

SHIGA-TOXIN PRODUCING *ESCHERICHIA COLI***EPIDEMIOLOGY PROGRAM**

Event Name:	STEC	
Event Time Period:	180 days	
Clinical Description (CDC 2018):	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).	
CDC Event Classification (2018) 17-ID-10:	<i>Confirmed</i>	<ol style="list-style-type: none">1. Isolation of <i>E. coli</i> O157:H7 from a clinical specimen OR2. Isolation of <i>E. coli</i> from a clinical specimen with detection of Shiga toxin or Shiga toxin genes
	<i>Probable</i>	<ol style="list-style-type: none">1. Isolation of <i>E. coli</i> O157 from a clinical specimen without confirmation of H antigen, detection of Shiga toxin, or detection of Shiga toxin genes OR2. A clinically compatible illness (one or more of the following: abdominal cramps, diarrhea) in a person<ol style="list-style-type: none">a. With identification of an elevated antibody titer against a known Shiga toxin-producing serogroup of <i>E. coli</i> ORb. With detection of Shiga toxin or Shiga toxin genes in a clinical specimen using a CIDT and no known isolation of <i>Shigella</i> from a clinical specimen ORc. With detection of <i>E. coli</i> O157 or STEC/EHEC from a clinical specimen using a CIDT ORd. That is epidemiologically linked to a confirmed or probable case with laboratory evidence ORe. That is a member of a risk group as defined by public health authorities during an outbreak
	<i>Suspect</i>	<ol style="list-style-type: none">1. Identification of an elevated antibody titer against a known Shiga toxin-producing serogroup of <i>E. coli</i> in a person with no known clinical compatibility OR2. Detection of Shiga toxin or Shiga toxin genes in a clinical specimen using a CIDT and no known isolation of <i>Shigella</i> from a clinical specimen in a person with no known clinical compatibility OR3. Detection of <i>E. coli</i> O157 or STEC/EHEC in a clinical specimen using a CIDT in a person with no known clinical compatibility OR4. A person with a diagnosis of post-diarrheal HUS/TTP
Massachusetts Event Classification (2019):	<i>Confirmed</i>	<i>Follows CDC classification</i>
	<i>Probable</i>	<i>Follows CDC classification</i>
	<i>Suspect*</i>	<ol style="list-style-type: none">1. Identification of an elevated antibody titer against a known Shiga toxin-producing serogroup of <i>E. coli</i> in a person with no known clinical compatibility OR2. Detection of Shiga toxin or Shiga toxin genes in a clinical specimen using a CIDT and no known isolation of <i>Shigella</i> from a clinical specimen in a person with no known clinical compatibility OR3. Detection of <i>E. coli</i> O157 or STEC/EHEC in a clinical specimen using a CIDT in a person with no known clinical compatibility

* A person with a diagnosis of post-diarrheal HUS/TTP without indication of STEC should have an HUS event created in MAVEN.

Report type	Test Type	Source	Result	New event or beyond report period?	Data Entry
Laboratory Report	Culture	Any source	E. coli O157:H7	Yes	New event CONFIRMED
				No	Same event
Select:	Microorganism: PrId: Pt: xxx: Nom: Culture				
Select:	Microorganism: PrId: Pt: Islt: Nom: Bacterial subtyping				
Select:	Escherichia coli shiga-like toxin identified : PrId : Pt : Stl : Nom : Organism specific culture				
Laboratory Report	Culture	Any source	E. coli O157	Yes	New event PROBABLE
				No	Same event
Select:	Microorganism: PrId: Pt: xxx: Nom: Culture				
Select:	Microorganism: PrId: Pt: Islt: Nom: Bacterial subtyping				
Select:	Escherichia coli shiga-like toxin identified : PrId : Pt : Stl : Nom : Organism specific culture				
Laboratory Report	Culture	Any source	E. coli AND patient has a positive Shiga toxin or Shiga toxin gene result	Yes	New event CONFIRMED
				No	Same event
Select	Microorganism: PrId: Pt: xxx: Nom: Culture				
Select:	Microorganism: PrId: Pt: Islt: Nom: Bacterial subtyping				
Select:	Escherichia coli shiga-like toxin identified : PrId : Pt : Stl : Nom : Organism specific culture				
Laboratory Report	Culture	Any source	E. coli, serotype not O157 AND patient does not have positive Shiga toxin result	Yes	New event DO NOT ENTER
				No	Same event
Select	Microorganism: PrId: Pt: xxx: Nom: Culture				
Select:	Microorganism: PrId: Pt: Islt: Nom: Bacterial subtyping				
Select:	Escherichia coli shiga-like toxin identified : PrId : Pt : Stl : Nom : Organism specific culture				

Report type	Test Type	Source	Result	New event or beyond report period?	Data Entry
Laboratory Report	PCR-Shiga toxin	Any source	Positive	Yes	New event SUSPECT
				No	Same event
Select (STX positive, type 1 or 2 not specified):	STX gene: PrId: Pt: xxx: Nom: Probe.Amp.Tar				
Select (STX positive, type 1 or 2 not specified):	E. coli stx1 + stx2 StI: QI: Non-probe PCR				
Select (STX positive, type 1 or 2 not specified):	EC stx1+stx2 genes StI QI NAA+probe				
Select (STX1 specified):	E. coli virulence factor STX1: PrId: Pt: xxx: Nom: Probe.Amp.Tar				
Select (STX1 specified):	EC stx1 gene StI QI NAA+probe				
Select (STX2 specified):	E. coli virulence factor STX2: PrId: Pt: xxx: Nom: Probe.Amp.Tar				
Select (STX2 specified):	EC stx2 gene StI QI NAA+probe				
Laboratory Report	PCR-Virulence factors	Any source	Positive	Yes	New event DO NOT ENTER
				No	Same event
Select (eae specified):	E. coli virulence factor eae: PrId: Pt: xxx: Nom: Probe.Amp.Tar				
Select (E-hly specified):	E. coli virulence factor E-hly: PrId: Pt: xxx: Nom: Probe.Amp.Tar				
Select (ehxA specified):	E. coli virulence factor ehxA: PrId: Pt: xxx: Nom: Probe.Amp.Tar				
Laboratory Report	PCR	Stool	Escherichia coli, serotype O157; Escherichia coli, serotype O157:H7; or Escherichia coli, shiga toxin 1 and 2	Yes	New event SUSPECT
				No	Same event
Select:	GI path DNA + RNA: Pnl: StI: Non-probe PCR				
Select:	E coli O157H7 DNA Spec NAA+probe				
Laboratory Report	Shiga toxin OR verotoxin	Any source	Positive for Shiga toxin OR verotoxin	Yes	New event SUSPECT
				No	Same event
Select:	Verotoxin identified: PrId: Pt: IsI: Nom:				
Select:	Escherichia coli verotoxin: Acnc: Pt: xxx: Ord				
Select:	Escherichia coli shiga-like toxin: ACnc: Pt: xxx: Qn: EIA				

Report type	Test Type	Source	Result	New event or beyond report period?	Data Entry
Laboratory Report	Antigen test	Any source	Positive	Yes	New event SUSPECT
				No	Same event
Select:	Escherichia coli O157:H7 Ag: ACnc: Pt: Stl: Ord:				