Department of Health Services
Surveillance and Statistics Section
MS 7306
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CASE REPORT

- ❒ *E. coli* O157 ***only***
- ❒ Other STEC (Shiga toxin producing *E. coli*) ***only***
- ❒ Hemolytic Uremic Syndrome (HUS) ***only***
- ❒ ***BOTH*** *E. coli* O157 ***and*** HUS
- ❒ ***BOTH*** Other STEC ***and*** HUS

FOR DCDC USE ONLY
- ❒ Suspected case
- ❒ Probable case
- ❒ Confirmed case

Patient name–last	first	middle initial	Date of birth	Age	Sex

Address–number, street	City	State	County	ZIP code

Telephone number
Home ( ) Work ( )

RACE
❒ African-American/Black ❒ White ❒ Native American ❒ Asian/Pacific Islander ❒ Other ____________

ETHNICITY (check one)
❒ Hispanic/Latino ❒ Non-Hispanic/Non-Latino

If Asian/Pacific Islander, please check one: ❒ Asian Indian ❒ Cambodian ❒ Chinese ❒ Filipino ❒ Guamanian ❒ Hawaiian ❒ Japanese ❒ Korean ❒ Laotian ❒ Samoan ❒ Vietnamese ❒ Other____________

Onset date (mm/dd/yy)	Duration of illness (days)	Attending physician	Telephone number ( )

LABORATORY DATA

Culture confirmed for *E. coli* O157 ❒ Yes ❒ No ❒ Unknown ❒ Not tested If yes, which lab confirmed it? ____________

Other *E. coli* confirmation? ❒ Yes ❒ No ❒ Unknown If yes, which *E. coli* serotype? ____________
Which lab confirmed it? ____________

Source of specimen: ❒ Stool ❒ Other: ____________ Date of specimen collection: ____/____/____ (mo day yr)

Submitted to State's MDL? ❒ Yes ❒ No ❒ Unknown If yes, MDL specimen number: ____________

Flagellar (H) antigen: ❒ H7 ❒ Non-motile

Shiga-like toxin assay: ❒ SLT_1 ❒ SLT_2 ❒ SLT positive, but type not specified ❒ Not done

CLINICAL INFORMATION AND PRESENT ILLNESS

1. SIGNS AND SYMPTOMS (Please check.)

	Yes	No	Unknown
Diarrhea	❒	❒	❒
Bloody diarrhea	❒	❒	❒
Fever (or felt feverish)	❒	❒	❒
Vomiting	❒	❒	❒
Abdominal cramps	❒	❒	❒
Headache	❒	❒	❒

Other, describe: ____________

2. What was the date of onset of ***diarrhea***? ____/____/____ (mo day yr)

3. What was the greatest number of stools in a 24-hour period? ________

4. What was the highest temperature, if taken? ___ ___ ___ • ___
❒ Not taken

5. Did the patient take an antimicrobial in the week ***prior*** to onset of illness?
❒ Yes ❒ No ❒ Unknown

If yes, name of antimicrobial:	Began (mo/day/yr)	Ended (mo/day/yr)
____________	____/____/____	____/____/____
____________	____/____/____	____/____/____

If patient has HUS, did the patient take an antimicrobial *after* the onset of diarrhea but *before* the onset of HUS?
❒ Yes ❒ No ❒ Unknown
If yes, name of antimicrobial: ____________

6. Was the patient admitted to a hospital for this illness (check one):
❒ Yes ❒ No ❒ Unknown
If yes, hospital name: ____________
City: ____________ Phone: ( ) ____________
Admission date: ____/____/____ (mo day yr) Discharge date: ____/____/____ (mo day yr)
Was the patient discharged: ❒ Alive *or* ❒ Dead

7. a. Did the patient have (please check answer for *each*):

	Yes	No	Unknown
(HUS) Hemolytic Uremic Syndrome (both anemia with microangiopathic changes and renal injury [hematuria, proteinuria, or elevated creatinine])	❒	❒	❒
(TTP) Thrombotic thrombocytopenic purpura (HUS with central nervous system involvement)	❒	❒	❒
b. Did the patient undergo dialysis?	❒	❒	❒
Did the patient undergo GI surgery for this illness?	❒	❒	❒

8. Did the patient miss school or work because of this illness? ❒ ❒ ❒
❒ Patient does not go to school or work

EPIDEMIOLOGIC INFORMATION

9. During the exposure period (<=7 days before onset), was the patient:

A close contact of a confirmed or probable case? ❒ Yes ❒ No ❒ Unknown

If yes, has that other case been reported? ❒ Yes ❒ No ❒ Unknown

If yes, specify nature of contact: ❒ Household ❒ Sexual ❒ Day care ❒ Other: ____________

If yes to any question, please provide relevant names, dates, places, etc. ____________

____

____

10. Was the patient in a known outbreak of *E.coli* O157? ❒ Yes ❒ No ❒ Unknown

If yes, identify outbreak/exposure: ____________

____

11. Did the patient eat or drink **any** of the following items in the seven days before the illness* began? *For patients with no symptoms, ask about the seven days before the positive culture was obtained.

	Yes	No	Unknown	
a. Raw (unpasteurized) milk/milk product . . .	❒	❒	❒	If yes, specify brand: ____________
b. Unchlorinated drinking water	❒	❒	❒	If yes, ❒ Bottled, source: ____________ *or* ❒ Well water
c. Ground beef	❒	❒	❒	If yes, ❒ Pink (rare) *or* ❒ Red (raw) *or* ❒ Well done Specify where obtained: ____________
d. Steak	❒	❒	❒	If yes, ❒ Pink (rare) *or* ❒ Red (raw) *or* ❒ Well done Specify where obtained: ____________
e. Roast beef	❒	❒	❒	
f. Apple juice or cider	❒	❒	❒	If yes, was it pasteurized? ❒ Yes ❒ No ❒ Unknown Specify brand: ____________
g. Lettuce	❒	❒	❒	If yes, ❒ Fresh *or* ❒ Prepackaged
h. Sprouts	❒	❒	❒	If yes, what kind? ❒ Alfalfa ❒ Mung bean ❒ Other: ____________
i. Dried meat (salami, jerky)	❒	❒	❒	If yes, what kind (specify brand): ____________

12. In the seven days before the illness* began, did the patient do any of the following: *(Please check.)* * For patients with no symptoms, ask about the seven days before the positive culture was obtained.

	Yes	No	Unknown
a. Swim in a lake, stream, or river	❒	❒	❒
b. Live on a farm	❒	❒	❒
c. Visit a farm	❒	❒	❒
d. Have contact with children in their home	❒	❒	❒
e. Have contact with children in a day care center or preschool . . .	❒	❒	❒
f. Live in an institution (such as a nursing home)	❒	❒	❒
g. Have occupational exposure to human or animal excreta	❒	❒	❒
h. Have contact with livestock, especially bovine	❒	❒	❒
i. Hunt/butcher animals	❒	❒	❒
j. Visit a petting zoo	❒	❒	❒

If any of the above are "Yes," *specify item (a.–j.), name, and location* (attach additional page, if needed).

ITEM	NAME	LOCATION

13. In the seven days before the illness began, did the patient eat at:
a. A fast food restaurant . . . . . ❒ Yes ❒ No ❒ Unknown
b. Another restaurant . . . . ❒ Yes ❒ No ❒ Unknown

If either of the above is "yes," specify name and location of restaurant:

Name: ____________ Location: ____________

14. Is the patient currently or usually employed as a:
a. Food handler? . . . . ❒ Yes ❒ No ❒ Unknown
b. Health care worker? . . . . ❒ Yes ❒ No ❒ Unknown
c. Child care worker? . . . . ❒ Yes ❒ No ❒ Unknown

If any of the above are "yes," *specify occupation (exact job title), name, and location of employment:* ____________

____

15. Is patient enrolled in: ❒ Childcare center *or* ❒ Family day care
❒ Preschool *or* ❒ Other childcare: ____________ *or* ❒ Unknown

16. Outcome of patient: ❒ Alive *or* ❒ Died, date of death: ___/___/___ (mo day yr) *or* ❒ Unknown

CONTACT MANAGEMENT AND FOLLOW-UP

HOUSEHOLD ROSTER

NAME	AGE	OCCUPATION	DIARRHEA (7 days before or after index case) Yes	No	Unknown	ONSET DATE mm/dd/yy	COMMENTS
			❐	❐	❐	___/___/___	
			❐	❐	❐	___/___/___	
			❐	❐	❐	___/___/___	

While symptomatic, did the case or any household member with diarrhea prepare food for any public or private gatherings? ❐ Yes ❐ No

❐ Unknown

If yes, please provide details:

If the case or an ill household member is a food handler, health care worker with direct patient contact, child care worker, or attends day care, please provide details about site, job description, dates worked/attended during communicable period for each ill person.

NAME	DETAILS ABOUT JOB SITE	JOB DESCRIPTION	DATES WORKED AND/OR ATTENDED DURING COMMUNICABLE PERIOD

ADDITIONAL INFORMATION OR COMMENTS

DATA COLLECTOR INFORMATION

Print name of person completing this form	Date	Telephone number ( )
Agency name		

NOTE: If patient was hospitalized, please attach a copy of the discharge summary, if possible.

SUMMARY OF FOLLOW-UP AND COMMENTS—FOR COUNTY USE

❐ Hygiene education provided
❐ Restaurant inspection
❐ Follow-up of other household members
❐ Testing of home/other water supply
❐ Day care or preschool inspection
❐ Work or day care restriction for case
❐ Investigation of raw milk dairy

CASE DEFINITION

CDC/MMWR, May 2, 1997/Vol. 46/No. RR-10 "Case Definition for Infectious Conditions Under Public Health Surveillance."

***Escherichia coli* O157:H7 (Revised 9/96)**

Case definition/clinical description:

An infection of variable severity characterized by diarrhea (often bloody) and abdominal cramps. Illness may be complicated by hemolytic uremic syndrome (HUS) or thrombotic thrombocytopenic purpura (TTP); asymptomatic infections also may occur.

Laboratory criteria for diagnosis:

- Isolation of *Escherichia coli* O157:H7 from a specimen or
- Isolation of Shiga toxin-producing *E. coli* O157:NM from a clinical specimen.*

Case classification

Suspected: A case of postdiarrheal HUS or TTP (see HUS case definition).

Probable:
- A case with isolation of *E. coli* O157 from a clinical specimen, pending confirmation of H7 or Shiga toxin; ***or***
- A clinically compatible case that is epidemiologically linked to a confirmed or probable case

Confirmed: A case that is laboratory confirmed.

Comment

Laboratory-confirmed isolates are reported via the Public Health Laboratory Information System (PHLIS), which is managed by the Foodborne and Diarrheal Diseases Branch, Division of Bacterial and Mycotic Diseases, National Center for Infectious Diseases, CDC. Both probable and confirmed cases are reported to the National Notifiable Diseases Surveillance System (NNDSS), but only confirmed cases are reported to PHLIS. Confirmation is based on laboratory findings, and clinical illness is not required.

*Strains of *E. coli* O157 that have lost the flagellar "H" antigen become nonmotile and are designated "NM."

Hemolytic Uremic Syndrome, Postdiarrheal (Revised 9/96)

Clinical Description

Hemolytic uremic syndrome (HUS) is characterized by the acute onset of microangiopathic hemolytic anemia, renal injury, and low platelet count. Thrombotic thrombocytopenic purpura (TTP) also is characterized by these features but can include central nervous system (CNS) involvement and fever and may have a more gradual onset. Most cases of HUS (but few cases of TTP) occur after an acute gastrointestinal illness (usually diarrheal).

Laboratory Criteria for Diagnosis

The following are both present at some time during the illness:

- Anemia (acute onset) with microangiopathic changes (i.e., schistocytes, burr cells, or helmet cells) on peripheral blood smear and
- Renal injury (acute onset) evidenced by either hematuria, proteinuria, or elevated creatinine level (i.e., $\geq$1.0 mg/dL in a child aged $<$13 years or $\geq$1.5 mg/dL in a person aged $\geq$13 years, or $\geq$ 50% increase over baseline).

Note: A low platelet count can usually, but not always, be detected early in the illness, but it may then become normal or even high. If a platelet count obtained within seven days after onset of the acute gastrointestinal illness is not $<150{,}000/mm^3$, other diagnoses should be considered.

Case Classification

Probable:
- *An acute illness diagnosed as HUS or TTP that meets the laboratory criteria in a patient who does not have a clear history of acute or bloody diarrhea in preceding three weeks or*
- *An acute illness diagnosed as HUS or TTP, that (a) has onset within three weeks after onset of an acute or bloody diarrhea and (b) meets the laboratory criteria except that microangiopathic changes are not confirmed.*

Confirmed: An acute illness diagnosed as HUS or TTP that both meets the laboratory criteria and began within three weeks after onset of an episode of acute or bloody diarrhea.

Comment

Some investigators consider HUS and TTP to be part of a continuum of disease. Therefore, criteria for diagnosing TTP on the basis of CNS involvement and fever are not provided because cases diagnosed clinically as postdiarrheal TTP also should meet the criteria for HUS. These cases are reported as postdiarrheal HUS.