

Interviewer name: _____

Date of interview: ___/___/___

Standard foodborne disease outbreak case questionnaire

Introductory note

This questionnaire is an adaptation of a standardized questionnaire developed by the Minnesota Department of Health. It is intended for use as a template for investigating foodborne disease outbreaks. The content or format may require modification in accordance with the circumstances of a particular outbreak. Some aspects of the questionnaire you may wish to customize include:

1. If you suspect a food item that does not appear in this questionnaire, add questions about this food.
2. If a pathogen has been identified, consider adding or altering clinical questions and specifying the incubation period accordingly.
3. Decide how to code onset times when respondents give nonspecific responses such as “morning” or “am.”

Part I. Demographics/Introduction:

Pt. Name: _____ DOB: ___ / ___ / ___

Age: _____ years

Address: _____

Home phone: _____

City: _____ County: _____

Zip: _____

Parent's Name (if child) _____

Occupation: _____

Work Phone: _____

Name and Address of Employer, daycare, school: _____

Hello. My name is _____ and I'm calling from the _____ State Health Department. I'm calling because there have been several cases of _____ in our community and we are working to identify the source of infection, so we can prevent additional illness in the community. We understand that you are one of the people who had this illness. I would like to ask you some questions about your illness and foods that you ate before becoming ill, that will help us in this work. This will take about ___ minutes. Can we go ahead?

If no: Is there a convenient time I can call you back? Day _____

Time ___:___ am pm

Interviewer name: _____

Date of interview: __/__/__

Telephone: _____

Who was interviewed?

9 Patient

9 Other person

Interviewer name: _____

Date of interview: ___/___/___

Part II. Clinical information

Which did you experience first: 9 vomit 9 diarrhea

Date of onset of vomit or diarrhea (whichever occurred first): ___ / ___ / ___

Onset time: *Circle closest hour. For onset times after midnight, double-check the onset day/date!*

| | | | |
|------|---------|---------|----------------|
| 1 am | 7 am | 13-1 pm | 19-7 pm |
| 2 | 8 | 14-2 | 20-8 |
| 3 | 9 | 15-3 | 21-9 |
| 4 | 10 | 16-4 | 22-10 |
| 5 | 11 | 17-5 | 23-11 |
| 6 am | 12 noon | 18-6 pm | 24-12 midnight |

Are you still experiencing vomit or diarrhea? Y N

Date of last day of illness with vomit or diarrhea: : ___ / ___ / ___

Time of last episode of vomit or diarrhea: ___:___ AM PM

Read questions exactly as written below. Circle Y for “yes,” N for “no” and DK for “don’t know, can’t remember, not sure” etc.

Did you have:

| | | | |
|----------|---|---|----|
| Nausea | Y | N | DK |
| Vomiting | Y | N | DK |
| Diarrhea | Y | N | DK |

If yes:

Maximum number of stools in a 24-hour period: _____

| | | | |
|------------------|---|---|----------|
| Bloody diarrhea | Y | N | DK |
| Abdominal cramps | Y | N | DK |
| Fever | Y | N | DK |
| Chills | Y | N | DK |
| Headache | Y | N | DK |
| Body aches | Y | N | DK |
| Fatigue | Y | N | DK |
| Constipation | Y | N | DK |
| Other: | Y | N | DK _____ |

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Date of interview: ___/___/___

Did you see a healthcare professional, such as a doctor or a nurse?

Y N When? ___ / ___ / ___

Were you hospitalized overnight? Y N
Where? _____

Was a stool culture done? Y N DK
Results: _____

Did you take any prescription medications for this illness? Y N DK
If yes, what medications? _____

Did anyone in your household have a similar illness? If yes, who?

Do you know of anyone else with a diarrheal illness during the past week? Y N DK
If yes, who? _____
Telephone: When? ___ / ___ / ___

Part III. General information

Did you attend a large gathering the week before your illness? (e.g., wedding reception, showers, church events, clubs, school events, athletic events, office parties or banquets, parties, festivals, fairs) Y N

If yes, what events?

Event 1: _____ location: _____ When? ___ / ___ / ___

Event 2: _____ location: _____ When? ___ / ___ / ___

Event 3: _____ location: _____ When? ___ / ___ / ___

Event 4: _____ location: _____ When? ___ / ___ / ___

Do you know anyone else in your neighborhood/school/office/business/health club/church/synagogue etc. with the same illness? Y N

If yes: Where? _____

How many people? _____ Name _____ Tel _____

Name _____ Tel _____

Name _____ Tel _____

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Did you travel anywhere during the seven days before your illness? Y N
If yes, where? _____ When? ___ / ___ / ___ to ___ / ___ / ___

If airline travel, what airline? _____

Outgoing flight no. _____ Return flight no. _____

Foods eaten on plane going there: _____

return: _____ If you stayed at a resort please provide resort name: _____

If cruise ship, name of ship _____ Destinations _____

Have you had contact with children in a childcare setting during the seven days before illness? Y N

If yes, when: ___ / ___ / ___ Name of facility: _____

Location _____ Phone: _____

Are you aware of any other illness in the daycare? Y N DK

During the seven days before your illness, did you have any pets at home, have contact with household pets elsewhere, or visit a household with pets? (including reptiles) Y N

If yes, what type of pets? _____

If your own pets, where do you buy your pet foods? _____ brand:

Did you live on a farm, visit a farm, or visit a petting zoo in the seven days before your illness? Y N

If yes: what kind of animal(s) did you have contact with? _____

When? ___ / ___ / ___ Where? _____

From what sources of water did you drink during the seven days before your illness?

Municipal tap water Y N DK

Private well water Y N DK

Untreated surface water
(river, pond, lake) Y N DK

Bottled water Y N DK

Other _____

Did you drink any untreated/raw water during the seven days before your illness? Y N

If yes, where? _____

Did you swim during the seven days before your illness? Y N

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| | | | |
|---------------------------------|---|---|-------------------------------|
| <i>If yes, where?</i> Ocean/sea | Y | N | <i>If yes: Location</i> _____ |
| Pool | Y | N | <i>If yes: Location</i> _____ |
| Lake | Y | N | <i>If yes: Location</i> _____ |
| Pond | Y | N | <i>If yes: Location</i> _____ |
| River | Y | N | <i>If yes: Location</i> _____ |
| Other | Y | N | <i>If yes: Location</i> _____ |

Where did you shop for groceries consumed the week before your illness?

Store name: _____ Location: _____

Store name: _____ Location: _____

Store name: _____ Location: _____

Store name: _____ Location: _____

Part IV. Specific food questions

In the week before your illness, did you eat any dish containing store-purchased ground **beef** (that is, cooked at home)? I'm referring either to bulk ground beef or pre-made beef patties purchased in a store by you or a relative/house-mate? Y N DK

If yes: where purchased? _____

When? _____

What was the brand name? _____

What type of ground beef was it (extra lean, lean, % fat, etc.)? _____

In the week before your illness, did you consume meat originating from any place other than a grocery store or restaurant, such as from hunting, a butcher shop, custom butchery? Y N

Where: _____ What: _____

In the week before your illness, did you make or eat any dish that involved breaking and mixing four or more eggs? Y N DK

If yes: Where did you buy the eggs? _____ *When?* _____

What was the brand? _____

Have you done any baking that used a raw egg in the preparation? Y N

Did you taste any of the uncooked batter? Y N

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Did you drink any unpasteurized milk, or cheeses such as queso fresco made with unpasteurized milk during the week before your illness? Y N

If yes, where? _____

Part V. Restaurants Exposures:

In the seven days before your illness, did you eat at any of the following types of commercial food establishment?

| | | | | |
|---|---|---|----|--|
| Restaurant | Y | N | DK | |
| Fast-food establishment | Y | N | DK | |
| Cafeteria | Y | N | DK | |
| Deli | Y | N | DK | |
| Read-to-eat food served in a supermarket or department store? | Y | N | DK | |
| Street-vended food | Y | N | DK | |
| Concession stand at | | | | |
| sporting event | Y | N | DK | |
| Snack bar | Y | N | DK | |
| Gas station | Y | N | DK | |

Please list all such food establishments where you ate during the seven days before you became ill.

Name: _____ date: ___ / ___ / ___

Address: _____ time: _____

Foods eaten:

Name: _____ date: ___ / ___ / ___

Address: _____ time: _____

Foods eaten:

Name: _____ date: ___ / ___ / ___

Address: _____ time: _____

Foods eaten:

Interviewer name: _____

Date of interview: __/__/__

Name: _____ date: ____ / ____ / ____

Address: _____ time: _____

Foods eaten:

Interviewer name: _____

Date of interview: __/__/__

Name: _____ date: ____ / ____ / ____

Address: _____ time: _____

Foods eaten:

Name: _____ date: ____ / ____ / ____

Address: _____ time: _____

Foods eaten:

Name: _____ date: ____ / ____ / ____

Address: _____ time: _____

Foods eaten:

Interviewer name: _____

Date of interview: ___/___/___

Part VI. Open-ended food history:

List the location of the meal and foods eaten within _____ days before onset of symptoms. [Use the incubation period applicable to the agent/disease under investigation, e.g.,

Bacillus cereus: 1-24 hours *E. coli* O157:H7: 2-7 days *Staphylococcus*: 30 min - 8 hrs Viral agent: 0-3 days
Campylobacter: 1-10 days *Salmonella*: 0-5 days *Vibrio parahemolyticus*: 0-2 days
Cryptosporidium: 1-12 days *Shigella*: 0-3 days

If a specific agent is not suspected at the time of interview, ask about the day of illness and the four days before illness.

| Days before illness onset: 0 (Day of illness onset) | <u>Meal</u> | Ate at <u>home</u> | Ate outside <u>of home</u> | <u>Outside</u> <u>location</u> | <u>Foods eaten</u> |
|--|-------------|-----------------------|-------------------------------|-----------------------------------|--------------------|
| | Breakfast | 9 | 9 | _____ | _____ |
| Day of week: _____ | Lunch | 9 | 9 | _____ | _____ |
| Date: ___/___/___ | Dinner | 9 | 9 | _____ | _____ |
| | Other | 9 | 9 | _____ | _____ |

| Days before illness onset: 1 (Day before illness onset) | <u>Meal</u> | Ate at <u>home</u> | Ate outside <u>of home</u> | <u>Outside</u> <u>location</u> | <u>Foods eaten</u> |
|--|-------------|-----------------------|-------------------------------|-----------------------------------|--------------------|
| | Breakfast | 9 | 9 | _____ | _____ |

Interviewer name: _____

Date of interview: ___/___/___

| | | | | | | |
|--------------------|-------|--------|---|---|-------|-------|
| Day of week: _____ | _____ | Lunch | 9 | 9 | _____ | _____ |
| Date: ___/___/___ | | Dinner | 9 | 9 | _____ | _____ |
| | | Other | 9 | 9 | _____ | _____ |
| | | | | | _____ | _____ |

Interviewer name: _____

Date of interview: ___/___/___

Days before illness onset: 2

| <u>Meal</u> | Ate at <u>home</u> | Ate outside <u>of home</u> | Outside <u>location</u> | <u>Foods eaten</u> |
|--------------------|-----------------------|-------------------------------|----------------------------|--------------------|
| Breakfast | 9 | 9 | _____ | _____ |
| _____ | | | | |
| Day of week: _____ | Lunch | 9 | 9 | _____ |
| _____ | | | | |
| Date: ___/___/___ | Dinner | 9 | 9 | _____ |
| _____ | | | | |
| | Other | 9 | 9 | _____ |
| | | | | _____ |

Days before illness onset: 3

| <u>Meal</u> | Ate at <u>home</u> | Ate outside <u>of home</u> | Outside <u>location</u> | <u>Foods eaten</u> |
|--------------------|-----------------------|-------------------------------|----------------------------|--------------------|
| Breakfast | 9 | 9 | _____ | _____ |
| _____ | | | | |
| Day of week: _____ | Lunch | 9 | 9 | _____ |
| _____ | | | | |
| Date: ___/___/___ | Dinner | 9 | 9 | _____ |
| _____ | | | | |
| | Other | 9 | 9 | _____ |
| | | | | _____ |

Days before illness onset: 4

| <u>Meal</u> | Ate at <u>home</u> | Ate outside <u>of home</u> | Outside <u>location</u> | <u>Foods eaten</u> |
|-------------|-----------------------|-------------------------------|----------------------------|--------------------|
|-------------|-----------------------|-------------------------------|----------------------------|--------------------|

Interviewer name: _____

Date of interview: ___/___/___

| | | | | | |
|--------------------|-----------|---|---|-------|-------|
| | Breakfast | 9 | 9 | _____ | _____ |
| Day of week: _____ | Lunch | 9 | 9 | _____ | _____ |
| Date: ___/___/___ | Dinner | 9 | 9 | _____ | _____ |
| | Other | 9 | 9 | _____ | _____ |

Interviewer name: _____

Date of interview: ___/___/___

Days before illness onset: 5

| | <u>Meal</u> | Ate at <u>home</u> | Ate outside <u>of home</u> | <u>Outside</u> <u>location</u> | <u>Foods eaten</u> |
|--------------------|-------------|-----------------------|-------------------------------|-----------------------------------|--------------------|
| | Breakfast | 9 | 9 | _____ | _____ |
| Day of week: _____ | Lunch | 9 | 9 | _____ | _____ |
| Date: ___/___/___ | Dinner | 9 | 9 | _____ | _____ |
| | Other | 9 | 9 | _____ | _____ |

Days before illness onset: 6

| | <u>Meal</u> | Ate at <u>home</u> | Ate outside <u>of home</u> | <u>Outside</u> <u>location</u> | <u>Foods eaten</u> |
|--------------------|-------------|-----------------------|-------------------------------|-----------------------------------|--------------------|
| | Breakfast | 9 | 9 | _____ | _____ |
| Day of week: _____ | Lunch | 9 | 9 | _____ | _____ |
| Date: ___/___/___ | Dinner | 9 | 9 | _____ | _____ |
| | Other | 9 | 9 | _____ | _____ |

Days before illness onset: 7

| <u>Meal</u> | Ate at <u>home</u> | Ate outside <u>of home</u> | <u>Outside</u> <u>location</u> | <u>Foods eaten</u> |
|-------------|-----------------------|-------------------------------|-----------------------------------|--------------------|
|-------------|-----------------------|-------------------------------|-----------------------------------|--------------------|

Interviewer name: _____

Date of interview: ___/___/___

| | | | | | |
|--------------------|-----------|---|---|-------|-------|
| | Breakfast | 9 | 9 | _____ | _____ |
| Day of week: _____ | Lunch | 9 | 9 | _____ | _____ |
| Date: ___/___/___ | Dinner | 9 | 9 | _____ | _____ |
| | Other | 9 | 9 | _____ | _____ |

Interviewer name: _____

Date of interview: ___/___/___

Appendix: Specific food consumption history:

Please indicate for each of the food items listed below whether you **definitively** ate it, **maybe** ate it, **definitively did not** eat it, and whether it was cooked or uncooked, during the seven days before you became ill. The time period we are talking about is from _____, ___/___/___ to _____, ___/___/___

Check the appropriate box; if “definitely ate” or “maybe ate” fill out remainder of columns.

| <u>Food item</u> | <u>definitel</u> <u>y</u> | <u>maybe</u> <u>ate</u> | <u>definite</u> <u>NOT</u> | <u>how prepared</u> | <u>brand</u> | <u>store</u> | <u>date bought</u> | <u>date eaten</u> |
|------------------|------------------------------|----------------------------|-------------------------------|---------------------|--------------|--------------|--------------------|-------------------|
|------------------|------------------------------|----------------------------|-------------------------------|---------------------|--------------|--------------|--------------------|-------------------|

Dairy

| | | | | | | | | |
|-----------------------|--|--|--|--|--|--|--|--|
| <u>Milk</u> | | | | | | | | |
| <u>Buttermilk</u> | | | | | | | | |
| <u>Sour cream</u> | | | | | | | | |
| <u>Cottage cheese</u> | | | | | | | | |
| <u>Cheese</u> | | | | | | | | |
| <u> a. shredded</u> | | | | | | | | |

Interviewer name: _____

Date of interview: ___/___/___

| | | | | | | | | |
|--------------------------------|--|--|--|--|--|--|--|--|
| <u>b. processed sliced</u> | | | | | | | | |
| <u>c. block</u> | | | | | | | | |
| <u>d. string</u> | | | | | | | | |
| <u>e. curds</u> | | | | | | | | |
| <u>Ice cream</u> | | | | | | | | |
| <u>Frozen dessert</u> | | | | | | | | |
| <u>Yogurt</u> | | | | | | | | |
| <u>Meat, poultry</u> | | | | | | | | |
| <u>Chicken</u> | | | | | | | | |
| <u>Turkey</u> | | | | | | | | |
| <u>Hamburger</u> | | | | | | | | |
| <u>Hamburger as ingredient</u> | | | | | | | | |

What kind of dish? _____

Hamburger: ___ raw, ___ rare (red in middle), ___ medium (pink in middle), ___ well done

| | | | | | | | | |
|-------------------|--|--|--|--|--|--|--|--|
| <u>Other beef</u> | | | | | | | | |
| <u>Pork</u> | | | | | | | | |
| <u>Lamb</u> | | | | | | | | |

Interviewer name: _____

Date of interview: ___/___/___

| | | | | | | | | |
|--------------------------------|--|--|--|--|--|--|--|--|
| <u>Sausage</u> | | | | | | | | |
| <u>Fish</u> | | | | | | | | |
| <u>Shellfish</u> | | | | | | | | |
| <u>Other meat/poultry/fish</u> | | | | | | | | |

Eggs

| | | | | | | | | |
|----------------|--|--|--|--|--|--|--|--|
| <u>Any egg</u> | | | | | | | | |
|----------------|--|--|--|--|--|--|--|--|

fried: ___ sunny-side up ___ over easy ___ fried hard

scrambled: ___ scrambled-runny ___ scrambled-dry

boiled: ___ soft-boiled ___ hard-boiled

omelette ___ omelette-runny ___ omelette-hard

Fruits (fresh, not canned)

| | | | | | | | | |
|-------------------------|--|--|--|--|--|--|--|--|
| <u>Oranges</u> | | | | | | | | |
| <u>Other citrus</u> | | | | | | | | |
| <u>Pears</u> | | | | | | | | |
| <u>Apples</u> | | | | | | | | |
| <u>Other tree fruit</u> | | | | | | | | |
| <u>Strawberries</u> | | | | | | | | |

Interviewer name: _____

Date of interview: ___/___/___

| | | | | | | | | |
|-------------------------------|--|--|--|--|--|--|--|--|
| <u>Other berries</u> | | | | | | | | |
| <u>Grapes</u> | | | | | | | | |
| <u>Bananas</u> | | | | | | | | |
| <u>Mangoes</u> | | | | | | | | |
| <u>Cantaloupe</u> | | | | | | | | |
| <u>Water melon</u> | | | | | | | | |
| <u>Other melon</u> | | | | | | | | |
| <u>Exotic fruit (specify)</u> | | | | | | | | |

Vegetables (fresh)

| | | | | | | | | |
|--------------------------|--|--|--|--|--|--|--|--|
| <u>Prepackaged salad</u> | | | | | | | | |
| <u>Lettuce</u> | | | | | | | | |
| <u>Iceberg</u> | | | | | | | | |
| <u>Red leaf lettuce</u> | | | | | | | | |
| <u>Romaine lettuce</u> | | | | | | | | |
| <u>Mesclun greens</u> | | | | | | | | |
| <u>Spinach</u> | | | | | | | | |
| <u>Cabbage</u> | | | | | | | | |

Interviewer name: _____

Date of interview: ___/___/___

| | | | | | | | | |
|-------------------------------|--|--|--|--|--|--|--|--|
| <u>Tomatoes</u> | | | | | | | | |
| <u>Cucumbers</u> | | | | | | | | |
| <u>Peppers</u> | | | | | | | | |
| <u>Asparagus</u> | | | | | | | | |
| <u>Celery</u> | | | | | | | | |
| <u>Carrots</u> | | | | | | | | |
| <u>Radishes</u> | | | | | | | | |
| <u>Pea pods</u> | | | | | | | | |
| <u>Egg plants, squash</u> | | | | | | | | |
| <u>Onions</u> | | | | | | | | |
| <u>Green</u> | | | | | | | | |
| <u>Other (white, Spanish)</u> | | | | | | | | |
| <u>Broccoli</u> | | | | | | | | |
| <u>Fresh herbs</u> | | | | | | | | |
| <u>Mushrooms</u> | | | | | | | | |
| <u>Cilantro</u> | | | | | | | | |

Interviewer name: _____

Date of interview: ___/___/___

| | | | | | | | | |
|-----------------------------------|--|--|--|--|--|--|--|--|
| <u>Sprouts (e.g. on sandwich)</u> | | | | | | | | |
| <u>Alfalfa sprouts</u> | | | | | | | | |
| <u>Bean sprouts</u> | | | | | | | | |
| <u>Peanut butter</u> | | | | | | | | |
| <u>Salsa</u> | | | | | | | | |
| <u>Dips</u> | | | | | | | | |

Salads

| | | | | | | | | |
|-----------------------|--|--|--|--|--|--|--|--|
| <u>Green (tossed)</u> | | | | | | | | |
| <u>Caesar salad</u> | | | | | | | | |
| <u>Fruit salad</u> | | | | | | | | |
| <u>Pasta salad</u> | | | | | | | | |
| <u>Potato salad</u> | | | | | | | | |
| <u>Cole slaw</u> | | | | | | | | |
| <u>Other Salad</u> | | | | | | | | |

Beverages

| | | | | | | | | |
|-----------------------------|--|--|--|--|--|--|--|--|
| <u>Apple juice or cider</u> | | | | | | | | |
| <u>Orange juice</u> | | | | | | | | |

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| | | | | | | | | |
|------------------------------------|--|--|--|--|--|--|--|--|
| <u>Other fruit juice</u> | | | | | | | | |
| <u>Iced tea</u> | | | | | | | | |
| <u>Special teas, herbal drinks</u> | | | | | | | | |

—