

To:CAHAN San Diego ParticipantsDate:October 25, 2023From:Public Health Services

# Health Alert: Shiga toxin-producing E. Coli Associated with Miguel's Cocina 4S Ranch

## **Key Messages**

- A foodborne outbreak of Shiga toxin-producing *Escherichia coli* (STEC) has been identified among patrons of Miguel's Cocina in 4S Ranch in October 2023.
- Non-culture-based diagnostics are increasingly used for enteric pathogen, but these methods do not allow for genomic sequencing of pathogens. Reflex culturing of specimens that are PCR-positive for *E. coli* spp. should be requested to allow for genomic analysis and linking of confirmed cases.
- Antibiotics and antimotility agents are not recommended for patients with suspect STEC infections because their use may increase risk for progression to Hemolytic Uremic Syndrome (HUS).

### Situation

As of October 24, 2023, 13 cases of confirmed or probable Shiga toxin-producing *E. coli* (STEC) have been identified among recent patrons of Miguel's Cocina 4S Ranch location, beginning on October 8, 2023. The median age is 18 years (range, 6–84 years). Symptoms included fever, bloody or watery diarrhea, nausea, vomiting, and headache. Seven of the 13 cases were hospitalized, including 4 children. One case has progressed to Hemolytic Uremic Syndrome (HUS). The identified Miguel's 4S location voluntarily closed yesterday, October 24, 2023.

## Background

STEC typically presents as acute, often bloody, diarrhea with prominent abdominal cramping and absent or low-grade fever. The typical incubation period for STEC is 3–4 days (range, 1–10 days). While most people recover from STEC without complications, illness may be more severe in young children and older adults. Approximately 5–10% of people develop HUS, a syndrome characterized by hemolytic anemia, acute kidney failure, and thrombocytopenia.

Transmission is most commonly foodborne. In past outbreaks, implicated items have included ground beef and other beef products, unpasteurized juice, unpasteurized dairy products, and produce such as lettuce, spinach, and sprouts. Other risk factors include contact with livestock or contaminated recreational water. Direct person-to-person transmission can also occur.

Management of STEC is supportive care, including hydration and monitoring for the development of HUS. Antibiotics and antimotility agents are not recommended due to their link to HUS. These treatments should be avoided even in suspect STEC cases until complete diagnostic testing can be performed and STEC infection is ruled out.

## **Actions Requested**

1. *Educate* patients on preventing STEC transmission by ensuring ground beef is thoroughly cooked ("well done"), avoiding unpasteurized products, and conducting effective hand washing before preparing or eating food.

- 2. **Diagnose STEC** in patients presenting with bloody diarrhea, especially those with risk factors for severe disease or high-risk exposures, by performing culture-based testing or reflex culture, if there is PCR positive for *E. coli* spp.
- 3. *Avoid* prescribing antibiotics and antimotility agents in patients with symptoms compatible with STEC, until complete diagnostic testing has ruled out STEC because of the association with progression to HUS.
- 4. **Report STEC** cases to the County of San Diego Epidemiology Unit by faxing a <u>Confidential Morbidity Report</u> to 858-715-6458, or by calling 619-692-8499 (Monday-Friday 8 AM-5 PM).

### Resources

- Resources for Clinicians and Laboratories E. coli | CDC
- <u>STEC Information for Health Professionals | CDPH</u>
- Shiga Toxin Producing E. Coli Summary, Sept 2023 | County of San Diego

Thank you for your participation.

### **CAHAN San Diego**

County of San Diego Health & Human Services Agency Epidemiology and Immunization Services Branch Phone: (619) 692-8499; Fax: (858) 715-6458 Urgent Phone for pm/weekends/holidays: (858) 565-5255 E-mail: <u>cahan@sdcounty.ca.gov</u> Secure Website: <u>http://cahan.ca.gov</u> Public Website: <u>http://www.cahansandiego.com</u>