

## FoodNet 2003 Laboratory Survey

### ***E. coli* O157 and non-O157 Shiga Toxin-producing *E. coli* (STEC) Testing**

1. Does your laboratory test fecal specimens (either on-site or off-site) for ***E. coli* O157 or other Shiga toxin-producing *E. coli* (STEC)** (using either culture or non-culture methods) ?
  - Yes                       No **[STOP—END OF SURVEY]**
  
2. Where are specimens tested for *E. coli* O157/ STEC?
  - Off-site only (where: \_\_\_\_\_ ) **[STOP—END OF SURVEY]**
  - On-site AND Off-site (where: \_\_\_\_\_ )
    - For off-site specimens, please answer the following:**
    - Are specimens “batched” before sending? . . . . .  Yes  No
    - Please estimate the average number of days between specimen arrival in the laboratory and mailing \_\_\_\_\_
  - On-site only

**THE FOLLOWING QUESTIONS PERTAIN ONLY TO THOSE SPECIMENS TESTED ON-SITE**

3. How many fecal specimens were tested on-site for ***E. coli* O157/STEC using culture-based methods** in 2002? \_\_\_\_\_ **[IF ZERO, THEN SKIP TO QUESTION 7].**
  - Check if the response to question 3 is a rough estimate
  
4. When does your laboratory use **culture-based** methods for on-site ***E. coli* O157/STEC** testing?
  - all specimens routinely, or
  - under the following specific circumstances **[check all that apply]**
    - when a physician specifically requests testing for *E. coli* O157/STEC
    - when specimen appears bloody
    - when the patient has history of bloody stools
    - when the patient is in a certain age group, specify: \_\_\_\_\_
    - during certain seasons (e.g., summer), specify: \_\_\_\_\_
    - when the patient has hemolytic uremic syndrome (HUS)
    - other, specify: \_\_\_\_\_
  
5. When using culture-based methods to test for ***E. coli* O157**, what media/methods does your laboratory use? **[check all that apply]**
  - Sorbitol-MacConkey agar (SMAC)
  - CT Sorbitol-MacConkey agar (CT-SMAC)
  - MacConkey agar
  - Enrichment broth, please specify: \_\_\_\_\_
  - Immunomagnetic beads
  - Other, please describe: \_\_\_\_\_
  - BCM O157:H7 agar
  - Rainbow agar
  - Chromagar O157
  
6. When sorbitol negative colonies are detected, which of the following are performed in your laboratory? **[check all that apply]**
  - A test to detect the O157 antigen (such as agglutination)
  - A test to detect the H7 antigen
  - A biochemical test to identify the organism as *E. coli*
  - Send the isolate to a reference laboratory or the state laboratory
  - Other, please describe: \_\_\_\_\_

7. How many fecal specimens were tested on-site for *E. coli* O157/STEC using **NON-culture-based methods** in 2002? \_\_\_\_\_ **[IF ZERO, THEN STOP—END OF SURVEY].**

Check if the response to question 7 is a rough estimate

8. When does your laboratory use **non-culture-based** methods for on-site *E. coli* O157/STEC testing?

- all specimens routinely, or
- under the following specific circumstances **[check all that apply]**
  - when a physician specifically requests testing for *E. coli* O157/STEC
  - when specimen appears bloody
  - when the patient has history of bloody stools
  - when the patient is in a certain age group, specify: \_\_\_\_\_
  - during certain seasons (e.g., summer), specify: \_\_\_\_\_
  - when the patient has hemolytic uremic syndrome (HUS)
  - other, specify: \_\_\_\_\_

9. When your laboratory uses non-culture methods to screen for *E. coli* O157/STEC, which tests are used?

- a) Shiga toxin immunoassay (e.g., Meridian Premier EHEC, Alexon-Trend Prospect STEC) . . .  Yes  No
  - b) Immunoassay for O157 antigen (e.g., Meridian Immunocard STAT O157, Universal HealthWatch QUIX O157) . . . . .  Yes  No
  - c) Other (e.g., PCR). . . . .  Yes  No
- if other, please describe: \_\_\_\_\_

10. In what year were non-culture methods for STEC adopted by your laboratory? . . . . . \_\_\_\_\_

11. When a specimen is **Shiga toxin positive** by a non-culture method, does your laboratory routinely...  
perform culture-based testing to isolate *E. coli* O157? . . . . .  Yes  No  
plate out and test individual colonies to obtain Shiga toxin-positive isolates? . . . . .  Yes  No  
send the specimen or isolate to the state laboratory? . . . . .  Yes  No

**If yes to send specimen or isolate, under what circumstances? [check all that apply],**

- specimen/broth/plate sent routinely without further testing
- isolate(s) sent routinely without further testing
- isolate sent when *E. coli* O157 identified
- specimen sent when *E. coli* O157 tested for but not identified
- isolate sent, when non-O157 STEC suspected
- other, specify \_\_\_\_\_

**If no to send specimen or isolate, is your laboratory required to report results to the state [check all that apply]**

- from isolates? . . . . .  Yes  No
- from broth? . . . . .  Yes  No

Comments: \_\_\_\_\_

\_\_\_\_\_