

**North Carolina Department of Health and Human Services
Division of Public Health • Epidemiology Section
Communicable Disease Branch**



ATTENTION HEALTH CARE PROVIDERS:

Please report relevant clinical findings about this disease event to the local health department.

Durham County Health Department
Communicable Disease Control
414 East Main Street
Durham, NC 27701

Telephone: (919) 560-7600
Fax: (919) 560-7716

**E. COLI INFECTION, SHIGA TOXIN PRODUCING
Confidential Communicable Disease Report—Part 2
NC DISEASE CODE: 53**

REMINDER to Local Health Department staff: If sending this form to the Health Care Provider, remember to attach a cover letter from your agency indicating the part(s) of the form the provider should complete.

Patient's Last Name	First	Middle	Suffix	Maiden/Other	Alias	Birthdate (mm/dd/yyyy) / /
						SSN



Verify if lab results for this event are in NC EDSS. If not present, enter results.

Isolation of Shiga toxin-producing Escherichia coli from a clinical specimen. Escherichia coli O157:H7 isolates may be assumed to be Shiga toxin-producing. For all other E. coli isolates, Shiga toxin production or the presence of Shiga toxin genes must be determined to be considered STEC.

Specimen Date	Specimen #	Specimen Source	Type of Test	Test Result(s)	Description (comments)	Result Date	Lab Name—City/State
/ /						/ /	
/ /						/ /	
/ /						/ /	



Is/was patient symptomatic for this disease? Y N U

If yes, symptom onset date (mm/dd/yyyy): ___/___/___

CHECK ALL THAT APPLY:

Fever Y N U

- Yes, subjective No
- Yes, measured Unknown

Highest measured temperature _____

How temperature taken: _____

Fever onset date (mm/dd/yyyy): ___/___/___

Nausea Y N U

Vomiting Y N U

Abdominal pain or cramps Y N U

Diarrhea Y N U

If yes, date of onset (mm/dd/yyyy): ___/___/___

Describe (select all that apply)

- Bloody
- Non-bloody
- Watery
- Other

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

Hematuria (urinalysis >5 RBC/hpf or positive for blood) Y N U

Proteinuria Y N U

Acute renal insufficiency Y N U

Acute renal failure Y N U

Elevated creatinine Y N U

Hemolytic uremic syndrome (HUS) Y N U

Thrombotic thrombocytopenic purpura (TTP) Y N U

Thrombocytopenia Y N U

Platelet count: _____

Anemia Y N U

Acute hemolytic anemia Y N U

Acute with microangiopathic changes Y N U

Hemoglobin <11 Y N U

Hematocrit <33 Y N U

Other symptoms, signs, clinical findings, or complications consistent with this illness Y N U

Specify:

REASON FOR TESTING

Why was the patient tested for this condition?

- Symptomatic of disease
- Screening of asymptomatic person with reported risk factor(s)
- Exposed to organism causing this disease (asymptomatic)
- Household contact to a person reported with this disease
- Other, specify: _____
- Unknown

TREATMENT

Did the patient receive an antibiotic for this diarrheal illness? Y N U

HOSPITALIZATION INFORMATION

Was patient hospitalized for this illness >24 hours? Y N U

1. Hospital name: _____

City, State: _____

Hospital contact name: _____

Telephone: (____) _____ - _____

Admit date (mm/dd/yyyy): ___/___/___

_____/_____/____

Discharge date (mm/dd/yyyy): ___/___/___

_____/_____/____

If applicable:

2. Hospital name: _____

City, State: _____

Hospital contact name: _____

Telephone: (____) _____ - _____

Admit date (mm/dd/yyyy): ___/___/___

Discharge date (mm/dd/yyyy): ___/___/___

Patient's Last Name	First	Middle	Suffix	Maiden/Other	Alias	Birthdate (mm/dd/yyyy) / /
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ISOLATION/QUARANTINE/CONTROL MEASURES

Restrictions to movement or freedom of action? Y N

Check all that apply:

Work Sexual behavior
 Child care Blood and body fluid
 School Other, specify _____

Date control measures issued: _____
Date control measures ended: _____

Was patient compliant with control measures? Y N

Did local health director or designee implement additional control measures? (example: cohort classrooms, special cleaning, active surveillance, etc.)..... Y N

If yes, specify: _____

Were written isolation orders issued?.. Y N

If yes, where was the patient isolated? _____

Date isolation started? _____
Date isolation ended? _____

Was the patient compliant with isolation? Y N

Were written quarantine orders issued? Y N

If yes, where was the patient quarantined? _____

Date quarantine started? _____
Date quarantine ended? _____

Was the patient compliant with quarantine?..... Y N

TRAVEL/IMMIGRATION

The patient is:

Resident of NC
 Resident of another state or US territory
 Foreign Visitor
 Refugee
 Recent Immigrant
 Foreign Adoptee
 None of the above

Did patient have a travel history during the 10 days prior to onset of symptoms? Y N U

List travel dates and destinations:
From ____/____/____ to ____/____/____

Does patient know anyone else with similar symptom(s) who had the same or similar travel history?..... Y N U

List persons and contact information:

In the 3 months prior to symptom onset, did anyone in the patient's household travel outside the US or Canada? Y N U

List persons and contact information:

List travel dates and destinations:
From ____/____/____ to ____/____/____

Additional travel/residency information:

OTHER EXPOSURE INFORMATION

Does the patient know anyone else with similar symptoms? Y N U

If yes, specify: _____

During the 10 days prior to onset of symptoms, did the patient have contact with sewage or human excreta?..... Y N U

CHILD CARE/SCHOOL/COLLEGE

Patient in child care? Y N U

Patient a child care worker or volunteer in child care? Y N U

Patient a parent or primary caregiver of a child in child care? Y N U

Is patient a student?..... Y N U

Type of school: _____

Is patient a school WORKER / VOLUNTEER in NC school setting? Y N U

Give details: _____

CLINICAL OUTCOMES

Discharge/Final diagnosis: _____

Survived? Y N U

Died?..... Y N U

Died from this illness? Y N U

Date of death (mm/dd/yyyy): ____/____/____

Notes: _____

BEHAVIORAL RISK & CONGREGATE LIVING

During the 10 days prior to onset of symptoms, did the patient live in any congregate living facilities (dormitories, barracks, camps, long term care facilities, commune, boarding school, shelter, etc.)? Y N U

Name of facility: _____
Dates of contact: _____

During the 10 days prior to onset of symptoms, did the patient attend social gatherings or crowded settings? Y N U

If yes, specify: _____

In what setting was the patient most likely exposed?

<input type="checkbox"/> Restaurant	<input type="checkbox"/> Place of Worship
<input type="checkbox"/> Home	<input type="checkbox"/> Outdoors, including woods or wilderness
<input type="checkbox"/> Work	<input type="checkbox"/> Athletics
<input type="checkbox"/> Child Care	<input type="checkbox"/> Farm
<input type="checkbox"/> School	<input type="checkbox"/> Pool or spa
<input type="checkbox"/> University/College	<input type="checkbox"/> Pond, lake, river or other body of water
<input type="checkbox"/> Camp	<input type="checkbox"/> Hotel / motel
<input type="checkbox"/> Doctor's office/ Outpatient clinic	<input type="checkbox"/> Social gathering, other than listed above
<input type="checkbox"/> Hospital In-patient	<input type="checkbox"/> Travel conveyance (airplane, ship, etc.)
<input type="checkbox"/> Hospital Emergency Department	<input type="checkbox"/> International
<input type="checkbox"/> Laboratory	<input type="checkbox"/> Community
<input type="checkbox"/> Long-term care facility /Rest Home	<input type="checkbox"/> Other (specify) _____
<input type="checkbox"/> Military	<input type="checkbox"/> Unknown
<input type="checkbox"/> Prison/Jail/ Detention Center	

CASE INTERVIEWS/INVESTIGATIONS

Was the patient interviewed? Y N U

Date of interview (mm/dd/yyyy): ____/____/____

Were interviews conducted with others?..... Y N U

Who was interviewed? _____

Were health care providers consulted? Y N U

Who was consulted? _____

Medical records reviewed (including telephone review with provider/office staff)? Y N U

Specify reason if medical records were not reviewed:

Notes on medical record verification:

Patient's Last Name	First	Middle	Suffix	Maiden/Other	Alias	Birthdate (mm/dd/yyyy) / /
						SSN / /

FOOD RISK AND EXPOSURE

During the 10 days prior to onset of symptoms, did the patient eat any raw or undercooked meat or poultry? Y N U

Specify meat/poultry: _____
Specify place of exposure: _____

Describe the source of drinking water used in the patient's home (check all that apply):
 Bottled water supplied by a company
 Bottled water purchased from a grocery store
 Municipal supply (city water)
 Well water

Does the patient have a water softener or water filter installed inside the house to treat their water? Y N U

During the 10 days prior to onset of symptoms, did the patient drink any bottled water? Y N U

Specify type/brand: _____

Where does the patient/patient's family typically buy groceries?

Store name: _____
Store city: _____
Shopping center name/address: _____

During the 10 days prior to onset of symptoms, did the patient:

Eat any food items that came from a produce stand, flea market, or farmer's market? Y N U

Specify source: _____

Eat any food items that came from a store or vendor where they do not typically shop for groceries? Y N U

Specify source(s): _____

During the 10 days prior to onset, was the patient: Employed as food worker? Y N U

Where employed? _____

Specify job duties: _____

Where did the patient work? _____

What dates did the patient work? _____

Employed as food worker while symptomatic? Y N U

Where did the patient work? _____

What dates did the patient work? _____

What day did the patient return to food service work? _____

Date: _____

Where did patient return to work? _____

Non-occupational food worker? (e.g. potlucks, receptions) during contagious period? Y N U

Where employed? _____

Specify dates worked during contagious period: _____

Health care worker or child care worker handling food or medication in the contagious period? Y N U

Where employed? _____

Specify dates worked during contagious period: _____

Comments:

During the 10 days prior to onset of symptoms, did the patient:

Handle raw meat other than poultry? Y N U

Specify type of meat:
 Beef (hamburger/steak, etc)
 Pork (ham, bacon, pork chops, sausage, etc)
 Lamb/mutton
 Wild game, specify: _____
 Other, specify: _____
 Unknown

Handle raw poultry? Y N U

Specify type of poultry:
 Chicken
 Turkey
 Other, specify: _____
 Unknown

Drink unpasteurized milk? Y N U

Specify type of milk:
 Cow
 Goat
 Sheep
 Other, specify: _____
 Unknown

Eat any other unpasteurized dairy products? Y N U

Specify type of product:
 Queso fresco, Queso blanco or other Mexican soft cheese
 Butter
 Cheese from raw milk, specify: _____
 Food made from raw dairy product, specify: _____
 Other, specify: _____

Drink unpasteurized juices or ciders? Y N U

Specify juices or ciders:
 Apple
 Orange
 Other, specify: _____

Eat ground beef/hamburger? Y N U

Eat other beef/beef products? Y N U

Roast
 Steak
 Other, specify: _____

Eat any poultry/poultry product? Y N U

Eat pork/pork products? Y N U

Specify type of pork/pork product:
 Sausage
 Smoked Unsmoked
 Chops
 Roast
 Ham
 Smoked Cured Canned
 Other, specify: _____
 Bacon
 BBQ
 Other, specify: _____

Eat wild game meat (deer, bear, wild boar)? Y N U

Specify type of wild game meat:
 Deer/venison
 Bear
 Wild boar/javelina/feral hog
 Other, specify: _____

Eat other meat / meat products (i.e. ostrich, emu, horse)? Y N U

Specify other meat/meat product:
 Ostrich
 Emu
 Horse
 Other, specify: _____

Eat raw fruit? Y N U

Specify raw fruit:
 Apples
 Bananas
 Oranges

Grapes, specify: _____
 Pears
 Peaches
 Berries, specify _____
 Melon, specify _____
 Mangoes
 Other, specify: _____

Eat raw salads or vegetables other than sprouts? Y N U

Specify raw salad or vegetable:
 Bagged salad greens without toppings, type: _____
 Salad with toppings, specify: _____
 Lettuce, type: _____
 Spinach
 Tomatoes, type: _____
 Cucumbers
 Mushrooms, type: _____
 Onions, type: _____
 Potatoes, type: _____
 Other, specify: _____

Eat sprouts? Y N U

Specify type of sprouts:
 Alfalfa Clover Bean
 Other, specify: _____
 Unknown

Eat fresh herbs? Y N U

Specify:
 Basil Thyme
 Parsley Cilantro
 Oregano Rosemary
 Cumin
 Other, specify: _____

Eat ready-to-eat dried, preserved, smoked, or traditionally prepared meat (i.e. summer sausage, salami, jerky)? Y N U

Specify type of prepared meat:
 Summer sausage, specify: _____
 Salami
 Jerky
 Other, specify: _____

Eat deli-sliced (not pre-packaged) meat? Y N U

Specify type of meat:
 Bologna
 Turkey
 Ham
 Roast beef
 Chicken
 Other, specify: _____

Eat meat stews or meat pies? Y N U

Specify: _____

Eat at a group meal? Y N U

Specify:
 Place of Worship
 School
 Social function
 Other, specify: _____

Name _____

Location _____

Eat food from a restaurant? Y N U

Name: _____

Location: _____

Did the patient ingest breast milk? Y N U

Source of milk: _____

Did the patient ingest infant formula? Y N U

Type: _____

Did the patient eat commercial baby food? Y N U

Type: _____

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						SSN

ANIMAL EXPOSURE

During the 10 days prior to onset of symptoms, did the patient have:
exposure to animals (includes animal tissues, animal products, or animal excreta)? Y N U
 If yes, specify and give details:

Did patient work at or visit a slaughterhouse (abattoir), meat-packing plant, poultry or wild game processing facility? Y N U
 Visited or worked?
 If yes, specify and give details:

Did patient work in a veterinary practice or animal laboratory, animal research setting, biomedical laboratory, or an animal diagnostic laboratory? Y N U
 If yes, specify and give details:

Did patient own, work at, or visit a pet store, animal shelter, and/or animal breeder/wholesaler/distributor? Y N U
 If yes, specify and give details:

Has patient otherwise slaughtered animals or been a butcher, meat cutter, or meat processor? Y N U
 If yes, specify and give details:

Notes:

Did patient work with animal importation? Y N U
 If yes, specify and give details:

Did the patient work at or visit a fair with livestock or a petting zoo? Y N U
 If yes, specify and give details:

Did patient / household contact work at, live on, or visit a farm, ranch, or dairy? Y N U
 If yes, specify and give details:

Did the patient work at or visit a zoo or zoological park? Y N U
 If yes, specify and give details:

Was patient exposed to animals associated with agriculture or aviculture (domestic/semi-domestic animals)? Y N U
 If yes, specify and give details:

WATER EXPOSURE

During the 10 days prior to onset of symptoms, did the patient have recreational, occupational, or other exposure to water, including aerosolized water in household, community or health care settings? Y N U
 If yes, describe in detail giving type of activity, water, route of exposure, water sources, factors contributing to water contamination, and any water treatment methods:

GEOGRAPHICAL SITE OF EXPOSURE

In what geographic location was the patient MOST LIKELY exposed?
 Specify location:
 In NC
 City _____
 County _____
 Outside NC, but within US
 City _____
 State _____
 County _____

Outside US
 City _____
 Country _____
 Unknown

Is the patient part of an outbreak of this disease? Y N

Notes regarding setting of exposure:

***E. coli* infection—Shiga toxin-producing (STEC)**

2005 CDC 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 and the organism may cause extraintestinal infections.

Laboratory criteria for diagnosis

- Isolation of Shiga toxin-producing *Escherichia coli* from a clinical specimen. *Escherichia coli* O157:H7 isolates may be assumed to be Shiga toxin-producing. For all other *E. coli* isolates, Shiga toxin production or the presence of Shiga toxin genes must be determined to be considered STEC.

Case classification

Suspect: A case of postdiarrheal HUS or TTP (see HUS case definition), or identification of Shiga toxin in a specimen from a clinically compatible case without the isolation of the Shiga toxin-producing *E. coli*.

Probable:

- A case with isolation of *E. coli* O157 from a clinical specimen, without confirmation of H antigen or Shiga toxin production, **OR**
- A clinically compatible case that is epidemiologically linked to a confirmed or probable case, **OR**
- Identification of an elevated antibody titer to a known Shiga toxin-producing *E. coli* serotype from a clinically compatible case.

Confirmed: A case that meets the laboratory criteria for diagnosis. When available, O and H antigen serotype characterization should be reported.

Comment

For users of the legacy National Electronic Telecommunications System for Surveillance (NETSS), laboratory-confirmed isolates are also 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. The National Electronic Disease Surveillance System (NEDSS) or NEDSS compatible systems will eventually replace PHLIS and NETSS; users of NEDSS or compatible systems which report to CDC should not report via PHLIS.

Both asymptomatic infections and infections at sites other than the gastrointestinal tract, if laboratory confirmed, are considered confirmed cases that should be reported.