Local ID Number:

California Department of Public Health Center for Infectious Diseases Division of Communicable Disease Control Infectious Diseases Branch Surveillance and Statistics Section MS 7306, P.O. Box 997377 Sacramento, CA 95899-7377

# SHIGA TOXIN-PRODUCING ESCHERICHIA COLI (STEC) AND/OR HEMOLYTIC UREMIC SYNDROME (HUS) CASE REPORT

Check on	e: □ST	EC	without HUS	I	□ STE	C with H	IUS 🗆	HUS without evidence of	f STEC
PATIENT INFORMATION									
Last Name  Social Security Number (9 digits	First Name		DOR (mm/dd		le Name	Age	Suffix  ☐ Years	Primary Language ☐ English ☐ Spanish	
Social Security Number (9 digits	)		DOB (mm/dd	vyyyy)		Age	☐ Months ☐ Days	☐ Other:	
Address Number & Street – Res	idence		•	Apan	tment / L	Jnit Num	ber	☐ Hispanic/Latino ☐ Non-Hispanic/Non-La	atino
City / Town				State	•	Zip	Code	☐ Unknown  Race(s)	
Census Tract	County of Res	idenc	ce	Coun	ntry of Re	esidence			ce descriptions on page 13) m should be based on the
Country of Birth		If n	oot U.S. Born - L	Date of	f Arrival i	in U.S. (r	mm/dd/yyyy)	patient's self-identity or	self-reporting. Therefore, ed the option of selecting
Home Telephone	Cellular	Pho	ne / Pager		Work /	School	Telephone	☐ American Indian or A	
E-mail Address		Other Elec			ntact Info	ormation		— □ Asian <i>(check all that a</i> □ Asian Indian — □ Bangladeshi	apply, see list on page 13) ☐ Korean ☐ Laotian
Work / School Location	cation W			Work / School Contact				☐ Cambodian ☐ Chinese	☐ Malaysian ☐ Pakistani
Gender □ Female □ Trans female / trans male			enderqueer or nentity not listed	ion-bin	•	Unknow	n d to answer	□ Filipino □ Hmong	☐ Sri Lankan ☐ Taiwanese
Pregnant? □ Yes □ No □ Unknown			If Yes, Est. De	elivery				— □ Indonesian □ Japanese — □ Other:	□ Thai □ Vietnamese
Medical Record Number			Patient's Pare	ent/Gua	ardian Na	ame		☐ Black or African-Ame	
Occupation Setting (see list on p	page 12)		Other Describ	e/Spec	cify			<ul><li>☐ Native Hawaiian or O (check all that apply,</li><li>☐ Native Hawaiian</li></ul>	
Occupation (see list on page 12,	)		Other Describ	e/Spec	cify			☐ Fijian ☐ Guamanian ☐ Other:	□ Tongan
								☐ White ☐ Other: ☐ Unknown	
ADDITIONAL PATIENT DE	MOGRAPHIC	S							
Sex Assigned at Birth  ☐ Female ☐ Unknown  ☐ Male ☐ Declined to ans		rose: , lesb	<i>ntation</i> xual or straight iian, or same-ge		oving		tioning, unsu	re, or patient doesn't know ed	☐ Declined to answer ☐ Unknown

California Department of Pul	blic Hea	alth							STEC AND/O	R HUS C	CASE F	REPORT
				First three letters of patient's last name:								
CLINICAL INFORMATION	NC											
Physician Name - Last Name  First Name  Telephone Number												
GROUP SETTING									<b>'</b>			
Attends child care or preschool?  □ Yes □ No □ Unknown  Location / Other Details of Child Care, Preschool, or Skilled Nursing Facilities.							ility					
Lives in skilled nursing facil  ☐ Yes ☐ No ☐ Unknow	-											
SIGNS AND SYMPTOM												
Symptomatic?       Onset Date (mm/dd/yyyy)       Onset Time (hh:mm)       Specify AM/PM       Duration of Acute Symptoms (days)         □ Yes       □ No       □ Unknown       □ AM       □ PM												
Signs and Symptoms	Yes	No	Unk	If Yes, S	pecify as Noted			·				
Diarrhea				Max. nun	mber of stools in 24-	-hr period		Onset date of	diarrhea (mm/dd/y)	yy)		
Bloody diarrhea												
Fever				Highest t	emperature (specify	y °F/°C)						
Vomiting												
Abdominal cramps												
Other signs / symptoms (sp	ecify)											
HEMOLYTIC UREMIC S In order for a patient to be thrombocytopenic purpura	counted	d as a co	onfirme	ed case of p								
Did patient have HUS? (Se □ Yes □ No □ Unknow		definitio	n on pa	age 12)	If patient had HU      Anemia with     Renal injury     Thrombocyto	n microangio (hematuria,	pathic chan	ges:	☐ Yes	□ No □ No □ No	□Un	iknown iknown iknown
Did patient have thrombotic changes, fever, and renal of			enic pu	rpura (TTF	?)? TTP is a syndro	ome consisti	ing of microa	angiopathic ane	emia, thrombocytop	enic purp	oura, n	eurologic
☐ Yes ☐ No ☐ Unknow		1-160001			Did notiont hou	:- !!!!C or T	TD that had		Iff anast of dis			
Onset Date of HUS or TTP	(mm/ac	<i>d/yyyy)</i>			□ Yes □ No		_	in within 3 wee	ks after onset of dia	arrnea?		
Did the patient require dialy  ☐ Yes ☐ No ☐ Unknow				_	· ·	ent receive antimicrobials after onset of diarrhea but before onset of HUS or TTP? □ No □ Unknown						
PAST MEDICAL HISTO	RY											
Did the patient take any ani		in the 3	30 days	prior to illi	ness onset?	If Yes, spe	ecify antibioti	c(s)				
Did the patient have other to Yes □ No □ Unknow	underlyi	ing conc	ditions r	elevant to	present illness?	If Yes, spe	ecify type of o	condition				
Other (specify)												
HOSPITALIZATION												

If Yes, how many total hospital nights?

If there were any ER or hospital stays related to this illness, specify details in the Hospitalization – Details section on page 3.

Did patient visit the emergency room for illness?

☐ Yes ☐ No ☐ Unknown

☐ Yes ☐ No ☐ Unknown

Was patient hospitalized?

During any part of the hospitalization, did the patient stay in an intensive care unit (ICU) or a critical care unit (CCU)?

☐ Yes ☐ No ☐ Unknown

STEC AND/OR HUS CASE REPORT									
First three letters of patient's last name:									

HOSPITALIZATION -	HOSPITALIZATION – DETAILS								
Hospital Name 1	Street Address					Admit Date (mm/dd/yyyy)			
	City				Discharge / Transfer Date (mm/dd/yyyy)				
	State	Zip Code	Telephone Number			Medical Record	Number	Discharge Diagnosis	
Hospital Name 2	Street A	Address				Admit Date (mm	/dd/yyyy)		
	City					Discharge / Trar	nsfer Date	e (mm/dd/yyyy)	
	State	Zip Code	Telephone Number			Medical Record	Medical Record Number   Discharge Diagnosis		
TREATMENT / MANA	GEMEI	ντ							
Received treatment (e.g. ☐ Yes ☐ No ☐ Unknown		ics, probiotics	intravenous fluids)?	If Yes, spec	cify the trea	atments below.			
TREATMENT / MANA	GEME	NT DETAILS							
Treatment Type 1  ☐ Antibiotic ☐ Other	Tre	eatment Name		Date Starte	Date Started (mm/dd/yyyy)			Date Ended (mm/dd/yyyy)	
Treatment Type 2  ☐ Antibiotic ☐ Other	Tre	atment Name	Date Started (mm/dd/yyyy) Date				Date Er	ate Ended (mm/dd/yyyy)	
OUTCOME									
Outcome?  □ Survived □ Died □	] Unknov	vn	If Survived, Survived as of		(m	nm/dd/yyyy)	Date of	f Death (mm/dd/yyyy)	
LABORATORY INFO	RMATIC	N							
For details on the laborate	tory crite	ia for diagnos	is and clarification of case cl	assification, plea	ase refer to	o the case definition	on on pa	ge 11.	
Note: Per Title 17, Shiga Microbial Diseases Labo				n-O157 isolates	s must be t	forwarded to a pu	blic healt	h laboratory (PHL) or CDPH	
CLINICAL LABORAT	ORY R	ESULTS – C	ulture and Culture Inde	pendent Diag	nostic T	esting [CIDT], i	includin	ng Shiga Toxin	
Specimen Type  ☐ Stool ☐ Other (specif	fy):		<i>Type of Shiga Toxin Test</i> ⊐ Enzyme immunoassay (El	A) □PCR [	∃ Vero cell	assay □ Unkno	own □O	ther (specify):	
Shiga Toxin Test Result  ☐ Stx positive ☐ Stx ne	gative [		If Stx positive, specify type o ☐ Stx 1 ☐ Stx 2 ☐ Stx 1		Inknown	☐ Other (specify)	):		
Other CIDT identification for STEC?  If CIDT positive, specify result(s)  Yes □ No □ Unknown □ Cther (specify):							(specify):		
			Type of Other CIDT  ☐ PCR ☐ Unknown ☐ Ot	her (specify):					
Clinical laboratory STEC ☐ Yes ☐ No ☐ Unkno				<i>result(s)</i> EC non-O157 gative for STEC		ther (specify):			
Collection Date (mm/dd/)	уууу)		Laboratory Name		Laborato	ry CLIA Number	7	Telephone Number	
				-					

STEC	AND/OR	HUS	CASE	REPORT
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First three letters of		
patient's last name:		

CLINICAL LABORATORY RESULTS – Culture and Culture Independent Diagnostic Testing [CIDT], including Shiga Toxin (continued)									
	ANTIMICROBIAL SUSCEPTIBILITY TESTING								
Antimicrobial susceptibility testing	completed?	Ampicillin:			□Susceptible	□ Interm	ediate	□Resistant	□ Not done
☐ Yes ☐ No ☐ Unknown Azithromycin:					□Susceptible	ediate	□Resistant	□ Not done	
		Ciprofloxacin:			□ Susceptible	□ Interm	☐ Intermediate ☐ Resistant ☐ Not o		
Attach additional results or upload CalREDIE electronic filing cabinet.		TMP-SMX:			□ Susceptible	□ Interm	ediate	□ Resistant	□ Not done
		Third-generation cephalosporin (specify):			□ Susceptible	□ Interm	☐ Intermediate ☐ Resistant ☐ Not done		
		Other antimicrobial (specify):			□ Susceptible	☐ Intermediate ☐ Resistant ☐ Not done			□ Not done
CLINICAL LABORATORY RE	SULTS – C	ther Tests for Er	nteric Diag	gnosis (e.g.,	serology or mi	xed ente	ric infe	ection)	
Specimen Type 1	Type of Test	t (include non-cultur	e diagnostic	testing results	5)	Test	Results		
	Collection D	ate (mm/dd/yyyy)	Laboratory	/ Name		Telep	hone N	lumber	
Specimen Type 2	Type of Test	t (include non-cultur	e diagnostic	testing results	5)	Test	est Results		
	Collection D	Pate (mm/dd/yyyy)	Laboratory	/ Name		Telep	Telephone Number		
CDPH MICROBIAL DISEASE. ***Please enter final confirmate			OTHER R	EFERENCE	PUBLIC HEAL?	TH LABC	RATO	RY (PHL) RE	SULTS
Was isolate or broth forwarded to a □ Yes □ No □ Unknown	a local public	health lab? (require	d field)	Local Lab ID	Number				
Was isolate or broth forwarded to I	MDL? (require	ed field)		State Lab ID	Number				
Specimen Type  ☐ Stool ☐ Other (specify):				Collection Da	te (mm/dd/yyyy)				
LI Stool Liber (specify)	<del></del>	S	HIGA TO	I KIN RESULT:	 S				
Shiga Toxin Test Result (required	field)	If Stx positive, spe							
☐ Stx positive ☐ Stx negative ☐	Unknown	□ Stx 1 □ Stx 2	2 🗆 Stx 1 a	and Stx 2 🔲 (	Cytopathic effect	□ Unkno		Other:	
Type of Shiga Toxin Test  ☐ Enzyme immunoassay (EIA)	□PCR □V	ero cell assay   □ Uı	nknown 🛭	Other (specify)	):	Laborato  □ MDL	•		
			STOOL (	CULTURES		•			
Culture Result (required field)  □ E. coli O157		157, specify flagella Non-motile □ Unk							
☐ STEC non-O157 ☐ Not done ☐ Negative ☐ Unknown	If STEC no □ O26 □ O45	on-0157, specify se.	121 🗆	E. coli not O26 Other (specify)	3, O103, O111, O1 ):	l21, O145,	or O15	7 (O-Undeterm	ined)
☐ Other (specify):		on-O157 and H antigotile □ Other:	gen identifie	ed, specify H ar	ntigen				
	Laboratory						Telep	hone Number	
							•		

First three letters of		
patient's last name:		

CDPH MICROBIAL DISEAS ***Please enter final results				R OTHER	REFERE	NCE PUB	LIC HEALTH L	ABOR	RATORY (PHL)	RESULTS
			N	/OLECUL	AR DIAG	NOSTICS				
Was PFGE completed?	Xbal Pattern # Blnl Pattern #				rn #		CDC Cluster ID	) #		
☐ Yes ☐ No ☐ Unknown  Was MLVA completed?										
☐ Yes ☐ No ☐ Unknown		If Yes, specify results   Laboratory Name     □ MDL   □ PHL:								
Was whole genomic sequencing □Yes □No □Unknown	(WGS) comple	eted?	If Yes, WGS	S ID#	Speci	fy results or	attach	<i>Labora</i> ☐ MD	atory Name L □ PHL:	
EPIDEMIOLOGIC INFORMA	ATION							טועו ט	L UFIIL	
			BATION PE		to	R TO ILLNE				
TRAVEL HISTORY										
<i>Did patient travel <b>outside coun</b></i> : □ Yes □ No □ Unknown	ty of residend	e durir	ng the <b>incub</b> a	ation perio	d?		If Yes, specify a	II locatio	ons and dates be	low.
TRAVEL HISTORY - DETA	ILS									
Travel Type	State	C	Country	Other loc	ation detai	ils (city, res	sort, etc.)		Travel Started nm/dd/yyyy)	Date Travel Ended (mm/dd/yyyy)
☐ Domestic ☐ Unknown ☐ International										
☐ Domestic ☐ Unknown ☐ International										
☐ Domestic ☐ Unknown ☐ International										
FOOD HISTORY - OUTSIDE	E HOME									
Did patient consume food or dri the incubation period?  ☐ Yes ☐ No ☐ Unknown	nk prepared o	utside (	of the home (	during			of place (e.g., rest date, and items o			nd, friend's
FOOD HISTORY - OUTSIDE	E HOME – D	ETAIL	S (Include	restaura	nts, partie	es, take ou	ıt, food trucks,	etc.)		
Name of Place 1	Local	tion (cit	ty, state)				D	ate (mi	m/dd/yyyy)	
	Items	Consu	umed							
Name of Place 2	Local	tion (cit	ty, state)				D	ate (mi	m/dd/yyyy)	
	Items Consumed									
Name of Place 3	Local	tion (cit	ty, state)				D	ate (mi	m/dd/yyyy)	
	Items	Consu	umed							
Name of Place 4	Local	tion (cit	ty, state)				D	ate (mi	m/dd/yyyy)	
	Items	Consu	umed							

STEC AND/OR HUS CASE REPORT	Т

First three letters of		
patient's last name:		

FOOD HISTORY - GROCERIES	;									
				ROCERIES CONSUMED DURII 5, AS WELL AS FARMERS' MA						
Store / Location 1	Add	Address / Cross-streets								
	City	y				State				
Store / Location 2	Add	dress / (	Cross-st	reets						
	City	y				State				
Store / Location 3	Add	Address / Cross-streets								
	City	y								
Store / Location 4	Add	dress / (	Cross-st	reets						
	City	City State								
FOOD HISTORY (For all "Yes"	respo	nses,	please	prompt for details as spe	cified.)					
DID THE PATI	ENT E	AT OR	DRINK .	ANY OF THE FOLLOWING ITE	EMS DURING THE INC	UBATIO	N PERI	IOD?		
Food Item	Ye	s No	Unk	If Yes, Specify as Noted			1			
Raw (unpasteurized) milk produced by a certified raw milk dairy				Type(s) e.g., cow, goat	Brand(s)		Where	purchased		
Raw milk from other sources (e.g., directly from farm or cow)				Type(s)	Describe Loca		Location	ition		
Other raw milk products such as colostrum, cream, kefir, cheese				Type(s) of product	Describe (e.g., brand, etc.) When		Where	re purchased		
Ground beef (e.g., hamburger, meatballs, meatloaf, pasta, etc.)  eaten or handled in the home				Purchased in bulk (e.g., chub, plastic wrapped on styrofoam container)?	Was the bulk ground undercooked or raw?  ☐ Yes ☐ No ☐ Brand(s)	•		Where purchased		
				Purchased as preformed pattie	es? Were the patties undercooked or r			Where purchased		
				☐ Yes ☐ No ☐ Unknown	☐ Yes ☐ No [	☐ Yes ☐ No ☐ Unknown  Brand(s)		_		
				Type(s)	Branu(s)					
				Describe (include as much information as possible, including fresh or frozen, % lean, organic, # lbs purchased, etc.)						
				Was the ground beef: (chec		handled				
Ground beef eaten outside the home (e.g., restaurant)				Eaten undercooked or raw?	How was it served		l	Where purchased		
Other beef				Yes No Unknown Type	Hamburger Other	er:		Where purchased		
Other book				**						
Untreated Water				Source(s)						
Venison or other game meat				Type(s)	Brand(s)		1	Where purchased		
Dried meat (e.g., salami, jerky)				Type(s)	Brand(s)		V	Where purchased		

STEC AND/OR	HUS CAS	SE REF	ORT

First three letters of		
patient's last name:		

Food Item	Yes	No	Unk	If Yes, Sp	pecify as Noted				
Unpasteurized juice or cider				Type(s)		Brand(s	)	W	/here purchased
<b>Leafy green vegetable (e</b> .g., spinach, lettuce, kale, cilantro, basil				Type(s)		Brand(s	;)	W	here purchased
Raw vegetables (Excluding leafy greens vegetable				Type(s)		Brand(s)	)	N	/here purchased
Raw sprouts, such as from a salad bar, sandwich, stir fry, etc.						roccoli spi lover spro		ed sprouts ish (daikon) spro	□ Other: outs □ Unknown
DID THE PATIENT ATTEND O	R PART	ICIPAT	ΓE IN A	ANY OF TH	HE FOLLOWING E	VENTS O	R ACTIVITIES D	DURING THE IN	CUBATION PERIOD?
Event / Activity		Ye	s	No Un	k If Yes, Specif	y as Note	ed		
Recreational water (e.g., pools, water $\mbox{\sc p}$ interactive fountain)	oarks,				Location				
Untreated recreational water (e.g., lake ocean)	es				Location				
Ranches, farms, or livestock raising/pro sites	cessing				Location				
Animal exhibits (e.g., petting zoos, fairs	S				Location				
Other activities of interest					Describe				
WAS THE PATIENT EMPLOYED IN	(OR SP	ENT S	IGNIFI	CANT TIM	IE IN) ANY OF THE	FOLLOV	VING ACTIVITIE	S DURING THE	E INCUBATION PERIOD?
Work with animals or animal products					Describe				
Contact with children in day care					Describe				
Other exposures of interest					Describe				
PATIENT CLEARANCE	NFO	RMA	ION						
Did this patient require clearance to re ☐ Yes ☐ No ☐ Unknown	turn to a	laycare	, scho	ol or work?	If Yes, please p	ovide clea	arance details be	elow.	
Was clearance completed?  ☐ Yes ☐ No	If Yes,	Date o	of First	Clearance	e Specimen (mm/dd	/уууу)	If Yes, Date of	Final Clearance	Specimen (mm/dd/yyyy)
		specify							
Clearance Issues (including use of antil	biotics to	) facilita	ate clea	arance, etc	c.) / Comments				
PATIENT EMPLOYMENT/SITUA					CLEARANCE				
Employer/Situation 1 (place of employn	nent, day	care n	ame, e	etc.)				Telephone Nu	mber
Street Address				City	,			State	Zip Code
Employer/Situation 2 (place of employr	nent, da	ycare i	name,	etc.)				Telephone Nun	nber
Street Address				City	/			State	Zip Code

STEC AND/OR HUS CASE REPOR					
First three letters of					
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Name 2 Rela		Age Similar ill. □ Yes □ Age	Iness? □ No □	Please provender  Unknown	Occupation Occupation Occupation Occupation	Sensitive occupation / situation?  Yes No Unknown  Comment  Sensitive occupation / situation?	
Name 1  Rela  Telep  Name 2  Rela  Telep	tionship  phone Number  tionship	Similar illi □ Yes □	Iness? □ No □	Unknown	Onset Date (mm/dd/yyyy)	☐ Yes ☐ No ☐ Unknown  Comment	
Telepolaries 2 Rela	ohone Number tionship	Similar illi □ Yes □	Iness? □ No □	Unknown	Onset Date (mm/dd/yyyy)	☐ Yes ☐ No ☐ Unknown  Comment	
Name 2 Rela	tionship	☐ Yes ☐	□ No □				
Telep	•		Ge	ender	Occupation	Sensitive occupation / situation?	
	phone Number		Age Ge			☐ Yes ☐ No ☐ Unknown	
Name 3 Rela		Similar illness?  ☐ Yes ☐ No ☐		Unknown	Onset Date (mm/dd/yyyy)	Comment	
	tionship	Age Gender  Similar illness?  □ Yes □ No □ Unknow		ender	Occupation	Sensitive occupation / situation? ☐ Yes ☐ No ☐ Unknown	
Telep	phone Number			Unknown	Onset Date (mm/dd/yyyy)	Comment	
Name 4 Rela	tionship	Age			Occupation	Sensitive occupation / situation?  ☐ Yes ☐ No ☐ Unknown	
Telep	phone Number	ber Similar illness? ☐ Yes ☐ No ☐ Unknown			Onset Date (mm/dd/yyyy)	Comment	
ILL CONTACTS							
Any contacts with similar illness (inc □ Yes □ No □ Unknown	luding househol	d contacts)	?	If Yes, spec	cify details below.		
ILL CONTACTS – DETAILS							
Name 1	ne 1 Age Gender Telep		Telephone Number		Type of Contact / Relations	hip Date of Contact (mm/dd/yyyy)	
Street Address City					Exposure Event	Illness Onset Date (mm/dd/yyyy)	
		State		Zip Code	Occupation	Sensitive occupation / situation? ☐ Yes ☐ No ☐ Unknown	
	Laboratory confirmed?  ☐ Yes ☐ No ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐				CalREDIE ID (if applicable)	)	
	Age Gender Telepho		Telephone Number		Type of Contact / Relations	, , , , , , , , , , , , , , , , , , , ,	
	Street Address				Exposure Event	Illness Onset Date (mm/dd/yyyy)	
	City Sta		State Zip Code		Occupation	Sensitive occupation / situation?  ☐ Yes ☐ No ☐ Unknown	
	Laboratory confirmed?  ☐ Yes ☐ No ☐ Unknown				CalREDIE ID (if applicable)		
Remarks							

STEC AND/O	RHUS	CASE F	REPORT	
First three letters of				
patient's last name:				

REPORTING AGENCY							
Investigator Name	Local Health Jurisdiction Telephone Number		Date Form Comple	Date Form Completed (mm/dd/yyyy)			
First Reported By		Health ed	lucation provided?	Patient restriction	Patient restriction / clearance needed?		
□Clinician □ Laboratory □ Other (specify):		□ Yes □	No ☐ Unknown	□Yes □No □	Unknown		
EPIDEMIOLOGICAL LINKAGE				·			
Epi-linked to known case?	ntact Name / Case Number						
□Yes □ No □Unknown							
DISEASE CASE CLASSIFICATION	V						
Case Classification (see case definition	on pages 11-12)						
□Confirmed □ Probable □ Suspect							
OUTBREAK							
Part of known outbreak? If Yes, ex	ktent of outbreak:						
☐ Yes ☐ No ☐ Unknown ☐ One C	e CA jurisdiction ☐ Multiple CA jurisdictions ☐ Multistate ☐ International ☐ Unknown Other:						
Mode of Transmission			Vehicle of Outbreak	Pattern 1 ID number	Pattern 2 ID number		
☐ Point source ☐ Person-to-person	☐ Unknown ☐ Other:						
STATE USE ONLY							
State Case Classification  ☐ Confirmed ☐ Probable ☐ Suspe	ect □ Not a case □ Need addi	tional infori	mation				
CASE DEFINITION							

# SHIGA TOXIN-PRODUCING ESCHERICHIA COLI (STEC) (2018)

#### **BACKGROUND**

Shiga-toxin producing Escherichia coli (STEC), also referred to as Enterohemorrhagic E. coli (EHEC), can cause illness that ranges from mild diarrhea to bloody diarrhea and life-threatening hemolytic uremic syndrome (HUS). STEC are categorized into serogroups by their somatic O antigen. The STEC serogroup most commonly identified and associated with severe illness in the United States is E. coli O157; however, there are over 50 other serogroups that can cause illness.

# **CLINICAL CRITERIA**

An infection of variable severity characterized by diarrhea (often bloody) and/or abdominal cramps. Illness may be complicated by HUS (note that some clinicians still use the term thrombotic thrombocytopenic purpura [TTP] for adults with post-diarrheal HUS).

# LABORATORY CRITERIA FOR DIAGNOSIS

# Confirmatory laboratory evidence

- Isolation of E. coli O157:H7 from a clinical specimen, OR
- Isolation of E. coli from a clinical specimen with detection of Shiga toxin or Shiga toxin genes.

# Supportive laboratory evidence

- · Isolation of E. coli O157 from a clinical specimen without confirmation of H antigen, detection of Shiga toxin, or detection of Shiga toxin genes, OR
- Identification of an elevated antibody titer against a known Shiga toxin-producing serogroup of E. coli, OR
- Detection of Shiga toxin or Shiga toxin genes in a clinical specimen using a culture-independent diagnostic test (CIDT) and no known isolation of Shigella from a clinical specimen, OR
- Detection of E. coli O157 or STEC/EHEC in a clinical specimen using a CIDT.

#### **EPIDEMIOLOGIC LINKAGE**

- · A clinically compatible illness in a person that is epidemiologically linked to a confirmed or probable case with laboratory evidence, OR
- A clinically compatible illness in a person that is a member of a risk group as defined by public health authorities during an outbreak.

Criteria to distinguish a new case of this disease or condition from reports or notifications which should not be enumerated as a new case for surveillance:

- A new case should be created when a positive laboratory result is received more than 180 days after the most recent positive laboratory result associated with a previously reported case in the same individual, OR
- When two or more different serogroups/serotypes are identified in one or more specimens from the same individual, each serogroup/serotype should be reported as a separate case.

California Department of Public Health	

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First three letters of				
patient's last name:				

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# **CASE DEFINITION** (continued)

#### CASE CLASSIFICATION

#### Confirmed

• A Person that meets the confirmatory laboratory criteria for diagnosis.

#### **Probable**

- A person with isolation of E. coli O157 from a clinical specimen without confirmation of H antigen, detection of Shiga toxin or detection of Shiga toxin genes, OR
- A clinically compatible illness in a person with identification of an elevated antibody titer against a known Shiga toxin-producing serogroup of E. coli, OR
- A clinically compatible illness in a person with detection of Shiga toxin or Shiga toxin genes in a clinical specimen using a CIDT and no known isolation of Shigella from a clinical specimen, OR
- · A clinically compatible illness in a person with detection of E. coli O157 or STEC/EHEC from a clinical specimen using a CIDT, OR
- A clinically compatible illness in a person that is epidemiologically linked to a confirmed or probable case with laboratory evidence, OR
- A clinically compatible illness in a person that is a member of a risk group as defined by public health authorities during an outbreak.

#### Suspect

- · A person that meets the supportive laboratory criteria for diagnosis with no known clinical compatibility, OR
- · A person with a diagnosis of post-diarrheal HUS/TTP (see HUS case definition).

#### SHIGA TOXIN-PRODUCING ESCHERICHIA COLI (STEC) (2018) (continued)

#### COMMENTS

Asymptomatic infections and infections at sites other than the gastrointestinal tract in people (1) meeting the confirmatory laboratory criteria for diagnosis or (still the confirmation of E. coli O157 from a clinical specimen without confirmation of H antigen, detection of Shiga toxin, or detection of Shiga toxinal specimen without considered STEC cases and should be reported. (2) with isol

Although infections with Shiga toxin-producing organisms in the United States are primarily caused by STEC, in recent years an increasing number are due to infections by Shiga toxin-producing *Shigella*. Persons with (1) detection of Shiga toxin or Shiga toxin genes using a CIDT and (2) isolation of *Shigella spp*. from a clinical specimen should not be reported as an STEC case.

Due to the variable sensitivities and specificities of CIDT methods and the potential for degradation of Shiga toxin in a specimen during transit, discordant results may occur between clinical and public health laboratories. Persons with (1) detection of Shiga toxin or Shiga using a CIDT, (2) the absence of isolation of Shigella from a clinical specimen, and (3) clinically compatible symptoms, should be reported as a probable case, regardless of whether detection of Shiga toxin or Shiga toxin genes is confirmed by a public health laboratory.

# HEMOLYTIC UREMIC SYNDROME, POST-DIARRHEAL (2010)

### **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., greater than or equal to 1.0 mg/dL in a child aged less than 13 years or greater than or equal to 1.5 mg/dL in a person aged greater than or equal to 13 years, or greater than or equal to 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 7 days after onset of the acute gastrointestinal illness is not less than 150,000/mm<sup>3</sup>, other diagnoses should be considered.

STEC AND/OR	HIIS CASE	REDORT

First three letters of patient's last name:		
,		

# **CASE CLASSIFICATION**

#### Confirmed

• An acute illness diagnosed as HUS or TTP that both meets the laboratory criteria and began within 3 weeks after onset of an episode of acute or bloody diarrhea

#### **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 3 weeks, OR
- An acute illness diagnosed as HUS or TTP, that a) has onset within 3 weeks after onset of an acute or bloody diarrhea and b) meets the laboratory criteria except that microangiopathic changes are not confirmed

# 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 post-diarrheal TTP also should meet the criteria for HUS. These cases are reported as post-diarrheal HUS.

RACE DESCRIPTION	ON						
Race	Description	Description					
American Indian or Alas	ka Native Patient ha	s origins in <b>any</b> of the original peop	les of North and South Amer	rica (including Central America).			
Asian	(e.g., inclu	s origins in <b>any</b> of the original peop iding Bangladesh, Cambodia, China Islands, Thailand, and Vietnam).	•	st Asia, or the Indian subcontinent orea, Malaysia, Nepal, Pakistan, the			
Black or African American Patient has origins in <b>any</b> of the black racial groups of Africa.							
Native Hawaiian or Othe	er Pacific Islander Patient ha	Patient has origins in <b>any</b> of the original peoples of Hawaii, Guam, American Samoa, or other Pacific Islands.					
White Patient has origins in <b>any</b> of the original peoples of Europe, the Middle East, or North Africa.							
ASIAN GROUPS	·						
Bangladeshi	• Filipino	Japanese	Maldivian	Sri Lankan			
Bhutanese	<ul> <li>Hmong</li> </ul>	<ul> <li>Korean</li> </ul>	<ul> <li>Nepalese</li> </ul>	<ul> <li>Taiwanese</li> </ul>			
• Burmese	<ul> <li>Indian</li> </ul>	<ul> <li>Laotian</li> </ul>	<ul> <li>Okinawan</li> </ul>	<ul><li>Thai</li></ul>			
Cambodian	<ul> <li>Indonesian</li> </ul>	<ul> <li>Madagascar</li> </ul>	<ul> <li>Pakistani</li> </ul>	<ul> <li>Vietnamese</li> </ul>			
• Chinese	<ul> <li>Iwo Jiman</li> </ul>	<ul> <li>Malaysian</li> </ul>	<ul> <li>Singaporean</li> </ul>				
ATIVE HAWAIIAN	AND OTHER PACIFIC ISL	ANDER GROUPS					
Carolinian	Kiribati	Micronesian	<ul> <li>Pohnpeian</li> </ul>	Tahitian			
<ul> <li>Chamorro</li> </ul>	<ul> <li>Kosraean</li> </ul>	<ul> <li>Native Hawaiian</li> </ul>	<ul> <li>Polynesian</li> </ul>	<ul> <li>Tokelauan</li> </ul>			
• Chuukese	Mariana Islander	<ul> <li>New Hebrides</li> </ul>	<ul> <li>Saipanese</li> </ul>	<ul> <li>Tongan</li> </ul>			
• Fijian	<ul> <li>Marshallese</li> </ul>	<ul> <li>Palauan</li> </ul>	<ul> <li>Samoan</li> </ul>	<ul> <li>Yapese</li> </ul>			
Guamanian	<ul> <li>Melanesian</li> </ul>	<ul> <li>Papua New Guinean</li> </ul>	<ul> <li>Solomon Islander</li> </ul>				

STEC AND/OR	PEDORT

First three letters of patient's last name:		

#### OCCUPATION SETTING

- · Childcare/Preschool
- · Correctional Facility
- · Drug Treatment Center
- · Food Service
- · Health Care Acute Care Facility
- · Health Care Long Term Care Facility
- · Health Care Other

- · Homeless Shelter
- Laboratory
- · Military Facility
- · Other Residential Facility
- · Place of Worship
- School
- Other

# **OCCUPATION**

- Agriculture farmworker or laborer (crop, nursery, or greenhouse)
- · Agriculture field worker
- · Agriculture migratory/seasonal worker
- · Agriculture other/unknown
- · Animal animal control worker
- Animal farm worker or laborer (farm or ranch animals)
- · Animal veterinarian or other animal health practitioner
- · Animal other/unknown
- · Clerical, office, or sales worker
- · Correctional facility employee
- · Correctional facility inmate
- · Craftsman, foreman, or operative
- · Daycare or child care attendee
- Daycare or child care worker
- · Dentist or other dental health worker
- · Drug dealer
- · Fire fighting or prevention worker
- · Flight attendant
- · Food service cook or food preparation worker
- · Food service host or hostess
- · Food service waiter or waitress
- Food service other/unknown
- Homemaker
- · Laboratory technologist or technician
- · Laborer private household or unskilled worker
- · Manager, official, or proprietor
- · Manicurist or pedicurist
- Medical emergency medical technician or paramedic
- Medical health care worker

- · Medical medical assistant
- · Medical pharmacist
- · Medical physician assistant or nurse practitioner
- · Medical physician or surgeon
- · Medical registered nurse
- · Medical other/unknown
- · Military officer
- · Military recruit or trainee
- · Protective service police officer
- · Protective service other
- · Professional, technical, or related profession
- Retired
- Sex worker
- · Student preschool or kindergarten
- · Student elementary or middle school
- · Student high (secondary) school
- · Student college or university
- Student other/unknown
- Teacher/employee preschool or kindergarten
- Teacher/employee elementary or middle school
- Teacher/employee high (secondary) school
- Teacher/instructor/employee college or university
- · Teacher/instructor/employee other/unknown
- Unemployed seeking employment
- · Unemployed not seeking employment
- Unemployed other/unknown
- Other
- Refused
- Unknown

STEC AND/OR HUS CASE REPOR	т

First three letters of		
patient's last name:		

HOUSEHOLD CONT	d from pag	re 7)							
Name 5	Relationship		Age	Gender	Occupation	1		occupation / situation? ∃No □ Unknown	
Telephone N		lumber	Similar illnes: ☐ Yes ☐ No	s? □ Unknown		e (mm/dd/yyyy)	Comment		
Name 6 Relationship			Age Gender		Occupation		Sensitive occupation / situation? □ Yes □ No □ Unknown		
	Telephone Numbe		Similar illness?  ☐ Yes ☐ No ☐ Unknown			Onset Date (mm/dd/yyyy)		Comment	
Name 7 Relationship			Age	Gender	Occupation	1		occupation / situation? ] No □ Unknown	
	Telephone N	lumber	Similar illnes: □ Yes □ No	s? □ Unknown		e (mm/dd/yyyy)	Comment		
Name 8	Relationship		Age	Gender	Occupation	1		occupation / situation? ] No □ Unknown	
	Telephone N	elephone Number		Similar illness?  ☐ Yes ☐ No ☐ Unknown		Onset Date (mm/dd/yyyy)		Comment	
Name 9	Relationship		Age	Gender	Occupation	1		occupation / situation? ] No □ Unknown	
	Telephone N	lumber	Similar illness ☐ Yes ☐ No	s? □ Unknown		e (mm/dd/yyyy)	Comment		
Name 10	Relationship		Age	Gender	Occupation	1		occupation / situation? ] No □ Unknown	
Telephone N		umber Similar illness?  ☐ Yes ☐ No ☐ Unknown		Onset Date (mm/dd/yyyy) Comr		Comment			
ILL CONTACTS – DETAILS (continued from page 7)				ge 7)					
Name 3		Age	Gender	Telephone	e Number	Type of Contact / Re	elationship	Date of Contact (mm/dd/yyyy)	
		Street Address				Exposure Event		Illness Onset Date (mm/dd/yyyy)	
		City		State	Zip Code	Occupation		Sensitive occupation / situation?  ☐ Yes ☐ No ☐ Unknown	
		Laboratory confirmed? ☐ Yes ☐ No ☐ Unknown			CalREDIE ID (if app	licable)			
Name 4		Age	Gender	Telephone	e Number	Type of Contact / Relationship		Date of Contact (mm/dd/yyyy)	
		Street Address			Exposure Event		Illness Onset Date (mm/dd/yyyy)		
		City State		Zip Code	Occupation		Sensitive occupation / situation?  ☐ Yes ☐ No ☐ Unknown		
		Laboratory confirmed? □ Yes □ No □ Unknown			CalREDIE ID (if applicable)				
Name 5		Age Gender Telephone		e Number	nber Type of Contact / Relationship		Date of Contact (mm/dd/yyyy)		
		Street Address				Exposure Event		Illness Onset Date (mm/dd/yyyy)	
		City		State	Zip Code	Occupation		Sensitive occupation / situation?  ☐ Yes ☐ No ☐ Unknown	
		Laboratory confirmed? □ Yes □ No □ Unknown				CalREDIE ID (if app	licable)		