

***E. COLI* O157:H7 INFECTION AND HEMOLYTIC UREMIC SYNDROME (HUS)**

Reportable to local or state health department

**Consult the health department before posting/distributing Parent/Guardian fact sheet.**

<b>CAUSE</b>	<i>E. coli</i> O157:H7 bacteria.
<b>SYMPTOMS</b>	<p>Watery or severe bloody diarrhea, stomach cramps, and low-grade fever. Some infected persons may have mild symptoms or may have no symptoms at all.</p> <p>In some cases, people infected with <i>E. coli</i> O157:H7 can develop HUS, which is a serious disease that affects the kidneys and the blood's ability to clot. HUS is more common in children than in adults.</p>
<b>SPREAD</b>	<p><i>E. coli</i> O157:H7 bacteria leave the body through the stool of an infected person and enter another person when hands, food, or objects (such as toys) contaminated with stool are placed in the mouth. Spread can occur when people do not wash their hands after using the toilet or changing diapers. These bacteria can easily spread from person to person, especially from children in diapers. Cattle are a source of these bacteria. People get <i>E. coli</i> O157:H7 either through eating contaminated food or through contact with cattle or the farm environment.</p> <p>Foodborne outbreaks have been caused by eating meat (especially ground beef) that is not thoroughly cooked, by eating fresh produce contaminated by cattle or deer feces, or by drinking unpasteurized milk or fruit juices.</p>
<b>INCUBATION</b>	It takes from 1 to 8 days, usually about 3 to 4 days, from the time a person is exposed until symptoms develop.
<b>CONTAGIOUS PERIOD</b>	As long as <i>E. coli</i> O157:H7 bacteria are present in the stool, a person can pass the germs on to other people. In many children, the bacteria can be found in the stool for 2 to 3 weeks after the start of symptoms. In a small number of children, the bacteria may be present in stool for 2-3 months after symptoms have stopped.
<b>EXCLUSION</b>	<p><u>Childcare</u>: Until two stool cultures obtained at least 24 hours apart have tested negative for <i>E. coli</i> O157:H7.</p> <p><u>School</u>: None, unless the child is not feeling well and/or has diarrhea and needs to use the bathroom frequently. Exclusion may be necessary during outbreaks.</p> <p>Everyone with <i>E. coli</i> O157:H7 should not use swimming beaches, pools, water parks, spas, or hot tubs until 2 weeks after diarrhea has stopped.</p> <p>Staff with <i>E. coli</i> O157:H7 may be restricted from working in food service. Call your local health department to see if these restrictions apply.</p>
<b>DIAGNOSIS</b>	Recommend parents/guardians call their healthcare provider if their child has symptoms of <i>E. coli</i> O157:H7 or HUS. There is a lab test to detect <i>E. coli</i> O157:H7 in the stool. A healthcare provider needs to diagnose HUS.

**TREATMENT** Diarrhea caused by *E. coli* O157:H7 usually goes away after a few days without any treatment. Antibiotics and drugs to stop diarrhea are usually not recommended because they may actually increase the likelihood of HUS. Treatment of HUS usually requires hospitalization and often dialysis (artificial kidney) and blood or platelet transfusions. Vomiting and diarrhea may lead to dehydration, which may be a medical emergency. Ask a healthcare provider how to prevent dehydration.

**PREVENTION/CONTROL**

- Wash hands thoroughly with soap and warm running water after using the toilet and changing diapers and before preparing or eating food. **Thorough handwashing is the best way to prevent the spread of communicable diseases.** Staff should closely monitor handwashing of all children after children have used the bathroom or have been diapered.
- Avoid having contact with cattle, particularly calves, at a petting zoo or farm. Wash hands thoroughly with soap and warm running water after touching any animals.
- Clean and disinfect diapering area and potty chairs after each use and bathroom toilets, sinks, and toys at least daily and when soiled. (See pgs 34-36.)
- Clean and sanitize mouthed toys, objects, and surfaces at least daily and when soiled. (See pgs 34-36.)
- Minimize self-service food items in the school cafeteria (i.e., salad bars, trays of fruit, trays of desserts, etc.) and in the classroom. Alternatively, an adult should serve children their lunches and group snacks.
- **Food Safety**
  - Thoroughly cook all hamburger or ground beef until it is brown, not pink, inside and the juices are clear. Heat kills the bacteria. Use a thermometer to ensure that the internal temperature of the meat is at least 155° F.
  - DO NOT drink unpasteurized milk or unpasteurized fruit juices.
  - Wash and disinfect all cutting boards, knives, utensils, or dishes that have been used for raw meat or poultry before using with uncooked foods, such as fruits or vegetables, and cooked foods.
  - DO NOT let children serve or prepare food for others in the childcare or school setting.

For more information, call Hennepin County HSPHD-Epidemiology at (612) 543-5230 or call your local health department.