

Health Advisory – Cluster of Shiga toxin-producing *E. coli* Infections among Children and Adolescents in King County – Unknown Source, 4 May 2021

Actions Requested:

- **Be aware of a recent cluster of Shiga toxin-producing *E. coli* (STEC) infections among children and adolescents in King County. At least one case has developed hemolytic uremic syndrome (HUS). The investigation is ongoing to determine if there is a common source.**
- **Consider STEC infection in all children and adolescents with bloody diarrhea and in people with any diarrhea and a history of any of the following within the 10 days prior to onset of symptoms:**
 - Consumption of high risk foods (e.g., raw produce, unpasteurized dairy or juice products, raw or undercooked meats).
 - Animal contact (particularly farm animals).
 - Known exposure to someone else with STEC.
- **In patients with symptoms compatible with STEC infections, obtain a stool specimen and request *E. coli* testing by culture and Shiga toxin.**
 - If bloody diarrhea is present, laboratory evaluation should include a complete blood count, serum electrolyte panel, BUN, and creatinine.
 - Shiga toxin immunoassays or PCR should be obtained in addition to cultures, but should not replace culture on sorbitol MacConkey agar plates.
- **Counsel patients with suspected or confirmed STEC to not work in or attend childcare or preschool, or work in food handling or healthcare until cleared by Public Health.**
- **Report confirmed & suspected STEC cases to Public Health immediately at (206) 296-4774. Obtain the following history about risk factors during the exposure period (1-10 days preceding symptom onset):**
 - Dietary history, including consumption of meats, unpasteurized juices or dairy products, fresh fruit and vegetables from grocery stores, farms and farmers markets, and restaurants
 - Travel with dates and destinations
 - Animal exposures (pets, farm animals, other)
 - Attendance in a childcare center

Background: Since April, seven cases of suspected *E. coli* O157 infection have been reported in children and adolescents (all under 14 years of age, 3 under 5 years of age) in King County. Illness onsets occurred during April 17–29, 2021. Six cases have been hospitalized, 1 developed HUS, and 1 is under evaluation for possible HUS. No deaths have been reported. We have not identified any foods, restaurants, or other sources in common among all cases, and the investigation is ongoing. Further testing to confirm the strain and do whole genome sequencing (WGS) is underway at the Washington State Public Health Laboratory. These WGS results will help determine whether these cases were infected with the same strain of STEC.

Anyone ill with suspected or known STEC should not work in or attend childcare or preschool, or work in food handling or healthcare until cleared by Public Health.

Resources:

- Public Health - Seattle & King County STEC: <https://kingcounty.gov/depts/health/communicable-diseases/disease-control/stec.aspx>
- CDC STEC Resources for Clinicians and Laboratories: <https://www.cdc.gov/ecoli/clinicians.html>