

***E. coli* 0104:H4 outbreak in Germany**

Between May 2 and June 2, 2011, 552 cases of Hemolytic Uremic Syndrome (HUS) caused by a shiga toxin-producing *E. coli* strain (STEC) have been associated with an outbreak in Germany. According to the World Health Organization, there have been 18 deaths among all outbreak-related cases to date. Toronto Public Health (TPH) is advising clinicians to inquire about travel history to Germany in patients presenting with signs and symptoms of HUS or bloody diarrhea. **Collected specimens must be directed to the OAHPP Public Health Laboratory and requisitions must explicitly state "request for shiga-toxin *E. coli* (STEC)" and indicate travel history.**

While HUS is typically observed in children under the age of 5 years, the majority of cases in this outbreak are adults and more than two thirds are women. While cases have been reported from other European Union countries, most of the cases are from, or have had a history of travel to the north of Germany (mainly Schleswig-Holstein, Lower Saxony, North-Rhine-Westphalia and Hamburg). The CDC reported earlier this week on two returning American travelers with HUS who they are investigating as potentially related to this outbreak.

The source of the outbreak has not yet been confirmed, but a food source is most likely responsible and investigations into contaminated cucumber, tomatoes, and lettuce are ongoing.

HUS is characterized by acute renal failure, hemolytic uremia, and thrombocytopenia. Typically it is preceded by diarrhea, often bloody diarrhea. **Any suspect or confirmed cases of toxin-producing *E. coli* should be immediately reported to the Medical Officer of Health by calling our surveillance unit at 416-392-7411 during work hours (8:30am to 4:30pm, Monday to Friday) or at 3-1-1 after hours.** Routine testing for *E. coli* O104 is not performed in Ontario; therefore clinicians should follow the submission guidelines listed above for suspected outbreak-related cases.

TPH received 28 reports of verotoxin-producing *E. coli* infections in 2010 and the previous 10-year average for this infection was 48 cases per year. The strain associated with the German outbreak is a rare strain that has not been implicated in outbreaks previously.

An Updated Lababstract is available at:
<http://www.oahpp.ca/resources/lababstracts.html>

Updates on the outbreak in Germany and fact sheets can be found on the European Centre for Disease Control website at:
http://www.ecdc.europa.eu/en/healthtopics/escherichia_coli/Pages/index.aspx

Toronto Public Health recently launched a new Health Professionals website at <http://www.toronto.ca/health/professionals>. Visit us and register to receive timely public health information.