Do you understand *why* each question is being asked?
- Improves the flow of the interview
- Plan for time management
- Conduct a practice run



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Instructor Note

Remind participants to carefully read through the questionnaire before starting the interview—not only does this improve the “flow” of the interview but can avoid mispronunciations, unfamiliar terms and help the interviewer be able to answer any questions that arise.

- Unfamiliar terms: there may be foods or medical terms that are new to you or hard to pronounce on the questionnaire—find out ahead of time what they are in case the interviewee asks (ex- babaganoush, acai, pho, etc.)
- Importance of questions be ready to explain why a question matter
- Familiarity improves the cadence and flow of the interview
- Have a time management plan (set goals; be ready to redirect)
- Practice administering the questionnaire

ASK:

- How can you best familiarize yourself with the questionnaire?
 - **RESPONSE:**
 - Have questionnaire-specific training; listen to a more experienced interviewer conduct an interview; conduct a mock interview.

vILT Delivery

Same as for ILT.

Questionnaire Basics

- Gives structure to the interview
- All interviewers must use same questionnaire
- Variety of question styles to collect desired level of detail



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Instructor Note

Emphasize the importance of a well formulated questionnaire that gives structure to the interview and collects the desired level of detail.

ASK:

- Why is it important for all interviewers to use the same questionnaire?
 - **RESPONSE:**
 - To allow comparison and analysis.

ENGAGEMENT OPTION(S):

ASK:

- Recall the difference between hypothesis-generating interviews and hypothesis-testing interviews.
- How might questionnaires for these interview styles differ?
 - **RESPONSE:**
 - Hypothesis-generating questionnaires are likely to ask more questions about various exposures but do not elicit as much detail about those exposures. Hypothesis-testing questionnaires get more detailed information on a smaller number of exposures of interest)

vILT Delivery

Same as for ILT.

Question Types

Closed-Ended Questions	Open-Ended Questions
• Pre-defined answer choices • Gather a lot of data rapidly • Easy to analyze	• Conversational in nature • Does not restrict responses • May provide additional detail

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Instructor Note

Compare and contrast closed-ended and open-ended questions. Emphasize that both are valuable for the investigation. Introduce the concept of “shotgun questionnaires”—long sections of yes/no questions related to food history (closed-ended questions).

ASK:

- What happens if the food causing illness is not on the questionnaire?
 - **RESPONSE:**
 - If the question is not asked the association will not be identified. An ongoing outbreak related to a new or unusual food may necessitate repeated interviewing or open-ended questionnaires to tease out the novel exposure.

ENGAGEMENT OPTION(S):

ASK:

- Do you think there are different techniques that interviewers might use when asking open-ended questions?
 - **RESPONSE:**
 - Yes. For open-ended questions an interviewer must listen carefully and pull out the most important details stated and record those. They must also have a more conversational technique that involves asking follow-up questions based on information the interviewee provides. They may also need to use gentle redirection to return the interviewee to the topic at hand.

VIRTUAL SUGGESTION:

Using “Yes” or “No” reaction buttons ask the following questions to affirm learning:

- Is this a closed-ended question: “Did you have contact with animals?” (Yes-it is closed-ended)
 - Challenge: Ask how it might be changed to an open-ended question. (“What animals have you had contact with?”)
- Is this a closed-ended question: “What did you eat at the party Friday night?” (No-it is open-ended.)

Emphasize that there is a time and place for both question styles as noted on the slide.

Notes:

Activity 3.1: Questionnaire Components

Demographics



Clinical Info



Exposures



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Instructor Note

Activity 3.1:

Break participants into their breakout groups and assign them a category:

- Demographics
- Clinical Info, and
- Exposures

Have groups spend 3 minutes brainstorming a list of questions in their category. Groups should be ready to report afterwards.

Have groups report out.

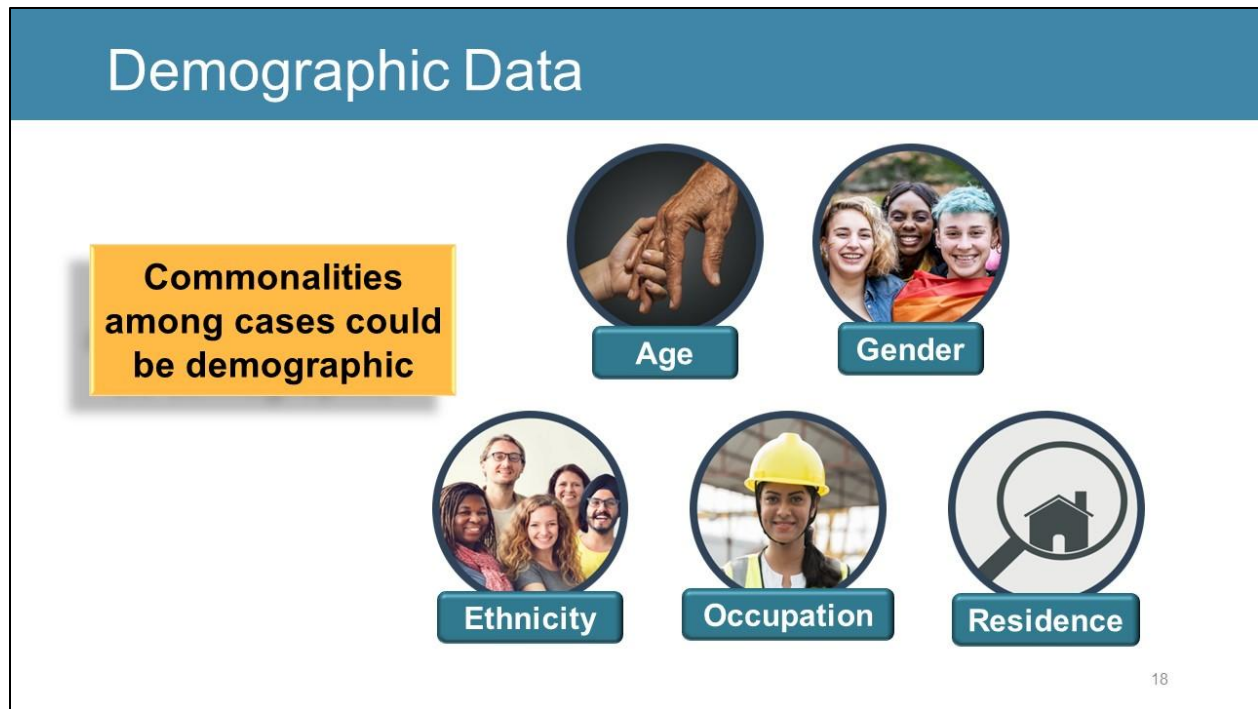
The following topics are likely to arise:

- **Demographics** (age, gender, residence, workplace, contact info)
- **Clinical Info** (onset, symptoms, duration, hospitalization status, medical visit info)
- **Exposures** (food history, ill contacts, animal contact, group events, water source, travel history)

vILT Delivery

- Send participants to pre-assigned breakout rooms for 3 minutes to discuss Activity 3.1 questions in Guide.
- Instruct each group to choose a participant to report findings upon return to large group.
- After breakout groups return to main session ask each group to share a synopsis of their discussion.

Notes:



Instructor Note

Emphasize the importance of looking for commonalities among cases and sometimes those commonalities are demographic. Explain that sometimes there are demographic clues that help identify exposures of interest, such as attending the same daycare, working in the same office, or even frequenting the same public swimming pool.

Additionally, there are sometimes exposure trends that can be recognized among demographic groups. For example, national outbreak data shows sex and age differences among cases in foodborne outbreaks depending on the food product implicated. These trends, while of course not a rule, can be helpful clues to investigators.

ASK:

- If you suspected that contaminated peanut butter was causing an outbreak, what age groups would you expect to be the most impacted?
 - **RESPONSE:** *(Participants will likely state children because children are known peanut butter and jelly consumers.)*
 - This is correct but also the elderly consumes a lot of peanut butter because it is cheap, easy, and high protein. Food consumption has trends, and these trends can be helpful to investigators.

vILT Delivery

Same as for ILT.

VIRTUAL SUGGESTION:

Ask learners to use the chat feature to chat potential ideas about exposures to explore if they note these demographic trends among the sick people:

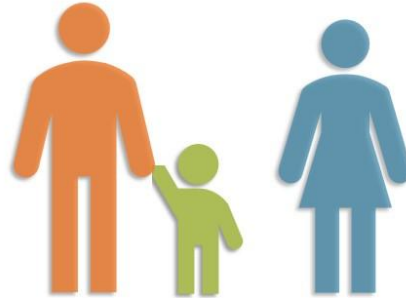
- Illness in children under 2 (common childcare facility; infant/toddler food)
- Illness in seniors over 80 (common long term care facility; common event)
- Illness in residents of same part of town (common local grocery store; common local event)
- Illness in workers from the same office (common office party; ill co-worker who spread illness at work)

Notes:

Demographic Trends: Outbreak Data

Males:

- Beef
- Shellfish
- Pork
- Dairy
- Game



Females:

- Grains-beans
- Nuts-seeds
- Fruits
- Sprouts
- Vegetable row crops

- Dairy
- Fruit

Source: CDC NORS Data, 1998-2015

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**This is an animated slide.*

Instructor Note

When national outbreak data over a 17-year period was analyzed demographic trends regarding sex and age can be seen. Males were more likely to be involved in outbreaks attributed to beef, shellfish, pork, dairy and game while females were more likely to be involved in outbreaks attributed to grains-beans, nuts-seeds, fruits, sprouts and vegetable row crops. Children under 5 were the most likely to be involved in dairy outbreaks.

Source: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6624866/#!/po=43.1034>

vILT Delivery

Same as for ILT.

Notes:

Clinical Information

- Symptoms
- Onset date/time
- Duration of illness
- Medical care
- Treatment
- Testing



Instructor Note

Clinical information can help characterize the illness if the agent is unknown. It can also help identify the exposure period of interest (incubation period). Onset information may be used to construct epidemiologic curves and graphically illustrate the outbreak. For routine surveillance clinical information may be used to determine case status.

Stress the importance of being as exact as possible with onset date and time.

vILT Delivery

Same as for ILT.

Notes:

Exposure Information

Collect:

- | | |
|---|---|
| <ul style="list-style-type: none">• Foods consumed (try to get specifics!)• Restaurants (include location!)• Grocery stores (include location!)• Other places where food was purchased or consumed | <ul style="list-style-type: none">• Recreational water activities• Travel history• Recent group gatherings• Exposure to ill persons with similar symptoms• Source of drinking water• Exposure to animals |
|---|---|

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Instructor Note

Emphasize that the ultimate goal of interviewing is to discover the source of illness by evaluating exposures. This can lead to implementing control measures that prevent others from becoming ill.

ASK:

- What kinds of control measures might be implemented based on interview data that implicates a common source?
 - **RESPONSE:**
 - Excluding an ill food worker; recalling a food product; hyperchlorination of a public swimming pool; sanitizing a common location; disposing of mishandled food; etc.

This discussion should reinforce the “why” or “WIIFM—What’s In It For Me” regarding the impact of interviewing.

vILT Delivery

Same as for ILT.

Knowledge Check

Which of the following would NOT be an expected component of an enteric illness questionnaire?

- A. Demographics
- B. Clinical Information
- C. Family Medical History
- D. Exposure Information

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Knowledge Check

Which of the following would NOT be an expected component of an enteric illness questionnaire?

- A. Demographics
- B. Clinical Information
- C. Family Medical History
- D. Exposure Information

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Instructor Note

The instructor displays the question to the class.

The instructor will read the question-and-answer options to the class. Participants are asked to select an answer. For classroom training, the instructor has the option to ask participants for a show of hands or write down their answer option. Allow participants a moment to make a decision.

The instructor then displays the question with the correct answer shown.

The correct answer is **C. Family Medical History**

After the results are shown, if there are a large number who selected an incorrect response, the instructor should be prepared to offer further explanation for the correct response.

vILT Delivery

The course administrator may opt to use virtual polling option in chosen virtual platform (Zoom, Teams, etc.). If so, insert the knowledge check question and answer choices into virtual poll and administer per the platform guidance. Existing knowledge check slides can augment the virtual poll in this manner:

- Show Knowledge Check slide and read question to participants
- Launch virtual poll and allow participants to answer; close virtual poll and share responses (optional)
- Advance slide to highlight the correct response and discuss as needed

4

Confirm the Interview Protocol

- Which questionnaire should be used?
- Which cases do I interview?
- Which interviews do I prioritize?
- When should interviews be complete?
- What do I do with completed interviews?
- Any other special instructions?



24

Instructor Note

Remind participants that there are different reasons for interviewing: routine case interviews; outbreak interviews; food complaint interviews, etc. Each situation may have a unique protocol and the interviewer should be clear on the steps involved:

- Make sure you use the right questionnaire and answer all questions unless told differently by lead investigator
- Be sure you understand which cases you are assigned and how to update the interview status
- Know the deadline for completing the interview
- Know who to give completed questionnaires to or where to upload them

Emphasize the importance of internal team communication.

ASK:

- What other special instructions might you receive as an interviewer?
 - **RESPONSE:**
 - Questions to prioritize; how to handle workplace/school exclusion; instructions for stool specimen or food sample collection; etc.

vILT Delivery

Same as for ILT.

Protocols: Internal Communication

- Likely multiple investigators involved in investigation process
- Documents may change as more information is gathered
- Need for clear case assignment process
- Internal team communication critical



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Instructor Note

Emphasize that investigations are dynamic and there are likely multiple investigators working on the investigation. Communication is critical to avoid confusion and duplication of efforts. Documents may change as information evolves during the investigation—such as a new exposure of interest or changing needs regarding specimen collection.

Particularly for interviewing stress the importance of knowing and following a clear protocol that dictates case assignment. Having a shared drive for investigation materials is recommended to ensure all investigators are using documents based on the current information.

ENGAGEMENT OPTION:

ASK:

- How participant's jurisdictions organize the case assignment process.
- Does it work well?

work well?it work well?

Protocols: Prioritizing Cases

PRIORITIZE...

1. Suspected outbreak cases
2. Cases with most recent illness onset
3. Cases in congregate settings
4. Cases among those working in high-risk settings
5. Cases of unusual disease with serious outcomes

Prioritizing may be necessary due to workload

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Instructor Note

Explain that case interview prioritization may be necessary due to staffing and workload. Ask your supervisor for jurisdiction-specific priorities for interview prioritization. However, emphasize that many jurisdictions prioritize the following types of case interview over routine cases:

- Suspected outbreak cases (could signal an ongoing public health threat with actionable control measure)
- Cases with most recent illness onset (most likely to have good recall and actionable public health intervention)
- Cases in congregate settings, such as detention centers/long term care facility/schools (have ability to spread to large number of cases rapidly)
- Cases among those working in high-risk settings, such as food workers, childcare workers, or healthcare workers (could spread rapidly and work with compromised population)
- Cases of unusual disease or with serious outcomes, such as Botulism, Salmonella Typhi or a novel pathogen (could result in death or signal unusual source in the community)

ENGAGEMENT OPTION(S):

ASK:

- Have you ever had to prioritize case interviews?
- How did they do it?

vILT Delivery

The course administrator has the option to pose the ASK questions as polls.

Notes:

5

Gather Tools to Support Interview

- Paper interview form
- Writing utensil
- Disease reference material
- Calendar
- Headset to keep hands free and for confidentiality
- Call log
- Any other relevant reference material (event menu, etc..)



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Instructor Note

Explain that a prepared interviewer should have tools handy to support the interview process. Review some of the suggested tools to have nearby:

- Paper interview form & pen (in case of power outage or computer malfunction)
- Disease reference material (to help with answering questions & giving prevention education)
- Calendar (to help jog patient's memory and ensure interviewer/interviewee on same page)
- Headset (life if easier with both hands free! Plus, it keeps things confidential)
- Call log (quick place to record interview status: pending; complete; message left and 4 pm; etc.)
- Other materials (menus; instructions for stool collection; etc.)

vILT Delivery

Same as for ILT.

Notes:

Activity 3.2

Investigation Notification: Unknown Enteric Illnesses, Lake County



Sully, Jane
To: Outbreak Response Team

😊

↩ Reply

↩ Reply All

➡ Forward

📧

⋮

2/17/2023 6:09 |

New Investigation Notification: 23-024: Unknown Enteric Illnesses, Lake County
Reported by: Stacey McVey (Nurse Manager, Memorial Hospital), (555) 555-5550

Summary:
2/17, 4 pm: Memorial reports a 3-4x increase in patients presenting today to Emergency Department with diarrheal illness. Lake County Outbreak Response Team (ORT) is being activated to investigate the situation.

Response Actions:

1. Line list of Memorial Hospital patients developed by Lake County on-call epidemiologist.
2. Investigation Folder created on shared drive (line list; investigation questionnaire; outbreak protocols).

Next Steps:

1. ORT interviewers will be assigned cases for interview, to be completed by noon 2/18:
 - a. Access questionnaire in [Investigation Folder 23-024](#)
2. On-call epidemiologist will coordinate with Memorial regarding available laboratory results, medical record information.
3. Next Update: 2/18 at 2 PM.

Jane Sully, MSPH
Epidemiologist
Lake County Health Department
(555) 555-5555
Jane.Sully@lakecountyhealth.gov

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This is a return to the scenario introduced in Module 1.

Activity 3.2: *(This discussion should take ~10 minutes)*

Lead a large group classroom discussion about the email just received:

ASK:

- Who was this email from and who is the recipient? (Lake County epidemiologist to the Outbreak Response Team) *Emphasize that all course participants are Lake County Outbreak Response Team members responsible for interviewing.*
 - Ask a volunteer to read the “Summary” section.
 - What is going on? (the hospital is seeing 3-4x the expected number of diarrheal cases in ED; Outbreak response team activated)

ASK:

- *What response actions have already been completed and what are the next steps?*
 - *Response:*
 - *completed: line list of cases created; investigation folder created; next steps: interviews will be assigned; lead epidemiologist will get more info from hospital.*

ASK:

- *What can the ORT interviewers do to prepare for their interviews?*
 - *Response:*

- *Go to investigation folder and review questionnaire; make sure they understand all questions and there aren't unfamiliar terms; practice the questionnaire; read the outbreak protocols and know where to place completed questionnaires; clear their schedules between now and noon tomorrow for interviewing; watch for case interview assignments.*

vILT Delivery

VIRTUAL SUGGESTION:

This activity can be facilitated as a breakout room discussion to increase engagement. If instructor staffing allows, have an instructor share this slide in the breakout room for reference. If not, the image and questions are in the Participant Guide.

- Send participants to pre-assigned breakout rooms for 6 minutes to discuss Activity 3.2 image and questions in Guide.
- Instruct each group to choose a participant to report findings upon return to large group.
- After breakout groups return to main session ask each group to share a synopsis of their discussion.

Notes:

Activity 3.2 “*You’ve Got Mail!*”

Who was the email from and who is the recipient?

Type Here:

Based on the Summary, what is going on?

Type Here:

What response actions have already been completed? What are the next steps?

Type Here:

What can interviewers do to prepare for an interview?

Type Here:

Module 3 Summary

- Described the steps to take when preparing for an interview
- Identified basic components in questionnaires
- Listed tools to support interviewing



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Instructor Note

Summarize the module.

vILT Delivery

Same as for ILT.

Notes:

MODULE 4 Conducting Interviews – The Fundamentals

Participants will be able to list interview tools and describe appropriate conduct, interview techniques and interview protocols.



Notes:

Module 4 Objectives

After completion of this module, you will be able to:

1. State three key steps to interviewing success
2. Describe ways to develop trust and establish rapport
3. List ways to avoid interviewer bias
4. Describe best practices for conducting interviews

2

Instructor Note

Briefly described the objectives for Module 4.

ENGAGEMENT OPTION

- Task a participant to provide a 30 second summary of one of the learning objectives at the end of the module.
- Tell them you will remind them when you get to that part of the lesson.

vILT Delivery

Same as for ILT.

Notes:



Instructor Note

Facilitate a whole class discussion exploring what makes an interview successful.

Ideas for discussion:

- Gathering details that lead to identifying the source of illness/preventing new illnesses (balance between getting details and managing time for both interviewer and interviewee)
- Communicating educational message to victim that can prevent spreading illness
- Positive interaction between interviewee and interviewer
- Interviewee understanding importance of interview process
- Allowing interviewee to “feel heard” with concerns, questions and ideas about potential public health hazards in the community
- Respecting time of both interviewee and interviewer (i.e.-doesn’t drag on or go completely off topic)
- Results in clinical specimens or food samples being available for testing (if any are needed)

Emphasize that adhering to best practices can help interviewers conduct successful interviews

VIRTUAL SUGGESTION:

Ask learners to use the chat feature to chat one word or phrase that denotes a successful interview (complete; organized; solves outbreak; finds associations; educates patient; etc.)



** This is an animated slide.*

Instructor Note

Emphasize that the three key steps to successful interviewing (and thus accomplishing the goals of interviewing) can be boiled down to starting strong, maintaining a conversational tone and paying attention to detail.

- **Have a strong start:**
 - Remember, the first 10 seconds really matter. Everyone gets many unwanted calls, and this call will come seemingly out of the blue for the interviewee.

ASK:

- What does a “strong start” to the interview look like?
 - **RESPONSE:**
 - Be able to succinctly introduce yourself and the purpose of the call. Conveying WHY the interview is important so the interviewee understands why their participation is important is key. Asking how the interviewee feels following the recent illness can also help start the interview off on the right foot.

ENGAGEMENT OPTION(S):

ASK:

- How do you start interviews?
- What has worked well for you?

- **Conversational tone:**
 - Being natural and conversational will help establish and maintain rapport. The interviewee will respond more openly if the interview feels like a conversation rather than an interrogation.
- **Attention to detail:**
 - Ultimately gathering details that uncover the source of illness is the goal. Asking the questionnaire questions will get desired answers but knowing when to probe for additional details is important. Also, sometimes extra details mentioned by interviewees are key. Interviewers should listen strategically for extra commentary and details that may end up “cracking the case”. Jot this info down in the margin if necessary and ask follow-up questions if it seems important. You may also hear similar details from multiple interviewees—be on the lookout for this and alert your supervisor—that just may be the connection that uncovers the source of illness!

Notes:

Activity 4.1 – Role Play

Need two volunteers.

Volunteers will read a scripted interview introduction.

Answer the following questions:

1. Was this interview successful?
2. What went well?
3. What improvements would you suggest?

5

Instructor Note

<This is likely right after lunch when energy levels are low. Try to revive participants with something interactive>

Group Activity: Role-Play

This activity should take about 10 minutes.

Explain the following:

- This is a role-play exercise that will use two scripts that involve the roles of an Interviewer and an Interviewee.
- Both role-plays are based on the GI Illness scenario initially introduced in Module 1.
- We will ask for volunteers to perform the roles for each script.
- Following the completion of the first role-play, the second script will be introduced using two new volunteers.

** Script 1 & 2 come straight from the video script, except the name *Memorial Hospital* was added.

Classroom:

- Round 1 –
 - Give the first round of volunteers a copy of “Video Script 1”.
 - Ask the volunteer(s) to read the scenario out loud and then follow the role script.

- Round 2 –
 - Give the second round of volunteers a copy of “Video Script 2”.
 - Ask the volunteer(s) to read the scenario out loud and then follow the role script.

Debriefing:

Following each round of role-play, facilitate a group discussion about how the interview attempt went.

If groups have trouble, here are some points to emphasize:

- Interviewer should state their name
- Don't use of jargon and formal language
- Show empathy
- Be more conversational
- Don't jump straight into sensitive topics (diarrhea)—work up to it after asking some easier questions
- Explain the purpose in an understandable manner—this interviewee did not grasp why the interview was important

vILT Delivery:

Virtual version can post the scripts in the Chat to download for the volunteers

SCRIPT 1:

Interviewer: *Hi, I'm calling from the Lake County Health Department. Public health authorities are working to identify causes of enteric disease in the community so we can prevent additional cases. Part of this process involves interviewing people who have recently been ill with an enteric illness so we can do analysis for common exposures. May I please speak with Luis Johnson?*

Interviewee: *Ummm.... this is Luis Johnson. I'm sorry, who are you again?*

Interviewer: *I'm from the Health Department. Did you recently experience diarrhea and go to Memorial Hospital?*

Interviewee: *Uhhhh.... I don't really want to talk about that. Also, I'm kind of in the middle of something right now....*

Interviewer: *This should only take about 20 minutes and I need to ask you some questions about your diet and activities before the diarrhea started.*

Interviewee: *Yeah, I don't have time or interest but thank you anyway.*

(Telephone hangs up.)

SCRIPT 2:

Interviewer: *Hi, I'm Jane Sully and I'm calling from the Lake County Health Department. May I please speak with Luis Johnson?*

Interviewee: *Ummm.... this is Luis Johnson. I'm sorry, who are you again?*

Interviewer: *I'm a nurse from the Health Department. We've had several people in the community sick lately and we are calling them to try and figure out what might be going on so we can hopefully prevent more illnesses. Memorial Hospital shared your name with us. Were you recently ill?*

Interviewee: *I was, and it was terrible.*

Interviewer: *I'm so sorry to hear that—how are you feeling now?*

Interviewee: *Better but I can't remember when I've been that sick.*

Interviewer: *Wow. I'm glad you are doing better and sorry you went through that. I'd love to ask you some questions about foods you ate and places you went before you got sick to compare with other people's answers who we suspect had the same illness. Would that be, OK? It could help us prevent more people from getting sick.*

Interviewee: *Yes, I can do that. How long will it take?*

Interviewer: *Probably about 20 minutes or so but if you need to stop at some point, we can set a time to finish later.*

Interviewee: *Sounds good.*



Instructor Note

*This is an animated slide.

Before showing the content -

ASK:

- How can an interviewer build trust and rapport?

Recognize that sharing personal details can be awkward so it is critical for the interviewee to trust the interviewer.

The interviewee will give you clues about how to connect with them—look for opportunities to build rapport.

A few ideas to help build trust:

- **Show Empathy:** ask how they feel; show empathy for the recent unpleasant experience they've had; don't minimize the symptoms
- **Avoid Judgement** be careful not to convey judgement about risk factors, lifestyle choices or other things the interviewee states. Showing judgement is the fastest way to lose trust and rapport.
- **Match communication styles:** some interviewees will want to discuss things more thoroughly and others will be straight to business—adjust your style to accommodate (as much as possible and still accomplish interview goals) these needs
- **Make sure the interviewee feels heard:** the interviewee may have a strong opinion about what made them ill that they feel compelled to get across—let

them. Perhaps it is crucial information for the investigation. And if not, they will be much more likely to answer your questions if they feel heard in their concerns.

- **Respect their time:** interviews take time, and everyone is busy. Be a good steward of their time and yours by keeping the interview moving, in as conversational a style as possible.
- **Show gratitude and** be thankful that they are donating their time to doing the interview and helping protect public health.

ASK:

- Do participants have any other suggestions of how to build trust with interviewees?

VIRTUAL SUGGESTION:

Ask learners to use the chat feature to chat ideas about how to build trust with interviewees.

Notes:

Determining Exposure Timeframe

- Pin down date and time of illness onset
- Determine exposure timeframe of interest based on:
 - Pathogen
 - Incubation period
 - Local protocol
- Remind interviewee of time period of interest often



Instructor Note

ASK:

- Why is the exposure timeframe important?
 - **RESPONSE:**
 - To get accurate exposures that may have caused illness this timeframe must be correct—it guides the entire interview.

Emphasize that collecting the information needed to identify the source of illness is VERY dependent on focusing on the right exposure timeframe. This timeframe must be established and communicated with the interviewee upfront before collecting exposure information. Only exposures during the relevant timeframe matter, so this detail must be correct, or the interview information is invalid.

To determine the timeframe of interest it's important to know the date and time of illness onset with as much exactness as possible. Then, using the incubation period of the pathogen (if known) the investigator can identify the likely exposure period. Many enteric illnesses have relevant exposure periods of 3-5 days prior to illness onset. However, it is often easiest for people to think in terms of 7 days or 1 week—therefore we often overshoot the exposure period a little to help with patient recall and to account for low level contamination, which can extend the incubation period. Ask the lead investigator what exposure timeframe to use if you aren't certain. Also, be sure to remind the interviewee the timeframe of interest several times throughout the interview.

ENGAGEMENT OPTION(S):

ASK:

- What strategies they might use if the interviewee is vague about date/time of symptom onset?

Notes:

Memory Aids to Help Interviewee



Routine
schedule or
events

Special events

Check
Calendars

Receipts & bank
statements

Look in
refrigerator,
pantry &
cabinets

Review social
media/apps

8

Instructor Note

Emphasize that people often have trouble remembering exposures. There are tools the interviewer can suggest that may aid interviewee recall should the interviewee struggle to remember exposures:

- Routine events (weekly fast food after youth sports practice; Wednesday night church supper; daily trip to the canteen at work; etc.)
- Special events (family reunion; wedding; dinner out with friends; etc.)
- Calendar for time period of interest. Reviewing the calendar for the time period of interest to jog memory
- Bank statements/receipts
- Reviewing contents of refrigerator and pantry or cabinets. Looking in the refrigerator, pantry or cabinets to see if anything jogs the memory
- Reviewing social media/apps where meals may have been recorded. Some people post food pictures on social media or log meal details into diet/fitness apps

Also, some people have special diets or food allergies that dictate meals—these can help exclude certain items from the food history.

ENGAGEMENT OPTION

ASK:

- What other items might help interviewees recall exposures?
 - **RESPONSE:**
 - Asking a spouse/family member involved in food preparation; reviewing menus; etc.

VIRTUAL SUGGESTION:

Ask learners to use the chat feature to chat ideas about other memory aids.

Notes:

Time Management

- Know the questionnaire
- Have target times
- Redirect if things go off topic
- Listen for answers that are out of order
- Have everything you need on hand



Instructor Note

Emphasize that enteric interviews take time. Time that neither we nor interviewees have. So, time management is important.

Some ways to help manage time include:

- **Know the questionnaire.**
 - Be very familiar with the questionnaire. Know it inside out to help the flow of the interview. Plus, if the interviewee jumps around, you can easily find your place.
- **Have target times.**
 - Set target times for yourself to use as cues. Before starting the interview set target times to get through the various sections of the questionnaire so you can keep an eye on time as you go.
- **Redirect if things go off topic.**
 - Keep the conversation on topic with gentle redirecting. Sometimes conversations can stray off topic and this costs time. *Gently* redirect. It needs to feel natural and not offend the interviewee—it's more of an art than a science.
- **Listen for answers that are out of order.**
 - Listen for hidden answers to avoid duplication. Sometimes interviewees answer questions out of order—listen for this and use this info as needed to avoid duplication. Later you might say, “You said earlier you made hamburgers, were they pre-formed patties or did you make them yourself?”

- **Have everything you need on hand.**
 - Have all the necessary materials on hand and ready. And more. Computer programs crash so have a paper form handy if you were planning to do direct data entry. Pens run out of ink, so have more. Have disease reference material handy to answer questions.

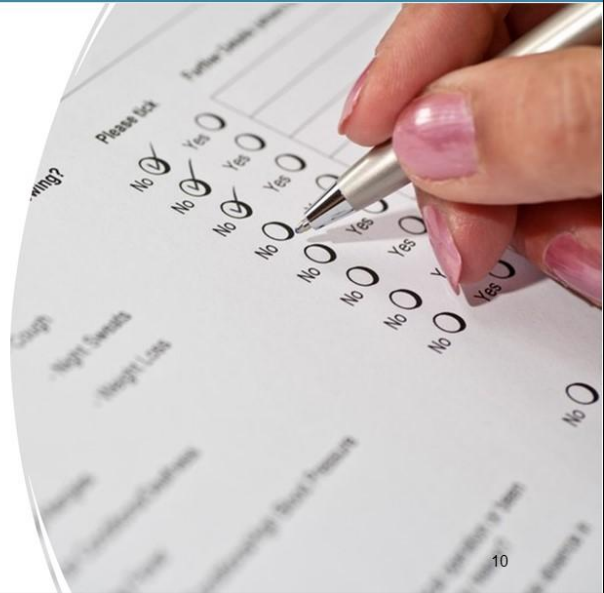
ASK:

- What other time management strategies could you use when interviewing?

Notes:

Maintaining Interview Flow

- Follow the questionnaire but maintain flexibility
- Save sensitive topics until trust established
- Ask questions if answers don't make sense
- Don't assume answers and skip questions



Instructor Note

Review a few overarching tips for maintaining the natural flow and cadence during an interview:

- Ask the questions on the questionnaire but be flexible enough to allow the interviewee to speak freely—they may jump around.
- Know the questionnaire well enough to account for that and not be repetitive later when questions already answered come up
- Some questions may be sensitive (sexual history; etc.)—saving these questions until the interviewee feels comfortable will result in best outcome—sometimes interviewees can be hesitant to provide detailed demographic information until trust is established (potentially due to fears of identity theft)—discussing illness first as part of showing empathy for recent illness can be helpful
- Ask clarifying questions if something doesn't make sense. Especially if the timeframe isn't adding up—we need to be sure we are asking about the relevant timeframe.
- Never assume answers or skip questions.

ASK:

- How would you handle an interviewee that stated they had consumed no chicken but later reported eating a chicken salad sandwich from a restaurant?
 - **RESPONSE:**
 - Revisit the chicken question, change the incorrect response and inquire about any other missed chicken eating.

Interviewer Bias

- Lack of interviewer objectivity
- Bias can be inadvertent
 - Strong beliefs about the source of illness
 - The way questions are asked
 - Certain exposures may be overemphasized
 - Other exposures may be downplayed



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Instructor Note

Emphasize that interviewers must be careful not to inadvertently bias.

ASK:

- What are ways that an interviewer might bias the interview?

Possible responses may include:

- leading questions
- sharing hypotheses
- giving personal opinions
- skipping questions
- sharing results from other interviewees; etc.

Review ways interviewers can inadvertently bias the results:

- Asking questions in a leading way;
- Allowing their personal opinions/beliefs to show;
- Share hypotheses about source of illness;
- Over focus (or not focus) on specific exposures.

ENGAGEMENT OPTION(S):

Ask participants to raise their hand if they think the following statements by an interviewer might introduce bias:

- “Did you travel prior to illness onset?” (No, this is not a biased statement)
- “You didn’t consume raw milk, did you?” (Yes, this wording could bias the answer.)

- “Are you sure you didn’t travel prior to illness onset?” (Yes, travel is overemphasized and could cause bias.)
- “Some of the sick people consumed ground beef. Did you?” (Yes, this wording could bias the answer.)

Emphasize that bias can be inadvertent. Wording matters.

VIRTUAL SUGGESTION:

Using “Yes” or “No” reaction buttons ask if the following statements by an interviewer might introduce bias:

- “Did you travel prior to illness onset?” (No, this is not a biased statement)
- “You didn’t consume raw milk, did you?” (Yes, this wording could bias the answer.)
- “Are you sure you didn’t travel prior to illness onset?” (Yes, travel is overemphasized and could cause bias.)
- “Some of the sick people consumed ground beef. Did you?” (Yes, this wording could bias the answer.)

Emphasize that bias can be inadvertent. Wording matters.

Notes:

Knowledge Check

Which of the following tactics can help interviewers build trust and rapport with interviewees?

- A. Referencing names of other ill persons
- B. Showing empathy
- C. Managing time by setting a stopwatch
- D. Referring to a calendar for specific dates

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Question Slide

Knowledge Check

Which of the following tactics can help interviewers build trust and rapport with interviewees?

- A. Referencing names of other ill persons
- B. Showing empathy
- C. Managing time by setting a stopwatch
- D. Referring to a calendar for specific dates

13

Answer Slide

The instructor will read the question-and-answer options to the class. Participants are asked to select an answer. For classroom training, the instructor has the option to ask participants for a show of hands or write down their answer option. Allow participants a moment to make a decision.

The instructor then displays the question with the correct answer shown.

The correct answer is **B. Showing empathy**

After the results are shown, if there are a large number who selected an incorrect response, the instructor should be prepared to offer further explanation for the correct response.

vILT Delivery

The course administrator may opt to use virtual polling option in chosen virtual platform (Zoom, Teams, etc.). If so, insert the knowledge check question and answer choices into virtual poll and administer per the platform guidance. Existing knowledge check slides can augment the virtual poll in this manner:

- Show Knowledge Check slide and read question to participants
- Launch virtual poll and allow participants to answer; close virtual poll and share responses (optional)
- Advance slide to highlight the correct response and discuss as needed

Knowledge Check

Which of the following help determine the exposure timeframe of interest?

- A. patient's last name
- B. date and time of onset
- C. foods consumed
- D. symptoms

14

Question Slide

Knowledge Check

Which of the following help determine the exposure timeframe of interest?

- A. patient's last name
- B. date and time of onset
- C. foods consumed
- D. symptoms

15

Answer Slide

The instructor will read the question-and-answer options to the class. Participants are asked to select an answer. For classroom training, the instructor has the option to ask participants for a show of hands or write down their answer option. Allow participants a moment to make a decision.

The instructor then displays the question with the correct answer shown.

The correct answer is **B. date and time of onset**

After the results are shown, if there are a large number who selected an incorrect response, the instructor should be prepared to offer further explanation for the correct response.

vILT Delivery

The course administrator may opt to use virtual polling option in chosen virtual platform (Zoom, Teams, etc.). If so, insert the knowledge check question and answer choices into virtual poll and administer per the platform guidance. Existing knowledge check slides can augment the virtual poll in this manner:

- Show Knowledge Check slide and read question to participants
- Launch virtual poll and allow participants to answer; close virtual poll and share responses (optional)
- Advance slide to highlight the correct response and discuss as needed

Collecting Details

- Actively listen and record details such as:
 - Brand, flavor, packaging type, purchase location
- Take notes on details given outside questionnaire parameters
- Shopper and loyalty cards can provide critical details



Instructor Note

Details are necessary to tease out exposures of interest—exposures that may have caused illness.

Interviewers should:

- Listen actively and record details about exposures
- Take notes, even if it's outside the questionnaire parameters. Interviewees will provide extra detail—take notes, in the margin of the questionnaire if needed. This information may be important.
- Consider shopper and loyalty cards as a source of information—they can be digital goldmines of detailed information to help solve illness clusters

ASK:

- Have any of you ever collected shopper card or loyalty card information during an interview?
- Can any of you think of a time when extra details or information that may have been scribbled in the margin provided relevant information for the investigation? If so, please share your experience.

Notes:

Probing and Clarifying

Probing may be needed to help interviewees answer a question or clarify answers:

- *“Ground beef. In any form, such as hamburgers or even as an ingredient like in spaghetti sauce.”*
- *“Yes, December 17-24, so the week before Christmas.”*
- *“Tell me more about that.”*



17

Instructor Note

Sometimes either the interviewee will not understand the question, or the interviewer will not understand their answer. Gentle probing and clarifying can help ensure the questionnaire is accurate and complete.

Notes:

Closing the Interview

- Ensure interviewee questions or concerns are addressed
- Ask permission to contact interviewee again if needed
- Express gratitude for their time



Instructor Note

Express the importance of answering interviewee questions and concerns and thanking them for their time. Also, be sure to ask permission to contact them again should new information be available to share regarding their illness or if additional information is needed for the investigation.

ENGAGEMENT OPTION

ASK:

- Do you have good strategies to share about closing the interview?

Notes:



Instructor Note

This video (*Do's and Don'ts of Outbreak Interviewing*) runs approximately 9 minutes.

The Oregon Health Authority developed this just-in-time training video for interviewing. Show the video as a way to summarize interviewing best practices.

Source: <https://youtu.be/nWBQH3mDdn4>

ENGAGEMENT OPTION

Following the video ask some of the following questions:

1. Have you ever encountered any of these challenges while interviewing?
2. Do you have any additional ideas for Do's or Don'ts?

Notes:

Observation Form

Video: *Do's and Don'ts of Outbreak Interviewing*

List items that are important take-aways from this video.

Type Here:

What other tips or advice would you suggest?

Type Here:

Module 4 Summary

1. Stated three key steps to interviewing success
2. Described ways to develop trust and establish rapport
3. Listed ways to avoid interviewer bias
4. Described best practices for conducting interviews



20

Instructor Note

Summarize the module objectives.

ENGAGEMENT OPTION

If a participant was assigned to describe one of the objectives, have them report out.

MODULE 5 Best Practices for Effective Interviewing

Participants will be able to describe best practices for collecting exposure histories, conducting iterative interviewing, and the pros and cons of conducting interviews online versus the phone.



Notes:

Module 5 Objectives

After completion of this module, you will be able to:

1. Analyze common challenges to enteric interviewing
2. Describe strategies for addressing common interviewing challenges
3. Describe how external investigation challenges can impact effectiveness of interviewing

2

Instructor Note

Briefly introduce the module objectives.

ENGAGEMENT OPTION

Task a breakout group by providing a 30 second summary of one of the learning objectives at the end of the module. Tell them you will remind them when you get to that part of the lesson. (*Suggest choosing only 1-2 objectives to have participants summarize. However, ensure that no objective is left out of the selection.*)

** Breakout groups apply to both classroom and virtual settings.*

vILT Delivery

Same as for ILT.

Notes:

What Now? Interview Challenges



Interviewee



Interviewer

What are some challenges from each of these categories?

3

Instructor Note

Facilitate a whole class discussion exploring interviewing challenges. Specifically break challenges down into challenges related to the interviewee or the interviewer. *Don't discuss how to solve these challenges yet.* Ideas for discussion:

- **Interviewee-related challenges:** reluctance to participate; language barriers; lost to follow-up; straying off topic; poor recall of exposures; interviewee fatigue partway through interview; last meal bias; fear of getting eating establishment in trouble; interviewee gives contradictory answer; interviewee won't answer the phone call.
- **Interviewer-related challenges:** interviewer asks leading questions; lack of time management; not being prepared/known questionnaire; only attempting contact during business hours; lack of good documentation

Emphasize that challenges will occur and experience as well as consideration ahead of time will help the interviewer be ready for common challenges.

ENGAGEMENT OPTION (to underscore “What’s In It For Me” or WIIFM)

- Ask participants what unique challenges they’ve had during interviewing and how they handled them.

vILT Delivery

VIRTUAL SUGGESTION

1. Ask learners to use the chat feature to chat one word or phrase that denotes an *interviewee*-related challenge (reluctance to participate; lost to follow up; language barrier; poor recall; etc.)
2. Ask learners to use the chat feature to chat one word or phrase that denotes an *interviewer*-related challenge (lack of preparation; time management issues; poor documentation; etc.)
3. Ask learners for clarification or more information as needed. Facilitate discussion on what participants place in the chat.

Notes:

Factors Leading to Interview Challenges



Interviewee

- Lack of trust
- Failure to see relevance
- Recall issues
- Communication barriers



Interviewer

- Lack of preparation
- Poor organization
- Lack of attention to detail
- Bias

4

Instructor Note

Emphasize that many of the challenges encountered stem from common factors:

Interviewee:

- **Lack of trust**—perhaps they are suspicious of unknown calls or the government in general. This can cause an interviewee to show reluctance to report eating establishments, group events or even participate at all.
- **Failure to see relevance**—they don't understand that this information matters—that other people may avoid illness through their participation; people are busy, so they are unlikely to participate if they don't understand the relevance.
- **Recall issues**—remembering is hard. However, accurate results are based on reported exposures. Finding a way to aid recall is critical.
- **Communication barriers**—perhaps it's a language barrier or a communication style (chatty, off topic vs. closed-down, reluctant) but the interviewer must adjust their style accordingly.

Interviewer:

- **Lack of preparation**—not knowing the questionnaire; having materials on hand or a clear idea of which questionnaire to use and who to contact can derail the investigation.
- **Poor organization**—not having a plan for the interview—time management, clearly communicating the importance; finding the balance between building rapport and managing the interview, keeping interview moving and interviewee motivated.
- **No attention to detail**—hearing “between the lines” and coaxing additional detail where needed to uncover important information; solid documentation for comparison to other cases.
- **Bias**—either knowingly or unknowingly influencing information collected from the interviewee; having such a strong idea/judgement about source that information collected is tainted.

vILT Delivery

Same as for ILT.

Notes:

Activity 5.1 – Addressing Challenges

Recall the scenario from earlier modules. The interview team has encountered the following challenges. In small groups, brainstorm potential solutions to your assigned challenge.

1. Interviewer could not reach interviewee for interview.
2. Interviewee has very poor recall of exposures.
3. Interviewee doesn't have time to finish interview.
4. Interviewee reluctant to participate.
5. Interviewee strays off topic during interview.

5

Instructor Note

Small Group Activity: Addressing Challenges

This activity should take about 20 minutes (10 minutes in small groups and 10 minutes to report out/large group discussion).

Remind participants of the scenario threaded throughout the course (local ED reporting increased GI illness; outbreak response team deployed; interview team currently interviewing patients).

Break participants into small groups and assign an encountered challenge. Ask them to brainstorm potential solutions, elect a spokesperson and be ready to report their findings to the large group. During report out, facilitate a large group discussion of the challenge and any additional solutions. If there are not enough groups to cover each challenge, either assign multiple challenges or cover the remaining challenges in a large group discussion. Potential discussion points below to help facilitation:

1. **Interviewer could not reach interviewee:** it may depend why (phone disconnected? Incorrect number? Straight to voicemail?) An incorrect number or disconnected line merits calling the healthcare provider for an alternate number; looking for patient in existing surveillance system; perhaps even using a phone directory like whitepages.com to look up phone number and as a last resort, sending a letter requesting a call back. Going straight to voicemail suggests calls are being screened. Leave a voicemail asking for a callback. Send a text message requesting a call back. Also, attempt calls at various times of day, including evenings, in case the patient can't answer during the workday. Most

interview protocols include 3 documented interview attempts before marking “lost to follow up”.

2. **Interviewee has very poor recall of exposures:** anchor the interview around significant dates/holidays; ask about routines; ask about any special events during timeframe of interest; suggest interviewee look at calendar to jog memory; suggest having a significant other or family member assist if possible; review receipts/apps that might track meals or purchases; ask about special diets or allergies; if all else fails, ask what they know they did not eat/do (you may have lots of “No” and “Maybe” and few “Yes” answers but it may still be helpful to the team).
3. **Interviewee doesn’t have time to complete interview:** if you know from the start that the interviewee is short on time you should attempt the highest priority sections first (symptoms, onset date/time, event attendance; suspect food items or exposures if hypothesis-testing); attempt to arrange a later time to complete interview; reiterate the power of interviews to uncover public health threats and prevent illness if you think interviewee doesn’t understand relevance; graciously thank them for their time.
4. **Interviewee reluctant to participate in interview:** it’s important to understand *why* the interviewee doesn’t want to take part. Listen actively to the interviewee’s concern. It may be related to confidentiality, not comprehending the relevance, mistrust of public health or some unique reason. Do your best to answer questions and calm concerns. Clearly state the importance of interviews to determine the source of illness and protecting the public. Often building rapport by listening will help. Using empathy regarding the person’s recent illness to help the patient develop motivation to protect others from the same fate can help.
5. **Interviewee strays off topic during interview:** some interviewees stray off topic out of loneliness and others stray because they are determined to tell you something they think is relevant. Find a balance of letting the interviewee feel heard and gently redirecting them back to the questionnaire. Connect their strayed topic to something on the questionnaire to help guide you back (Ex-wow, that does sound like an exciting trip! Did you eat at any restaurants during the trip?)

vILT Delivery

Send participants to their pre-assigned breakout groups with an assigned challenge to discuss and brainstorm potential solutions. Ask them to elect a spokesperson to report out for the group. To aid in clarity post the assignments in the chat:

Group 1: Challenge 1 (Could not reach interviewee)

Group 2: Challenge 2 (Poor recall of exposures)

Group 3: Challenge 3 (Interviewee ended interview prematurely)

Group 4: Challenge 4 (Interviewee reluctant to participate)

Group 5: Challenge 5 (Interviewee strays off topic)

**If class size does not allow 5 breakout groups, instructor can facilitate large group discussion of extra challenges.*

Notes:



Instructor Note

Pan out and remind participants that investigations are a balance of many factors that must work together. This course focuses on interviewing but there are many factors beyond interviewing that impact the ability to identify and control disease, and ultimately impact the ability of interviewers to be effective. Among these factors are:

- **Reliable surveillance** to detect cases
- **Testing** to identify pathogens
- **Teamwork and communication** to trigger response actions
- **Effective interviewing** to identify commonalities and hypotheses
- **Sound study designs** to test hypotheses and identify sources of illness

Effective interviewing is a critical component of the investigation. However, even solid interviewing will not identify illness sources if other components are lacking.

The interviewer needs *surveillance and testing* to identify cases for interview; a sound *study design* to ensure the right cases are being asked the right questions and *teamwork* to make sure control measures are being implemented once an illness source is detected.

vILT Delivery

Same as for ILT.

Notes:

Investigation Challenges Impacting Interviews



7

Instructor Note

Sometimes despite solid interviewing no commonalities can be detected. These could be classified as investigation challenges, not true interviewing challenges but they impact interviewing. Reasons include:

- **Question not on questionnaire**—perhaps the illness source is novel, unexpected, or rare and simply not asked about on the questionnaire
- **Stealth exposure**—the source of illness may have been “hidden” such as an ingredient like peanut butter in a variety of food products among cases (cookies, crackers, etc.) or something that went unnoticed such as garnishes on a plate or unknown ingredient used in a salad dressing such as a freshly chopped herb.
- **Too few cases**—analysis of results can be challenging if there are too few cases (i.e.-hard to interpret significance of 2 people consuming fresh melon). This can happen if surveillance and testing are not being done or if the cases are spread across a wide geographic area
- **Lack of (or inadequate) control group**—it can be hard to interpret findings without a control group to help frame significance of ill person exposures. Often a case-control study may be done as part of hypothesis-testing.
- **Misclassification issues**—if people with other illnesses or who aren’t truly ill with the illness under investigation are included in the interviewing and analysis the results will not accurately reflect the cluster source of illness

- **Bias**—bias can occur at multiple levels of the investigation: biased question wording on questionnaire; recall bias where ill persons have better recall than well persons; “last meal” bias where interviewee is fixated on last meal consumed

ENGAGEMENT OPTION:

Instead of lecturing on this slide, go through each challenge and ask participants why they think these investigation challenges are important—and then round out the discussion to make sure all points are covered.

vILT Delivery

Pre-select 6 participants you feel would be willing to discuss the implications of these investigation challenges. Before starting, warn participants that you will be asking for their help on the topic.

Notes:

The “Astute Interviewer”

- Listen for clues in case exposure not overtly asked about on questionnaire
- Solicit additional details when merited
- Watch for trends between interviews
- Pay attention for “sub-clusters” with common exposures
- Communicate findings with team members



Interviewers can hear clues that solve investigations

8

Instructor Note

If the question isn't overtly asked on the questionnaire or if a “stealth ingredient” is causing illness an astute interviewer is critical.

Emphasize that interviewing is somewhat of an art, not just rote reading of the questionnaire. It's a conversation and unexpected clues may come up during the interview. The interviewer should know when to solicit additional details and record those—even in the margin of the page. This is especially true during *hypothesis generating interviews*. Remember the goal is to identify the source and at times the source may be a commonality that is not overtly listed on the questionnaire and requires strong listening skills.

Be sure to highlight how the interviewer can help with issues from stealth items or novel items: **by listening carefully for clues** and asking more about anything interesting that comes up.

Watch for “sub-clusters” of cases with common exposures. For example, a small group within the larger group of ill people who dined at a common restaurant. This can provide powerful clues that can help solve the larger cluster, such as tomatoes used in restaurant salsa but also sold to consumers.

If an interviewer hears something familiar—from a previous interview completed on another patient be especially curious and ask for additional details.

vILT Delivery

Same as for ILT.

Notes:



Instructor Note

Sometimes the source of illness is not an overt question on the questionnaire—which can make it really difficult to determine the source! One potential solution is employing the “single interviewer” approach.

ASK:

Look at the statements made by multiple interviewees during interviews.

1. How would having a single interviewer be helpful in this situation? (hear various ways different ill people may have visited a common park)
2. What might a single interviewer do if encountered with these clues? (ask for details about *which* park, what exactly they did while at the park, if any food/drinks were purchased and any other relevant exposures while there such as animal contact, filling a water bottle, recreational swimming, etc.)

Note: This example was borrowed from a real outbreak: In South Carolina a cluster of *Salmonella* Javiana was detected but the standard enteric questionnaire did not identify any commonalities. Local interviewers mapped the residences of cases and noted they lived in the same part of town. One interviewer noted that several cases were involved in various activities at a local park. Further questioning determined that cases had visited the park and purchased nuts (boiled peanuts) from a local, unlicensed vendor. The outbreak was solved by one astute interviewer who heard something intriguing and communicated with the team.

vILT Delivery

Same as for ILT.

Notes:

Single vs Multiple Interviewer Approach

Single Interviewer Approach	Multiple Interviewer Approach
• May detect commonalities more easily • Time consuming • Difficult with large case load • Must be seasoned interviewer	• Can rapidly interview large number of cases • Must share information well with each other to detect commonalities

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Instructor Note

**This is an animated slide.*

ASK:

Compare and contrast benefits and challenges of single interviewer vs multiple interviewer approaches. Ideas for discussion:

Single interviewer: one set of ears may detect commonalities more easily; can be time consuming; large case load may not allow single interviewer approach; single interviewer needs to be very proficient interviewer

Multiple interviewers: can rapidly interview a large number of cases; can share information among the team to detect commonalities and decide investigation direction

Click to populate the columns.

vILT Delivery

VIRTUAL SUGGESTION

Have learners use the animate feature (if desired) or chat feature to compare and contrast benefits and challenges of single interviewer vs multiple interviewer approaches.

Single interviewer: one set of ears may detect commonalities more easily; can be time consuming; large case load may not allow single interviewer approach; single interviewer needs to be very proficient interviewer

Multiple interviewers: can rapidly interview a large number of cases; can share information among the team to detect commonalities and decide investigation direction

Click to populate the columns.

Notes:

Need for Additional Cases

Small clusters are hard to solve

FOOD ITEM	ATE	+ 9 additional cases	➔	ATE
Romaine lettuce	2/3 (66%)			2/12 (17%)
Iceberg lettuce	1/3 (33%)			4/12 (33%)
Spinach	1/3 (33%)			3/12 (25%)
Kale	2/3 (66%)			10/12 (83%)

Interviewers can assist with case finding

11

Instructor Note

**This is an animated slide.*

Small clusters are particularly challenging. The impact of error of any kind (recall issues; cases lost to follow-up; reluctance to participate; etc.) is amplified and it's hard to determine significance of exposures with small numbers. Sometimes investigators need *more cases* to be able to determine the illness source.

Use the example table to illustrate this concept.

ASK: How should investigators interpret these results from interviewing? (these results are so small you should not interpret them as meaningful—more cases are needed to develop a hypothesis).

Click to show how the results change with additional case interviews.

ASK: How did adding additional case interviews changed next steps in this investigation? (Kale has emerged as a suspect food item and should be further investigated with hypothesis-testing interviews to learn where, when and what variety of kale were consumed)

Be sure to highlight how the interviewer can help with issues from too few cases: **by asking about ill contacts** who may also need interviewing.

ENGAGEMENT OPTION

Ask participants how investigators might find additional cases for interview. (Review surveillance data for additional cases; communicate with state partners to determine if additional cases have been detected in neighboring jurisdictions; determine if any known cases have ill contacts—although this should be done carefully as it may include illnesses from person-to-person transmission and may not be relevant)

vILT Delivery

Same as for ILT.

VIRTUAL SUGGESTION

1. Ask learners to use the chat feature to ideas for how investigators might find additional cases for interview.

Notes:

Knowledge Check

When might the investigator want to do case finding to improve chances of determining source of illness?

- A. When more than one pathogen is causing illness
- B. When a waterborne illness is suspected
- C. When the questionnaire does not ask about exposure of interest
- D. When there are a small number of cases

12

Question Slide

Knowledge Check

When might the investigator want to do case finding to improve chances of determining source of illness?

- A. When more than one pathogen is causing illness
- B. When a waterborne illness is suspected
- C. When the questionnaire does not ask about exposure of interest
- D. When there are a small number of cases

13

Answer Slide

Instructor Note

The instructor displays the question to the class.

The instructor will read the question-and-answer options to the class. Participants are asked to select an answer. For classroom training, the instructor has the option to ask participants for a show of hands or write down their answer option. Allow participants a moment to make a decision.

The instructor then displays the question with the correct answer shown.

The correct answer is **D. When there are a small number of cases**

After the results are shown, if there are a large number who selected an incorrect response, the instructor should be prepared to offer further explanation for the correct response.

vILT Delivery

The course administrator may opt to use virtual polling option in chosen virtual platform (Zoom, Teams, etc.). If so, insert the knowledge check question and answer choices into virtual poll and administer per the platform guidance. Existing knowledge check slides can augment the virtual poll in this manner:

- Show Knowledge Check slide and read question to participants
- Launch virtual poll and allow participants to answer; close virtual poll and share responses (optional)
- Advance slide to highlight the correct response and discuss as needed

Interviews: Ill vs Well Person

Case or Ill Person

- Symptomatic person who meets the case definition

Control or Well Person

- Person who is not ill interviewed with same questionnaire to provide a comparison

Comparing well person interview data to ill person interview data can flush out the exposures of interest

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Instructor Note

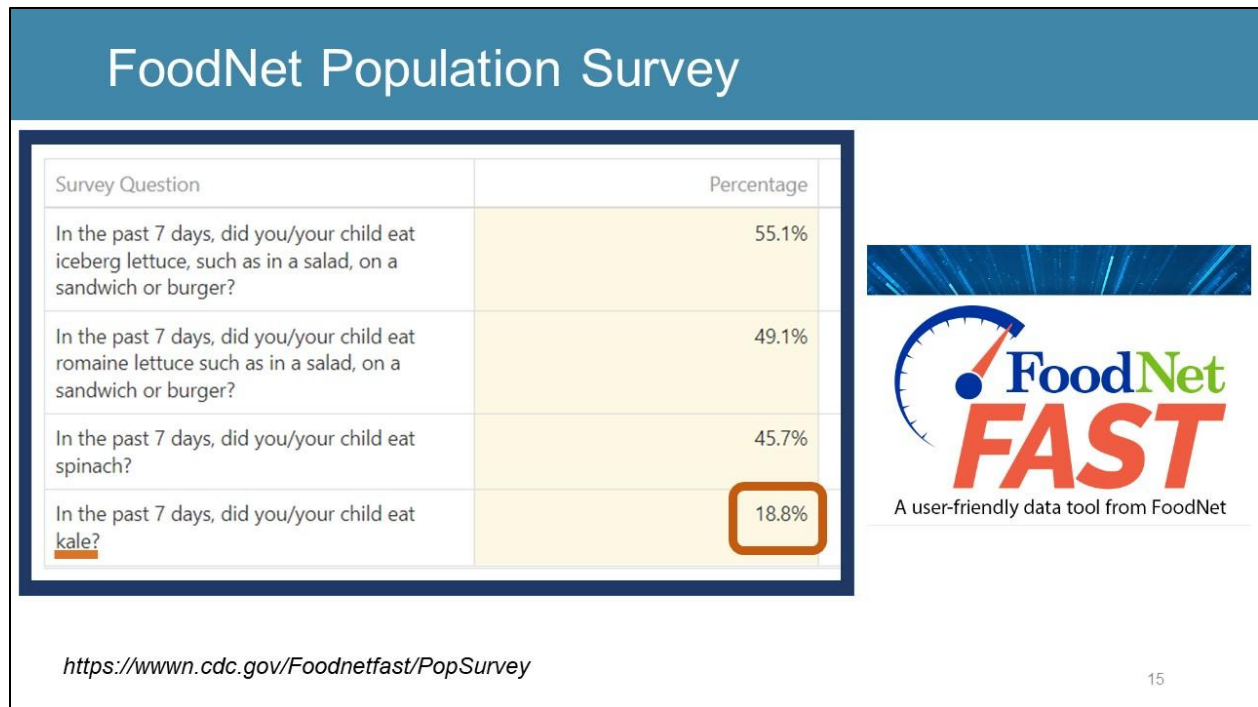
Very briefly show this slide from Module 2 again to remind participants that we sometimes interview well persons as a control group to help focus on exposures of interest.

However, sometimes a control group is either unavailable (everyone at the event became ill; some other practical reason controls are not possible) or the team does not currently have resources available to pursue control interviews. There are other methods of seeking “proxy” comparison groups.

vILT Delivery

Same as for ILT.

Notes:



Instructor Note

**This is an animated slide*

Explain that there are investigation tools available to help investigators gauge if their findings might be significant, such as CDC's FoodNet Population Survey. The "Pop Survey" provides a bank of exposure data on well persons that can be used for comparison. The data can be filtered by location, time of year, age group, sex and race to make it a better comparison for your cluster data.

ASK:

Click to highlight the percentage of well people who ate kale during the exposure period: ~19%.

In the example done in the previous slide 83% of cases reported consuming kale—does that increase or decrease suspicion that kale may be causing illness? (increase because that says that while 83% of ill people report kale only 19% of well people do, which is a big difference)

Source: <https://wwwn.cdc.gov/Foodnetfast/PopSurvey>

vILT Delivery

VIRTUAL SUGGESTION

1. Post the link to the CDC Population Survey in the Chat feature:
<https://wwwn.cdc.gov/Foodnetfast/PopSurvey>
2. The instructor can stop screen sharing the PowerPoint presentation and start screen sharing an internet browser, with the Pop Survey already loaded and ready to go. *Instructor should explore this tool prior to demonstration to increase fluency.*
3. The instructor can demonstrate how to use the investigation tool by:
 - Choosing a category under “Survey Questions” (*allow learners to choose category*)
 - Choosing “Geographic Location” under “Demographic Questions”
 - Scrolling to the geographic-specific results and determining as a class which location would be the best correlation to the course location⁴
4. Discuss findings.

This activity should take no more than 5-8 minutes.

Notes:

Misclassification Issues

- Often investigators interview *ill* persons and *well* persons for comparison
- Important to have strict criteria for which cases are included in both groups



Instructor Note

Explain that often we want to compare exposures between ill and well people. However, it's very important to have strict criteria for both groups. You don't want your ill group to include multiple causes of illness or different illnesses (i.e.-many people have diarrhea for a variety of reasons on any given day). You also don't want your well group to include people who were in fact symptomatic—even if it was mild.

vILT Delivery

Same as for ILT.

Notes:

Misclassification Issues (Cont'd.)

- Strategies to reduce classification issues:
 - Follow a case definition
 - Consider using only lab confirmed cases
 - Exclude people who aren't clearly in either group, such as "mildly ill" persons

Interviewers can get clear and specific clinical information



Instructor Note

(Continued)

Be sure to highlight how the interviewer can help with misclassification issues: **collecting clear and specific clinical information** so people can be classified correctly.

ASK: Why is having strict inclusion criteria important for the investigation? (to compare you need data that is as clean as possible, or your results will not be accurate)

vILT Delivery

Same as for ILT.

Notes:

Knowledge Check

Misclassification involves including people who may not have the illness under investigation in the analysis.

- A. True
- B. False

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Question Slide

Knowledge Check

Misclassification involves including people who may not have the illness under investigation in the analysis.

- A. True
- B. False

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Answer Slide

Instructor Note

The instructor displays the question to the class.

The instructor will read the question-and-answer options to the class. Participants are asked to select an answer. For classroom training, the instructor has the option to ask participants for a show of hands or write down their answer option. Allow participants a moment to make a decision.

The instructor then displays the question with the correct answer shown.

The correct answer is **A. True**

After the results are shown, if there are a large number who selected an incorrect response, the instructor should be prepared to offer further explanation for the correct response.

vILT Delivery

The course administrator may opt to use virtual polling option in chosen virtual platform (Zoom, Teams, etc.). If so, insert the knowledge check question and answer choices into virtual poll and administer per the platform guidance. Existing knowledge check slides can augment the virtual poll in this manner:

- Show Knowledge Check slide and read question to participants
- Launch virtual poll and allow participants to answer; close virtual poll and share responses (optional)
- Advance slide to highlight the correct response and discuss as needed



Instructor Note

Emphasize that while interviewing is interdependent on other aspects of public health (testing, surveillance, communication, etc.) it is an absolutely critical part of illness prevention. Only by interviewing can we determine the commonalities within a group of ill people and focus on the source of illness. Knowing the source of illness can lead to public health control actions to prevent illness.

vILT Delivery

Same as for ILT.

Notes:

Module 5 Summary

1. Analyzed common challenges to enteric interviewing
2. Described strategies for addressing common interviewing challenges
3. Described how external investigation challenges can impact effectiveness of interviewing



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Instructor Note

Briefly described the objectives covered within Module 5.

ENGAGEMENT OPTION(S)

- If a breakout group was tasked with providing a 30 second summary of one of the learning objectives at the end of the module, have them report out.

** Breakout groups apply to both classroom and virtual settings.*

vILT Delivery

Same as for ILT.

Notes:

MODULE 6 Documenting and Conveying Case Data

Participants will be able to state the importance of data as well as describe how to appropriately fill out required forms and complete post-interview data tasks.



Notes:

Module 6 Objectives

After completion of this module, you will be able to:

1. Recognize the importance of thorough documentation during the interview process.
2. Give examples of common documentation pitfalls during interviewing and how to address them.
3. Describe how to clarify the interviewing protocol with your team.

2

Instructor Note

Briefly described the objectives for Module 6.

ENGAGEMENT OPTION(S):

- Task a breakout group by providing a 30 second summary of one of the learning objectives at the end of the module. Tell them you will remind them when you get to that part of the lesson. *(Suggest choosing only 1-2 objectives to have participants summarize. However, ensure that no objective is left out of the selection.)*

** Breakout groups apply to both classroom and virtual settings.*

vILT Delivery

Same as for ILT.

Notes:

Why Documentation Matters

Why is thorough documentation important?



Instructor Note

Facilitate a whole class discussion exploring the role of documentation in enteric interviewing. Ideas for discussion:

- Documenting details can **lead to illness source identification**.
- Each questionnaire is an **official document** and becomes part of the investigation file.
- Sometimes enteric illness cases lead to **litigation** and the questionnaire (and even the investigator) may be deposed regarding the interview process.
- Good documentation can **save the investigator from having to contact the case a second time** to answer outstanding questions.
- Clear documentation allows for **clean analysis** with other questionnaires.

Emphasize that an interview that isn't well documented is not useful, no matter how well conducted it was! Only a well conducted and well-documented interview is useful to the investigation.

vILT Delivery

VIRTUAL SUGGESTION

1. Ask learners to use the chat feature to chat one word or phrase that denotes a reason documentation is important (more likely to identify source; official government document; interviewer integrity; better analysis possible; etc.)
2. Ask learners for clarification or more information as needed. Facilitate discussion on what the participants place in the chat.

Notes:

Common Pitfall: Blank Responses

Yes	Maybe	No	Don't Know	In the 7 days before the illness began, did you (your child) eat any:
☒	☐	☐	☐	16. Fresh basil, sometimes in pesto or as a garnish?
☐	☐	☒	☐	17. Fresh cilantro, sometimes in salsa, Mexican food, Asian food, or as a garnish?
☐	☐	☐	☐	18. Other fresh herbs (parsley, chives, dill, sage, thyme, etc.)?

How do we interpret the “Other fresh herbs” question?

4

Instructor Note

Use this example of a blank response to ask participants how this response should be interpreted. (it should be excluded from analysis or, if critical the interviewer should attempt to contact the case again to get the answer)

Missing responses greatly impact the ability of interviewing to determine the source of illness and help prevent additional illness.

vILT Delivery

VIRTUAL SUGGESTION

Instruct learners to use the green checkmark to denote “Yes” and the red X to denote “No” for the following questions:

1. Did the case consume fresh basil? (Yes)
2. Did the case consume fresh cilantro? (No)
3. Did the case consume any other fresh herbs? (Unknown!)
4. Is it OK to assume that no other fresh herbs were consumed to simplify outbreak analysis? (No!)

Common Pitfall: Blank Exposures

- Blank exposures are generally interpreted as “not exposed”
- This issue can have a large impact on investigations

	Exposed	Not Exposed
Sick	15	5
Not Sick	5	20

Odds Ratio = 12.0, $p = 0.004$
0 interviews with missing information

	Exposed	Not Exposed
Sick	15	3 (2 blank)
Not Sick	5	6 (14 blank)

Odds Ratio = 6.0, $p = 0.09$
16 interviews with missing information

5

Instructor Note

*This slide is animated.

Emphasize that when questions are skipped, and responses are left blank it can have major impact on the investigation. It can be tempting to assume that the blank exposure means that the exposure did not occur, but this is a dangerous assumption.

Use this example to illustrate the power of blank responses to derail analysis.

vILT Delivery

Same as for ILT.

Notes:

Common Pitfall: Incoherent Responses

<u>Meal</u>	<u>Foods Eaten</u>	
<u>Breakfast:</u>		<i>How do we interpret the foods eaten at lunch?</i>
Place: <u>Home</u>	<u>Eggo Waffles; honey</u>	
	<u>Coffee (black)</u>	
Time: <u>6:30</u>	<u>banana</u>	
<u>Lunch:</u>		
Place: <u>Los Arcos</u>	<u># 4 from lunch menu</u>	<i>(#4 = Chicken enchilada with rice and beans and guacamole on side)</i>
<u>222 Main St.</u>	<u>chips and salsa</u>	
Time: <u>1:30</u>	<u>iced tea</u>	

Instructor Note

*This is an animated slide

Have a participant read aloud what the case consumed for lunch.

ASK: Ask the participant to describe the #4 from the lunch menu (obviously they cannot because the detail is not present)

Use this example of an incoherent response to ask participants how this response should have been handled by the interviewer. (the interviewer should have asked the respondent for more detail about what the #4 lunch item was and if any choices or alterations were made, such as chicken or beef; no onions, etc.)

Click to show how the interviewer should have documented the response after clarifying.

Incoherent responses are not able to be compared with other respondents very easily.

vILT Delivery

Same as for ILT.

Notes:

Common Pitfall: Inconsistent Responses

Please list restaurant/store names and address/location mentioned by the interviewee below:

Restaurant Name	Address/Location	Meal Date(s)	Food Ordered/Eaten
Bobby's BBQ	2513 Main St.	May 18th	BBQ sandwich, beans, fries
Frosty Guys Creamery	101 Main St.	May 19th	Vanilla ice cream in waffle cone

The respondent later said this:

Yes	Maybe	No	Don't Know	Did you (your child) eat any:
☐	☐	☒	☐	1. Ice cream, ice cream products, frozen yogurt, or non-dairy frozen desserts?

How do we interpret the inconsistency?

7

Instructor Note

ASK: Is there inconsistent information on this questionnaire? (Yes, the case reported going to Frosty Guys for ice cream but later stated they consumed no ice cream products.)

Use this example of an inconsistent response to ask participants how this response should have been handled by the interviewer. (the interviewer should have asked the respondent for clarification whether ice cream was consumed or not, reminding the interviewee of the earlier reported trip to Frosty Guys Creamery)

An astute interviewer should always be listening for inconsistencies and the goal is for the interview as a whole to make sense.

VIRTUAL SUGGESTION:

1. Ask learners to use the chat feature to describe the inconsistency on this questionnaire (case reported going to Frosty Guys for ice cream but later stated they consumed no ice cream products)

vILT Delivery

Invite learners to respond using Chat.

Common Pitfall: Discontinued Interview

Seafood consumption						
1. Only indicate consumption during the 7 days before illness began.						
Type of Seafood	Eaten?	Eaten raw?	Multiple dates?	Last date consumed	Type of Seafood	Eaten?
	Y N U	Y N U	Y N U	(MM/ DD/ YY)		Y N U
Clams	☐ ☒ ☐	☐ ☐ ☐	☐ ☐ ☐		Shrimp	☒ ☐ ☐
Mussels	☐ ☒ ☐	☐ ☐ ☐	☐ ☐ ☐		Crawfish	☐ ☒ ☐
Oysters	☒ ☐ ☐	☒ ☐ ☐	☒ ☐ ☐	08/12/23	Lobster	☒ ☐ ☐
Scallops	☐ ☒ ☐	☐ ☐ ☐	☐ ☐ ☐		Crabs	☒ ☐ ☐
Other shellfish	☐ ☒ ☐	☐ ☐ ☐	☐ ☐ ☐		Fish	☒ ☐ ☐
Further description of seafood: **Interviewee doesn't want to continue interview and hung up**						
2. Did any dining partners consume the same seafood? ☐ Yes ☐ No ☐ Unk 3. If yes, did						



Instructor Note

ASK:

What should an interviewer do if the interviewee suddenly doesn't want to continue the interview?

(It depends on *why* the interviewee wants to end the interview. If something has suddenly come up or they are out of time the interviewer can suggest finishing the interview at another time and make a plan to call back later. Perhaps the call was dropped, or the cell phone battery died—if that is the case the interviewer can call back after a few minutes and leave a message. But if the interviewee truly does not want to continue the interviewer should respect that decision and thank them for their time.)

ASK:

What should the interviewer do with the partially completed questionnaire?

(Ask your supervisor. However, there is likely some useful information on the partially completed questionnaire. For example, this CDC Vibrio CRF indicates that raw oysters were consumed in mid-August—that may be of some use to investigators.)

vILT Delivery

Invite learners to respond using Chat.

Knowledge Check

Which is an acceptable reason to mark “No” on a questionnaire:

- A. You forgot to ask.
- B. The interviewee refused to respond.
- C. The interviewee denied this exposure.
- D. All the others interviewed denied this exposure.

9

Question Slide

Knowledge Check

Which is an acceptable reason to mark “No” on a questionnaire:

- A. You forgot to ask.
- B. The interviewee refused to respond.
- C. The interviewee denied this exposure.
- D. All the others interviewed denied this exposure.

10

Answer Slide

Instructor Note

The instructor displays the question to the class.

The instructor will read the question-and-answer options to the class. Participants are asked to select an answer. For classroom training, the instructor has the option to ask participants for a show of hands or write down their answer option. Allow participants a moment to make a decision.

The instructor then displays the question with the correct answer shown.

The correct answer is **C. The interviewee denies this exposure.**

After the results are shown, if there are a large number who selected an incorrect response, the instructor should be prepared to offer further explanation for the correct response.

vILT Delivery

The course administrator may opt to use virtual polling option in chosen virtual platform (Zoom, Teams, etc.). If so, insert the knowledge check question and answer choices into virtual poll and administer per the platform guidance. Existing knowledge check slides can augment the virtual poll in this manner:

- Show Knowledge Check slide and read question to participants
- Launch virtual poll and allow participants to answer; close virtual poll and share responses (optional)
- Advance slide to highlight the correct response and discuss as needed

Notes:

Knowledge Check

Which of the following is the best way to handle inconsistent responses?

- A. Choose the response that best fits your hypothesis
- B. Ask the interviewee for clarification
- C. Leave the inconsistency on the questionnaire to reflect the answers given by the interviewee
- D. Change one of the inconsistent responses to match the other

11

Question Slide

Knowledge Check

Which of the following is the best way to handle inconsistent responses?

- A. Choose the response that best fits your hypothesis
- B. Ask the interviewee for clarification
- C. Leave the inconsistency on the questionnaire to reflect the answers given by the interviewee
- D. Change one of the inconsistent responses to match the other

12

Answer Slide

Instructor Note

The instructor displays the question to the class.

The instructor will read the question-and-answer options to the class. Participants are asked to select an answer. For classroom training, the instructor has the option to ask participants for a show of hands or write down their answer option. Allow participants a moment to make a decision.

The instructor then displays the question with the correct answer shown.

The correct answer is **B. Ask the interviewee for clarification**

After the results are shown, if there are a large number who selected an incorrect response, the instructor should be prepared to offer further explanation for the correct response.

vILT Delivery

The course administrator may opt to use virtual polling option in chosen virtual platform (Zoom, Teams, etc.). If so, insert the knowledge check question and answer choices into virtual poll and administer per the platform guidance. Existing knowledge check slides can augment the virtual poll in this manner:

- Show Knowledge Check slide and read question to participants
- Launch virtual poll and allow participants to answer; close virtual poll and share responses (optional)
- Advance slide to highlight the correct response and discuss as needed

Opportunity: Unique Responses

Yes	Maybe	No	Don't Know	Did you (your child) eat any:
☐	☐	☒	☐	4. Dried fruit?
				a. What was the Type, variety: ☐ Unknown
☐	☐	☒	☐	5. Peanuts?
☒	☐	☐	☐	6. Almonds (whole, sliced, chopped, etc.)? <i>Roasted & glazed, from truck at Christmas Market 12/22</i>

Capture unique responses even if you have to record in the questionnaire margins

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Instructor Note

Use this example of an opportunity to document a unique response. This almond exposure is specific and unique enough to merit recording in case the Christmas Market or roasted glazed almonds from the market are mentioned in another interview.

vILT Delivery

VIRTUAL SUGGESTION

Instruct learners to use the green checkmark to denote “Yes” and the red X to denote “No” for the following questions:

1. Is it OK to write in the questionnaire margin? (Yes)
2. Does this merit collecting almonds from the Christmas market for testing at the lab? (No—we need to see if other cases report the same exposure)

Notes:

Opportunity: New Details

Y	N	UNK	FOOD ITEM	COMMENTS
X			Baked Chicken	**There were two buffet lines, case consumed food from buffet to the left of the stage
	X		Pork Tenderloin	
X			Macaroni and Cheese	
X			Green Beans	

***Interviews may reveal useful event details
unknown to investigators***

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Instructor Note

Use this example of an opportunity to document new details unknown to investigators about an event under investigation. There are two buffet lines!

ASK:

Is it potentially important that there are two buffet lines at this event under investigation?

(Yes! Perhaps only food from one side is causing illness. If so, it may be difficult to determine what food is causing illness without knowing which line people visited.)

vILT Delivery

VIRTUAL SUGGESTION

1. Ask learners to use the hand raise feature to answer:
 - Is it potentially important that there are two buffet lines at this event under investigation? (Yes! Perhaps only food from one side is causing illness. If so, it may be difficult to determine what food is causing illness without knowing which line people visited.)
2. Ask learners to use the chat feature to chat potential ideas for how food on one side of the buffet line might be contaminated while the other side might not be. (contaminated serving utensil, i.e., Norovirus; one side of buffet did not have food)

held at proper temperature; ill food handler serving on one side only; one pan of food did not get cooked thoroughly; etc.)

Notes:

Protocols: Completed Interviews

- Analysis of multiple questionnaires to determine commonalities
- Next steps may change as more information is gathered
- Need for clear process
- Internal team communication critical



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Instructor Note

Emphasize that investigations are dynamic and analysis on completed questionnaires is likely an iterative process. Results of this analysis may alter subsequent interview forms with new questions added to capture exposures of interest.

Communication is critical to avoid confusion and reduce duplication of efforts.

ENGAGEMENT OPTION:

Ask:

How participant's jurisdictions organize completed interviews. Who analyzes the data?

**If possible, have a supervisor or someone with longevity in the jurisdiction provide a response to this. It is advisable to warn them ahead of time and provide them with this opportunity to use this portion of the course to provide this information to staff. If multiple jurisdictions are present in the training, they are likely to have different protocols—use this as an opportunity for a robust discussion of “best practices” and what works well in various jurisdictions.*

vILT Delivery

Same as for ILT.

Protocols: Completed Interviews

- When should interviews be complete?
- What do I do with completed interviews?
- Who should I tell if I learn something unique or that seems important?
- How will the team communicate if new questions are added or others deleted?
- Any other special instructions?



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Instructor Note

Remind participants that there are different reasons for interviewing: routine case interviews; outbreak interviews; food complaint interviews, etc. Each situation may have a unique protocol and the interviewer should be clear on the steps involved:

- Make sure you use the right questionnaire and know when you should have interviews completed
- Be sure you understand who to give the completed questionnaire to and how to submit them (electronically? Printed?)
- Know who to tell if something interesting comes up, such as multiple buffet lines or cases visiting the Christmas Market
- Know how the team will communicate new findings or updates to the existing protocol

Emphasize the importance of internal team communication.

ASK: Have you ever been involved in a team interviewing effort? How did that process work and how did the team communicate?

**Suggest the lead instructor ask jurisdiction point of contact some of these questions ahead of time to aid in discussion.*

vILT Delivery

Same as for ILT.

Notes:

Activity 6.1

Recall the scenario from earlier modules. The interview team has interviewed several cases and is trying to determine next steps.

Review the interview data and answer the questions in the Participant Guide.

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Instructor Note

**This is an animated slide.*

This is a return to the scenario introduced in Module 1.

Activity 6.1: (This is the introduction to a scenario of six slides in a multi-step discussion illustrating how interview information can guide the investigation. Total activity including discussion of all 6 slides should take ~20-25 minutes). This activity can either be done as a breakout group or large group activity per instructor preference and time constraints:

Option 1: Breakout Group Activity (~8 min in breakout groups/~15 min report out)

1. Send groups to their breakout groups for ~8 minutes and instruct them to view images and answer questions for Activity 6.1 in the participant guide.
2. Each group should select a spokesperson to report during large group discussion.
3. Instructor should walk through slides 6-18 through 6-21 and ask groups to respond to the questions in the Participant Guide.
4. Slide 6-22 and 6-23 should be delivered in a large group setting (not breakout room) to wrap up the scenario.

Option 2: Large Group Activity (~20 min total time)

1. Facilitate a large group discussion of each of the scenario slides and encourage robust discussion of investigational decision making based on the suggested questions and answers in the instructor hints.

Activity 6.1

Last name:	Smith	First name:	Joe
Address: Turner Hall, Room 212			

Last name:	Bouring	First name:	Albert
Address: 101 Rosemont Ave			
City:	College Town	Zip:	55555
Home phone:	(555) 555-5555	County:	York
DOB:	09/01/76	Cell phone:	()
Age:	46	Gender:	M ☒ F ☐
Occupation:	Professor		

Last name:	Partay	First name:	John
Address: 200 Frat Circle			
City:	College Town	Zip:	55555
		County:	York

18

Instructor Note

**This is an animated slide.*

This is a return to the scenario introduced in Module 1.

Activity 6.1: (This is the first of six slides in a multi-step discussion. Total activity including discussion of all 6 slides should take ~20 minutes). This activity can either be done as a breakout group or large group activity per instructor preference and time constraints.

Option 1: Breakout Group Activity

The breakout group will have used the image in the Participant Guide to answer the following questions. Ask for a report from the groups about their findings.

1. What potential commonalities do you see in the case demographics of these patients from Memorial Hospital? (connection to a college—student from a dorm, professor and likely fraternity member).
2. Will these commonalities potentially change the questionnaire? If so, how? (adding on campus dining facilities; large events related to college; exposures in town frequented by college students and staff; perhaps collecting student meal card numbers to evaluate purchase history. Note: questions on the currently used questionnaire *may* already address these things but brainstorming any

other college specific questions and working with college administration to identify recent events held on campus would be useful.)

Option 2: Large Group Activity

Facilitate a large group discussion of the following questions. Also, consider using the *Virtual Suggestion* below to further engage online audiences.

1. **ASK:** What potential commonalities do you see in the case demographics of these patients from Memorial Hospital? (connection to a college—student from a dorm, professor and likely fraternity member).
2. **ASK:** Will these commonalities potentially change the questionnaire? If so, how? (adding on campus dining facilities; large events related to college; exposures in town frequented by college students and staff; perhaps collecting student meal card numbers to evaluate purchase history. Note: questions on the currently used questionnaire *may* already address these things but brainstorming any other college specific questions and working with college administration to identify recent events held on campus would be useful.)

vILT Delivery

VIRTUAL SUGGESTION:

Ask learners to use the chat feature to chat potential ideas for what types of common exposures might occur related to college that could lead to an outbreak of gastrointestinal illness. (contaminated food at a large event; ill food worker at area or on campus eatery; person-to-person transmission of illness in the college community; contaminated drinking or recreational water source; etc.)

Notes:

Activity 6.1

☐ Y ☒ N ☐ UNK Did you attend a large gathering in the 7 days (wedding, church/school events, athletic events)? Joe Smith

Albert Bouring

☒ Y ☐ N ☐ UNK Did you attend a large gathering in the 7 days (wedding, church/school events, athletic events)?

Event 1: Friends of Library location: College Library (potluck)

Event 2: Dean's Luncheon location: Groce Dining Hall

☒ Y ☐ N ☐ UNK Did you attend a large gathering in the 7 days (wedding, church/school events, athletic events)?

Event 1: Frat Party location: Sigma Nu House

Event 2: Winter Formal location: The Farm (event venue)

Event 3: Sorority Party location: Debbie's Lakehouse

John Partay

Continue on back of page if more space is needed.

***See pages 2-4 for additional parties attended*

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Instructor Note

**This is an animated slide.*

Activity 6.1: (This is the second of six slides in a multi-step discussion. Total discussion of all 6 slides should take ~20-25 minutes)

Lead a large group classroom discussion about the completed questionnaires coming in:

Option 1: Breakout Group Activity

The breakout group will have used the image in the Participant Guide to answer the following questions. Ask for a report from the groups about their findings.

1. Are there any large events of interest?

(Not in these three questionnaires, but it's worth looking at more questionnaires. Actually, these three individuals seem quite diverse: one dorm room dweller who does not report much social activity; one professor who lives off campus but had some on campus events and a very socially active member of a fraternity. We may want to consider something more basic that they might have in common, such as common dining experience.)

Option 2: Large Group Activity

Facilitate a large group discussion of the following questions.

1. **ASK:** Are there any large events of interest?

(Not in these three questionnaires, but it's worth looking at more questionnaires. Actually, these three individuals seem quite diverse: one dorm room dweller who does not report much social activity; one professor who lives off campus but had some on campus events and a very socially active member of a fraternity. We may want to consider something more basic that they might have in common, such as common dining experience.)

Notes:

Activity 6.1

Albert Bouring

<u>Breakfast:</u>	
Place: <u>Home</u>	<u>Coffee</u>
	<u>Boiled eggs</u>
Time: <u>5:15</u>	<u>Oatmeal</u>
<u>Lunch:</u>	
Place: <u>Groce</u>	<u>Pulled pork sandwich</u>
<u>Dining Hall</u>	<u>Salad bar</u>
Time: <u>11:30</u>	<u>Cherry cobbler</u>

Joe Smith

<u>Breakfast:</u>	
Place: <u>Groce</u>	<u>Bacon, scrambled eggs</u>
	<u>hashbrowns, biscuits</u>
Time: <u>10:30</u>	<u>cereal, milk, muffins,</u>
	<u>toast, oatmeal, Sprite</u>
<u>Lunch:</u>	
Place: <u>Groce</u>	<u>Hamburger, fries, Coke</u>
	<u>salad (romaine, tomato, carrot,</u>
Time: <u>12:00</u>	<u>cucumber, egg, croutons, ranch)</u>
	<u>Pound cake</u>

John Partay

<u>Breakfast:</u>	
Place: <u>NA</u>	<u>Doesn't eat breakfast</u>
Time: <u> </u> : <u> </u>	
<u>Lunch:</u>	
Place: <u>Groce</u>	<u>Caesar salad (Romaine lettuce,</u>
	<u>grilled chicken, cheese, croutons,</u>
Time: <u>12:15</u>	<u>caesar dressing)</u>

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Instructor Note

**This is an animated slide.*

Activity 6.1: (This is the third of five slides in a multi-step discussion. Total discussion of all 6 slides should take ~20-25 minutes)

Lead a large group classroom discussion about the completed questionnaires coming in:

Option 1: Breakout Group Activity

The breakout group will have used the image in the Participant Guide to answer the following questions. Ask for a report from the groups about their findings.

1. Are there any common meals of interest? (Not a specific meal but all three-report eating at Groce Dining Hall. This may not be unusual as many people likely eat at the dining hall, so be cautious about making assumptions. Looking at foods reported there are multiple mentions of salad. Professor Bouring did not specify what he consumed from the salad bar but the other two mention both romaine lettuce and croutons in common.)
2. What actions would you take based on this information? (Definitely we would want to review more questionnaires to see if other cases reported Groce Dining Hall and salad items; may want to work with college to determine if any food handlers have been ill recently and interview Groce kitchen staff)

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Option 2: Large Group Activity

Facilitate a large group discussion of the following questions. Also, consider using the *Virtual Suggestion* below to further engage online audiences.

1. **ASK:** Are there any common meals of interest? (Not a specific meal but all three-report eating at Groce Dining Hall. This may not be unusual as many people likely eat at the dining hall, so be cautious about making assumptions. Looking at foods reported there are multiple mentions of salad. Professor Bouring did not specify what he consumed from the salad bar but the other two mention both romaine lettuce and croutons in common.)
2. **ASK:** What actions would you take based on this information? (Definitely we would want to review more questionnaires to see if other cases reported Groce Dining Hall and salad items; may want to work with college to determine if any food handlers have been ill recently and interview Groce kitchen staff)

VIRTUAL SUGGESTION

1. Ask learners to use the chat feature to chat potential ideas for next actions based on these initial interviews. (additional interviews needed; explore potential illness in food handlers at Groce dining hall; explore any computerized systems that record dining hall purchases for potential data retrieval if merited as investigation develops)

Notes:

Activity 6.1

Dinner: Place: <u>Groce Hall</u> <u>Caesar salad (no meat)</u>	Place: <u>Groce Hall</u> <u>Potato soup</u> <u>salad bar</u>
<u>Lettuce wrapped turkey sandwich</u> <u>(discarded bread from sandwich</u> <u>replaced with romaine from</u> <u>salad bar)</u>	Lunch: Place: <u>Groce</u> <u>Salad bar (romaine, carrots,</u> <u>ham, peas, Italian dressing)</u>
Lunch: Place: <u>Groce</u> <u>Caesar salad</u>	Dinner: Place: <u>Groce</u> <u>Burger and fries</u> <u>(added lettuce from salad bar)</u>
Place: <u>Groce</u> <u>Hot Dog</u> <u>Dining Hall</u> <u>Salad bar</u>	Dinner: Place: <u>Groce</u> <u>Caesar Salad Special with</u> <u>salmon</u>

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Instructor Note

**This is an animated slide.*

Activity 6.1: (This is the fourth of six slides in a multi-step discussion. Total discussion of all 6 slides should take ~20-25 minutes)

Lead a large group classroom discussion about the completed questionnaires coming in:

Option 1: Breakout Group Activity

The breakout group will have used the image in the Participant Guide to answer the following questions. Ask for a report from the groups about their findings.

1. Is there a hypothesis emerging? (Lettuce stands out as a potential hypothesis. But we need to keep an open mind.)
2. What questions do you still have and how will the investigation team get the answers? (Need more numbers—how many sick people ate romaine lettuce? How many did not? Have we talked to any well people?)

Option 2: Large Group Activity

Facilitate a large group discussion of the following questions. Also, consider using the *Virtual Suggestion* below to further engage online audiences.

1. **ASK:** Is there a hypothesis emerging? (Lettuce stands out as a potential hypothesis. But we need to keep an open mind.)
2. **ASK:** What questions do you still have and how will the investigation team get the answers? (Need more numbers—how many sick people ate romaine lettuce? How many did not? Have we talked to any well people?)

VIRTUAL SUGGESTION:

Instruct learners to use the green checkmark to denote “Yes” and the red X to denote “No” for the following questions:

1. Is a potential hypothesis emerging? (Yes--lettuce)
2. Does this merit collecting lettuce for testing at the lab? (Yes—not a bad idea)
3. Is it time to issue a public warning or recall of lettuce? (Not yet—we need more data. More interviews of sick and well people to compare.)

Notes:



Activity 6.1



Sully, Jane
To: Outbreak Response Team

😊 ↩ Reply ↶ Reply All ➡ Forward 👤 ⋮

Fri 2/20/2023 2:04

Update: 23-024: E. coli O104, Lake County

Summary:
2/20, 2 pm: State Lab confirms E. coli O104 in 6 cases seen at Memorial Hospital. Interviews find 86% cases consumed romaine lettuce from Groce Dining Hall on campus between 2/12-2/17. No known ill food handlers. Last new case onset 2/20—this outbreak is ongoing.

Response Actions:

1. Environmental assessment conducted; food handlers interviewed and romaine lettuce samples collected for testing.
2. College (in coordination with Lake County HD) has alerted students and staff to report illness to Student Health Clinic.
3. State and federal partners notified of illness potentially associated with regionally distributed product.

Next Steps:

1. ORT interviewers continue interviews, including well person interviews. Analysis ongoing.
2. State Lab testing romaine samples.
3. Next Update: 2/21 at 2 PM.

Jane Sully, MSPH
Epidemiologist
Lake County Health Department
(555) 555-5555
Jane.Sully@lakecountyhealth.gov

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Instructor Note

This is a return to the scenario introduced in Module 1.

Activity 6.1: (This is the fifth of six slides in a multi-step discussion. Total discussion should take ~15-20 minutes)

Lead a large group classroom discussion about the update email:

ASK: What new information is in the summary? (State Lab confirmed E. coli O104 in clinical specimens; 86% of respondents ate romaine at Groce Dining Hall over a 5-day period; new cases continue).

ASK: What have we (the outbreak response team) done? (collected lettuce for testing; done an env assessment; interviewed food handlers; assisted the college in alerting students/case finding efforts; notified state partners—who in turn gave federal partners a heads up since this is potentially an issue with a widely distributed product)

ASK: What do we still need to do? (keep interviewing and analyzing results; get lettuce test results; find out more info about where the lettuce came from and went, aka, “product tracing”)

vILT Delivery

Same as for ILT.

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Activity 6.1



Romaine lettuce was traced to a regional grower where *E. coli* O104 was isolated in the field

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Instructor Note

This is a return to the scenario introduced in Module 1.

Activity 6.1: (This is the last of six slides in a multi-step discussion. Total discussion of all 6 slides should take ~20-25 minutes)

Lead a large group classroom discussion about the update email:

ASK: How did interviewing impact this investigation? (critical in identifying the source of illness; identified the date/time and place of product consumption as well as interviewing well persons to test the hypothesis).

ENGAGEMENT OPTION(S):

Ask participants if they have been involved in case interviewing that led to the identification of an illness source? If so, describe the situation.

vILT Delivery

Same as for ILT.

Module 6 Summary

1. Recognized the importance of thorough documentation during the interview process.
2. Gave examples of common documentation pitfalls during interviewing and how to address them.
3. Described how to clarify the interviewing protocol with your team.



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Instructor Note

Briefly review the module objectives.

ENGAGEMENT OPTION(S):

- If a breakout group was tasked with providing a 30 second summary of one of the learning objectives at the end of the module, have them report out.

** Breakout groups apply to both classroom and virtual settings.*

vILT Delivery

Same as for ILT.

Notes:

Course Goal

To apply interviewing skills and techniques to gather needed information to facilitate foodborne illness surveillance and outbreak investigation activities.



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Instructor Note

Reemphasize that effective interviewing can help solve foodborne illness investigations and thus, prevent additional illness.

Be sure to bring out the prevention of illness part stronger in the upcoming discussion to reinforce the importance to the learner.

ENGAGEMENT OPTION(S):

- What have you learned in this course that you plan to use in future interviewing?
- Did anything surprise you?
- Do you plan to change anything in your interviewing process if you were already doing interviews?

vILT Delivery

Same as for ILT.

Notes:

Post-Test/Course Evaluation

1. Complete the post-test
 - a) 20-minutes
2. Complete the course evaluation
3. Pick up your certificate



Instructor Note

Complete the final course administrative procedures

- Complete the Post-test
- Complete the Course Evaluation

Post-Test

Explain that the post-test is to assess their mastery of the course goals and module objectives, as well as provide learners with performance feedback.
Explain the directions for accessing the post-test.

** For classroom instruction, the post-test may be a hard copy distribution.*

The test results will be used to evaluate the effectiveness of the training in terms of both content and instruction.

- The post-test should take 20 minutes or less to complete.
- Participants must score at least 75% on the post-test to pass.
- Participants are allowed to retake the post-test one additional time if they fail.
- Instructors will review with participants individually the failed subject areas and content to ensure they have a better understanding before retaking the post-test.

Course Evaluation

Explain the directions for accessing the course evaluation.

** If the evaluation is to be administered digitally, send out the document to participants.
If the evaluation is to be administered online, send out the link to participants.*

- Course evaluations provide feedback on the course and the instructor's effectiveness.
- Verify participants completed the course evaluation.
- Distribute certificates after participants have successfully passed the post-test and completed the course evaluation.

vILT Delivery

- Post the links for accessing the post-test and course evaluation in Chat and send an email link to participants with the link as well.
- Electronic certificates will be sent to participants following the successful completion of the course.

Notes:

Reference List

Foodborne Diseases Centers for Outbreak Response Enhancement

<https://www.cdc.gov/foodcore/metrics/metrics-table-year-11-ssl.html>

Module 2, Slide 4 – Identifying Potential Cases

Tennessee Integrated Food Safety – Training Development

https://foodsafety.utk.edu/?page_id=29

Module 2, Slide 5 – Reportable Disease Surveillance

Photo source: <https://kernpublichealth.com/communicable-disease-reporting/>

Module 2, Slide 6 – Laboratory Surveillance

Photo source:

<https://www.oregon.gov/oha/PH/DISEASES/CONDITIONS/COMMUNICABLEDISEASE/REPORTINGCOMMUNICABLEDISEASE/Documents/ReportingPosters/poster-laboratory.pdf>

Module 2, Slide 7 – Burden of Illness Pyramid

Pyramid Adapted from Source: <https://www.cdc.gov/foodnet/surveillance.html>

Metric 10e of FoodCORE data Source: <https://www.cdc.gov/foodcore/metrics/metrics-table-year-11-ssl.html>

Module 2, Slide 17 – Program Highlight: Utah Dept. of Health Food Complaint System

Video Source: <https://pubredcap.health.utah.gov/surveys/?s=AMR9NWM7YP8FFDF3>

Module 2, Slide 22 – Outbreak Interview Types: Multi-state

Source : <https://www.cdc.gov/foodsafety/outbreaks/basics/data-types-collected.html>

Module 4, Slide 19 – Do's and Don'ts of Outbreak Interviewing

Source: <https://www.youtube.com/watch?v=O6gKLQpEkfY>

Module 4, Slide 19 – Do's and Don'ts of Outbreak Interviewing

Source: <https://www.youtube.com/watch?v=O6gKLQpEkfY>

Module 5, Slide 14 – FoodNet Population Survey

Source: <https://wwwn.cdc.gov/Foodnetfast/PopSurvey>

Module 6 – CDC Vibrio Questionnaire

Source: <https://www.cdc.gov/nationalsurveillance/pdfs/cdc5279-covis-vibriosis-508c.pdf>

Module 6 – CDC Interview Questionnaire Tool

Source: <https://www.cdc.gov/foodsafety/outbreaks/tools/interview-questionnaires.html>

Additional sources of inspiration:

- MN Key Points for Successful Foodborne Outbreak Detection and Investigation <https://mnfoodsafetycoe.umn.edu/wp-content/uploads/2018/12/Key-Points-Interviewing-Final.pdf>
- Can't figure out if this is from Oregon or Australia: <https://sites.google.com/site/outbreaktoolkit/website-builder/interviewing-tips>
- CIFOR Guidelines <https://cifor.us/clearinghouse/cifor-guidelines-for-foodborne-disease-outbreak-response>