

FoodCORE Model Practice: Initial Case-patient Interviewing

Introduction:

Interviewing case-patients about where and what they ate in the days or weeks before they got sick is a critical component to hypothesis generation during an outbreak investigation. Interviews can also identify high-risk case-patients who could spread their infections to others (e.g., food handlers, day care workers or attendees, healthcare workers). During interviews, case-patients can also receive information about risky exposures and how to protect themselves and others.

The FoodCORE Model Practice: Initial Case-patient Interviewing is intended to describe the basic practices and characteristics of conducting comprehensive interviews for all enteric disease case-patients upon initial identification or first contact, not just those identified as part of a local cluster or multistate cluster. The activities described would be applicable for various pathogens but are focused on those that are likely transmitted via food. Depending on jurisdictional resources, attempts should be made to interview all identified case-patients with enteric disease to ascertain an exposure history.

This model practice describes successful triage and routing of case reporting and the process of attempting interviews with case-patients, recommends categories and elements identified as essential to ascertain during an initial enteric disease interview, and provides a checklist to determine alignment of initial interview practices with the FoodCORE model practice.

Appendices:

[Appendix A](#). FoodCORE Initial Interviews: Major Categories and Elements

[Appendix B](#). Checklist for FoodCORE Initial Interview Practices

[Appendix C](#). FoodCORE Sample Letters for Non-responsive Case-patients

Aligning with other initiatives:

The initial interview model practice document is not intended to replace guidance about use of *Listeria* Initiative Case-patient Report Form or the Shiga toxin-producing *Escherichia coli* Standardized Case-patient Report Form (STEC Standard Form, under development).

The recommendations included in the initial interview model practice document align with the Core Elements defined within the Standardized National Hypothesis Generating Questionnaire (SNHGQ). The SNHGQ defines the minimum recommended elements to be used in interviewing case-patients known to be associated with a multistate cluster investigation. The SNHGQ elements should be an equivalent or expanded version of initial interviews that are not associated with a multistate cluster investigation.



Case-patient identification:

Case-patients of enteric disease are identified using a variety of sources, including laboratory reporting, direct reports from other jurisdictions or agencies (other states, CDC, etc.), and consumer complaint systems. Identified case-patients with a reasonable expectation of being an enteric illness should be investigated. If a complaint system is available, data should be reviewed to identify potential clusters or trends.

FoodCORE centers utilize various electronic systems to track reported case-patients, completed interviews, and to store demographic and exposure data centrally for ease of review and analysis.

Timeliness, timing, and description of interview attempts:

Interviews should be attempted as soon as possible after public health officials are notified of a case-patient, which may be before all subtyping is completed. Prompt interviewing is critical for best exposure recall by the case-patient and increases the likelihood of identifying epidemiologic links between cases and food products that may be available for testing. Additionally, early interviewing provides an opportunity to give prompt prevention education to case-patients to limit secondary transmission, especially if they have a connection to a high-risk setting (e.g., food workers, childcare workers or attendees, or healthcare workers).

At least three attempts should be made to contact each case-patient. Attempts should be made at different times of day, with at least one attempt during evening or weekend hours, if possible.

During initial contact, interviewers can determine if the interview would be better conducted at a different time, confirm case-patient contact information, and arrange for the interview to be conducted with an interpreter or other means of translation service, if necessary, and if resources are available.

If a case-patient cannot be reached for interview via telephone, FoodCORE centers have used the following approaches to attempt to ascertain exposure history and/or conduct prevention education:

- Leave a voicemail and/or send a text message to case-patients with call back information, either a toll-free or direct line for reaching an interviewer. FoodCORE centers have used ELC funds to purchase cell phones in order to leave text messages.
- Mail a letter from the relevant public health agency with the reason for attempted contact and provide both contact information and educational prevention materials about the enteric pathogen. This letter may also contain a paper copy of the questionnaire for the case-patient to fill out and mail back in a stamped and addressed envelope. See [Appendix C](#) for sample letters.
- Though not used for all routine interviews, some centers provide online questionnaires for exposure ascertainment. This method of exposure ascertainment is used as an alternative method for case-patients who cannot be reached via traditional methods or are unwilling to complete an interview over the phone but would like to provide their exposure history online. Online systems for self-reported data must be secure and allow for confidential data submission.

Before sending a text message, some FoodCORE sites use software to determine if the phone number they have for a case-patient is for a cell phone. Other sites send a text message to any phone number without first validating.



Interview content:

FoodCORE initial case-patient interviews include elements from the following major categories:

1. Demographics
2. Clinical History
3. Travel
4. Risks to others
5. Local Cluster/Events, Finding Additional Cases
6. Food Sources/Diet Information
7. Other Exposures (animal, water, environmental, etc.)

Please see [Appendix A](#) for the table of minimum suggested elements within each major category.

For all case-patients of enteric disease, data collected in categories 1–5 are needed to identify case-patients where public health officials can provide educational information to prevent additional illnesses and to identify any events or local trends that could indicate ongoing risk. FoodCORE center initial interviews include elements in categories 6 and 7 as part of a full exposure history. Depending on jurisdictional resources, interviews should collect sufficient detail to enable public health investigation in these categories. As resources allow, jurisdictions can evaluate including a detailed food exposure history as part of an initial interview. Other initiatives, including the *Listeria* Initiative, the STEC Standard Form, and the SNHGQ, have suggested food categories and elements to ascertain in a food history (e.g., Meat and Poultry; Fish and Seafood; Eggs, Dairy, and Cheese; Fruits and Vegetables; Frozen and Convenience Foods).

For successful interviews, interviewers should be familiar with the questionnaire and jurisdictional policies for education and intervention so the case-patient interaction is efficient and comfortable. The content and structure of the initial interview should be understandable and sensitive to the personal nature of the questions. FoodCORE centers have implemented the following practices and considerations:

- The order in which elements are asked can influence how responsive a case-patient may be
 - » More sensitive information should be collected after the case-patient is comfortable with the interviewer and the reason for being contacted
- If an interviewer determines that a case-patient is short on time, elements can be prioritized to ascertain the highest priority elements earlier in the interview
 - » This could include risk of spreading infection to others or identifying additional case-patients for local clusters/events
- Interview elements can also be prioritized for pathogen-specific concerns to focus on highest priority elements for those specific interviews
 - » This should include identifying persons who are at risk of spreading infection to others
- Since interviews may be conducted before case-patients are linked to a cluster of illness, interviewers may explain to case-patients that they may be re-contacted for additional details about their illness to keep other people from getting sick
 - » Interviewers can verify contact information and preferred means of contact, the best times of day to reach a case-patient, and other preferences (as reasonable), such as preferred language



Appendix A. FoodCORE Initial Interviews: Major Categories and Elements

Demographics	Race	Ethnicity	Gender	Refugee/Immigrant
	Other elements to consider including: E-mail address or other contact information; language preference			
Clinical History	Symptoms	Onset Date	Duration of Illness	Ongoing illness
	Hospitalization: before ill and specifically for illness		Medical care and/or treatments	Diagnoses (HUS, TTP)
	Immunocompromised or other conditions (e.g., pregnancy, etc)			
Travel	In-state	Out-of-state	International	Non-local visitors
	Other elements to consider including: Brought food into home from destination			
Risks to others	Occupation	Ill contacts	Diapered people	Daycare center
	Other elements to consider including: Specifically listing high-risk occupations (daycare/nursery, food handler, healthcare); volunteer activities			
Local Clusters or Events/Finding Additional Cases	Restaurants	Special Events		Large gatherings
	Other elements to consider including: Other shared location of exposures (e.g., nosocomial exposures)			
Food Sources/ Diet Information	Special diets/ Preferred diets		Sources of food at home	Sources of food away from home
	A food exposure history as resources allow (other initiatives including the <i>Listeria</i> Initiative, the STEC Standard Form, and the SNHGQ, have suggested food categories and elements to ascertain in a food history)			
Other Exposures	Animal and pet contact: Petting zoos, farm animals, events with animals, pets at home or other location			
	Water: Source at home, recreational water, natural water			Outdoor, other environmental

Appendix B. Checklist for FoodCORE Initial Interview Practices

Yes	No	Partial	Will be implemented (Date)	Practice
				1. Review laboratory data to identify case-patients of enteric disease
				2. Review direct report data (physicians, other jurisdictions, etc.) to identify case-patients of enteric disease
				3. Review complaint system data to identify potential enteric diseases case-patients, clusters, or other trends
				4. Utilize electronic system to track reported case-patients
				5. Utilize electronic system to track interviewed case-patients
				6. Utilize electronic system to store case-patient demographic data
				7. Utilize electronic system to store case-patient exposure data
				8. Routinely review case-patient data to identify trends
				9. Attempt an interview with all identified case-patients of enteric disease
				10. Begin interview attempts as soon as a case-patient is reported, not necessarily waiting for subtyping to be completed
				11. Make at least three attempts to reach a reported case-patient of enteric disease
				12. Conduct interview attempts at different times of day
				13. Conduct interview attempts during “off-hours” including nights and weekends
				14. Provide call-back information for case-patients (either toll free or a direct line to an interviewer) to promote responsiveness
				15. Determine if the interview would be better conducted at a different time, confirm case-patient contact information, and (resource dependent) arrange for the interview to be conducted with an interpreter or other means of translation service, if necessary
				16. Send letters to case-patients who are not reached via phone to provide information, educational materials, and to promote responsiveness (i.e., encourage case-patients to call back)
				17. Provide alternative method (non-phone-based) to provide exposure history for case-patients who cannot or will not complete a phone-based interview
				18. Train interviewers so they are familiar with the questionnaire content and details
				19. Train interviewers so they are familiar with jurisdictional policies for education and intervention
				20. Order of questions within initial interview has been designed to promote user acceptance for interviewee
				21. Elements within the initial interview are prioritized so interviewers can focus on highest priority exposures if necessary
				22. Initial interview includes telling case-patients they may be re-contacted for additional information or clarification
				23. Initial interview includes confirming case-patient preference for contact including the means of contact and primary contact information, preferred language, etc.

Appendix B. Checklist for FoodCORE Initial Interview Practices

Collect data elements in following initial interview major categories:

Yes	No	Partial	Will be implemented (Date)	Content
				24. Collect data elements for Demographics
				25. Collect data elements for Clinical History
				26. Collect data elements for Travel
				27. Collect data elements for Risk to others
				28. Collect data elements for Local Cluster/Events, Finding Additional Cases
				29. Collect data elements for Food Sources/Diet Information
				30. Collect data elements for Other Exposures (animal, water, environmental, etc.)

Appendix C. FoodCORE Sample Letters for Non-responsive Case-patients

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2. Sample letter for contacting a Spanish-speaking adult with a reportable disease diagnosis (New York City).	8
3. Sample letter for contacting the parent or guardian of a minor with <i>Salmonella</i> infection (Tennessee).	9
4. Sample letter for contacting a case-patient or parent/guardian of a case-patient with a reportable disease diagnosis who has been unreachable (Utah).	10



NEW YORK CITY DEPARTMENT OF
HEALTH AND MENTAL HYGIENE
Thomas Farley, M.D., M.P.H.
Commissioner

[Date of Letter]

Dear First Name Last Name,

This office has been informed by your doctor that you were recently diagnosed with a reportable disease. All possible cases of infectious diseases are required by law to be reported to the Health Department. I have attempted to contact you by telephone at the number provided by your doctor, but have been unable to reach you to discuss this matter. I would like to ask you a few questions and see how you are doing.

Please call me between the hours of 9am and 5pm, Monday through Friday at (xxx) xxx-xxxx. If I am not in the office when you call, please leave a message with a telephone number and hours you can be reached.

Thank you in advance for your time.

Sincerely,

[Signature of Health Official]

[Health Official's Name]
Bureau of Communicable Disease
New York City Department of Health and Mental Hygiene
[(xxx) xxx-xxxx]



NEW YORK CITY DEPARTMENT OF
HEALTH AND MENTAL HYGIENE
Thomas Farley, M.D., M.P.H.
Commissioner

[Date of Letter – in Spanish]

Estimado/a Sr. /Srta. /Sra. *(Insert patient name)*,

Su doctor nos ha notificado que usted fue diagnosticado con una enfermedad. Por ley, todos los casos de las enfermedades transmisibles necesitan ser reportadas al Departamento de Salud y Salud Mental. Intentamos de comunicarnos con usted usando el número suministrado por su doctor. No hemos podido comunicarnos con usted. Nos gustaría poder hablar con usted para hacerle unas preguntas y para saber como usted se siente ahora.

Por favor llámenos entre las 9am y 5pm, de lunes a viernes al (xxx) xxx-xxxx. Si no estamos en la oficina cuando usted llame, por favor déjenos un mensaje con las horas que usted está disponible.

Gracias por su tiempo.

Atentamente,

[Signature of Health Official]

[Health Official's Name]

Bureau of Communicable Diseases (Oficina de Enfermedades Transmisibles)
Departamento de Salud y Salud Mental de la Ciudad de Nueva York
[(xxxx) xxx-xxxx]



STATE OF TENNESSEE
DEPARTMENT OF HEALTH
COMMUNICABLE AND ENVIRONMENTAL DISEASE SERVICES
CORDELL HULL BUILDING
425 5th AVENUE NORTH
NASHVILLE, TENNESSEE 37247

[Date of letter]

Parent or Guardian of *[Patient Name]*

[Patient Address 1]

[Patient Address 2]

Dear Parent or Guardian of *[Patient Name]*,

The Tennessee Department of Health (TDH) located in Nashville needs to speak with you regarding your child's recent diagnosis of *Salmonella*. All patients with *Salmonella* are contacted by TDH. We want to know more about the foods your child ate and places *[he or she]* traveled. The phone interview will take approximately 30 minutes. Please call my direct line at (xxx) xxx-xxxx or call (xxx) xxx-xxxx *[general line]* and ask to speak with *[Name of Interviewers]*. If I am away from my phone when you call, please leave a phone number and time when I may reach you.

Thank you,

[Signature of Health Official]

[Health Official's Name]

Tennessee Department of Health
Communicable and Environmental Disease Services Section
425 5th Ave North— 1st Floor
Nashville, Tennessee 37243
[(xxx) xxx-xxxx]



Patient Name
MM/DD/YYYY
Street Name
City, State, Zip

Dear Patient Name,

You (or your child) were recently reported to Choose LHD as testing positive for Choose Disease. By law, doctors and other healthcare providers must report diseases that may be spread to others so that we may investigate, and provide education and assistance to you as needed.

Our goal is help you (or your child) to get well, stay well, and to keep others from becoming ill. You may be able to help us figure out what made you (or your child) sick.

It is important that we speak with you as soon as possible. We have been unable to reach you by telephone, and would appreciate it if you would return our call. If you are unable to contact us by phone, you may provide some of the information we need electronically at igotsick.health.utah.gov.

If you prefer to provide information electronically, please enter the following link into your internet browser and follow the instructions: igotsick.health.utah.gov. The information you chose to share is completely confidential, secure, and will automatically be routed to the appropriate health department. Local health departments may follow up as needed to prevent future illness.

Thank you for your time.

Sincerely,

Utah Department of Health
<Enteric Disease Investigator or Dept>
<email>
<phone>
<Days/ Hours available>

Enc. Factsheet